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Changing Face of the Indian Insurance Sector

भारतीय बीमा संस्थान
INSURANCE INSTITUTE OF INDIA

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EDITORIAL

"Changing face of the Indian insurance sector" is the theme for this issue of the Journal of the Insurance Institute of India. The Journal periodically comes up with specific themes that are announced well in advance and articles are invited.

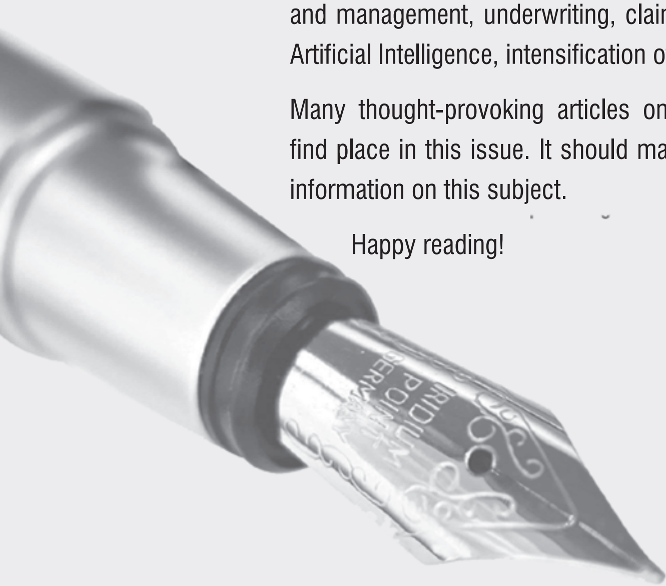
The field of insurance has been constantly undergoing change. The market changes, and so does the need for insurance solutions. The need for devising new types of insurance products is constant. As new activities emerge, the call for insurance coverage of the ensuing risks emerges. For instance, Cyber as a field was not as prevalent and as exposed to various risks a few decades back. Today Cyber risk has become quite prominent entails a significant share of risks which could lead to losses - small and big. The insurance industry has stepped up its efforts to understand the sector, assess possible risks and implications and device coverages. Being untested, the industry has to constantly appreciate the nuances and evolve. There are any number of such new areas calling for attention from the insurance industry.

There are also demands for a relook at many of the existing lines of businesses, the concepts, the practices etc. Even the fundamental principles of insurance can be tested and even challenged in changing contexts. Changes could create the need for making exceptions to some of the fundamental principles, while some of the long-standing practices and concepts might require revisions and modifications.

Change is not only happening with regard to products and other concepts, it is also happening in the way the industry operates. Technology has practically modified many of the existing operations. At first, the modifications were on digitalization of processes; then with connectivity improving, along with the development of various applications, the industry had no option but to adopt technology in a big way. Now, technology engulfs risk appreciation and management, underwriting, claims and so on and so forth. With the rapid adoption of Artificial Intelligence, intensification of use of technology needs to follow.

Many thought-provoking articles on various aspects of change in the insurance sector find place in this issue. It should make for interesting reading and also provide a wealth of information on this subject.

Happy reading!



Editorial Team

Metamorphosis of the Indian Insurance Industry

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The author is working with Reliance General Insurance as a Motor Claims Manager having 10+ years of overall experience in claims assessment and customer service. He has completed MBA in Marketing from Wesley PG College and B-Tech in Mechanical Engineering from Sree Nidhi Institute of Science and Technologies. He has also acquired Licentiate Certification from Insurance Institute of India and he has working towards his goals viz., Associate, Fellowship and Research in Insurance.

I) Introduction

In recent years, the Indian insurance sector has experienced a remarkable metamorphosis. This transformation has been driven by a confluence of factors, including significant regulatory changes, rapid technological advancements, and evolving consumer preferences. The once traditional and highly-regulated industry is now at the forefront of innovation and adaptation, serving a dynamic market with diverse needs. This journal delves into the multifaceted evolution of the Indian insurance landscape, exploring the key drivers of change, their impact, and the challenges and opportunities that lie ahead.

II) Historical Perspective

The roots of the Indian insurance sector trace back to the early 19th century when the first insurance company, Oriental Life Insurance Company, was established in Kolkata in 1818. However, the sector remained relatively underdeveloped and primarily served the needs of the British colonial rulers. It wasn't until the nationalization of insurance in 1956 that the government took control of the industry, leading to the formation of Life Insurance Corporation (LIC) of India, a behemoth in the Indian insurance landscape.

The liberalization of the Indian economy in the early 1990s marked a turning point. In 1999, the Insurance Regulatory and Development Authority of India (IRDAI) was established, ushering in a new era of regulation and opening the door for private players. This shift allowed for greater competition, innovation, and customer choice, setting the stage for the dynamic changes we witness in the Indian insurance sector today. The historical evolution of the sector provides valuable insights into the forces that have shaped its current landscape.

III) Regulatory Changes

Regulatory reforms have been pivotal in reshaping the Indian insurance sector. The watershed moment arrived with the Insurance Regulatory and Development Authority of India (IRDAI), established in 1999. Prior to this, the industry was highly monopolistic, with the state-owned Life Insurance Corporation (LIC) dominating the market. The IRDAI's mandate was to liberalize and regulate the sector, opening the door for private players.

One of the most significant regulatory changes was the increase in the foreign direct investment (FDI) cap in insurance companies. In 2015, the FDI limit was raised from 26% to 49%, and in 2021, it was increased to 74%. These policy changes have encouraged foreign insurers to increase their stakes in Indian joint ventures and brought in more capital and expertise. The result has been greater competition and a wider array of insurance products available to consumers.

Moreover, the Insurance Laws (Amendment) Act of 2015 introduced further reforms, including the provision for insurance companies to raise capital from the capital markets. These reforms have allowed insurers to diversify their products and offerings, catalysing innovation and change in the Indian insurance landscape.

The regulatory changes have not only made the sector more competitive but have also focused on enhancing consumer protection, risk management, and financial stability. As a result, the Indian insurance industry has seen a shift from a heavily controlled and state-dominated entity to a more vibrant and customer-centric marketplace, with regulatory changes playing a crucial role in shaping its evolution.

IV) Technological Advancements

Technology has emerged as a disruptive force, propelling the Indian insurance sector into a new era. The digital revolution has not only redefined operational processes but has also fundamentally transformed customer interactions and product offerings.

Artificial intelligence (AI) and machine learning have been instrumental in automating underwriting, claims processing, and risk assessment. Insurers have harnessed these technologies to better analyse data, detect fraud, and offer more personalized policies. The use of AI chatbots and virtual assistants has also improved customer service, providing instant responses and assistance.

The advent of big data analytics has enabled insurers to make data-driven decisions, enhancing pricing accuracy and risk assessment. These analytics have allowed for the development of usage-based insurance, particularly in the motor insurance segment, where premiums are determined by individual driving habits.

Blockchain technology has brought transparency and security to the sector, particularly in claims processing and record-keeping. It has reduced fraud and improved the overall efficiency of insurance operations.

The rise of Insurtech companies has been a game-changer, offering innovative solutions and disrupting traditional insurance business models. From digital distribution platforms to on-demand insurance products, these start-ups have forced established insurers to adapt and innovate.

In addition, the digitalization of insurance processes has made it more accessible to consumers. Policy purchase, renewal, and claims submission can now be done online, making insurance a convenient and customer-centric service.

These technological advancements have not only improved the efficiency of insurance operations but have also enhanced the overall customer experience, making insurance more accessible and relevant to the modern Indian consumer. The industry's embrace of technology has been a key driver of its evolution.

V) Market Dynamics

The Indian insurance sector is witnessing a profound shift in market dynamics, driven by changing consumer preferences, competitive forces, and evolving economic and demographic factors.

One of the key trends in market dynamics is the changing consumer behaviour. As India's middle class expands and becomes more tech-savvy, the demand for insurance products is growing. Consumers are increasingly seeking insurance solutions that are tailored to their specific needs, pushing insurers to offer more customized and flexible policies.

The shift from traditional life insurance products to a broader range of offerings, including health, motor, and term insurance, reflects changing market dynamics. Health insurance, in particular, has seen significant growth, driven by increasing health awareness and rising healthcare costs. This trend has been accelerated by the COVID-19 pandemic, which underscored the importance of health coverage.

Moreover, the competitive landscape of the Indian insurance market has evolved. Private insurers, both domestic and foreign, have entered the scene, intensifying competition. Digital insurers and intermediaries are gaining prominence, offering online policy purchases and servicing, which align with the preferences of tech-savvy consumers. This has led to enhanced customer service, product innovation, and competitive pricing.

Demographic changes, such as an aging population and a burgeoning young workforce, are also influencing market dynamics. Insurers are responding by developing retirement and pension products for the elderly and affordable policies for the younger generation.

The dynamic nature of the Indian insurance market presents both opportunities and challenges. While it offers a growing customer base and potential for innovation, insurers must adapt to changing consumer needs and preferences, remain competitive in a crowded marketplace, and address the evolving risk landscape. Understanding and navigating these market dynamics are crucial for insurers seeking sustainable growth and success in the Indian insurance sector.

VI) Competitive Landscape

The competitive landscape of the Indian insurance sector has undergone a significant transformation, marked by the entry of private players, the rise of digital insurers, and evolving consumer expectations.

Private insurers have played a pivotal role in reshaping the competitive dynamics of the industry. Prior to liberalization, the sector was primarily dominated by state-owned entities like Life Insurance Corporation (LIC). However, with the opening of the market, a slew of private insurers, both domestic and foreign, entered the arena. This has led to increased competition, innovation, and a wider range of insurance products, providing consumers with more choices.

Digital insurers and intermediaries have emerged as a disruptive force, catering to the evolving preferences of tech-savvy consumers. They have leveraged online platforms and mobile apps to simplify the insurance purchase process, offer instant quotes, and streamline claims settlement. This digital transformation has not only enhanced customer convenience but has also resulted in more competitive pricing and a seamless user experience.

The traditional insurance distribution model, primarily relying on agents and brokers, is also evolving. Insurance aggregators and online comparison platforms are gaining traction, allowing consumers to compare policies, premiums, and features from various insurers. This shift in distribution channels has increased transparency and fostered competition.

Product innovation is another avenue of competition. Insurers are constantly introducing new and tailored insurance products, from customizable health plans to telematics-based motor insurance. Such innovations cater to specific customer needs and preferences, further intensifying competition.

While the competitive landscape in the Indian insurance sector has become more diverse and customer-centric, it has also raised challenges related to maintaining profitability and market share. Insurers must continually adapt, innovate, and focus on customer satisfaction to thrive in this dynamic and competitive environment.

VII) Challenges and Opportunities

The changing face of the Indian insurance sector presents a unique set of challenges and opportunities for both established insurers and newcomers to the market.

Challenges:

1. **Regulatory Compliance:** Adhering to a complex and evolving regulatory landscape can be challenging. Insurers must continually update their practices to ensure compliance with IRDAI guidelines.
2. **Fraud and Cybersecurity:** With the increasing use of technology, the risk of fraud and cybersecurity threats has grown. Insurers must invest in robust security measures to protect sensitive customer data.
3. **Customer Education:** Many consumers in India remain underinformed about insurance products. Insurers face the challenge of educating the market about the benefits and intricacies of insurance.
4. **Distribution Challenges:** While digital platforms have made it easier to reach customers, reaching remote or rural areas remains a challenge. Expanding the distribution network to include underserved regions is an ongoing effort.
5. **Pricing Pressure:** The competitive landscape has led to pricing pressure, potentially affecting profit margins. Striking a balance between competitive pricing and profitability is a challenge.

Opportunities:

1. **Growing Customer Base:** India's burgeoning middle class and

young population provide a vast and untapped market for insurers. The potential for growth in terms of policyholders is substantial.

2. **Innovation:** Technological advancements open doors for innovation. Insurtech solutions, such as telematics for auto insurance or wearable devices for health insurance, create opportunities to develop unique and value-added products.

3. **Customization:** Evolving consumer preferences enable insurers to provide tailored insurance solutions. Offering customizable policies for specific needs, such as travel, health, and cybersecurity, is a growing opportunity.

4. **Data Analytics:** The vast amounts of data generated provide insurers with the opportunity to leverage data analytics for better risk assessment, fraud detection, and personalized pricing.

5. **Digital Engagement:** Digital platforms offer the chance to engage with customers more effectively, improve customer service, and provide a seamless user experience.

6. **Cross-Selling:** The ability to offer a broader range of financial products, including insurance, banking, and investments, presents opportunities for cross-selling to existing customers.

Navigating these challenges and capitalizing on these opportunities will be critical for insurers in India as they continue to adapt to the evolving insurance landscape. Those who successfully address these issues and harness the potential of this dynamic market are poised for sustainable growth and success.

VIII) Case Studies

1. **Digital Transformation at Policy Bazaar:** Policy Bazaar, one of India's leading online insurance aggregators, has become a symbol of the digital revolution in the insurance sector. This case study examines how Policy Bazaar leveraged technology to simplify the insurance buying process, provide instant quotes, and offer a wide range of insurance products online. The company's rapid growth and success shed light on the power of digital platforms in reshaping the competitive landscape.

2. **The Evolution of HDFC Life:** HDFC Life, a prominent private insurer in India, has consistently adapted to changing market dynamics. This case study explores how HDFC Life embraced technology and innovation to enhance customer service, expand product offerings, and establish a strong online presence. The company's journey reflects the transformation of traditional insurers into dynamic and customer-centric entities.

3. **Health Insurance During the COVID-19 Pandemic**: The COVID-19 pandemic has had a profound impact on the Indian insurance sector, particularly in the health insurance segment. This case study analyses how health insurance companies responded to the crisis, adapted their policies, and rapidly processed claims. It demonstrates the flexibility and resilience of insurers in times of unprecedented challenges.

4. **The Rise of Insurtech Start-ups:** The Indian insurance landscape has witnessed the emergence of numerous insurtech start-ups offering innovative solutions. This case study examines the success stories of insurtech companies like Digit Insurance and Acko, which have introduced disruptive technologies and customer-centric approaches to insurance. Their growth showcases the potential for innovation in the sector.

5. **LIC's Digital Transformation:** Life Insurance Corporation (LIC), a long-established government-owned insurer, has also embraced digital transformation. This case study delves into how LIC has adapted to the changing environment by digitizing processes, expanding its online presence, and offering more customer-centric solutions, all while retaining its market leadership.

These case studies provide concrete examples of how insurers in India have navigated the changing landscape, offering valuable insights into the strategies and approaches that have proven successful in this evolving industry.

IX) Conclusion

The Indian insurance sector has undergone a remarkable transformation, driven by a confluence of regulatory reforms, technological advancements, shifting market dynamics, and evolving consumer preferences. The historical evolution of the sector, from a state-controlled monopoly to a dynamic, competitive marketplace, underscores the significance of regulatory changes brought about by the IRDAI and the liberalization of FDI limits.

The influence of technology cannot be overstated, as artificial intelligence, big data analytics, and digital platforms have revolutionized the way insurers operate and interact with customers. This digital transformation has given rise to digital insurers, online aggregators, and insurtech start-ups, each contributing to a more customer-centric and efficient industry.

Market dynamics have shifted with changing consumer behaviour, leading to the diversification of insurance products and distribution channels. Health insurance, in particular, has seen exponential growth, driven by increased health consciousness and the impacts of the COVID-19 pandemic.

The competitive landscape is now marked by a balance between established insurers and new entrants, offering more choices and customization for consumers. However, this increased competition has also created pricing pressures and challenges in maintaining profitability.

While challenges persist, including regulatory compliance, fraud prevention, and customer education, the opportunities are equally promising. With a growing customer base, innovation, and customization, insurers have ample room for growth and profitability. Leveraging data analytics, digital engagement, and cross-selling can further enhance insurers' prospects in this dynamic environment.

In conclusion, the changing face of the Indian insurance sector is a story of adaptation, innovation, and customer-centricity. Insurers that successfully navigate these changes and embrace the opportunities are poised to thrive in this evolving landscape. As the industry continues to evolve, it will be crucial for insurers to remain agile, customer-focused, and technologically adept to meet the ever-changing needs of Indian consumers and secure their position in a rapidly changing marketplace. TJ

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Resilience and Innovation in turbulent times: Changes in the Indian Insurance Landscape

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Abstract

The Indian insurance industry is experiencing a profound transformation driven by technological advancements, increased computational power, connectivity, and the availability of vast data reservoirs. This metamorphosis is characterized by a focus on convenience and personalization, revolutionizing the prospects of the insurance sector. The COVID-19 pandemic acted as a catalyst for insurers to reconsider their business models and embrace data-driven strategies to foster growth. The need for customized insurance policies tailored to individual needs and risk profiles is increasingly apparent, with data from wearables, smartphones, and other devices being leveraged for this purpose.

Furthermore, the insurance sector must adapt to emerging modes of transportation, such as autonomous vehicles and ride-sharing, necessitating the use of data analytics for a more precise understanding of risk and accurate policy pricing. Robotic process automation (RPA) is another technological tool that can revolutionize the industry by automating tasks like claims processing and customer service, further enhancing efficiency and reducing overheads.

This research highlights the digital transformation of the Indian insurance sector in recent years and discusses how this will lead to a fundamental change in the insurance business model. However, it's crucial to emphasize that, despite the digitalization of insurance, customer experience during transactions and fostering higher levels of trust between insurance companies and customers will be pivotal in securing a sustainable competitive advantage in the sector.

Keywords

Automation, Artificial Intelligence, Operational Models, Robotic Process Automation, Frauds, Big Data, Data Analytics.

Introduction

The insurance sector in India is in the cusp of change as it faces both challenges as well as exciting opportunities. The Indian digital economy is expected to grow from Rs 7 lakh crores in 2020 to 9 times by 2030. Changing demographics of the world population in general and the Indian population in particular and new forms of risk are characterising the dynamics of the insurance business. Innovations in new products and services, strategic alliances with Insurtech firms and developing data analytics capabilities to offer integrated solutions are some of the actions that are going to chart the course of the future of the insurance sector.

Use of data from wearable devices, social media, and other sources to create personalized insurance products and services and use of artificial intelligence to automate insurance processes, such as underwriting and claims management are examples of how technology is transforming the insurance landscape.

Insurance contributes to economic progress and social development of a nation. Growth of insurance industry in India is the result of several factors. FDI in insurance, growing awareness about insurance, banks entering insurance sector, strategic alliances, tech-savvy insurance agents and brokers, improvements in distribution and operational capabilities and a strong regulatory support have made a significant contribution to boost the prospects of the insurance sector in India.

The regulatory reforms in India are making it easy for insurance companies to do business in India. The government has relaxed the foreign direct investment (FDI) limit in the insurance sector, and it has also introduced new regulations that are designed to make it easier for insurance companies to use technology. These reforms are making India a more attractive market for insurance companies, and they are expected to lead to further growth in the Indian insurance market.

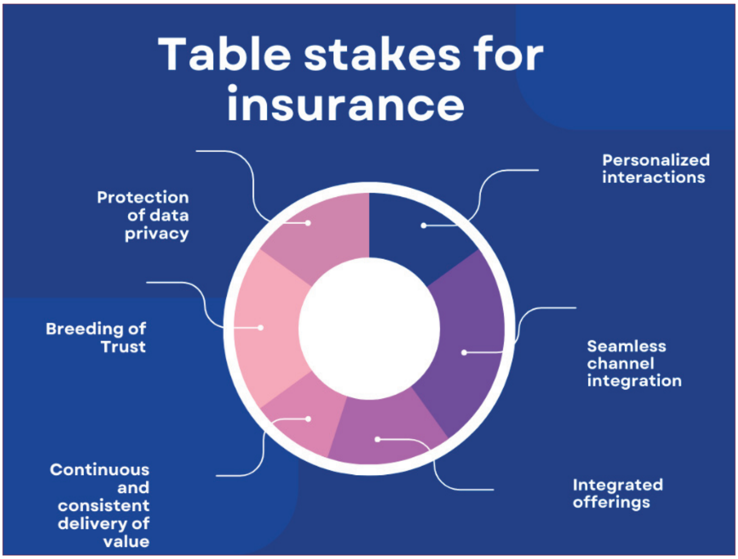
Favourable demographics like 55% population in the age group of 20-59, increase in the middle-class population (140 million middle class income Indian households by 2030) and attempts to make insurance more inclusive is further adding to the charm of insurance both as a business and as a service.

Government's push in enabling JAM (Jan Dhan, Aadhar and Mobile) has made customers comfortable in sharing data with financial services providers. Focus on customer convenience, personalisation, transparency and trust will engender a positive customer experience while transacting with insurers. Data is becoming increasingly important in the insurance industry. Insurers are using data to better understand their customers, to price their products more accurately, and to improve their claims management processes. The pandemic deflected attention of consumers to the "protection" value of insurance which had hitherto got side tracked in favour of value propositions like "insurance for tax protection" and "insurance as an investment avenue".

For a long time, the narrative around insurance has revolved around investment and tax savings with the protection component being relegated to peripheral importance. However, post Covid-19 pandemic, consumers have realized the importance of protection. This realization will grow stronger and, in the future, insurance policies will be purchased more for their "protection" value than anything else. Insurance will regain its position as a mechanism to protect against death, disease and disability. This behavioural change will certainly have an impact on insurance penetration.

The insurance growth in future will rely more on pervasive connectivity between market participants and intelligent use of data. Let us understand how the insurance sector is coping up with uncertainties and rapid changes in the external business environment through resilience and technology-enabled innovations that aim to use customer centricity as the main driver of business agenda.

Chart 1: Table stakes for insurance



Source: Author

Tracing the Growth of Insurance Business in India

India is the 9th largest life insurance market globally and 14th largest non-life insurance market globally. India will add 140 million middle-class and 21 million high-income households by the year 2030, which would fuel demand for the expansion of the country's insurance market. The Indian insurance market is expected to reach $200 billion by 2027.

India is the 10th biggest insurance market in the world in 2021 worth $130b growing to $420b by 2032. Life insurance premiums are expected to grow by 9% annually by 2032.

A Swiss Re report mentions that India, by 2032, can become the sixth largest insurance market in the world. The report, titled "The Future of Insurance in India", projects that India's total insurance premiums will grow by an average of 14% per annum over the next decade. India's middle class is expected to grow from 340 million in 2021 to 530 million by 2032. The second-largest market for Internet users is India. 1 billion people will be online by 2026.

This growth will lead to increased demand for insurance products, as people with higher incomes are more likely to purchase insurance. People are more likely to have assets that they want to protect, such as their homes, their cars, and their investments.

The insurance density in India increased to $91 in 2021 from $11.1 in 2001. The insurance penetration in India has been increasing from 2.7% in 2000 to 4.2% in 2021. The new business premium of the life insurance industry grew at 17.91% in FY23.

As against a global average of 9%, the total insurance premium in India increased by 13.5% in 2021. The insurance premium volume is $ 127 billion (Life: 76%; Non-life:24%). In terms of total premium volumes, India is the 10th largest market globally with an estimated market share of 1.9%. In 2021, India's share of the worldwide market for life insurance was 3.23%.

In FY 22, the life insurance sector reported total written premium income of $ 91 billion (INR 6.93 lakh crore), an increase of 10.2% over FY 21. The private insurers reported a 17.4% increase in premiums, and LIC saw a 6.1% increase.

The report by Swiss Re estimates that the insurance sector will contribute $100 billion to the Indian economy by 2032. The insurance industry will need to invest $50 billion in new technologies by 2032.

From 2.2% in FY 02 to 3.2% in FY 22, the life insurance sector's insurance penetration has increased. From 0.5% in FY 2002 to 1% in FY 22, the non-life insurance sector's insurance penetration increased. Between FY 2002 and FY 22, the life insurance density increased from $ 9.1 to $ 69. The density of non-life insurance increased from $2.4 in FY 02 to $22 in FY 22.

Table 1: Insurance Penetration and Density across the Globe

Year	Penetration (%)			Density (USD)		
	Life	Non-Life	Total	Life	Non-Life	Total
2001-02	2.15	0.56	2.71	9.1	2.4	11.5
2002-03	2.59	0.67	3.26	11.7	3.0	14.7
2003-04	2.26	0.62	2.88	12.9	3.5	16.4
2004-05	2.53	0.64	3.17	15.7	4.0	19.7
2005-06	2.53	0.61	3.14	18.3	4.4	22.7
2006-07	4.10	0.60	4.80	33.2	5.2	38.4
2007-08	4.00	0.60	4.70	40.4	6.2	46.6
2008-09	4.00	0.60	4.60	41.2	6.2	47.4
2009-10	4.60	0.60	5.20	47.7	6.7	54.3
2010-11	4.40	0.71	5.10	55.7	8.7	64.4
2011-12	3.40	0.70	4.10	49.0	10.0	59.0
2012-13	3.17	0.78	3.96	42.7	10.5	53.2
2013-14	3.10	0.80	3.90	41.0	11.0	52.0
2014-15	2.60	0.70	3.30	44.0	11.0	55.0
2015-16	2.72	0.72	3.44	43.2	11.5	54.7
2016-17	2.72	0.77	3.49	46.5	13.2	59.7
2017-18	2.76	0.93	3.69	55	18	73
2018-19	2.74	0.97	3.70	54	19	74
2019-20	2.82	0.94	3.76	58	19	78
2020-21	3.2	1.0	4.2	59	19	78
2021-22	3.2	1.0	4.2	69	22	91

Source: IRDA Report – 2021-2022

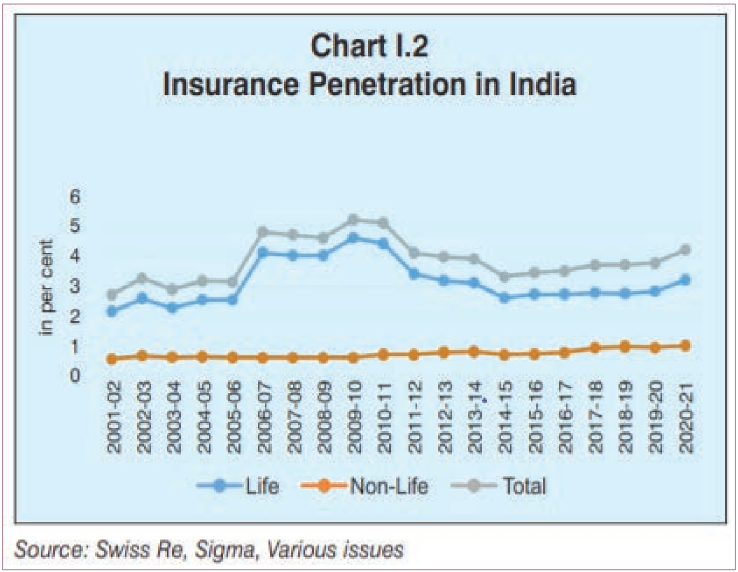


CHART 2: Insurance penetration in India

Role of Insurance Regulator in Boosting the Business Prospects

Positive regulatory interventions are resulting in increased capital flow, improved valuation and the entry of specialized and niche players. The FDI limit has been increased to 74% from 45%. India is all set to become a reinsurance hub. Changes in regulatory sandbox requirements are expected to boost innovations in insurance sector.

IRDA is working on a three-pronged approach – availability, accessibility and affordability. This will help industry achieve the lofty goal of 'Insurance for All by 2047". The "Insurance for All" mission is expected to further give a fillip to the efforts of insurers and government to enhance penetration levels of insurance in the country. IRDA wishes to double the penetration of the insurance market in India in the next 5 to 7 years (by 2028- 2030). IRDA has permitted insurers to conduct video-based KYC and launch standardized insurance products.

The success of "Insurance for all" will rely on

1. Distribution effectiveness through digital solutions
2. Measures to improve cyber security
3. Attention to personalization supported by data analytics capabilities
4. Increased capital infusion and consolidation through mergers and acquisitions

Bima Sugam is a digital platform for insurance products and services and intends to empower all insurance stakeholders. IRDA is also mooting a united payments interface for insurance through Bima Sugam, Bima Vistar and the woman centric Bima Vahak.

Table 2: Key Innovations in Insurance in Future

Type of innovation	Description	Outcome	Changes needed
Pay-as-you-go-insurance	This is a new type of insurance that charges premiums based on how much you use your insurance. For example, if you drive less, you will pay less for car insurance. If you stay healthy, you will pay less for health insurance	It could make insurance more affordable and accessible for everyone. It could also encourage people to live healthier and safer lifestyles.	Such a business model will need insurers to have access to a lot of data about their customers. This data can be used to assess risk and set premiums.
Internet of Things and Telematics	IoT refers to the network of physical devices that are connected to the internet. Telematics refers to the use of technology to collect and analyse data about driving behaviour.	IoT can track the location and condition of assets, such as cars and homes. Telematics can track driving behaviour and set premiums.	Use of data to improve the efficiency of claims payments.

Type of innovation	Description	Outcome	Changes needed
Peer-to-peer (P2P) insurance	a group of people can pool their capital, self-organize and self-administer their own insurance. A small group of family members, friends or individuals with common interests combine premiums to insure against risks.	In the event of a loss, money from the pool is used to cover the individual.	Leverage social networking to address customer needs

Changes in the Insurance Landscape

Traditional insurance products offered protection against losses, but today's technology driven world has products that prevent risks. Sensors in residential buildings, factories and complexes can prevent threats from fire, gas, water leaks or burglaries. Wearable sensors and health monitors record physical parameters but also are adept in calling up emergency services. Doctors have real time access to patient information. Augmented or Virtual Reality can be used to establish emotional bonds with customers as part of CRM. Customer data can be effectively leveraged to underwrite risks and pay claims.

RPA (Robotic Process Automation), IPA (Intelligent Process Automation) and Artificial Intelligence (AI) will streamline underwriting and claims management, fraud detection, and payments. Use of chatbots as part of conversational commerce will ensure support to customers 24 x 7.

Future trends in the insurance industry encompass several crucial aspects. The evolution towards cloud-based Enterprise Resource Planning (ERP) systems, alongside the increasing automation of processes, stands out prominently. The surge in data generated by interconnected devices is reshaping the landscape, necessitating a shift towards a data-centric culture and strategic approach. A key focus is on enhancing the skills of the insurance workforce to adapt to these technological advancements. Notably, there is substantial progress in extending institutional insurance coverage, and the automation of claims detection in real-time is becoming a norm, reducing the time gap between claim intimation and processing. Addressing the emerging challenge of cyber risks is another imperative. Additionally, there is a transformation in the role of insurance intermediaries, empowering agents and brokers to provide technologically informed financial advice, aligning with a customer-centric approach. These trends collectively underscore the industry's commitment to embracing technology and data-driven strategies for a more efficient and responsive future.

Chart 3: Source: Author

Let us take an example of Mobility Insurance to highlight the influence of digital technologies in insurance:

Capgemini's World Property Casualty Insurance report for 2023 highlights the projected growth of the mobility insurance industry, expected to reach $1.38 trillion by 2030 from its current $0.65 trillion. The expansion is driven by Autonomous, Connected, Electric, and Sharing (ACES) mobility trends. Revenues in the automobile business are forecasted to surge by 35%, reaching $3.8 trillion by 2030. Insurers are urged to adapt to new individualized business models to navigate the changing landscape.

Globally, the automotive industry is aiming for a future characterized by zero traffic jams, zero emissions, and zero collisions. India stands out for its increased interest in adopting innovative mobility options compared to its global counterparts. In India, insurers identify technology capabilities and competition as key challenges in embracing the future of mobility. Interestingly, Indian insurers appear to be more prepared than their global peers in talent and product development, essential aspects for evaluating readiness.

For Indian insurers, the focus should be on strengthening the delivery of value-added services to enhance customer engagement. The preferences of Indian customers lean towards value-added services, improved claim processes, and digital distribution, prioritizing these over personalized pricing, which is more favoured globally. As the mobility landscape evolves, Indian insurers have an opportunity to cater to these preferences and position themselves for success in the future of mobility.

The evolution of autonomous vehicles (AV) and the rise of Mobility as a Service (MaaS) are expected to significantly impact the insurance landscape, leading to a reduction in individual vehicle ownership. This shift is likely to refocus insurance offerings from individuals to fleet owners and AV manufacturers, necessitating the development of entirely new business models with a Business-to-Business (B2B) emphasis. Insurance is anticipated to transition to a pay-per-use model, integrated into services like AV rentals.

In this linked mobility environment, insurers will need to create more agile, real-time products to adapt to changing needs. The transformation from personal to commercial insurance marks a substantial change in risk management within the insurance industry. Distribution channels may shift from personal market aggregators and brokers to fleet owners' business policies, requiring new partnerships and operational methods in the fully integrated B2B space.

The integration of insurance into other services and products, known as "insurance as a service," is expected to become commonplace. Pay-per-use models, such as charging drivers per mile, and addressing product liability for expensive vehicle parts will gain prominence. The demand for instant coverage for urgent journeys through connected tech platforms will rise. Customers now expect a faster, simpler, and more seamless claims cycle. In the event of a vehicle breakdown, customers are likely to expect immediate arrangements for a replacement, self-driving vehicle to be dispatched to them promptly. This ongoing transformation reflects a paradigm shift in the insurance industry's approach, aligning with the changing dynamics of the evolving mobility landscape.

OEMs, fleet managers, and ride-hailing services are just a few of the mobility service providers who will put an even greater emphasis on supply chain risk insurance. Telematics and artificial intelligence (AI) are anticipated to make underwriting increasingly automated. The growth of AVs may result in 30 to 50% fewer accidents, which would cause premiums to decline by 40% by 2040.

Table 3: Emerging Focus Areas for Insurance

Area of interest	Description	Outcome(s)	Future
Market Trends & Research	Separate research wing that can be clubbed with the technology vertical with CTO (Chief Technology Officer) rechristened as CTRO (Chief Technology and Research Officer).	Expertise in data analytics; Predict future market trends;	Consolidation of Insurtech into insurance business

Area of interest	Description	Outcome(s)	Future
Innovative performance metrics	Use the total sum insured underwritten by the industry as a metric rather using premium incomes alone.	For example, CII and KPMG have proposed a metric called Coverage Ratio – ratio of cover availed by an individual to an individual's annual income	Embrace the environmental, social and governance (ESG) agenda to assess the impact of their actions on employees, customers and local communities. Social responsibility has to be cleverly intertwined with insurance marketing and selling.
Insurance education and knowledge dissemination	Reduce information asymmetry; Increase insurance penetration	Empower intermediaries and customers; Use of high-quality credible information.	Focus on customer centricity and customer experience
Attracting digital natives	Digital natives are accustomed to using technology and anticipate interacting with companies and organisations digitally.	Strengthening digital payment architecture for on boarding and renewals. Collaboration with Insurtech firms and aggregators.	Leverage Ayushman Bharat Digital Mission to drive transparency. Differentiated value propositions for different customer segments like rural, Gen Y, Gen Z, SMEs etc
Customer Centricity	Place customers before profits;	use multi-channel and multi-location architecture to offer a diversified product portfolio to customers.	Customers can be offered tailor made products like sachet products, on-demand insurance, event-based insurance and even pet insurance

How Can Insurance Industry Respond To The Changes?

The insurance sector is undergoing a transformative shift, where the ease of conducting transactions becomes pivotal for customer retention. Moving away from demographic segmentation, social groups with shared beliefs and attitudes will increasingly influence insurance purchases. Customization of life insurance policies based on individual factors such as occupation, age, and preferences are becoming the standard, necessitating tech-savvy agents for effective after-sales service. The moment of truth lies in claims administration, emphasizing the critical role it plays.

To adapt to these changes, insurance business models must evolve continually. The sector should shift its focus towards incentivizing risk prevention behaviours rather than solely providing protection. For instance, the growing threat of job loss elevates the demand for unemployment insurance, including coverage for gig economy workers. Customer-centricity requires insurers to listen to the "Voice of the Customer," streamlining internal processes to align with the customer journey and integrating interactions across various touchpoints.

Tied covers, like bundling maintenance services with motor insurance premiums or offering free health check-ups with health insurance, become essential. Insurtech start-ups are disrupting traditional models by providing more convenient, affordable, and personalized products and services. The future might witness the convergence of banks, insurers, reinsurers, and insurtech firms, with bancassurance models evolving accordingly. The shift to the cloud and the prominence of blockchain technology are imminent, enhancing transparency, fairness, and operational efficiency.

Governance mechanisms become crucial to protect against reputational risks, and a confluence of technology and data defines the customer experience. Connected devices provide valuable data for understanding customer profiles, enabling personalized pricing and real-time service delivery. However, identifying quality data remains a challenge, emphasizing the need for a balance between leveraging technology and maintaining the trust factor between insurers and policyholders. Embedding Environmental, Social, and Governance (ESG) metrics with performance metrics becomes imperative for insurance companies in this evolving landscape.

Conclusion

The future landscape of the insurance sector is shaped by various factors and promising statistics. According to a report by Red Seer, the insurance market is anticipated to reach $222 billion by FY 26, while policybazaar.com predicts that the total annual premium of insurance companies in India is expected to reach Rs 39 lakh crore by FY 2030. Against the backdrop of a resilient Indian economy, the World Bank's India Development Update in April 2023 forecasts a growth rate of 6.9% for 2023, with real GDP expanding at 7.7% year on year during the first three quarters of fiscal year 2022/23.

The future of insurance is intricately tied to the rise of Insurtech start-ups, the increasing demand for data-driven decision-making, and the imperative to enhance customer experiences. Democratization of data and the integration of artificial intelligence (AI) will be transformative, ushering in an era where deeper data analytics enhances customer service, combats fraud, and makes insurance more affordable. Smart devices such as fitness trackers, home assistants, smartphones, and smartwatches will generate significant data for the sector, and smart contracts will revolutionize authorization processes, reducing fraud risks and supporting efficient claims settlement.

The application of AI in various aspects of the insurance industry, from customer service and underwriting processes to claims processing and fraud detection, is pivotal. AI-enabled algorithms will generate real-time risk profiles, leading to more accurate risk assessment and automated pricing models. Over the next decade, cloud-based insurance lifecycles, financial planning bots, and telematics are expected to become industry practices, reflecting the ongoing digital transformation.

Digital transformation has bolstered the market share of private insurance companies compared to national counterparts. Yet, this transformative journey requires changes in the operating model, including realigning customer interfaces, information sharing protocols, and data security architecture. Staying abreast of the evolving regulatory environment is crucial, with simpler products, common IT platforms, simplified offerings, and omnichannel distribution methods identified as key growth drivers.

The escalating threat of cyberattacks necessitates significant investments in cybersecurity to safeguard data and customer interests. Reinsurance is anticipated to cover high-risk scenarios such as nuclear risks, terrorism, business interruptions due to bilateral wars, and cyberattacks. Composite insurance arrangements may replace individual covers, with property insurance underwriting utilizing satellite images for detailed risk assessment. The entry of global players like Amazon into the insurance sector adds a competitive dimension for Indian insurers.

The evolving customer expectations play a central role in shaping the future of insurance. A shift towards digital and personalized experiences is evident, with customers increasingly expecting to buy, use, and renew insurance online. Insurance is perceived as an essential financial tool to mitigate risks and protect against unexpected events, marking exciting times for the insurance sector in India. TJ

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The Future of Indian Insurance Sector: Growing Impact of InsurTech

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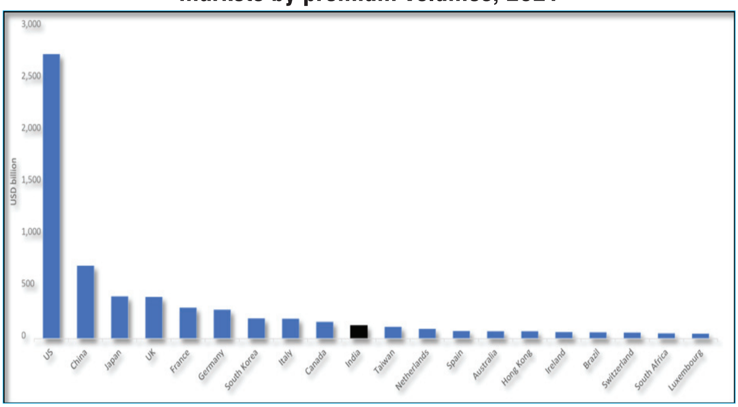
Introduction

The Indian insurance industry has been witnessing a remarkable transformation in recent years. From its traditional, branch-led model to a more tech-savvy approach, the sector is undergoing significant changes. These changes involve improved distribution channels, innovative product offerings, the integration of emerging technologies, and adaptation to evolving regulations. These developments have not only expanded growth opportunities but have also made insurance more accessible to consumers in a decentralized manner. It is evident that both the Insurance Regulatory and Development Authority of India (IRDAI) and the industry are committed to achieving India's ambitious mission of "Insurance for all by 2047."

Globally, insurance and reinsurance companies have undergone accelerated transformations by adopting emerging technologies. In India, insurance companies have increasingly positioned themselves as stabilizers in the broader economic landscape, supporting businesses, markets, and societies during times of economic upheaval. As of March 2022, Indian insurance carriers had invested over USD 700 billion, a testament to the sector's financial strength. Despite challenges like the COVID-19 pandemic, the climate crisis, and geopolitical conflicts such as the Russia-Ukraine conflict, the Indian insurance industry, currently the 10th largest in the world, has displayed robust growth (Chart1). As per RBI's Financial Stability Report June 2023, the Indian insurance industry has registered a compound annual growth rate of 10.3 per cent during the last 10 years. Additionally, in FY 2023, the general insurance and life insurance markets have continued to recover from the impact of the COVID-19 pandemic, with growth rates of 16% and 18%, respectively, compared to the previous year. This resilience is attributed to the industry's agility in embracing digitization across its operations and distribution channels, as well as its robust risk management practices that prioritize customer welfare.

Chart 1: Top 20 largest insurance markets by premium volumes, 2021



Source: PwC, Swiss Re Sigma Reports, Various Issues

Key Growth Drivers in Indian Insurance Industry

India is one of the fastest growing insurance markets in the world. According to SwissRe's projections, it is anticipated that total insurance premiums will experience an annual average growth of 14% in nominal terms (9% per annum in real terms) over the upcoming decade. This indicates a promising future for the insurance industry in India. Some of the key drivers of growth in the country's insurance industry are detailed below.

1. **New Insurers -** India currently has 58 insurance companies, including 26 life insurers and 32 non-life insurers. In 2023, IRDAI approved the applications of two life insurance companies - Acko Life Insurance Ltd. and Credit Access Life and Insurance Ltd., and one general insurance company - Kshem a General Insurance Ltd. For life insurance companies, these were the first new approvals since 2011, while for general insurance, the last approval was granted in 2017. The regulator also plans to issue 20 more licenses to interested companies over the financial year. While established insurance companies with strong growth and trusted brands have managed to list their businesses profitably, new insurance companies are trying to make an impact by focusing on the uninsured and under-addressed segments, through innovative offerings, specialized channels, and a digital-first approach.

2. **Product Offerings -** The Indian insurance market is witnessing two distinct trends. First, IRDAI is promoting the standardization of existing protection products to simplify the purchase experience for customers. Second, the introduction of the 'use and file' procedure allows insurance companies to launch products with increased speed to market without prior regulatory approval. This encourages the development of new-age insurance covers, including cyber insurance, electric vehicle insurance, climate risk insurance, bite-size/sachet insurance, pay-as-you-drive cover, and other subscription-based policies, that reflect evolving risk landscapes and changing lifestyles. The government's emphasis on driving financial inclusion through comprehensive insurance schemes further supports the development of new products.

3. **Distribution Channels -** While traditional channels remain dominant, new regulations allowing corporate agency tie-ups between banks and insurers, as well as relaxed commission payout norms, are set to bolster distribution channels. Currently, 52% of Indians are active internet users. The number of internet users is expected to reach 900 million by 2025, with 56% of new users from rural centres (Kantar, IAMAI). With a significant number of internet users across India, digital channels, e-commerce platforms, and online ecosystems are expected to emerge as the preferred distribution model, providing greater reach and convenience, especially in remote and rural areas.

4. **Digital-First and Tech-Enabled Ecosystems -** The adoption of technology has accelerated significantly in the insurance sector. Insurers have embraced robotic automation platforms, artificial intelligence, cloud computing, data analytics, and mobile apps to transform various aspects of their operations. This technology adoption is enabling insurers to offer hyper-personalized products, transparent and efficient customer interactions, and a seamless omnichannel experience. The rise of embedded insurance, facilitated by digital payment apps, e-commerce players, third-party application providers, and e-tailers, is set to drive insurance penetration further.

5. **Changing Risk Landscape -** The increased collection and storage of personal and financial data have given rise to cybersecurity threats. Insurers are recognizing the importance of addressing these risks. Additionally, climate change has emerged as a major disruptor, leading to the development of climate risk insurance. Insurers are exploring innovative covers such as pet insurance, shared property insurance, nomad insurance, and mental health cover, aligning with evolving customer risks.

6. **Regulatory Intervention -** The IRDAI has introduced several initiatives to support the changing market demands. The creation of a regulatory sandbox provides regulators a controlled environment for the testing of new products and services, potentially leading to the development of creative and innovative insurance solutions. The introduction of risk-based capital requirements by the insurance regulator is another significant step. This approach ensures that insurers maintain an adequate level of capital relative to their risk exposure, contributing to the sector's stability. The launch of "Bima Sugam," an online portal for all insurance-related queries and services, is also expected to enhance customer engagement.

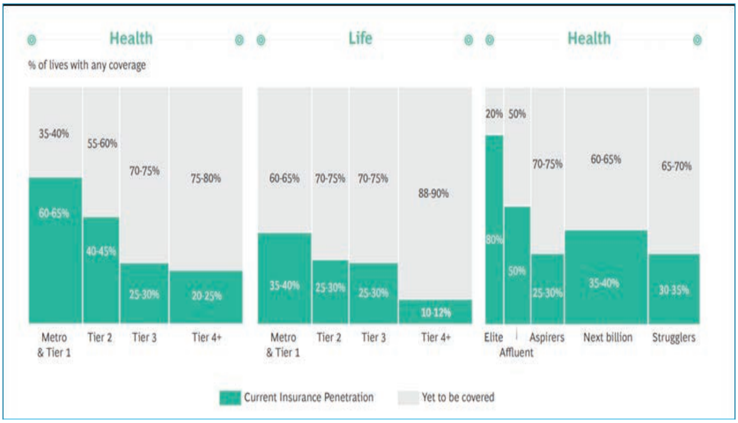
7. **Foreign Direct Investment (FDI) Increase -** The government's decision to raise the FDI limit in the insurance sector from 49% to 74% is likely to encourage more foreign investments, fostering increased competition and expertise in the market.

Insurtech in India

In India, the progress in insurance market penetration and growth is attributed to relaxed regulatory policies, rapid digitization efforts by industry players, and increased awareness among customers. However, despite positive trends, the protection gap in India continues to widen, presenting both a challenge and an opportunity for the industry.

As of FY 2020, only 18% of the eligible population subscribed to pure retail term insurance, and the protection penetration based on the sum assured was at approximately 12% (Chart 2). This protection gap is expected to grow further at a rate of 4% per annum (PWC). Swiss Re Institute estimates that the mortality protection gap in India alone stood at USD 40.4 billion (in premium equivalent terms) at the end of 2021. To address this growing gap, new protection products are needed, along with digital-first operating models, expanded reach, and simplified business processes through technology interventions. It is here that insurtech is expected to play a very significant role.

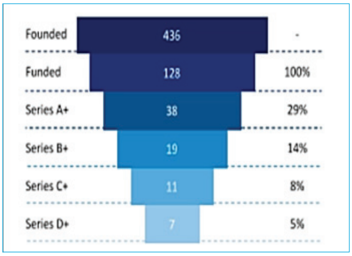
Chart 2: Insurance Penetration in India



Source: BCG

Insurtech refers to technological innovations that are created and implemented to improve the efficiency of the insurance industry. Insurtech powers the creation, distribution, and administration of insurance business. It is also a dynamic and promising industry with vast potential. Over the last few years, InsurTech in India has shown robust growth, including the emergence of unicorns like Policybazaar, Digit Insurance and Acko (Chart 3). Insurtech companies offers innovative solutions to various insurance-related challenges, including perils coverage, claims processing, and customer support. The technology available in the sector also enables insurtech companies to quickly adapt to changing trends and provide scalable services to their customers.

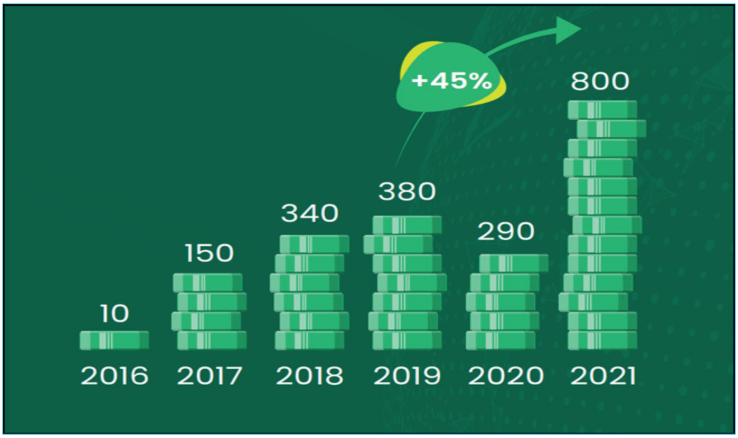
Chart 3: InsurTech – India (Companies by Stage as on March 2023)



Source: Tracxn

The Indian insurtech industry has been on a strong growth trajectory and is expected to continue expanding in the future. One of the reasons for this is the industry's access to a wider customer base. This extensive customer base allows companies to provide cost-effective services. Additionally, automation of claims processing and customer support services reduces operational costs while enhancing customer satisfaction. With the maturing insurtech sector, focus has also moved from traditional sales and distribution channes to other segments of the value chain. Currentlt, there is growing traction in underwriting, claims technology, business analytics, and administration platforms. Given its strong potential for growth, funding for Indian insurtechs has also experienced substantial growth. A report by PG Labs shows that funding to Indian insurtechs grew at a CAGR of 34% from FY17 to FY20. In 2021 alone, equity funding in InsurTech exceeded USD 800 million, surpassing the combined funding of 2019 and 2020 (Chart 4). Despite global economic and geopolitical disturbances affecting the funding landscape, the Indian InsurTech sector is steadily gaining momentum in the market.

Chart 4: Equity Funding in Insurtechs in India (in $Mn)



Source: Crunchbase, Tracxn, BCG

As the regulator for the sector, the IRDAI has also played a proactive role in fostering innovation within the insurtech sector. It introduced the Regulatory Sandbox in 2019 and granted insurance companies the authorization to utilize Video-Based KYC (V-CIP) for consumer onboarding. Furthermore, government institutions, such as the Health Ministry and NITI Aayog, have thrown their support behind InsurTech companies in India. Initiatives like the National Digital Health Mission ("NDHM"), the Digital Information Security in Healthcare Act ("DISHA"), and the National Health Stack have been introduced to create an integrated digital health infrastructure, further promoting innovation in the industry.

InsurTech: Disrupting Traditional Insurance

The COVID-19 pandemic heightened awareness of the value of insurance among consumers, resulting in a substantial demand for life, motor, and health insurance products. The insurance industry is now striving to meet these evolving consumer expectations and, more crucially, extending its reach to India's Tier 2 and Tier 3 cities and remote districts. A Boston Consulting Group (BCG) and India Insurtech Association (IIA) report titled 'India Insurtech Landscape and Trends' indicates that by 2030, Tier 2 and below regions will contribute to 70% of consumption in insurance. This transformation is also occurring against the backdrop of changing consumer affluence in these regions, which will further incentivise InsurTech to innovate. Some of the noteworthy ways in which insurtech is changing the traditional ways of insurance business are detailed below:

1. **Revolutionizing Underwriting** - The underwriting process, a pivotal element for insurance companies in risk evaluation and product development, has traditionally been a laborious, time-consuming, and protracted procedure, hampering operational efficiency. However, InsurTech firms, harnessing advanced technologies and AI algorithms, have streamlined this process. They can swiftly analyse customer records, reports, and related data to assess risks

and provide quotations more expeditiously than conventional methods. Advanced technologies such as artificial intelligence and machine learning also enables insurance companies to make more informed business decisions with minimal human intervention. Apart from streamlining operations it also helps in reducing insurance fraud and increasing customer retention rates.

2. **Expedited Application Procedures -** In traditional insurance frameworks, the approval process for insurance products often entailed waiting for weeks or even months. With the advent of InsurTech companies, this timeline has been significantly reduced. Leveraging cutting-edge technologies and user-friendly mobile applications, these companies can approve applications within minutes. Customers can conveniently complete forms from anywhere in the world using these mobile apps. Subsequently, AI algorithms can swiftly scrutinize the data to determine an applicant's eligibility for a particular policy, enabling these companies to serve a larger pool of consumers simultaneously.

3. **Streamlined Claim Processing - ** The insurance industry has long struggled with a poor reputation when it comes to processing claims and managing customer claims due to a sluggish administrative process. However, InsurTech companies have transformed the consumer experience in this regard. By leveraging data obtained from smart devices and other sources, they can digitally process claims within minutes, providing a clear and efficient resolution to the incident.

4. **Meeting Demand for Micro and Sachet Insurance -** The increasing digitization of various sectors, including payments, pharmacy services, and medical consultations, has driven a surge in demand for personalized insurance, micro insurance, and sachet insurance. Traditional insurance companies have struggled to meet this demand. In contrast, InsurTech firms, empowered by advanced technologies, have automated the underwriting process and refined risk assessment, to create customized sachet insurance policies and micro insurance offerings that cater to a diverse range of categories.

Challenges and Legal Roadblocks for InsurTech Companies

1. **Data Protection -** InsurTech companies rely heavily on consumer data acquired through advanced technologies, to assess risk and develop products. Reports from the Ministry of Electronics and Information Technology (MEITY) reveals that India witnessed 13.91 lakh cyber security incidents in 2022 alone. This underscores the susceptibility of the insurtech sector to cybersecurity risks, given its reliance on extensive data. However, India lacks a comprehensive codified law addressing data protection and privacy. As such, the industry is primarily governed by the Information Technology Act, 2000, and the Information Technology Rules, 2011, concerning data protection. To combat third-party security threats, data breaches, cloud-based security threats, digital identity risks and safeguard sensitive data from hackers, a balanced approach to data protection is needed- one that encourages the growth of the industry while also mitigating associated risks at the same time.

2. **Smart Contracts and Blockchain - ** To expedite the settlement of transactions within InsurTech companies, the adoption of Smart Contracts and Blockchain Technology is a potential solution. These technologies convert conventional contracts into computer code, eliminating the need for time-consuming authorization and validation processes. However, India currently lacks a robust regulatory framework for governing and utilizing smart contracts and blockchain technology effectively.

3. **Intellectual Property -** Incorporating connected devices

and advanced technology in InsurTech also raises concerns regarding the protection of intellectual property rights (IPR). When developing, obtaining, or licensing new technology, it is crucial for companies to exercise caution in addressing underlying IPR issues. Additionally, the availability of robust IP protection and enforcement is what investors look out for, while investing in risky, uncertain and expensive innovations, as is common in insurtech. However, India is India is yet to fill in the gaps that allow it to take full advantage of the transformative benefits of a strong IP system, including that of IP laws and regulations.

Conclusion

Over the next few years, the global insurance industry is poised to be shaped by four prominent trends. First, strategic partnerships will take center stage, with insurtechs seeking collaboration with insurance carriers and distribution partners rather than direct competition. Such alliances will provide a means to leverage the experience and financial stability of established carriers in navigating the evolving market. The emphasis on transparency and innovation between insurtechs and traditional players is set to drive mutual value creation. Second, insurtechs are likely to narrow their focus on specialization and segmentation, concentrating on specific customer segments, industries, geographies, or sizes in search of underserved niches with substantial growth potential. Third, the insurance industry is poised for increased mergers and acquisitions (M&A) activity as economic challenges force insurtechs to explore various options address evolving market dynamics. Lastly, a customer-centric approach will continue to gain prominence, with insurtechs and traditional carriers alike striving to enhance technology, user-friendly applications, and online service delivery to bridge the gap between customer expectations and industry practices.

According to GlobalData, India's life insurance sector is projected to experience a compound annual growth rate (CAGR) of 12.5%. This growth is expected to drive the industry from $128.0 billion in 2023 to $170.6 billion in 2027, as measured by gross written premiums (GWP). The entry of new InsurTech firms is bound to reshape the Indian insurance sector, making it more accessible, efficient, and customer-centric. With the continued support of regulatory authorities, the adoption of advanced technologies, and a growing customer base, the InsurTech sector is poised for substantial future growth. As India's insurance market continues to expand, InsurTech will definitely play a pivotal role in achieving the vision of "Insurance for all" by 2047. TJ

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Changing Face of Indian Insurance Sector in the Light of SDGs

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Abstract

Sustainable Development Goals (SDGs) adopted by United Nations in 2015 have become a guiding force behind all policy reforms throughout the World. With the recognition of the fact that in the mad race of economic development, we are causing irreparable harm to the people and the environment; and it is creating more of social and economic divide, rather than equality and justice, a need was felt to develop some unanimous goals for a more responsible utilisation of resources and to achieve sustainable development. This came in the form of the seventeen SDGs in 2015.

Insurance sector across the world has recognised its role in accomplishment of SDGs and is carefully aligning its operations with the SDGs. This paper highlights the role of insurance vis-a-vis SDGs and describes the changing face of Indian Insurance Sector in the light of SDGs.

Keywords: Sustainable Development, SDGs, United Nations, Insurance Sector.

1. Introduction

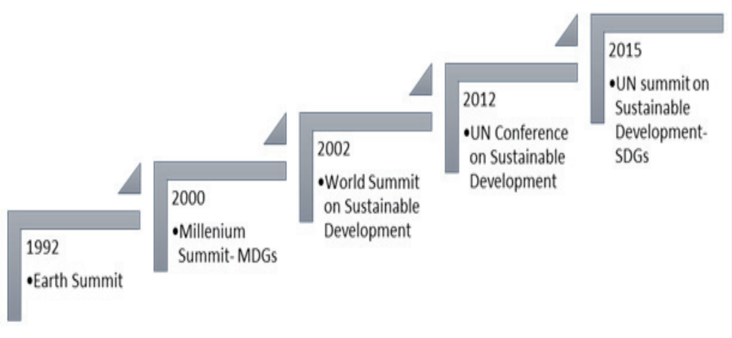
Shift towards sustainability at the global level saw its beginning with the Earth Summit of the United Nations in 1992. Followed by it, the further UN summits strengthened the move towards sustainability as highlighted in Figure 1. Some major UN summits that paved way for eventually developing the SDGs are explained in Table 1.

Table 1: Development of SDGs

Year	Summit	Place	Agenda
1992	Earth Summit	Rio de Janeiro, Brazil	Agenda 21- global partnership to improve human lives and environment
2000	Millenium Summit	UN Headquarters, New York	Eight Millennium Development Goals- to reduce extreme poverty by 2015
2002	World Summit on Sustainable Development	South Africa	Johannesburg Declaration on Sustainable Development- stressed the multilateral partnerships for poverty eradication and protection of environment
2012	United Nations Conference on Sustainable Development	Rio de Janeiro, Brazil	To launch a process for the development of SDGs
2015	UN Sustainable Development Summit	New York	2030 Agenda for Sustainable Development based on 17 SDGs

Source: United Nations (n.d.)

Figure 1: Development of SDGs



Source: Self

As highlighted in Table 1 and Figure 1, the 2015 UN summit on sustainable development

Figure 2: Sustainable Development Goals

Source: https://www.un.org/sustainabledevelopment/news/communications-material/

adopted the 2030 development agenda and the seventeen sustainable goals (SDGs) which are shown in Figure 2. These SDGs are comprehensive goals covering various spheres ranging from environment to humans and from biosphere to economic growth, in order to make this planet a better place to live, and to provide a liveable world to the coming generations.

Since 2015, these SDGs have served as the guiding light for all the major policies at international and national levels. The financial sector has also been greatly influenced by the SDGs. Insurance, which a crucial part of the financial sector is increasingly been recognised as a driver for sustainable development and economies across the world, including India are aligning the insurance sector to these SDGs.

2. Objectives and methodology

This study is a descriptive study based on secondary data with the following objectives:

1. To describe the evolution of SDGs.
2. To understand the role of insurance vis-a-vis SDGs
3. To present an account of the changes that have been witnessed in the insurance sector in the light of SDGs.
4. To present the changing outlook of Indian insurance sector in the post-SDG scenario.

3. Literature Review

A2ii (n.d.) has identified the nine sustainable development goals where insurance can play a direct and important role. These SDGs are - No Poverty, Reduced Inequalities, Zero Hunger, Good Health and Well-being, Gender Equality, Decent Work and Economic Growth, Industry Innovation and Infrastructure, Climate Change and Partnerships for Goals.

Holliday, Remizova and Stewart (2021) have provided a detailed account of the research that has been carried out in the area of insurance vis-à-vis SDGs. As per their analysis, research has majorly focussed at understanding SDGs and insurance in a generalised manner instead of looking at the role of insurance in achieving the individual SDGs. According to their study, the SDGs where insurance has a significant impact are- climate action, safe cities and communities, good health and well-being and reduction of inequality. The SDGs where insurance can have a strong impact are- no poverty; decent work and economic growth; zero hunger and food security. "Insurance regulators can engage through global platforms of insurance supervisors and regulators to strengthen the understanding of sustainability issues amongst the entities which they oversee and the challenges facing the insurance sector, particularly in developing countries, from incorporating these issues and goals into their operations."

Pfiefer and Langen (2021) has highlighted the role of insurance SMEs, which represent a significant number of companies in the insurance industry of Europe, in the achievement of SDGs. "Due to their flat management hierarchies and local business orientation, they are able to comply with almost all legal ESG demands without accumulating a higher risk profile, and can easily serve as forerunners in the propagation of ESG principles in the society."

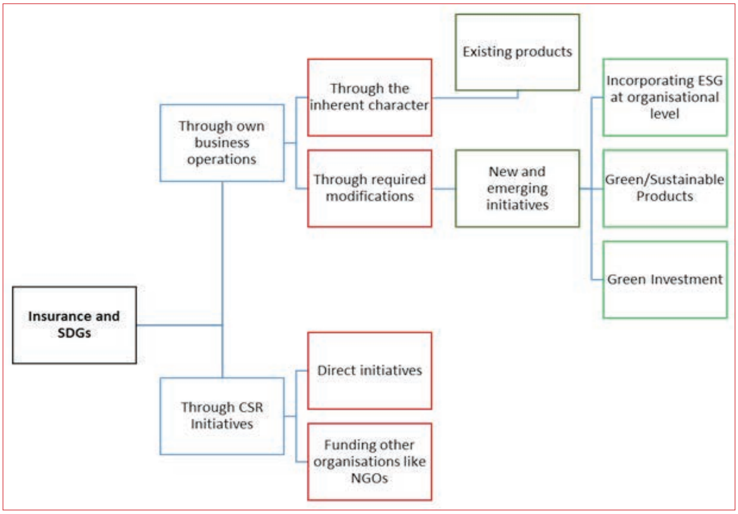
Goda and Jha (2022) have highlighted the importance of insurance in achieving sustainable development and have identified the challenges in the process of using insurance for sustainable development- affordability; insufficient coverage; lack of awareness; limited data for designing effective insurance products; and moral hazard.

Pranugrahaning et al. (2023) have highlighted the role of multi-national enterprises (MNEs) in general and financial and insurance sector, in particular in the achievement of sustainable development. Corporate Sustainability Assessment (CSA) framework that encompasses three areas- sustainability governance system, measurement for corporate sustainability performance, and reporting for corporate sustainability, helps companies to support their sustainability practices. Through a detailed study of Allianz Malaysia Berhad (AMB), they have presented a "comprehensive picture of not only the sustainability practices that have been implemented but also the important role that global and local operations operate to translate global strategies to achieve sustainability into meaningful and contextualised local agendas for sustainability."

4. Insurance vis-a-vis SDGs

Insurance sector can be a game-changer in the process of sustainable development because of its pervasive character and multifarious role. Figure 1 sums up the potential of insurance sector in the achievement of SDGs, which if harnessed appropriately, can contribute to a great extent in bringing the world closer to the realisation of SDGs.

Figure 3: Insurance and SDGs



Source: Self

As highlighted in Figure 3, insurance companies can lead to the achievement of SDGs in two ways- first through their own operations and second through the Corporate Social Responsibility (CSR) initiatives. These two are explained in detail below.

4.1 Through own business operations

The nature of insurance is such that it can directly contribute to the achievement of SDGs. Also, certain desired modifications are being made in the operation of the insurance companies which can help in harnessing the full potential of insurance in the achievement of SDGs. The way inherent character of insurance and the modifications (through the new and emerging initiatives) bring us closer to SDGs is explained below.

4.1.1 Through the inherent character

Insurance companies perform the dual role- protection from risk and providing long-term investment for the economic growth. Some of the SDGs are addressed through the existing/traditional insurance products and insurance sector has been fuelling the economic growth by providing long-term funds. Security or protection is a feature which is embedded in every insurance product and thus insurance serves as a strong tool in combating any sort of uncertainty by ensuring preparedness to face the unpredictable situations and losses arising out of them. Therefore, through its inherent character itself, insurance is capable of directly helping in the achievement of following SDGs- No Poverty; Zero Hunger; Good Health and Well-being; Quality Education; Gender Equality; Decent Work and Economic Growth; Industry, Innovation and Infrastructure; Reduced Inequalities; and Climate Action.

4.1.2 Through required modifications

Insurance companies have started modifying their own operations in three ways- their functioning, their products and their investment strategies, to better align them with the SDGs. These three modifications are explained below.

Modification of Functioning

At the organisational level, insurance companies have started incorporating the Environmental, Social and Governance (ESG) factors. Examples of incorporating environmental factors are- use of LED lights in offices, shifting to paperless transactions, using solar energy etc. Social concerns are being incorporated by providing engaging work to the employees; ensuring their physical, mental and emotional well-being; taking care of their families and so on. Governance can be and is being made more responsible by bringing transparency, better reporting, ensuring confidentiality of the clients' data etc. Many of the leading insurance companies have started addressing the ESG issues at their organisational level and others are in the process.

Designing new green/sustainable products

The main business of insurance is to cover the risks. Insurance business has to identify new and emerging forms of risk and develop new products to cover these risks and ensure adequate protection. Climate change, pollution, chemical and biological hazards etc. are the new forms of risk that are witnessed in the wake of environmental degradation. Insurance sector can design the sustainable/green products for covering these risks and contribute in adaptation to these risks.

Secondly, as there is a growing need to promote environmentally reponsible behaviour, insurance companies can incorporate such features in their products that incentivise green behaviour. For example, pay-as-you drive insurance, premium discounts for taking care of health, lower premiums for cars using green fuel and so on.

Also, as individuals and businesses are increasingly being sensitised towards using environment-friendly products and resources; and adopting sustainable behaviour, when they start doing so, it brings a new set of challenges and risks. The traditional insurance products don't cater to such risks. So, here insurance sector can fill the gap by designing new products that protect individuals and businesses who adopt the sustainable technologies and resources by protecting them from the risks involved and thus encouraging a smooth transition to the sustainable practices. For example, green building insurance, renewable energy insurance etc.

Thus by designing green/sustainable insurance products, insurance companies can help in adaptation and mitigation of risk arising from climate change.

Modification of investment strategies

Another important role played by insurance sector is providing huge amount of long-term investment funds to the economy. The premiums collected by insurance companies are invested in various sectors thus contributing to economic growth. By making a careful choice about the projects and companies where they invest, insurance companies can make a quantum change in the development process. If they choose to invest in green projects or organisations that are reducing the carbon-footprints, contributing to the betterment of the environment and the planet as a whole, it will give a major boost to these organisations and thus promote sustainability.

4.2 Through CSR Initiatives

Other than their own business operations, insurance companies also engage with the environment and communities through their CSR initiatives. These CSR initiatives are either undertaken by the insurance companies on their own or through funding other social and Non-Government Organisations (NGOs) to work towards the betterment of the people and the planet. Insurance companies have been engaged in various CSR activities like education, health, sanitation, forestation, safe water, skill, employability, women empowerment, rural development and so on, thus touching upon and bringing about qualitative change in millions of lives across the various areas as envisaged in the SDGs.

To summarise the discussion so far, a detailed account of the way insurance helps in the achievement of the SDGs through its various facets (existing and emerging) is given in Table 2.

Table 2: Role of Insurance vis-a-vis SDGs

SDG	Role of insurance	Strategy	Insurance Products
No Poverty	Insurance products help the poor to face uncertainties related to health and life	Existing products	Micro insurance, health insurance
Zero Hunger	Insurance products are designed to compensate for losses arising out of crop failures due to natural hazards and climate change.	Existing products	Traditional crop insurance
		New products	• Mobile apps and web-based platforms to access multiple sources of risk information • Use of digital technologies to develop tailored insurance solutions covering risks like drought, hail, storm, rain etc.
Good Health and Well-being	Increasing number of health issues require appropriate medical treatment. Insurance products are designed to cover the expenditure related to various medical ailments. Insurance companies can also promote good health by incentivising preventive measures.	Existing products	Health insurance
		Behavioural modification	Designing products that provide premium discounts for taking care of the health. Here, again technology like mobile apps, digital devices and trackers serve as an enabler to monitor the health initiatives by individuals
Quality Education	In order to ensure that children receive quality education and there are no drop outs because of financial crisis or untimely demise of the parent(s), insurance companies have designed the education plans.	Existing products	Child Education plans
		CSR initiatives	Free education to underprivileged children, vocational training, adoption of schools etc.

SDG	Role of insurance	Strategy	Insurance Products
Gender Equality	Taking cognisance of the special needs of women, insurance companies, along with their existing products, have started designing specialised products for women catering to maternity, other health issues and financial emergencies.	Existing products	Health insurance, life insurance for all
		New products	Women-centric insurance products like women health insurance
		CSR initiatives	Women empowerment initiatives through education, skill development, employability and so on
Clean Water and Sanitation	Majorly, through the CSR initiatives, insurance companies can contribute to this SDG.	CSR Initiatives	Cleaning of water bodies; restoration of rivers, sanitation initiatives, constructing toilets, waste-recycling etc.
Affordable and Clean Energy	Insurance, through its emerging green products is covering risks associated with renewable energy business so that more organisations can start such business. Also, insurance can contribute through careful investment in organisations that produce clean energy.	Designing new products	Renewable energy insurance, Green building insurance; Electric vehicle insurance etc.
		Green Investment	Investment in solar power projects, wind energy, electric vehicle manufacturing organisations and so on.
Decent Work and Economic Growth	Insurance contributes to workplace safety through its preventive measures. By providing adequate protection to Micro, Small and Medium Enterprises (MSMEs) against the insurable risks, insurance promotes economic growth. Also, insurance sector provides long-term investment funds to fuel economic growth.	Existing products	Keyman Insurance; Employer-employee insurance, Family Protection Insurance; Workmen compensation liability insurance; Group health insurance
		Behaviour modification	Giving guidance and premium discounts to organisations ensuring workplace safety
Industry, Innovation and Infrastructure	Insurance enhances business resilience by empowering and equipping organisations to face financial losses arising out of uncertain business environment. It also fosters innovation by allowing businesses to venture into new areas by designing new products to cover the risks associated with the new, innovative carbon-reducing and environment-friendly initiatives	Existing products	Traditional: Fire insurance, flood insurance, marine insurance etc.
		New products	renewable energy insurance, green building insurance etc.
		Green investment	Investing in those industries and projects that reduce carbon footprints, pollution and harm to the environment
Reduced Inequalities	Insurance empowers those with limited means to face the uncertainties of life	Existing products	Micro insurance, health insurance

SDG	Role of insurance	Strategy	Insurance Products
Sustainable Cities and Communities	Insurance sector can be big behaviour modifier at the individual and organisational level. By incentivising sustainable behaviour through premium discounts, insurance companies can transform the cities and communities into more sustainable ones	Promoting sustainable behaviour	Pay-as-you drive insurance; premium discounts on using renewable energy etc.
		CSR initiatives	Awareness programmes, Road-Safety initiatives, Tree plantation, e-waste management etc.
		Green investment	Funding renewable energy projects etc.
Responsible Consumption and Production	Insurance can promote responsible consumption and production by incentivising sustainable and environment friendly behaviour at individual and organisational level	Promoting sustainable behaviour	Premium discounts on use of renewable energy; discounts on health insurance premium for consuming healthy food; green building insurance; discounts for reduction in wastage of resources through efficient processes and so on
Climate Action	Rampant economic growth has resulted in environmental imbalances and climate change. Insurance companies have started designing products to face the risks arising out of the climate change. They can also mitigate risk by promoting behaviour modification through premium discounts. CSR initiatives undertaken by insurance companies also help in combating climate change.	New products	Catastrophe insurance, weather insurance, agricultural insurance
		Behaviour modification	Pemium-discounts for doing digital transactions, using mobile apps, using renewable energy and so on
		Green investment	Investing in those companies that do not add to the problem of climate change
		CSR Initiatives	Forestation, bio-diversity restoration, water body rejuvenation etc.
Life below water	Through targeted CSR initiatives; investing in organisations that do not cause harm to the water through their harmful and hazardous waste; and through incentivising sustainable behaviour, insurance sector can contribute to life below water.	CSR Initiatives	Initiating and funding projects like cleaning of rivers, preserving life under water etc.
		Green Investment	Investing in companies that engage in proper waste-disposal practices
		Promoting sustainable behaviour	Giving premium discounts to organisations that do not discharge their waste into the water bodies and adopt proper waste disposal.
Life on land	Emerging green products that cover losses arising out of harmful environmental impact and pollution help to protect life on land and make organisations more responsible and careful of their actions. Insurance sector can also contribute to this SDG through its CSR initiatives and through investing in organisations that do not cause harm to life because of their functioning.	Green products	Environmental liability insurance, pollution liability insurance
		CSR Initiatives	Forestation drives; promoting bio-diversity; solar energy integration
		Green Investment	Investing in companies that do not cause harm to the life on land through their operations

SDG	Role of insurance	Strategy	Insurance Products
Peace, Justice and Strong Institutions	Insurance companies are increasingly focussing on preventive measures to reduce the occurrence of accidents and disputes, to avoid heavy claim pay-outs, thus promoting peace. They also promote strong institutions by building resilience and capacity to face risks. Their own ESG initiatives can lead to building strong organisations.		
Partnership for Goals	Insurance companies and regulators are collaborating with various stakeholders like Govt., international bodies, to bring about necessary changes to harness the full potential of insurance sector in achieving SDGs		

Source: Self

5. Indian Insurance Sector and SDGs

According to Riachi (2021), "India ranked 45th among the 48 countries in the Climate Economics Index, which examines the overall climate resilience of the countries that together represent 90% of the world economy. India's agriculture and tourism sectors, which respectively accounted for about 18% and 9% of total GDP in 2019, are particularly susceptible to fallout from climate change." This report further states that the south and south-east Asian economies will be the most affected by the physical risks and transaction risks arising out of climate change and thus require concrete action-plan to mitigate and adapt to these risks.

According to ET (2022), as per the latest rankings on SDGs, India is now behind all south Asian nations except Pakistan, which stands at 129. The south Asian countries ahead of India are Bhutan ranked 75, Sri Lanka 87, Nepal 96 and Bangladesh 109.

Covering risks is the forte of insurance sector. Thus, insurance companies need to be pro-active in designing insurance product that can cover various risks arising out of climate change. The slow progress of India on SDG path, makes it all the more important for the insurance sector to speed up its actions.

5.1 CSR and ESG Initiatives

Some of the SDG initiatives (covering CSR and ESG) taken up by major Indian insurance companies are given in Table 3.

Table 3: SDG (CSR and ESG) Initiatives by Indian Insurance Companies

Name of the Company	SDG Initiative
HDFC Life (n.d.)	Education and livelihood; Girl child education; quality health and safe sanitation services; increased use of eco-friendly technology; consumption rationalisation to reduce carbon footprints
ICICI Prudential Life Insurance (n.d.)	Sustainable employment for No Poverty; Skill development programme for Gender Equality; use of 'Green Energy' at all offices to combat Climate Change; Anti-bribery policy, transparent management to build Peaceful and Strong Organisation.
Kotak Life Insurance (n.d.)	CSR initiatives focus on activities related to quality education to the underprivileged; health care and sanitation, maintaining ecological balance, protection of flora and fauna, animal welfare, agriculture, agro- forestry, forestry, conservation of natural resources and maintaining quality of soil, air and water.

Name of the Company	SDG Initiative
ICICI Lombard General Insurance Co. (n.d.)	Caring hands- eye check-ups for underprivileged children Ride to safety- safety for children riding 2 wheelers as pillion, awareness rallies, distributing helmets Niranjali- providing safe drinking water through installation of water-purifiers; Healthy villages- providing medical equipment to PHCs and organization of wellness camps Installation of solar panels, support to road accident victims, medical camps
Reliance General Insurance (n.d.)	Education and livelihood; environmental sustainability; rural development, national heritage protection; eradicating hunger and poverty; promoting gender equality

Source: Self based on web resources

Table 3 shows that most of the Indian Insurance companies are engaging with the SDGs through their CSR initiatives and incorporating ESG factors at their own organisational level.

5.2 Green Insurance Products

As far as the green insurance products are concerned, following are some of the examples:

(a) City green Auto insurance policy covering damages to e-rickshaws

(b) Pollution Liability insurance by TATA AIG Insurance Company and New India Assurance Company

(c) Environment Liability insurance by HDFC Ergo General Insurance Company and ICICI Lombard Insurance Company

(d) Earthquake Home insurance and eco-friendly house insurance by Bajaj Allianz Insurance Company

(e) Crop Insurance by Tata AIG General Insurance, Reliance General Insurance, IFFCO-Tokio General Insurance, Bajaj Allianz General Insurance and SBI General Insurance

5.3 Green Investments

Insurance Regulatory and Development Authority of India (IRDAI) has encouraged the insurance companies to invest in sovereign green bonds and this investment will be treated as investment in infrastructure. Also, some of the major insurance companies like ICICI Prudential Life Insurance, PNB Metlife, Bajaj Allianz, Max Life, TATA AIA and HDFC Life have launched the sustainable equity funds wherein the premium collected will be invested in organisations that promote sustainability.

6. Conclusion

The adoption of SDGs in 2015 marked a series of policy reforms across the world. Various sectors including the financial sector started aligning themselves to the SDGs. Insurance sector is one sector which because of its unique character of risk carrier and investment provider, is very well placed to act as a catalyst in the process of achievement of the SDGs. Insurance sector, through its inherent character and through making certain modifications in its functioning, products and investment; can bring us closer to SDGs. These modifications have already started taking place. If we look at the Indian scenario, it can be seen that Indian insurance sector is gradually adapting to the SDGs. The transition, though slow is moving in the right direction. It requires more co-ordinated efforts on the part of the Government, Regulator and Insurance companies to speed up the process of transition so that insurance sector can contribute its best to the achievement of SDGs. TJ

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Insurance Landscape in 2030

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Abstract

By 2030, the Indian insurance landscape will have undergone major change. Digitalization, artificial intelligence, and data analytics will revolutionise the sector, allowing insurers to create personalised, accessible, and inexpensive products. Micro insurance will help marginalised populations overcome the coverage gap, while health insurance will become more holistic, emphasising preventive treatment and wellness. The success of the sector will be determined by regulatory reforms, market consolidation, and a customer-centric approach. As India's economy expands, the insurance industry will play a critical role in protecting individuals, businesses, and the nation's wealth. In addition, the government and regulators can play a crucial role in promoting insurance penetration by implementing policies and regulations that encourage innovation and competition in the sector. Insurance sector needs a sustained thrust which will result in potential benefits which are significant, including increased financial protection for individuals and families, greater financial inclusion, and a more robust insurance sector that can support economic growth and development. India's insurance penetration is very low at just 4 %. The insurance industry has grown to be a crucial part of the nation's financial landscape as a result of the economy's rapid evolution, shifting demographics, and growing knowledge of risk management. This article examines the projected course of India's insurance market through the year 2030, outlining significant trends, difficulties, and opportunities that are likely to influence the sector's future.

Keywords

Insurance Penetration, PESTLE Analysis, Financial Inclusion.

I. Introduction

The insurance industry is crucial to a country's sustainable development. Insurance provides chances for risk reduction by allowing individuals to hedge risks and lowers the adverse effects of disasters and macroeconomic shocks on household welfare and economic activity (Asongu et al., 2020). In addition, insurers serve as intermediaries by mobilizing domestic capital and converting it into long-term investments. This very intermediation function has positive implications on the expansion of financial markets and economic development. The insurance sector has the potential to boost economic expansion through mediating financial transactions, reducing the public's appetite for risk, and creating new jobs. At a global level, insurance market development has been found to be associated with economic growth, as supported by several studies in developed nations (Adams et al.,2009; Cristea et al.,2022) as well as developing world(Arena, 2008;Alhassan,2016).Insurance has a long and illustrious history in India. Insurance business is a combination of savings and investment which serves the dual purpose during the life span of a single individual policy. It not only protects the individuals or their family members from any kind of unforeseen events it also helps to generate enough capital to fund the expansion of Indian economy. The importance of the sector is so strong that overall growth of GDP affects due to change in insurance and pension funds. Research studies in Indian context have depicted a causal link between higher rates of life insurance coverage and higher rates of economic growth over the long term(Ghosh,2013). The vast nature of Indian economy and its huge untapped population base gives immense opportunity for every player to grow and sustain and as the nature of market is changing its business mechanism is also keep on changing.

This research article discusses how the PESTLE framework's various dimensions can help aiding in understanding the key vectors which will shape the future of Insurance in India.

Review of Literature

Research studies related to insurance development and penetration have focussed on different aspects of insurance. One of them has been the determinants of insurance demand such as economic growth (Beenstock et al.,1986). Consequently, research has shaped in this arena regarding the insurance's effect on economic growth in general, or even separately studying association between life insurance or non-life with economic growth. The expansion of the insurance industry influences growth primarily through increased productivity in developed nations and encourages capital accumulation in developing nations (Ul Din et al.,2017). In the context of developed world, many studies have shown insurance market development to be positive for economic growth(Adams et al.,2009;Ege & Bahadır,2011; Pradhan et al.,2015). Gross claims payments and gross operational expenses have a large and favorable relationship with economic expansion in case of OECD countries (Apergis & Poufinas, 2020). A positive association has been found between insurance activities and economic growth for many European countries (Kugler and Ofoghi, 2005; Chang et al.,2014). Even for developing nations, economic growth has been found to be positively linked to economic growth (Ghosh,2013;Akinlo,2015). Insurance was found to boost Ghana's economy in the short and long term(Osei-Bonsu et al.,2022). Insurance penetration has a greater impact on economic growth for developing nations as compared to the developed ones(Curak et al.,2009;Han et al.,2010).

Research studies have also concentrated widely upon the factors driving insurance penetration. Economic factors such as income of population and savings rate are key drivers of insurance growth (Li et al.,2007; Alhassan & Biekpe,2016; Yadav & Sudhakar,2018). Especially, non-life insurance premiums have been elastic as regards to real income(Lee & Chiu, 2012). Other economic indicators including inflation and financial sector development also influence use of insurance (Beck & Webb, 2003; Zerriaa et al.,2017). Economic policies, especially fiscal policy and monetary policy, which can influence interest rates impact the insurance market (Berends et al.,2013). The nations with the lowest insurance market penetration and density are those where interest rates are high (Flores et al.,2021). Income, unemployment, interest rates, and inflation negatively impact the prevalence of life insurance in BRICS countries (Segodi & Sibindi,2022). Also, demographic factors such as age and gender affect demand for life insurance (Lin et al.,2017). Education level is also influential in purchase of insurance as financially literate individuals have a higher probability to purchase life insurance (Lin et al.,2017). A favorable correlation exists between several financial literacy measures and the likelihood of owning life insurance as well as the premium paid(Wang et al.,2021). On the technology front, Asongu et al.,2020 studied ICT as a crucial policy tool which can be applied to governance channels to encourage insurance consumption in Sub-Saharan Africa. The consumption of life insurance is positively impacted by increasing fixed broadband and mobile phone penetration (Asongu & Odhiambo,2019). Merchandise trade and business freedom ompact insurance penetration in emerging nations (Elango & Jones, 2011).

II. Research Methodology

This study aims to explore the factors influencing the growth in insurance penetration rate and density in India and identify the best practices which can ensure we benchmark amongst the top countries by 2030. The research methodology for this study is based on secondary data analysis, which involves collecting and analyzing data from various sources such as academic journals, industry reports, government publications, and other relevant sources.

1. **Literature Review:** A comprehensive literature review was conducted to identify the current Recommendations: state of insurance penetration in India, the factors influencing insurance adoption, and the best practices for increasing insurance penetration
2. **Data Collection:** Secondary data was collected from various sources such as the Insurance Regulatory and Development Authority of India (IRDAI), industry associations, and research reports on the insurance sector in India.
3. **Data Analysis:** The collected data was analyzed to identify trends, patterns, and gaps in the current insurance landscape in India.
4. Based on the findings of the research, recommendations were developed for insurance companies, policymakers, and regulators on the best practices for increasing insurance penetration and density in India by 2030.

III. Discussion and Analysis

Insurance Penetration & Density in India

Two essential measures of the insurance sector's development in any country *are insurance density* and *insurance penetration*.

Insurance density is the ratio of premium underwritten in a given year to the total population of that country, whereas ***Insurance penetration*** is the ratio of premium underwritten in a given year to the Gross Domestic Product (GDP).

This research study will focus on insurance penetration and the aim to double it by 2030 for India.

Insurance Penetration = [Premium underwritten in a given year / GDP]..... *equation 1*

The average GDP growth over the last 22 years has been over 6%. To understand the formula better, the premium underwritten in FY **(in $ Bn)**

FY	Life	Gen	Total	Annual Change
FY'20	80.6	26.49	107.09	-
FY'21	90.4	26.52	116.92	9.18%
FY'22	89.3	28.14	117.44	0.44%
FY'23	99.5	31.53	131.6	12.06%

In USD $ Bn

Region	Life	Gen	Total
Advanced Markets	2140.47	3356.4	5496.87
Emerging Markets	672.56	612.8	1285.36
Asia Pacific	1032.81	692.16	1724.97
India	**99.5**	**31.53**	**131.03**
World	2813.03	3969.2	6782.23

Table 1: Premium Underwritten in India in last 4 FY and Global Comparative of Premium Volume by region.

India's GDP growth over the past 5 years is as under (see Table 2). Currently, insurance penetration in India is **4.0 percent of GDP (FY'22),** compared to the global average of 6.8 percent. In the developed markets like USA and Canada, the penetration rate is in double digits (11.8% in FY'20). The advanced Asia pacific countries have penetration at 9.3% in FY'20.[4]

According to a Swiss Re Sigma report, the insurance penetration of the life insurance business in India has decreased from 3.2% in 2021-22 to 3.In 2022-23, the Non-Life Insurance sector maintained a 1% growth rate. India's insurance penetration fell to 4% in 2022-23 from 4.2% in 2021-22. The life insurance density reached USD 70 in 2022-23, up from USD 69 in 2021-22 (USD). However, non-life insurance density remained stable. In 2022-23, India's insurance density increased to USD 92 from USD 91 in 2021-22. The global insurance penetration and density for the life USD segment was 2.8% and 354 and for the non-USD life segment it was 4% and 499, according to the Swiss Re Sigma World Insurance Report. In

2022, the overall insurance penetration and density were 6.8% and 853 USD, respectively.

It is in India's best interests to ensure that the country's economy grows sustainbly, which compels the insurance industry to pursue faster but more sustainable growth in order to increase the penetration rate above the global average, surpass it, and double it by 2030.

The regulator and the stakeholders in the Insurance sector would have limited control on the factors impacting the GDP but they all certainly can play a constructive role to increase the numerator in the equation 1.

India GDP - Historical Data[1]			
Year	**GDP**	**Per Capita**	**Growth**
2022	$3,385.09B	$ 2389	7.45%
2021	$3,150.31Bn	$2,277	17.92%
2020	$2,671.60Bn	$1,933	-5.78%
2019	$2,835.61Bn	$2,072	4.91%
2018	$2,702.93Bn	$1,998	6.45%
2017	$2,651.47Bn	$1,981	6.80%

Table 2: India GDP Growth Rate and Historical Data

Towards doubling Insurance Penetration & Density by 2030-A PESTLE Analysis[2]

Following the opening of the insurance sector, the Indian life insurance industry has welcomed global foreign players of repute which has necessitated a strategic approach by the regulator-IRDAI alongwith a supportive role by the Government in all areas. **India's insurance penetration rate stood at 4.0% in FY 22** (Life Insurance: 3.0% and General Insurance: 1.0%) [2a] (Refer Chart 1 and 2)

PESTEL is an acronym that stands for **Political, Economic, Socio-cultural, Technology, Legal, and Environment.** In this analysis, the industry is evaluated based on the six factors listed above, with some recent models updating the factors **ethics** and **demographics,** and the updated acronym is **STEEPLED.**

1) **Political Will-**

a. **Strict implementation of MV Act,1988:** to a report by the Insurance Information Bureau[2]. In India, there were over 30.48 crore automobiles on the road in 2023, and over 54% of those vehicles without insurance. The penetration of General Insurance will automatically improve if the state governments take these laws seriously. Over 1300 road accidents take place every day out which 425 turn fatal in India.[3]

b. **Tax benefits to policyholders:** Sec 80C was introduced in 1967 and replaced by Sec 88 in 1991 for income tax rebates. Under the new guidelines the new regime does away with such sections. Government must focus solely on long-term savings in insurance if insurance penetration is to be increased. Despite constant pressure from the industry, the 1.5 Lacs deduction threshold has not increased in recent years to keep up with inflation.

c. **More Insurance companies' needed-**India is the seventh largest and second most populous nation in the world. We have 58 Insurance companies' whereas countries much smaller in size and population have insurance companies much higher in count than India. USA has 5929 insurance companies, Italy 1257, Germany 530, UK 361, even the SAARC countries like Bangladesh has 78, Pakistan 54 and Nepal 39 insurance companies[4]. At present, the FDI limit is 74% for insurance companies and 100% for brokers and insurance intermediaries which is a welcome move by the Regulator-IRDAI.

d. **Reforms in education:** Importance of Insurance needs and its awareness to be engrained in the school curriculum so that the existing and future generations embrace the products willingly.

e. The Government of the day would need to take some bold and reformative steps to drive **the *"insurance inclusion agenda".*** Sections 415, 420, 422 and 423 of the CrPC,1973 need to be amended to make it extremely stringent so that businesses that go by the mobilization of money through the NBFC route or similar classifications think twice before raising crores of money through unethical activities. These financial frauds not only erode public money but also weaken public confidence in insurance companies and their intermediaries. To punish such offenders uniformly, regulators must work together. The perpetrators must not be permitted to hide out in our legal or regulatory system's shortcomings.

2. Economic factors:

While the pandemic affected everyone, the Indian economy rebounded and now ranks fifth among all countries in terms of nominal GDP and third in terms of purchasing power parity (PPP) after China and the United States. The Covid 19 pandemic has taught us to think creatively about how to improve and handle the distribution problems associated with insurance. When compared to the conventional agency force, bancassurance and other alternative channels are still the most cost-effective means of distribution.

a) **Focus on Bancassuarance:** From Corporate Agency to Insurance Broker, Banks should be allowed to distribute products of all insurance companies. This not only will ensure healthy competition but avoid concentration risk and the first movers advantage that few insurance companies have had viz HDFC Life, PNB Met Life, Star Union Daiichi and Canara HSBC Life to name a few. The late entrants have had no such advantage. LICI has the largest share of Bancassurance partners which are just not leveraged, 94% of its sales still come through the Agency force. There are approximately 15 bank branches catering to a population of 1 Lac in India. Europe, Russia, Australia have over 25 branches per lac of population.[6]

b) **Leverage and Optimize the potential of India Post-** Postal Life Insurance operates in isolation and has a network of 1.55 lakh post offices out of which 1.35 are in rural India. The 150 year old institution has over 5 lakh employees[7]. IRDAI should explore giving them license to operate as Broker so that they can offer multiple insurers and not restrict themselves to PLI or government sponsored insurance products like PMJJBY,PMSBY or APY.

c) **Thrust on Insurance Inclusion & Productivity of PSU bank staff:** The concept of isolating roles between banks and other financial activities has become redundant throughout the world. The regulators, IRDAI and RBI, must work together to improve the productivity and efficiency of PSU employees so that there is a greater emphasis on cross-selling and generation of risk-free income with a greater emphasis on insurance inclusion. In Europe, over 50% of Insurance sales is generated by Banks.

The possibility of' 'reverse bancassuance', a new concept for these new insurance entrants alongside existing insurers, should be explored wherein insurance company sales staff actively participate to generate leads for multiple asset products of their bank partner, thereby building synergy and a win-win opportunity for both.

3. Socio Cultural Factors

a) Favorable Demographics: As of 2023, India has the largest youngest population with median age of 28 years. About 90% of the population is below 60 years old by 2021. As per CRISIL research. 63% of them will be between 15 and 59 years.[5]

b) Urbanization: The country's urban population has been increasing over the decades. In 1950, 17% of total population was in urban areas, which increased to 34% in 2018. This is expected to reach 37% by 2025. Increased urbanization has a trickle-down effect in the economy.[4]

c) Increased awareness of financial products: As per Global Findex Database, India's financial inclusion improved significantly, from 53% in 2014 to 80% in 2017. This was possible through the Governments push for Pradhan Mantri Jan Dhan Yojana (PMJDY). As of 31st Mar'2021, 422 Million accounts were opened and had a cumulative deposit of Rs 1455 Billion, 66 percent of these accounts were in rural and semi-urban areas.[4]

4. Legal Factors:

To respond to changing market conditions, the insurance business in India will undergo regulatory adjustments. The Insurance Regulatory and Development Authority of India (IRDAI) would encourage innovation while also protecting consumers and guaranteeing fair practises. The legislative framework will encourage insurance and technology enterprises to collaborate, creating collaborations and facilitating the use of sophisticated technologies. Furthermore, market consolidation is anticipated as larger firms purchase smaller insurers, resulting in higher competition, economies of scale, and improved industry stability.

a) IRDAI will need to come out with guidelines for Insurers to have forward looking relevant products in which the Insurers should keep in mind the "time value of money" concept.

For eg. A life cover (term plan) for INR 1Crore may sound big today but will be of little value for the nominees after a few decades (around INR 9.72 Lacs after 40years) as the policy doesn't consider the time value of money and is not indexed to inflation.

Sum Assured (Life Cover) in Rs	1,00,00,000
Avg Inflation Rate	6%
Term (in Years)	40
Present Value (in Rs)	9,72,222

Table 3: Present Value estimation of Future single cash flow.

The new generation will see through such poorly designed and redundant products and it's important to have better and innovative products introduced especially keeping the millennials in mind.

b) Regulator would need to mandate declaration of ***"lapsation profits"*** in the profits declared by Insurer. Also, Insurers should be prohibited to issue fresh policy to a customer in case his earlier policy stands lapsed.

c) **Creating Awareness for Insurance:** It is an ongoing activity throughout the entire year, not just the final three months of any fiscal year. In addition to CSR, insurance companies should contribute a portion; say 10–15% of their lapsation profit, to the regulator to raise awareness and trying out new channels including schools, banking correspondents, NGOs and digital means to spread awareness.

d) Ease of Licensing process: IRDAI would need to re-visit its licensing process in line with best practices abroad and make it less time consuming and make on boarding /transfer of agents easy.

5. Technology:

Technology will play a critical role in altering the insurance environment in India over the next decade. Insurers will use digital platforms, data analytics, and artificial intelligence to improve their operations, streamline processes, and provide personalised consumer experiences. Automation will reduce response times and improve customer satisfaction by simplifying underwriting, claims processing, and policy administration. Insurtech firms will grow as they introduce novel solutions such as usage-based insurance, parametric insurance, and peer-to-peer insurance to meet consumers' changing needs. Numerous research studies have focussed on the impact of information and communication technology (ICT) on development outcomes within and between developing nations. India has the highest year-on-year growth in terms of Internet penetration. As the population adapts to the ease of digital payments, insurers will need to embrace technology across all functions in order to meet the expectations and demands of the younger generation and the nuanced customer.

5. Environmental factors: Suitable environment friendly products will be encouraged which would provide suitable rebates in case eco-friendly methods are used viz PM Fasal Bima Yojana and awareness created not only for crop produce but also towards Micro Insurance Products to improve insurance inclusion. The Indian insurance business is set to meet the needs of underserved areas through microinsurance by 2030. With a sizable section of the population remains uninsured, insurers will focus on producing affordable and accessible policies that are customised to the specific needs of low-income groups. Microinsurance offered via digital means will provide coverage to previously excluded persons, shielding them from risks and giving financial security.

IV. A Peek Into The Future;

a) Benefit of Mortality rates to consumers in both life and health insurance.

b) Digital transformation and rise of insuretech: Insurtech startups will grow, bringing innovative solutions and upsetting existing insurance models, especially in micro insurance, parametric insurance, and peer-to-peer insurance.

c) Increase in Insurance penetration and density: As a result of positive reinforcements to the sector by all stakeholders, doubling the key parameters should be a reality by 2030.

d) Customization and Personalization: Insurance solutions will become increasingly personalised and suited to individual needs as technology advances. Data analytics, machine learning, and artificial intelligence will be used by insurers to acquire insights into client behaviour, risk profiles, and preferences. This will allow for the creation of bespoke insurance products that provide flexible coverage, competitive pricing, and personalised experiences. Furthermore, usage-based insurance models, such as pay-as-you-drive or pay-as-you-use, may become increasingly common, allowing customers to pay premiums based on real usage patterns or risk profiles.

e) Focus on Health, Protection and Retirement: With rising healthcare expenses, rising lifestyle diseases, and increase in lifespan, the demand for comprehensive health coverage and retirement solutions will skyrocket. Insurers will take a more comprehensive approach to health insurance, emphasising wellness programmes, preventive treatment, and sustainable retirement solutions. The integration of wearable devices, telemedicine, and digital health platforms will allow insurers to monitor policyholders' health, make personalised suggestions, and simplify remote access.

f) Regulatory reforms and market consolidation: The regulatory environment will develop to accommodate new technology, make insurtech collaborations easier, and increase consumer protection. Consolidation in the market is also projected, with larger insurers purchasing smaller firms, resulting in higher competition, economies of scale, and improved industry stability.

V. Conclusion

Development of insurance is crucial for economic growth of a country (Ghosh, 2013;Apergis & Poufinas, 2020). With India currently holding the tenth-place spot in the world's life insurance market, ahead of China (with 2.4% of the market) and the UK (with 3%), we are well-positioned to meet the growing demand of younger, digital-first consumers coming from smaller and newer geographies across both life and non-life insurance. The top four areas of disruption for insurance firms are customer experience, distribution costs, digital adoption and product innovation. As a result, the essential sectoral reforms identified by PESTLE analysis will be useful for all policymakers and stakeholders to achieve Insurance Density and Penetration of 2X by 2030, which is highly possible if the correct levers are pushed.

The researcher also suggest for enhancing financial literacy to increase life insurance penetration (Wang et al., 2021).Life insurance companies in public as well as private sector can enhance customer accessibility to insurance products through effective use of technology, including mobile phones (Asongu et al.,2020).This, in turn, will address accessibility and cost-efficiency concerns while improving client experience, resulting in a huge behavioural shift in the insurance business. TJ

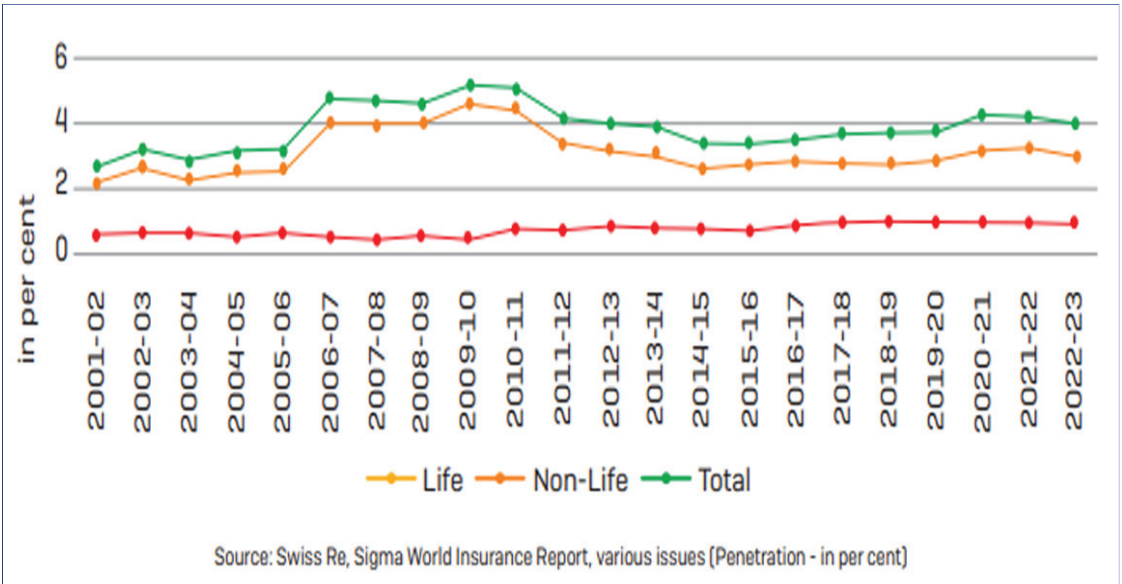

Chart 1: Trend in Insurance Penetration in India

Source: IRDAI Annual Report 2022-23

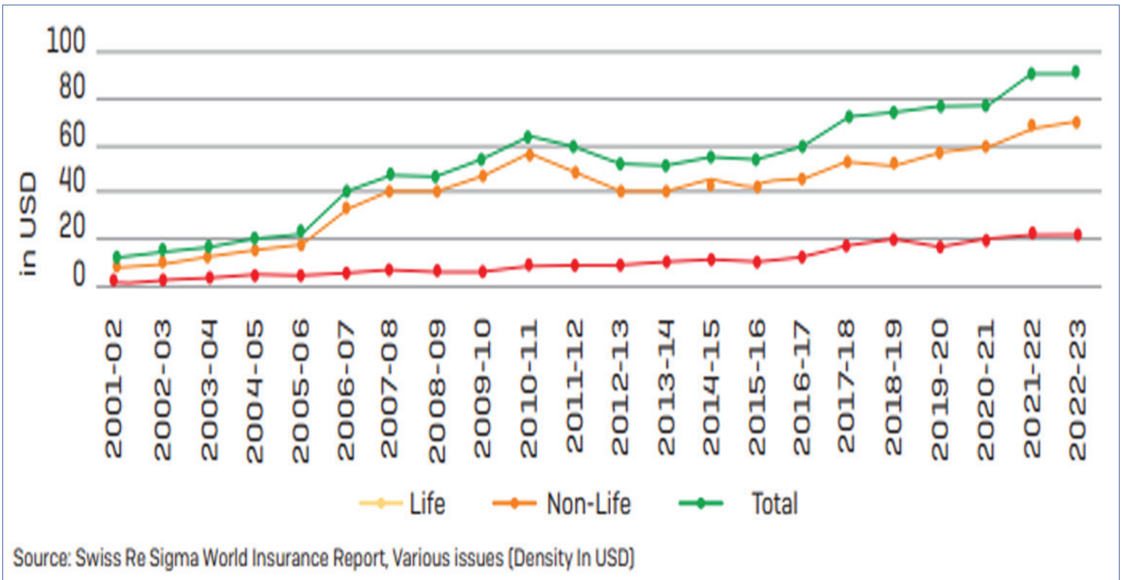

Chart 2: Trend in Insurance Density in India

Source: IRDAI Annual Report 2022-23

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The Changing Face of the Indian Insurance Sector: Trends, Challenges, and Opportunities

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Abstract

The Indian insurance sector is undergoing a remarkable transformation, propelled by technological advancements, shifting consumer preferences, and regulatory reforms. This article delves into the dynamic landscape of the Indian insurance industry, highlighting key trends, challenges, and opportunities that define its evolution. From the rise of insurtech startups and digitalization to the diversification of products and emphasis on customer-centricity, the sector is witnessing unprecedented changes. Additionally, the article addresses challenges such as low insurance penetration and compliance complexities, offering insights into the hurdles faced by insurers. Despite these challenges, there are substantial opportunities on the horizon, including rural market expansion, innovative product development, and strategic collaborations. By navigating these shifts and leveraging emerging opportunities, the Indian insurance sector is poised for significant growth, with the potential to positively impact the financial security of individuals and families across the nation.

Keywords

Insurtech Revolution, Digitalization of Insurance, Product Diversification, Microinsurance, Regulatory Reforms, Customer-Centric Approach, Data Analytics in Insurance, Insurance Penetration, Fraud Detection in Insurance, Rural Market Expansion, Innovative Product Development, Strategic Collaborations in Insurance Financial Inclusion, Healthcare Integration in Insurance, Risk Assessment in Insurance.

Introduction

The Indian insurance sector, once known for its cautious approach and limited outreach, is currently undergoing a remarkable transformation. This evolution is driven by a convergence of factors, including rapid technological progress, shifting consumer perspectives on financial security, and progressive regulatory reforms. Consequently, the insurance landscape in India is experiencing unprecedented growth and innovation.

This article delves into the intricate dynamics of this transformation, highlighting the crucial trends, challenges, and opportunities shaping the Indian insurance sector. From the rise of innovative insurtech startups to the sweeping wave of digitalization, these developments are fundamentally changing how insurance products are conceptualized, promoted, and provided to consumers. Moreover, this transformation extends beyond conventional boundaries, influencing areas like product diversification, microinsurance, and an intensified focus on customer-centricity.

While these transformative shifts are promising, they are not without their challenges. Issues such as low insurance penetration and the constantly evolving regulatory environment present significant obstacles. However, within these challenges lie prospects for expansion and innovation, especially in domains like expanding into rural markets, pioneering new product offerings, and forming strategic partnerships.

In this article, we embark on an extensive exploration of the evolving landscape of the Indian insurance sector. We uncover its various facets and delve into the strategies employed by insurers to adapt to this dynamic environment. Through a meticulous examination of each trend and challenge, we aim to present a vivid portrayal of an industry in transition, standing at the threshold of a new era.

1. Digitization and Insurtech: A Transformative Force

The insurance sector is experiencing a digital revolution, driven by the rise of insurtech startups. These innovative companies leverage cutting-edge technologies to streamline processes and create tailored insurance solutions. Digital platforms are central to this shift, offering customers unprecedented convenience, transparency, and efficiency in managing their policies.

Adapting to the New Normal

Traditional insurers face a pivotal choice - adapt or risk obsolescence. Many are embracing digital transformation, partnering with insurtech startups or developing in-house technological capabilities. This convergence of traditional and innovative approaches is reshaping the competitive landscape.

Data-Driven, Customer-Centric Insurance

The insurtech revolution goes beyond technology adoption. It's about reimagining the insurance experience. Through advanced data analytics and artificial intelligence, insurers can refine risk assessment, personalize offerings, and expedite claims processing. This customer-centric approach tailors policies to individual needs, enhancing overall satisfaction.

Embracing Technological Advancements

Blockchain and smart contracts are set to revolutionize claims processing, offering speed, transparency, and reduced disputes. Data analytics in underwriting leads to more accurate risk assessment, enabling competitive premiums based on behavior and lifestyle. This incentivizes healthier habits, ultimately reducing risk.

Navigating Regulatory Challenges

Regulators must strike a balance between fostering innovation and protecting consumer rights. They must adapt to the evolving insurtech landscape, providing clear guidelines and frameworks that uphold industry standards.

Charting a Customer-Centric Future

The digitization and insurtech revolution signify a pivotal shift towards a more dynamic insurance ecosystem. Insurers that embrace this revolution are poised for success, enjoying increased efficiency, enhanced customer experiences, and broader reach. With the continued maturation of insurtech and the emergence of new technologies, the future of the Indian insurance sector is bound to be characterized by innovation and accessibility, meeting the evolving needs of policyholders.

2. Product Customization and Diversification in Indian Insurance

Traditionally, insurance options in India were confined to life and health policies. However, the sector is experiencing a surge in diversification. Insurers are now rolling out specialized policies tailored to specific needs like critical illness, travel, cyber, and even pet insurance. This shift towards a more diverse range of products acknowledges the varied and evolving needs of consumers.

Meeting Unique Needs with Specialized Policies

Responding to changing lifestyles and emerging risks, insurers are designing policies that go beyond the usual offerings. Critical illness policies offer financial protection in the face of severe health conditions. Travel insurance now covers a wide range of scenarios, from trip cancellations to medical emergencies abroad. The rise of cyber insurance addresses the increasing threat of cyberattacks, providing coverage for data breaches and associated liabilities.

Empowering Policyholders Through Customization

In addition to diversification, insurers are emphasizing customization. Policyholders can now fine-tune coverage to their specific requirements, ensuring they receive precisely the level of protection they need. This shift empowers consumers, allowing them to choose the elements of coverage that align with their individual circumstances and risk tolerance.

Microinsurance for Inclusivity

Another noteworthy development is the ascent of microinsurance. This segment focuses on providing coverage to low-income individuals and families, addressing the insurance needs of a large population that was previously underserved. Microinsurance policies offer simplified coverage at affordable premiums, making financial protection accessible to those who may have been excluded from traditional insurance offerings.

Technology Driving Customization

Technology plays a pivotal role in enabling product diversification and customization. Advanced algorithms and data analytics allow insurers to assess risk profiles more accurately, leading to the creation of specialized policies. Digital platforms provide a user-friendly interface for policyholders to explore and select tailored coverage options.

Anticipating Future Trends

As insurers continue to innovate, the trend of product diversification and customization is expected to gain further momentum. The evolving landscape of risks, coupled with a deeper understanding of consumer preferences, will likely drive the introduction of even more specialized policies. This shift towards a more dynamic and personalized insurance market positions insurers to better meet the evolving needs of their diverse customer base.

3. Microinsurance: Bridging Gaps in Financial Protection

Microinsurance is a transformative force in India's insurance landscape, catering to an underserved demographic. It offers crucial financial protection against various risks at premiums tailored for low-income individuals and families. This rise not only extends insurance's reach but also bolsters financial inclusivity across the nation.

Closing the Accessibility Divide

Microinsurance addresses the accessibility challenges faced by those with limited financial resources. Recognizing the financial constraints of traditional policies, microinsurance offers a viable alternative. By providing simplified coverage at lower premiums, it enables a larger portion of the population to secure essential financial protection.

Tailored Protection for Specific Needs

Designed to suit the unique risks of low-income groups, microinsurance covers essentials like health emergencies, accidents, and natural disasters. This safety net prevents financial setbacks, empowering policyholders towards economic stability.

Accessible Distribution Channels

Effective distribution channels are critical to microinsurance's success. Insurers partner with local entities, microfinance institutions, and community organizations to reach target demographics. By utilizing existing networks, insurers surmount logistical barriers, ensuring accessibility to those who need it most.

Empowering Communities: Success Stories

Initiatives like health microinsurance have provided timely medical assistance to marginalized communities. Agricultural microinsurance shields farmers from unpredictable weather-induced financial devastation. These success stories highlight the tangible benefits of microinsurance for vulnerable populations.

Regulatory Backing for Growth

Indian regulatory bodies recognize microinsurance's pivotal role in advancing financial inclusion. They've introduced measures facilitating streamlined approval processes and regulatory frameworks. This encourages insurers to innovate and broaden their offerings in this segment.

Future Challenges: Scaling for Broader Impact

As microinsurance gains traction, the focus shifts to scaling these initiatives for a wider audience. Insurers, regulators, and community organizations must collaborate in designing sustainable models that accommodate diverse regional and demographic needs.

4. Health and Wellness: Transforming Indian Insurance

As healthcare costs surge, the Indian insurance sector is witnessing a significant shift towards prioritizing health. This shift encompasses a comprehensive approach to well-being, not only addressing illnesses but actively promoting healthier lifestyles. Insurers now provide extensive health coverage coupled with integrated wellness programs and services.

The New Paradigm of Health Insurance

Health insurance has evolved from a reactive measure to a proactive strategy for safeguarding well-being. Insurers offer policies that cover a wide spectrum of healthcare needs, including hospitalization, outpatient care, diagnostics, and preventive measures. This ensures policyholders have access to a range of medical services.

Incentivizing Wellness for Prevention

Insurers are increasingly including wellness programs in their offerings. These programs incentivize and support policyholders in adopting healthier lifestyles. This may involve discounts on gym memberships, access to virtual health platforms, and rewards for achieving health milestones. By promoting preventive measures, insurers aim to reduce the need for costly medical treatments.

Leveraging Technology for Monitoring Health

Technological advancements enable insurers to take a proactive stance on health and wellness. Wearable devices can monitor vital signs and provide valuable health and activity data. This information helps customize wellness programs and offers tailored recommendations for maintaining optimal health.

Streamlined Access to Quality Care

Insurers are forging partnerships with healthcare providers to offer cashless facilities to policyholders. This ensures that, in a medical emergency, treatment can be received without immediate upfront payments. Access to a network of hospitals and clinics further guarantees a broad array of quality healthcare services.

Prioritizing Mental Health

Acknowledging the significance of mental health, insurers are expanding their coverage to include mental health services. This mirrors society's recognition of the pivotal role mental well-being plays in overall health. By providing coverage for mental health treatments and therapies, insurers contribute to a more holistic approach to wellness.

Future Prospects of Health Insurance

The future of health insurance in India is poised for even deeper integration of technology and a more personalized approach to well-being. Insurers will continue to utilize data and analytics to customize coverage and wellness programs. Additionally, the focus on preventive measures and holistic health is expected to remain at the core of health insurance offerings.

5. Regulatory Reforms and Market Dynamics in Indian Insurance

The regulatory framework overseeing the Indian insurance sector has undergone substantial changes aimed at encouraging competition, safeguarding consumer interests, and upholding industry stability. The pivotal role played by the Insurance Regulatory and Development Authority of India (IRDAI) has led to reforms reshaping the market, promoting increased participation from private entities and fostering a culture of innovation.

Liberalization Spurs Competition

A pivotal reform was the liberalization of the insurance sector, inviting private players into a domain previously dominated by state-owned insurers. This shift injected competition, driving innovation and elevating customer service standards and product offerings.

Foreign Investment Amplifies Growth

Recognizing the need for capital infusion, the government permitted foreign direct investment (FDI) in insurance companies. This enticed foreign insurers, infusing expertise, technology, and capital, further accelerating sector growth and development.

Strengthening Financial Stability and Governance

To ensure insurers' financial robustness, regulatory authorities introduced stringent solvency norms. These norms dictate that insurers maintain a minimum capital level relative to their risk exposure. Additionally, governance standards have been elevated to ensure transparency, accountability, and ethical conduct within the industry.

Enabling Digital Transformation

Regulatory authorities have played a pivotal role in facilitating the sector's digital evolution. They introduced frameworks allowing digital onboarding of customers, enabling seamless and paperless transactions. This not only enriched customer experiences but also contributed to broader industry digitalization.

Prioritizing Consumer Protection

Reforms underscore a strong emphasis on consumer protection. Measures are in place to safeguard policyholders' interests and provide avenues for grievance redressal. This includes the establishment of ombudsman offices and strict guidelines for fair and transparent insurer practices.

Fostering Innovation

Regulatory authorities have displayed a readiness to embrace innovation in insurance. They introduced sandboxes and innovation hubs, enabling insurers and insurtech startups to experiment with novel technologies and business models. This supportive environment has cultivated a culture of innovation within the industry.

Anticipating Future Regulations

As the insurance landscape continues to evolve, regulatory authorities will play a crucial role in maintaining a dynamic, competitive, and consumer-centric sector. Striking the right balance between fostering innovation and safeguarding consumer interests will be an ongoing challenge, but one vital for the continued growth and stability of the Indian insurance sector.

6. Elevating Customer-Centricity in Indian Insurance

In the fast-paced world of technological advancement and evolving consumer demands, prioritizing customer-centricity has become pivotal for success in the Indian insurance sector. Insurers now understand that a personalized, responsive approach not only benefits policyholders but is also a strategic necessity for sustainable growth.

Transition to Customer-Centricity

Historically, insurance interactions were transactional, with limited engagement beyond policy issuance and claims processing. However, the modern landscape necessitates a more interactive and empathetic approach. Insurers are heavily investing in technologies like chatbots, virtual assistants, and customer relationship management systems to provide timely, accurate support and address inquiries.

Leveraging Customer Insights

Understanding policyholders' preferences and needs is vital in delivering a customer-centric experience. Insurers are utilizing data analytics and feedback mechanisms to gain valuable insights. These insights refine product offerings, streamline processes, and tailor communication strategies to resonate with the diverse customer base.

Tailoring Products and Services

Customer-centricity permeates the core of insurance products and services. Insurers increasingly offer policies that can be customized to individual needs. This empowers policyholders to choose coverage aligned with their unique circumstances, fostering a sense of ownership and value derived from the policy.

Cultivating Long-Term Relationships

Establishing enduring relationships with policyholders is fundamental to customer-centricity. Insurers invest in initiatives aimed at fostering loyalty and trust. This includes timely and transparent communication, proactive outreach during critical life events, and value-added services that go beyond traditional coverage.

Prioritizing Accessibility and Convenience

Modern customers expect seamless, hassle-free interactions with insurers. Insurers are revamping digital interfaces, ensuring user-friendliness and accessibility across various devices. This focus extends to all touchpoints, from online portals to mobile apps and physical branches.

Empowering Policyholders with Knowledge

Informed policyholders are empowered policyholders. Insurers take proactive steps to educate customers about their policies, coverage options, and claims processes. By providing clear, easily accessible information, insurers demystify insurance and enable policyholders to make well-informed decisions.

Measuring Customer Satisfaction

Regularly gauging customer satisfaction through surveys and feedback mechanisms is crucial in a customer-centric approach. These insights offer valuable feedback for process enhancement and gauge how well insurers are meeting the needs and expectations of policyholders.

The Path Forward: Adapting to Evolving Expectations

Customer-centricity is an ongoing journey, not a fixed destination. As customer expectations evolve, insurers must remain adaptable, embracing emerging technologies and trends. Those consistently prioritizing the needs and experiences of their policyholders are likely to build deeper, more enduring relationships, setting the stage for sustained success in the dynamic insurance landscape.

7. Empowering Insurance through Data Analytics and Predictive Modeling

In today's data-driven era, the fusion of data analytics and predictive modeling stands as a transformative force within the Indian insurance sector. Insurers are capitalizing on this data wealth to fine-tune risk assessment, personalize offerings, and elevate decision-making at every stage of the insurance process.

Maximizing Big Data for Precision

The interconnected world of today generates a wealth of data, granting insurers unparalleled insights. From demographic shifts to behavioral tendencies, insurers are leveraging this trove of information to gain profound understandings of their customer base. This data treasure trove refines underwriting processes, leading to more precise risk assessment and pricing models.

Personalization for Policyholders

Data analytics enables insurers to transcend generic policies. By categorizing policyholders based on various criteria, insurers can extend personalized coverage options that align precisely with individual needs and preferences. This not only enhances value for policyholders but also positions insurers as trusted partners in securing their financial interests.

Predictive Modeling for Risk Evaluation

Predictive modeling, utilizing historical data and statistical algorithms, foresees future events. Within insurance, it plays a critical role in assessing risks linked with various policies. By scrutinizing historical claims data, insurers can discern patterns and trends, enabling more accurate forecasts about potential future claims.

Combatting Fraud Through Data Analysis

Data analytics stands as a powerful weapon against insurance fraud. By scrutinizing behavior patterns and identifying irregularities, insurers can flag potentially fraudulent claims for further scrutiny. This proactive stance aids insurers in minimizing financial losses while upholding the integrity of the insurance ecosystem.

Elevating Customer Engagement

Data analytics also holds a pivotal role in heightening customer engagement. By comprehending customer behavior and preferences, insurers can anticipate their needs and provide tailored solutions. This level of customization not only fortifies customer relationships but also positions insurers as nimble and forward-thinking partners.

Real-Time Insights for Informed Choices

In an ever-evolving landscape, real-time insights are priceless. Data analytics grants insurers the capability to swiftly access and analyze information, enabling timely, well-informed decisions. This agility proves especially vital in scenarios like claims processing, where prompt action can yield a significant impact.

The Future of Insurance: Data-Driven Agility

As data analytics progresses, so will its influence on the insurance sector. Insurers investing in advanced analytics capabilities will be better equipped to navigate the intricacies of an ever-changing market. The integration of data-driven decision-making not only leads to sharper risk assessment but also unlocks new avenues for innovation and growth.

8. Bridging the Insurance Penetration Gap in India

While the Indian insurance sector has seen significant progress, there's still a notable disparity in insurance penetration compared to global standards. This gap, however, presents a compelling opportunity for insurers to extend financial security to a broader segment of the population.

Understanding Insurance Penetration

Insurance penetration indicates the percentage of the population holding an insurance policy. In India, this metric has historically lagged behind developed economies due to factors like low awareness, affordability challenges, and a limited grasp of insurance benefits.

Overcoming Entry Barriers

To narrow the insurance penetration gap, insurers must tackle the underlying obstacles that discourage individuals from obtaining coverage. This could involve targeted awareness initiatives to educate the public about the value of insurance, as well as introducing more accessible and affordable policies tailored to diverse needs.

Empowering with Microinsurance

Microinsurance is pivotal in boosting insurance penetration, especially among low-income groups. By offering simplified, cost-effective policies, microinsurance grants a larger portion of the population access to essential coverage.

Tailoring Products for Diversity

Recognizing varied needs and financial capacities, insurers should develop products catering to different segments. This may include crafting specialized policies for specific demographics, like students, seniors, or young families, ensuring coverage aligns with their unique circumstances.

Tapping into Unexplored Markets

Rural and semi-urban areas represent significant untapped markets. Initiatives to expand insurance services in these regions can substantially impact overall penetration rates. This may involve establishing physical branches, partnering with local organizations, or leveraging digital platforms to reach previously inaccessible markets.

Technology as an Empowerment Tool

Mobile technology, in particular, holds the potential to revolutionize insurance penetration. Mobile platforms provide a convenient, accessible channel for individuals to explore, purchase, and manage insurance policies. Insurers can leverage mobile apps and online platforms to extend their reach and engage with a broader audience.

Forward to Inclusive Growth

Closing the insurance penetration gap not only offers a commercial opportunity for insurers but also promotes financial inclusion and stability in the broader economy. Through a strategic and inclusive approach, insurers can contribute to a more resilient and financially secure society.

9. Challenges in the Indian Insurance Sector: Navigating the Landscape

The Indian insurance sector, though experiencing rapid growth, grapples with significant challenges. Overcoming these hurdles is vital for insurers seeking to leverage opportunities in this evolving landscape.

Low Insurance Awareness

A fundamental challenge is the limited understanding of insurance benefits and coverage options among the general populace. Bridging this awareness gap necessitates targeted education campaigns to enlighten individuals about the value of insurance.

Affordability Constraints

For low-income individuals and families, affordability remains a formidable barrier. Despite efforts to introduce more accessible policies, there is a need to ensure that coverage remains financially viable for a wider segment of the population.

Trust and Perception

Establishing trust is paramount in the insurance industry. Some segments of the population may harbor doubts about the reliability and transparency of insurance providers. Building trust requires transparent communication, fair claims processing, and adherence to ethical practices.

Regulatory Compliance

The evolving regulatory landscape can be intricate for insurers. Staying updated with regulatory changes and ensuring full compliance is imperative for effective operations and maintaining policyholders' trust.

Cybersecurity and Data Privacy

As insurers increasingly rely on digital platforms and data-driven technologies, cybersecurity threats loom larger. Protecting customer information and ensuring data privacy are critical concerns. Insurers must invest in robust cybersecurity measures and remain vigilant against emerging threats.

Climate-Related Risks

The growing impact of climate change poses challenges in assessing and managing associated risks. This includes an upsurge in natural disasters and extreme weather events. Adapting underwriting models and risk assessment methodologies to account for these environmental factors is crucial.

Competition and Market Saturation

With the sector's rapid growth, competition among insurers escalates, leading to market saturation, particularly in urban areas. Differentiation through innovative products, exceptional customer service, and strategic market positioning becomes imperative.

Technological Disruption

While technology offers opportunities, its integration poses challenges. Insurers must invest in the right technology, train their workforce, and navigate the complexities of digital transformation to remain competitive.

Economic and Regulatory Uncertainties

Economic fluctuations and regulatory changes wield significant influence over the insurance sector. Insurers must demonstrate agility and preparedness to navigate uncertain economic periods or shifts in regulatory frameworks.

Balancing Innovation with Risk Management

Embracing innovation is crucial for competitiveness, but it must be coupled with effective risk management. Insurers need to carefully evaluate the potential risks associated with new technologies, products, and business models.

10. Future Trends and Prospects in the Indian Insurance Sector

The trajectory of the Indian insurance sector promises dynamic growth and transformation. Anticipated trends hold both opportunities and challenges for insurers.

Technological Integration

The insurance landscape will be increasingly shaped by technology. Artificial intelligence, data analytics, and blockchain will be harnessed to elevate customer experiences, streamline operations, and foster innovative product development. The integration of IoT devices and wearables will enable insurers to deliver highly personalized coverage.

Sustainability and Inclusivity

The industry will pivot towards sustainability and inclusivity. Insurers will assume a pivotal role in addressing environmental and social challenges. This may manifest in the creation of eco-conscious insurance products, initiatives to bolster financial literacy, and endeavors to bridge insurance gaps in underserved communities.

Cyber Insurance Demand Surge

The escalating frequency and sophistication of cyber threats will lead to an upsurge in the demand for cyber insurance. Insurers will be tasked with crafting robust policies that afford comprehensive coverage for both businesses and individuals. Staying ahead of evolving cyber risks will be paramount.

Growth in Health and Wellness Offerings

Preventive healthcare will take center stage, prompting insurers to diversify their offerings. Wellness programs, telemedicine services, and policies encompassing alternative healthcare approaches will become standard. Mental health coverage will gain prominence as an integral facet of insurance offerings.

Integration of ESG Factors

Environmental, social, and governance (ESG) considerations will significantly influence insurance decisions. Insurers will scrutinize the ESG impact of their investments and underwriting practices, aligning strategies with sustainable and socially responsible principles. This shift will echo evolving consumer preferences and contribute to broader societal objectives.

Resilience to Catastrophic Events

Given the heightened frequency of natural disasters and catastrophic events, insurers will fortify their capacity to respond and recover. Innovative risk mitigation strategies, predictive modeling for disaster preparedness, and collaborations with government agencies and relief organizations will be pivotal.

Intensified Collaboration with Insurtech Startups

The synergy between traditional insurers and insurtech startups will deepen. Startups infuse agility and innovation, complemented by established insurers' regulatory expertise and resources. This collaboration will birth cutting-edge solutions attuned to evolving customer needs.

Regulatory Adaptation for Innovation

Regulatory bodies will play a central role in shaping the insurance landscape. Striking a balance between propelling innovation and safeguarding consumer interests will be paramount. Regulatory frameworks will evolve to embrace emerging technologies and business models, fostering an environment conducive to growth and innovation.

Globalization and International Expansion

As the Indian insurance sector matures, insurers will venture into international expansion. This could encompass market entry, strategic alliances with global counterparts, and navigating diverse regulatory landscapes. International expansion offers a strategic avenue for diversification and access to new growth vistas.

Adapting to Demographic Shifts

Evolving demographics, including an aging population and shifting family structures, will influence insurance preferences and demands. Insurers must innovate products and services to cater to these evolving demographics, ensuring relevance and accessibility for a diverse customer base.

Conclusion: Charting the Future of Insurance in India

The Indian insurance sector is on the brink of a profound transformation. Technological advancements, shifting consumer expectations, and regulatory reforms are reshaping the industry. Insurers are not only adapting to these changes but are also pioneering innovative approaches to cater to the diverse needs of policyholders.

Digitization and insurtech are driving efficiency and customization, revolutionizing the way policies are conceptualized and administered. Product diversification and microinsurance initiatives are ensuring even specialized needs find coverage. The focus on health and wellness, powered by data analytics, is promoting a proactive approach to well-being.

While challenges persist, from low insurance awareness to cybersecurity threats, overcoming these hurdles will necessitate a collective effort from insurers, regulators, and industry stakeholders.

Looking forward, the Indian insurance sector's future is marked by promise. Technological advancements, sustainability, and inclusivity will play pivotal roles. Insurers, as they navigate this dynamic landscape, hold the vital responsibility of safeguarding the financial well-being of individuals and businesses.

In this endeavor, insurers have the opportunity not only to drive economic growth but also to contribute to the broader social and environmental progress of India. Through innovation, a focus on customer-centricity, and unwavering integrity, insurers are poised to lead the way into a future where insurance becomes not only a financial instrument but also a catalyst for progress and security. TJ

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Changing Face of Indian Insurance Sector

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Abstract

The article describes the changing face of the Indian insurance sector. It describes the evolution of the Indian insurance sector and the significant changes it has gone through. The article presents a picture of the present scenario in the Indian insurance sector and highlights the foreseeable changes for the future. It aims to present an accurate picture of the changes and their impact on the Indian insurance sector.

Keywords

Changes in Indian insurance sector, IRDAI regulations, technology in insurance, government initiatives, insurance penetration.

Introduction

The insurance sector in India is the 10th largest in the world and grew at a rate of 10.3% in FY 2023 and is expected to become the sixth largest market by 2032.. It has seen many changes over the years and continues to evolve. The sector has managed to accommodate the changing customer demands and come up with products to suit India's varied demographic profiles and needs.

The Indian insurance sector has adapted to changes in technology and insurance regulator in India the IRDAI has brought in modifications in the industry with periodic regulatory changes.

The insurance penetration in India is yet to grow significantly. With a burgeoning middle class and growing youth population, the sector can tap the right sources to grow substantially.

We will look at the changing face of the insurance sector in India and what the future holds in this article.

Evolution of Indian insurance sector

Insurance as a concept existed in ancient India and we have evidence of this in the form of marine trade loans and carrier's contracts. These were earlier precursors to the concept of insurance as we know it today. Life insurance was introduced in 1818 when the Oriental Life Insurance Company was established in Calcutta. The British rule in India saw the evolution of life insurance through the implementation of many acts. Many British life insurance companies dominated the market till India's independence.

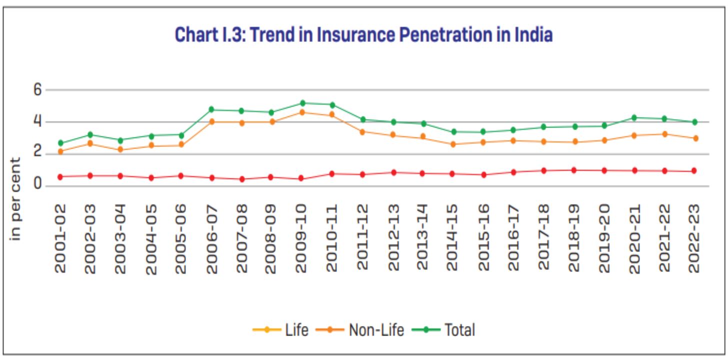
After India's independence and the establishment of the Life Insurance Corporation of India, life insurance came under the government's control. As for general insurance it was introduced in the year 1850 by the British with the establishment of the Triton Insurance Company. Again, British companies dominated the general insurance market till India's independence.

The establishment of the General Insurance Council in 1957 post-independence was aimed at regulating the general insurance business in India and in 1973 the general insurance business was nationalised. However, things took an interesting turn in the 1990s when the government decided to open the insurance sector to private companies.

The Malhotra Committee recommendations paved the way for initiating changes in the way insurance business is conducted in the market. The Committee suggested strengthening the infrastructure and entry of private sector.

The penetration of the insurance industry in the 1990s was around 1.5% due to low per capita income and lower insurance awareness. Insurance policies were restricted to marine and property insurances more due to compliance with law and loan covenants. Coming to life insurance the growth was predominantly driven by the limited available saving options then. Over a period, there has been a shift due to higher disposable income and changing attitudes towards insurance.

Figure 1-Insurance penetration in India 2001-2023



Source: Swiss Re, Sigma World Insurance Report, various issues (Penetration - in per cent)

Source IRDAI

The penetration of life insurance in the Indian market for FY 23 was 4 percent while the penetration of the non-life insurance stood at 1 percent in the same period. The numbers are expected to increase due to the growth in the Indian middle-class population which is expected to touch 160 billion by 2030. Another contributing factor to the growth of insurance will be the young insurable population of India which is expected to be 55% of the total population by 2025.

Evolution of new policies such as Cyber Risks, Global Medical, Corporate Crime and other policies

In line with the general trends in economy and business jurisprudence the industry has seen evolution of new products like Cyber Risks, Corporate Crime, etc., though these products cater to specific needs of clients, there are still quite a few business risk mitigation needs that remain outside the insurance canvas.

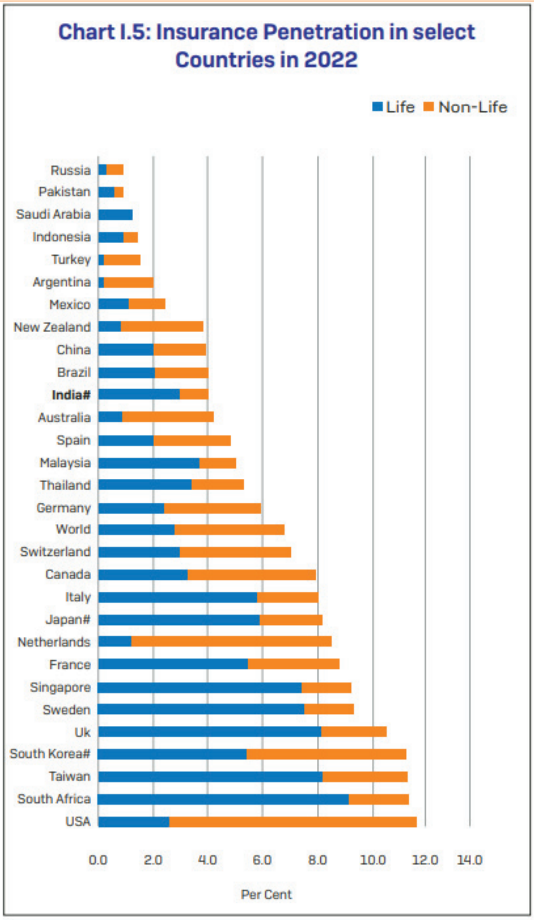
The need to protect and insure through life insurance and health insurance policies has increased with the health-conscious population. The increasing percentage of older people in the demographics of the Indian population has led to the development of various policies in the insurance sector that seek to protect their health and life.

Expectations of a rising middle class and demand for health insurance, lifestyle changes and consumer awareness have assisted in the further demand for insurance. Mandatory policies like the motor and liability have increased insurance spread.

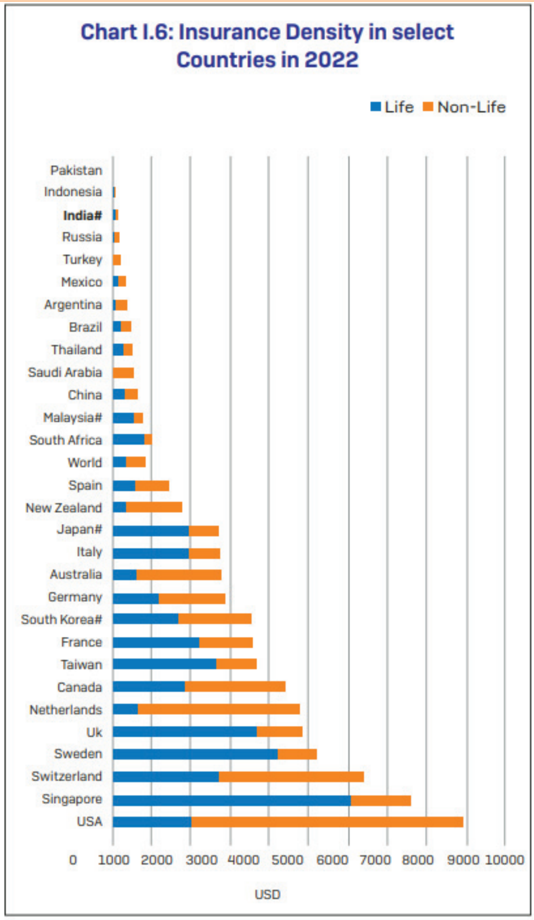
Cyber insurance policies have facilitated in the growth of IT sector infrastructure as sufficient protection is offered through insurance given IT protocols being in place.

With regulatory approvals in place, the industry is now open to customized products to suit each individual/organization's needs. Products are now tailor-made to insure as per the risk perception of the customer.

Figure 2-Insurance penetration and density in various countries (2022)



Data Relates to financial year
Note: Insurance Penetration is measured as percentage of Insurance premium to GDP



Data Relates to financial year
Note: Insurance Density is measured as ratio of Insurance premium to population

Source-IRDAI

Rural insurance has also gained momentum with various suitable micro policies for the rural population with crop insurance, health cover, personal accident insurance, livestock insurance, and insurance for agricultural implements such as tractors and pump sets.

Product differentiation to suit the diverse socio-economic segments of the market

The Indian population has evolved into distinct socio-economic segments. The economic and social background is so diverse that it makes product offerings to them very interesting as also a challenge. While at one end, price is the most important parameter for the buying decision, at the other end customer satisfaction is the prime motive. Between such ends the market offers a spectrum of differing expectations and capacity. Understanding the same, the insurers have done extensive product variations which have to some extent cluttered and complicated the product shelf. Added to the information asymmetry of the industry, the insurance product offering, and its servicing continues to be challenging and interesting.

Regulations by IRDAI

IRDAI has permitted dematerialization of life insurance policies; a facility made available to policyholders in the form of a single platform to manage multiple policies. This is another significant move that makes it easier for customers to manage policies from anywhere. Also, challenges like loss of a policy document or physical damage get eliminated through this process.

Policy holder's protections Act regulation is yet another safeguard for policyholders that verifies and validates an insurer's accounting methods, procedures, and more. The goal is to ensure the financial standing of insurers. Should an insurance company become financially impaired, the state insurance department would step in and use guarantee funds to cover policyholder losses.

Standardisation of insurance products, file and use guidelines for product regulation and differentiation has enabled wider reach as customized products are now available to suit individual organisations according to their needs and budget.

Recognizing the self-disciplining measures taken up by insurers themselves as also at times with nudging from the reinsurers, the regulator has started granting freedom to insurers to better monitor and control their operational costs.

Focus on increasing profitability of PSU's and pressure of profits on listing insurance companies

The insurance industry is one of the more closely regulated industry compared to most others. With regulatory hurdles to access public funds being cleared, quite a few large players have since tapped the capital markets for listing of their shares. This has had multiple positive effects like increased financial muscle resulting in increased underwriting capacities, better value determination especially in the case of JV underwriters, government of India's disinvestment process and similar measures. This has had downstream benefits also in terms of insurers improvement in underwriting processes, handling of customer complainants, sensitizing them of profitable underwriting etc.

Government measures regarding standardized policies for home, small businesses, COVID

COVID witnessed the government of India nudging the industry to offer specialized products for the pandemic as there was an expectation from the populace that the government needs to take care and handling the economic and medical impact of the pandemic. Most insurers offered the standard set of coverages with varying prices. In continuation with this trend, the industry witnessed the launch of standardized coverages for residential units and small and medium businesses. The issue with most of such offerings is that these are products which are launched on "top down approach" basis with minimal data support, product innovation and motivation. Consequently, after the initial launch euphoria, the momentum drastically falls subsequently.

Rural insurance

Simple and easy-to-understand product benefits are required to cater to this non-urban customer segment. The product structure and benefits are to be designed keeping in mind the low financial literacy of the customer segment and the need to reduce substantially the threat of mis-selling.

Government and Regulator Initiatives the Pradhan Mantri Suraksha Bima Yojana and the Pradhan Mantri Jeevan Jyoti Bima Yojana Pradhan Mantri Fasal Bima Yojana offers basic insurance at minimal rates through government agencies and private sector outlets. Other schemes are the Pradhan Mantri Suraksha Bima Yojana etc. The PMFBY has covered the farmers and their crop to a large extent.

Advent of brokers in insurance industry

The impact of advent of brokers is not as pervasively felt as that of the impact of technology. That is because traditionally most of the insurance brokers were catering to the corporate sector and mainly dealing with general insurance. However, the last decade or so has seen the phenomenal rise of certain niche and specialized brokers catering to the retail segment with large technological and manpower investments. Such brokers have not only aided insurance penetration in the big way, both in the general and life segments, but have also evolved as powerful entities in the insurance industry.

Marketing of insurance products

Market regulations: To maintain fair and reasonable prices, products, and trade practices are important in the industry to ensure consumer protection. Non-tariff market ensures a liberal pricing mechanism which is accommodated keeping in view the entire portfolio of the client. Segment marketing and analysis of new products for various segments are in place and on the rise.

Distribution channels: Retail business is dominated by the agencies; however, it is the brokers who have contributed to the insurance growth as they provide all round services right from underwriting to claims service. The advisory nature of brokers services has enabled specialized services and policies with feedback and follow up. These services have improved customer experience in the insurance sector.

New channels like web aggregators, POS have quickly permeated the market. As measures to increase insurance penetration, the focus in now more on affinity sales under which insurance is offered along with sale of the underlying product or service, viz., laptops, tickets bookings, credit cards, etc.,

Insurance sales growth is enhanced by availability of various modes of authorized payment like credit card, UPI payment, NEFT, net banking etc. Ease of doing business/transaction is enabled due to digitized payments and faster and robust IT, technological initiatives.

Standalone insurance companies cater to a single line of business, health have made their impact.

Micro insurance has helped reach the micro enterprises that can purchase insurance at affordable premium. Large scale tie-ups common service centers and public sector banks for distribution of micro insurance products has made the insurance penetration and awareness relevant.

Risk based pricing of insurance policies

Risk-based pricing of insurance uses a wide variety of objective data to accurately predict an individual's likelihood of suffering an insured loss. This method helps improve customer satisfaction as every customer is not penalized for the claims of a larger few. This also develops healthy practices by the customer as the customer would like to remain insured with premiums that match his budget.

Increased consumer awareness

Advent of web and social media has brought information to the fingertips of customers. This has resulted in increased customer awareness and expectations. To meet such a situation with an intangible and contingent service offering has its unique challenges.

Customer expectations are the drivers in this process of insurance selling. Customers' demand for transparency 24-hour services, the option to choose the platform of purchase whether digital or human interface have changed the dynamics of insurance sector. Also, the customers' viewpoint in today's scenario is questioning the need for insurance renewal if there was no claim. Increase in health premiums/loading of premiums are other areas customers have issues with. The higher the premiums, the higher are customer expectations for outstanding service.

Insurance programs are an experience with personalized service and feel-good factors that come from human interaction. Though online apps are quickly serving the need for insurance yet there remain some doubts regarding the post sales service, whom to contact, where to submit claim etc. Agents, micro agents are most relevant in such a scenario and for individuals who do not want total reliance on technology.

Establishment of consumer services

With many changes taking place in the insurance and financial services marketplace, insurers are establishing consumer services to handle questions and complaints. These services often include toll-free numbers, informational websites, educational seminars, and special consumer services units.

Grievance redressal systems and regulatory discipline to protect the interests of policyholders are required for greater insurance penetration.

Digitization of insurance sector- Distribution and online purchase of insurance policies

Today a policy can be purchased through one's mobile phone with minimum paperwork. Digital transactions have quickened the process of policy purchase. Chatbots are enabled in all spheres for quick information and understanding of the subject.

The impact of technology has been most profound in the distribution segment of the industry especially in the over the counter (OTC) products catering to the retail segment. This is evident in the evolution of online quotes comparison, online and social media marketing of products, web enabled transaction processing and renewal etc. This has contributed to increase in insurance penetration in the retail segment especially by the younger generation.

Physical interactions with insurance agents or company sales personnel for policy purchase has become obsolete for the young although the old still believe in the old pattern of product purchase.

Artificial Intelligence (AI) as a technology driver is shaping one of the most critical insurance industry trends. Losses are reduced and claim settlement has become quicker with the help of artificial intelligence. Claims are settled on the spot as all the required docs are available through the system and minimum personal level monitoring is required.

Artificial intelligence aids in better systems controls, monitoring mobile apps, easy processing, and faster claims handling with less manual intervention.

Data analytics is the area where technology is put to optimum use. Actuarial evaluation provides the macroscopic view of the business with relation to profitability and the grey areas which need attention. Technology has quickened this process of research and analytics and provides the most accurate solutions.

Technology adoption in the operations segment has been generally satisfactory as evident with the industry's capacity to handle larger volumes, facilitate easier transaction closing, etc.

However, technology impact on underwriting process has still not been felt significantly. Despite COVID 19 impact on certain processes like risk inspection, etc., turning online, a more impactful effect on pricing and underwriting is still to evolve.

Advances in technology

The industry needs to gear up for quite a few other technological advances which will have a bearing on its future. In terms of motor which the number of vehicles on road are expected to continue to increase, the policy coverage in terms of existing add-ons of engine protection etc., shall turn redundant with increase EV sales. In the medical segment, advent of robotic surgery will demand clarity on its coverage, which is still a grey area, as of now. The professional indemnity risk to the surgeon vis a vis the robotic equipment is to be practically tested. With most new age businesses turning asset light, preferring a lean headcount as also the increasing business complexities, the challenges in meeting their insurance requirements shall increase.

Claims management has become critical

Insurance claims management is the process an insurance company undertakes to ensure they pay claims in accordance with regulations, from swift payment of "clean claims" to quick resolution on disputed claims that may require more hands-on attention from adjusters.

Claims management skills serve the insurer in achieving profitability by reducing delays and rejecting fraudulent claims, improves customer satisfaction and retention and minimizes the use of resources.

Certain new age insurers have adopted technology in claim settlement process which includes intimation, online submission of claims documents, assessment of loss and its settlement. The effect of technology is evident in the motor and medical insurances. However, the threat of frauds has pulled back higher levels of technology adoption. The tradeoff between enriching customer satisfaction vis a vis potential fraud loss is still to swing in favor of the customer.

Measures in consumer grievances vis a vis judicial ruling

The gap in customer expectations in relation to the actual product features results in increased customer grievances. Recognizing the same, the regulator had taken measures in laying down SOPs for insurance companies to set up necessary grievance redressal systems. A fallback system with the regulator was also set up as part of this process along with the earlier measures of ombudsman system. Notwithstanding the same, the industry has witnessed increased recourse by customers with the judicial process. While the judicial process is a longer process compared to the industry grievance process, the outcomes of the judicial processes have been rather stark. While as is to be expected, most cases are decided in favor of the customer, many of the judgements have gone against the agreed policy terms thereby throwing the sanctity of contract terms out of the window. Such instances unfortunately tend to further pull down the trust deficit between the contacting parties.

Need for improved insurance penetration

As per latest reports India is only 3 % insured and a huge market and potential for insurance lies untapped. The urban poor continue to remain largely uncovered, extending coverage to such customer segments with attractive products is the urgent need.

Simplified policy terms and conditions without ambiguity in meaning will enable faster permeation. Most of the customers understand the terms and conditions of the policy only at the time of a claim. When the need arises for the utilizing the policy the T & C of the policy betray the customer's assuredness. Hence servicing of a policy must be at all levels - underwriting, claims and post claim so that a comprehensive understanding is made available to the client.

Clarity in product offered, and policy wordings, transparency in the transactions will enhance the awareness of the consumer for insurance goods. The aim of the market must be to bring insurance as a necessity for any transaction where risk is perceived.

Conclusion

The insurance sector is poised to grow at a higher rate in the next decade. The increase in insurance penetration is expected to put India among the top six insurance markets in the world in the next nine years if we look at the estimated premium volumes in US dollars based on a report by Swiss Re. According to this report India will be ahead of Germany, Canada, Italy, and South Korea by 2032 in terms of its share in the total global premium.

This growth will be due to various factors such as easing of regulations, increased digitization process and favorable demographic factors. Government initiatives and increasing consumer awareness will also contribute to the sector's growth.

The insurance sector in India is undergoing a change process and it can look at sustained growth provided the sector can make use of advances in technology such as data analysis, artificial intelligence to improve its products and the customer experience.

The changing face of the insurance sector will be impacted by increasing urbanization, climate change and geopolitical risks which will bring with it the concentration of risks. Hence the determination of EML and PML should be based on a comprehensive understanding of real-life conditions. Going forward insurance will also have to face the prospect declared by Bill Gates in 1994, "Banking is necessary but banks are not." This will extend to the insurance sector owing to the advances in technology where several insurance services and products can be self-serviced. TJ

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Indicators of Post Reform Growth in Insurance and Its Impact on Economy: Evidences Using ARDL Approach

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Abstract

The current research is aimed to study the indicators of post reform growth in insurance and its impact on economic development in India. Insurance penetration, insurance density, and gross domestic savings are the dominant measures to study the growth of insurance. Economic development is studied through Gross Domestic Product (GDP). The annual data of 22 years (year 2001 to 2022) from IRDA annual reports and economic surveys have been used. To analyse the data, ARDL technique has been employed. The findings of the study revealed that there is an existence of co-integration (both long-run and short-run) amongst the dependent (GDP) as well as independent variables (indicators of insurance). The findings of the current study have come up with the view that still in insurance, there is an ample scope to tap by creating more awareness and providing more benefits to the policyholders as the intention to purchase the policies may be enhanced.

Keywords

Insurance Penetration, Insurance Density, Economic Growth, ARDL, Gross Domestic Savings.

1. Introduction

India is a country of 1,427,868,600 million people (World population review), which is expanded across the 28 states. India has witnessed the tenth global insurance market in the world with a market share of 1.85 per cent (Swiss Re Report 2021). According to S&P Global Market Intelligence, India is the second-largest market in Asia-Pacific for insurance. The insurance industry has played a vital role in the economic development of a country (Ward & Zurbruegg, 2000). It offers strong financial services that contribute to nation's development and growth (Yinusa & Akinlo, 2013; Adeniyi *et al.*, 2019). A huge amount of money is deployed through premiums for short-term and long-term investments for expansion and underwriting of risk in economic establishment as a part of its services. Life insurance products stimulate long-term savings and considerable investments in public and private sectors, which are also helpful in economy (Beck & Webb, 2003). Life insurance companies encourage long-term investments over short-term investments than non-life insurance companies which are more interested in short-term investments.

Traditionally, the growth of the insurance sector is measured by insurance penetration and insurance density. Other macroeconomic factors such as savings, bank deposits, shares & debentures etc. also influence the growth of insurance sector. These macroeconomic factors saving is called household saving. Household saving is part of Gross Domestic Savings (GDS). GDS is determined by deducting GDP from total consumer spending. GDS helps in economic development through its formation of investment. It is also a medium of foreign investment. Additionally, Foreign Currency Assets (FCA) are the next important component meant to help countries in the time of economic crisis. It is the biggest component of the foreign reserve. These macroeconomic factors significantly impact economic development.

2. Literature Review

This section describes review of literature in the light of current study. The impact of insurance industry on economic development has been extensively studied by many researchers. Milestone studies have been done on the relationship between insurance sector and economic growth (King & Levine, 1993; Levine et al., 2000; Blum et al., 2002; Merton, 2004; Rousseau & Wachtel, 2005; Vadlamannati, 2008; Outreville, 2012; Mohy ul din et al., 2017). The association between financial sector growth and economic growth in India have been measured with Granger causality test (Fink et al., 2005). Watchel (2001), Favara (2003), Ward & Zurbruegg (2000) and Dawd & Belnagah (2023) have also come up with the similar arguments.

Insurance Density and Insurance Penetration are the two conventional metrics that are used to illustrate the expansion of the insurance industry in economic development. Further, both are projected via; life insurance, non-life insurance, and total insurance (both life and non-life). The ratio of direct premiums to Gross Domestic Product (GDP) is known as insurance penetration. The expansion of the insurance industry is reflected by high insurance penetration. In contrast to the previous pattern, Pradhan et al. (2015) found that economic growth actually has a positive impact on the insurance industry's development. However, the association between insurance and economic growth means that increasing insurance penetration will also boost financial inclusion and encourage economic growth (Olaiya et al., 2023). An unidirectional casuality association between insurance penetration and economic development had been witnessed. The work was then extended by Dash et al, (2018) where he examined both unidirectional and bidirectional casuality among insurance penetration and economic growth.

The ratio of insurance premiums to the whole population of the nation is known as insurance density. Pradhan et al., 2017 mentioned long-run equilibrium between insurance market activities and economic development. Both unidirectional and bidirectional granger causality also come up as a fact between insurance market activities and economic growth in short run. The Gross Domestic Savings (GDS) consist savings of public sector, private sector, and household sector. GDS is calculated as GDP less final consumer spending. GDS contributes to economic growth through investments. Hossin & Miah (2020) have described a positive significant relationship between GDS and GDP.

The current study employed FCA as a control variable. Foreign reserves play vital role in the development of economies around the world (Nteegah & Okpoi, 2017). These roles include safeguarding the value of the local currency, settling international payments like trade needs and debt payments, building wealth, managing exchange rates, fostering investor confidence, funding key economic sectors, and acting as a safety net against potential external shocks.

To study the association between the growth in insurance industry and economy in depth, bibliometric technique has been employed. R-studio and Biblioshiny software have been used for the bibliometric technique. SCOPUS database has been used to extract documents.

2.1. Articles Production by Country

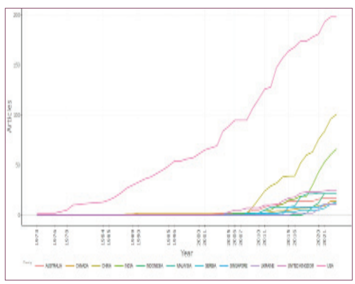
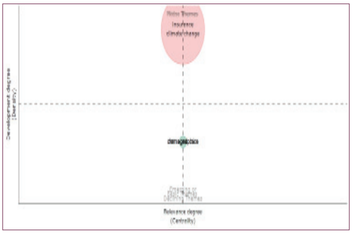


Figure 1 : Articles Production across Countries

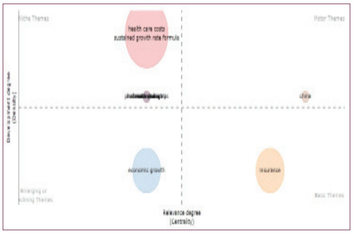
The publication growth of research articles across countries has been presented in figure 1.. India started publishing the studies in this field from the year 2006 (2 documents) and a total of 66 documents have been published till 2023. This indicates that scope of research is still there in current subject if a comparison is made with USA and other developed nations.

2.2. Thematic Map

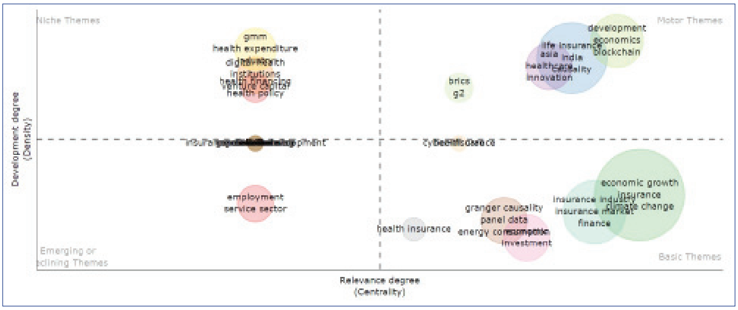
The thematic map is the map that illustrates the information on a particular theme. The current study built a thematic map of the conceptual structure of the articles in biblioshiny software. This map provides four types of theme, namely; niche theme, motor theme, emerging theme, and basic theme. Figure 2 shows the thematic map of author keywords. To expand the knowledge on current study, thematic evolution map is made.



(a) 1973-2000



(b) 2001-2010



(c) 2011-2023

Figure 2: Thematic evolution analysis

Figure 2 shows the thematic evolution process of the keywords related to the current study. In the 2001-2010 era, insurance is revelant topic but not developed and economic growth is considered as emerging topic. In the period of 2011-2023, life insurance, health, development, economics, causality, innovation are relevant and developed topics but insurance industry, insurance market, economic growth, climate change, and finance lie in basic theme, which means that these are relevant but not developed. To conclude the review, it can be said that more research work is needed on insurance industry, insurance market, economic growth, climate chaange, and finance as ample scope of research is realized.

3. Research Methodology

A mixture of bibliometric literature review and quantative study have been employed in this research paper. Post reforms period is justified by collecting the time series data from FYs 2001-02 to 2021-22 (22 years) as IRDA came into existance in year 2000. The data of insurance penetration, insurance density, and gross domestic savings are taken from various issues of IRDA reports. GDP and FCA figures are taken from the issues of economic survey. GDP, GDS, insurance penetration, insurance density, and FCA are the variables taken for the study. This study has used Auto Regressive Distributed Lag (ARDL) method to examine the relationship between economic growth and insurance where economic growth is taken as dependent variable and description about rest of the variables are stated here under:

The following model equation is specified for empirical analysis:

$$GDP_t = \beta_0 + \beta_1 GDS_t + \beta_2 PEN_t + \beta_3 DEN_t + \beta_4 FCA_t + U_t \qquad \text{...............(1)}$$

The current study has used time series data. Hence, some particular tests are designed for this data. The ARDL model is an econometric analysis to demonstrate the association between dependent, independent and control variables (Im et al., 2003 and Pesaran et al., 2001). The ARDL modelling techniques have been used extensively in previous literature for its own strengths. The ARDL model is very helpful when the data is time series in nature and capable to handle variables if their integration order is not similar. The following equation is transformed into the ARDL framework as followed by previous literature (Huan et al., 2022):

$$\Delta GDP_t = \beta_0 + \sum_{i=1}^{n1} \beta_{1i}\, \Delta GDP_{t-i} + \sum_{i=0}^{n2} \beta_{2i}\, \Delta GDS_{t-i} + \sum_{i=1}^{n3} \beta_{3i}\, \Delta PEN_{t-i} + \sum_{i=1}^{n4} \beta_{4i}\, \Delta DEN_{t-i} + \sum_{i=1}^{n5} \beta_{5i}\, \Delta FCA_{t-i} + \gamma_1 GDP_{t-1} + \gamma_1 GDS_{t-1} + \gamma_2 PEN_{t-1} + \gamma_3 DEN_{t-1} + \gamma_4 FCA_{t-1} + \varepsilon_t$$

.................................(2)

In equation 1 and 2 the parameters linked with the difference operators ($\beta_1 - \beta_5$) represent short run relationships. Similarly, the parameters associated to the lagged terms ($\gamma_1 - \gamma_5$) stand for long-run relationship. After the estimation of equations 1and 2, following hypothesis will be framed:

$$H_0 : \gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = \gamma_5 = 0$$
$$H_1 : \gamma_1 \neq \gamma_2 \neq \gamma_3 \neq \gamma_4 \neq \gamma_5 \neq 0$$

The framed hypothesis and unit root test depicted that the ARDL model is suitable for the current study. With this, step 5 ends.

After establishing the long-run relationship in the ARDL model, Error Correction Model (ECM) has been employed to check short-run relationship (step 6) and the model equation is specified in following manner:

$$\Delta GDP_t = \beta_0 + \sum_{i=1}^{n1} \beta_{1i}\, \Delta GDP_{t-i} + \sum_{i=0}^{n2} \beta_{2i}\, \Delta GDS_{t-i} + \sum_{i=1}^{n3} \beta_{3i}\, \Delta PEN_{t-i} + \sum_{i=1}^{n4} \beta_{4i}\, \Delta DEN_{t-i} \sum_{i=1}^{n5} \beta_{5i}\, \Delta FCA_{t-i} + \theta_1 ECT_{t-1} + \varepsilon_t$$

.....................(3)

4. Data Analysis and Results

4.1. Descriptive Analysis

In the data analysis process, first step is to measure the basic characteristics of the data by Descriptive analysis. Table 1 depicted the descriptive analysis of the study variable.

Table 1: Descriptive Analysis of Study Variables

Year	Penetration (%)	Density (USD)	GDP (Amount)	GDS (Amount)	FCA (Amount)
2001-02	2.71	11.5	--	--	249118
2002-03	3.26	14.7	180482	88512	341476
2003-04	2.88	16.4	305176	177726	466215
2004-05	3.17	19.7	400706	221893	593121
2005-06	3.14	22.7	451160	182405	647327
2006-07	4.8	38.4	601337	246841	836597
2007-08	4.7	46.6	692384	366497	1196023
2008-09	4.6	47.4	642973	-105127	1230066
2009-10	5.2	54.3	847764	449891	1149650
2010-11	5.1	64.4	1306288	298960	1224883
2011-12	4.1	59	952214	544907	1330511
2012-13	3.96	53.2	1207684	342564	1412631
2013-14	3.9	52	1289509	238792	1660914
2014-15	3.3	55	1234437	411765	1985458
2015-16	3.44	54.7	1303915	262301	221906
2016-17	3.49	59.7	1619795	542855	2244939
2017-18	3.69	73	1698373	732616	2597569
2018-19	3.7	74	1809626	553010	2665564
2019-20	3.76	78	1175188	-108359	3333815
2020-21	4.2	78	-273942	-401604	3924168
2021-22	4.2	91	3864086	1262073	4094565
Mean	**3.87**	**50.65**	**918161.5**	**315425.9**	**1590786**
Median	**3.76**	**54.30**	**952214.0**	**280630.5**	**1230066**
Maximum	**5.20**	**91.00**	**1809626**	**1262073**	**4094565**
Minimum	**2.71**	**11.50**	**-273942**	**-401604**	221906
Std. Dev.	0.71	22.89	559914.3	343578.8	1165689
Skewness	0.31	-0.27	-0.28	0.56	0.82
Kurtosis	2.17	2.16	2.34	4.66	2.66
Jarque-Bera	0.94	0.88	0.59	3.37	2.46

Source: Author's Computation using Eviews 10.0

Note: GDP and GDS are taken at 1st difference

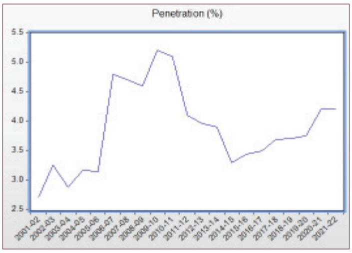


Figure 3: Trends in Penetration

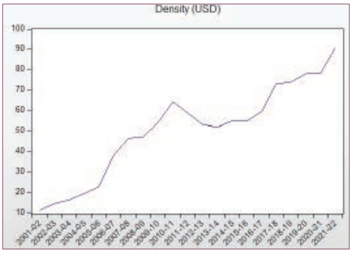


Figure 4: Trends in Density

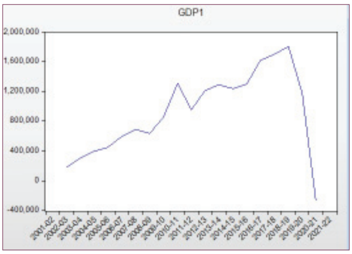


Figure 5: Trends in GDP 1

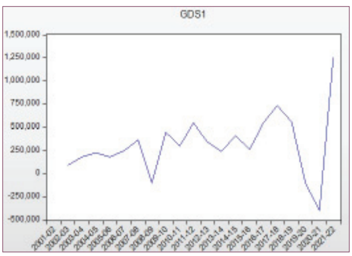


Figure 6: Trends in GDS 1

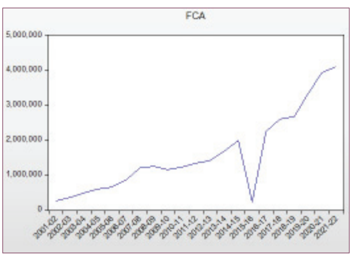


Figure 7: Trends in FCA

Table 1 shows the results of descriptive analysis and graphic representation of the study variables are shown by figures 3 to 7. Figure 5 shows the overall increasing trend of GDP from the year 2001-02 to 2021-22 in India, whereas a downward trend is observed in the year 2020-21 with GDP value -273492.The GDP for the FY 2020-21 has jumped down from the value 1175188 (FY 2019-20) to -273942. The reason might be COVID-19 as the economy was almost closed (Das & Patnaik, 2020; Behera et al., 2021). The overall trend of GDS for the sample period is fluctuated as ups and downs are reliased as routine part of the sample time period.

Insurance penetration has shown increasing trend. Insurance density gives good sign as the increasing trend is recorded for the sample time period. Overall, increasing trend has been recorded for FCA for the sample time period.

4.2. Correlation Analysis

Table 2: Correlation Analysis

Variable	GDP	GDS	Penetration	Density	FCA
GDP	1.00	0.84	0.09	0.64	0.51
GDS	0.84	1.00	0.05	0.34	0.21
Penetration	0.09	0.05	1.00	0.38	0.13
Density	0.64	0.34	0.38	1.00	0.85
FCA	0.51	0.21	0.13	0.85	1.00

Source: Author's Computation using Eviews 12.0

Table 2 shows that correlation among all dependent and independent variables are positive and significant as the values are explained.

4.3. Unit Root Test

Table 3: Unit Root Test (Augmented Dickey-Fuller)

Variable	ADF at Level		ADF at 1st Difference		Order Decision
	T-statistics	P value	T-statistics	P value	
GDP	-1.20	0.64	-4.22	0.00	I (1)
GDS	-4.20	0.004	-5.27	0.00	I (1)
PEN	-6.56	0.00	-3.84	0.01	I (0)
DEN	-0.48	0.87	-3.36	0.02	I (1)
FCA	1.20	0.99	-6.56	0.00	I (1)

Note: P Value Less than 0.05 Significance Level
Source: Author's Computation using EViews 12.0

Table 3 shows the results of unit root test using ADF method. If the P-value is lower than 5 per cent levels of significance, it indicates the variables are stationary. Hence, the mixed order decision of variables justified the use of ARDL modelling approach in the current study (Olaiya, 2023; Shreshta & Bhatta, 2018).

4.4. Optimal Lag Length Selection

Before conducting the ARDL model, appropriate lag length selection is the important step. According to the Liew (2006), the probability to forecast the lag length of variables are checked with five leg selection criteria namely; the Akaike Information Criterion (AIC), Schwarz Information Criterion (SC), Hannan-Quinn Information Criterion (HQ), Final Prediction Error (FPE), and Bayesian Information Criterion (BIC). The AIC method is the best fit for lag selection criteria as compared to SC, HQ, FPE, and BIC (Pesaran & Shin, 1999).

Table 4: Lag Length Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-865.8768	NA	7.28e+35	96.76409	97.01142	96.79820
1	-816.3047	66.09623*	5.41e+34	94.03385	95.51780	94.23847
2	-777.4542	30.21706	2.76e+34*	92.49491*	95.21549*	92.87004*
* indicates lag order selected by the criterion						
LR: Sequential Modified LR Test Statistic (each test at 5% level)						
FPE: Final Prediction Error						
AIC: Akaike Information Criterion						
SC: Schwarz Information Criterion						
HQ: Hannan-Quinn Information Criterion						

Source: Author's computation using Eviews 12.0

Table 4 shows that a length of two lags enabled the estimation of ARDL short-run and long-run estimation. In order to ascertain the existence of long-run and short-run associations, long-run and bound test is applied and the results are explained as:

4.5. Long Run Form and Bound Test

Table 5 represents the results of long run form and bound test which is applied to check the long-run association among dependent (GDP) and independent varibles (GDS, penetration, density, and FCA). The null hypothesis of this test is that there is no co-integration equation among the parameters. While the alternatives hypothesis for this test is taken as; there exists co-integration equation among the parameters. The decision of acceptance/rejection of the hypothesis is made on the basis of F-statistics.

Table 5: Long Run Form and Bound Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDS1	1.434312	0.396593	3.616582	0.0224
PENETRATION	-168379.5	76321.97	-2.206174	0.0920
DENSITY USD	19011.63	6861.875	2.770617	0.0503
FCA	-0.038476	0.171354	-0.224539	0.8333
C	295067.1	234411.5	1.258757	0.2766
F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	5.454831	10%	2.2	3.09
k	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Author's Computation using Eviews 12.0

The value of F-statistics (5.45) is far greater than the values of lower bound (2.2) and upper bound (4.37) thereby confirms that the parameters of current study show co-integrating equation and null hypothesis is rejected and alternate hypothesis is accepted.

4.6. Short Run Form

Short-run model indicates the coefficients of ECM which are used to measure the speed of adjustments towards long-run equilibrium. ECM values lies between 0 to -1. The equilibrium of model in short-run is confirmed by its negative value.

Table 6: Error Correction Model

ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP1(-1))	0.499754	0.223479	2.236246	0.0890
D(GDS1)	1.080507	0.132309	8.166552	0.0012
D(GDS1(-1))	-1.289120	0.339501	-3.797103	0.0192
D(PENETRATION____)	-685078.8	123518.9	-5.546348	0.0052
D(DENSITY__USD_)	88831.92	12615.37	7.041563	0.0021
D(DENSITY__USD_(-1))	-30806.03	7426.132	-4.148328	0.0143
D(FCA)	-0.312888	0.078923	-3.964452	0.0166
D(FCA(-1))	-0.237093	0.069338	-3.419387	0.0268
CointEq(-1)*	-2.763970	0.322089	-8.581388	0.0010
R-squared	0.988883	Mean dependent var		197717.2
Adjusted R-squared	0.979001	S.D. dependent var		1072182.
S.E. of regression	155371.9	Akaike info criterion		27.05188
Sum squared resid	2.17E+11	Schwarz criterion		27.49707
Log likelihood	-234.4670	Hannan-Quinn criter.		27.11327
Durbin-Watson stat	1.713953			
Source: Author's Computation using Eviews 12.0				

Table 6 indicates the results of ECM model for short run. The value (1.71 which is near to 2) of D-W test indicates that the model is free from serial correlation. The value of R square (0.988) indicates that 98 per cent variations in GDP are explained by ECM. In last, it is drawn as a result that GDS and density are the major contributors of GDP in long-run while penetration and FCA, along with GDS and density are confirmed as contributors of GDP in Short-run.

4.7. Diagnostic Tests

Diagnostic tests illustrated the model's normality, validity, and stability. Normality test with Jarque-Bera, Serial-Correlation LM Test with Breusch-Godfrey, Heteroskedasticity with Breusch-Pagan, and Functional Form with the Ramsey Test, and Recursive Test with the CUSUM test and CUSUM of Squares Test has been included for the current study.

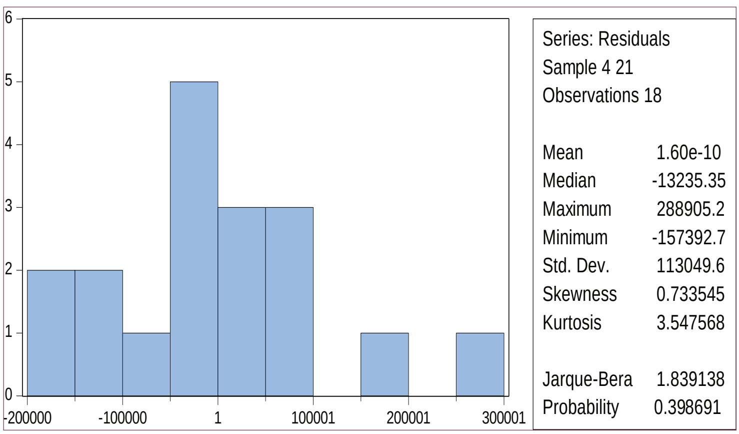


Figure 8: Normality Test (Jarque-Bera)

Figure 8 indicates the results of Normality Test which confirms that model is normal as P value is greater than 0.05 per cent.

Table 7: Diagnostic Test

Test	F-Test	P-value
Serial Correlation (LM)	1.30	0.43
Heteroskedasticity	0.54	0.81
Functional Form (Ramsey Test)	3.69	0.15

Source: Author's Computation using Eviews 12.0

In order to test the problem of serial correlation, heteroskedasticity, and functional form, the table 7 presents the diagnostics test values. All the p-values are higher than 0.05, it shows H_0 is accepted (Tahir & Hayat, 2020) for all the set hypotheses.

4.8. Stability Test

The current study employed Cumulative Sum (CUSUM) and Cumulative Sum of squares (CUSUMSQ) tests to assess the model stability (Im et al., 2003 and Pesaran et al., 2001).

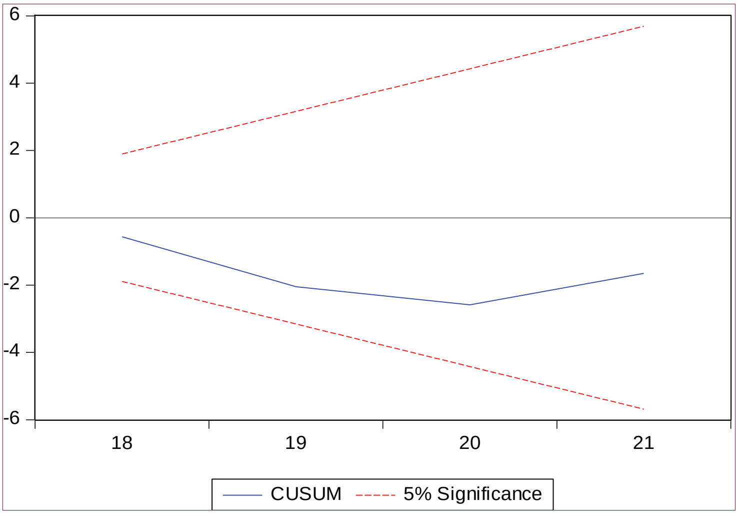


Figure 13: CUSUM Test

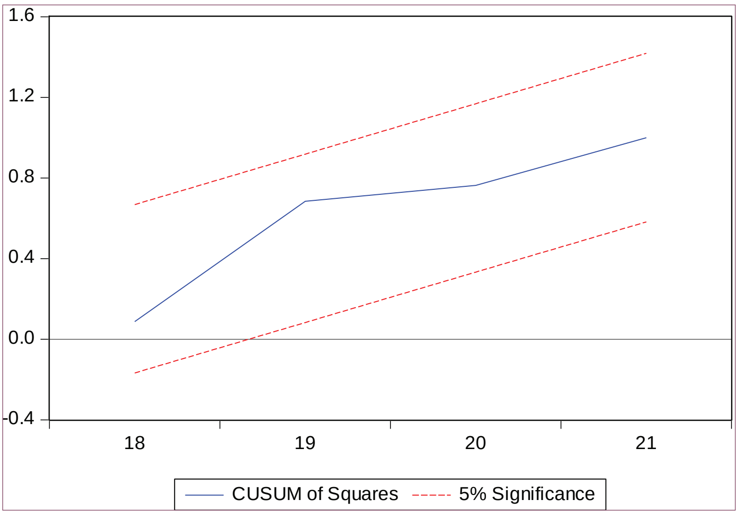


Figure 14: CUSUM of Squares Test

Figures 13 and 14 show the graphic results of Stability test. Both the test (CUSUM and CUSUM of squares) showed that the estimated line (solid line) is lying in between the critical lines (dotted Line) at 5 per cent levels of significance. Hence, it is said that current study model is stable and reliable.

5. Discussion and Findings

The current study employed ARDL modelling approach to investigate the relationship between dependent (GDP) and independent (GDS, PEN, DEN, and FCA) variables. FCA is taken as control variable. The empirical findings revealed that GDS is positively related to the economic development and there is a significant correlation among GDP and GDS. The results are consistent with the previous studies (Khan et al., 2017; Makori et al., 2022; Jongwanich, 2010). On the other hand, Sothan (2014) contradicted the results by saying that economic growth and savings are independent to each other in many other countries.

According to the finding of the current study, insurance density has come up as important indicator to economic growth. The study also found insurance penetration is negatively related to the economic development. On the other hand, some researchers have discover positive relationship between insurance density and economic growth (Cristea et al., 2014; Balcilar et al., 2018; Iyodo et al., 2020; and Olaiya, 2023). The findings of the study also revealed that foreign currency assets are insignificantly related to economic growth. On the Contrary, some researcher found positive and significant association between FCA and economic growth (Kalaitzi & chamberlain, 2020; Terfa & Kpoghul, 2020).

6. Conclusion

The present study investigates the impact of insurance on economic development in Indian context by using time series data from FYs 2001 to 2022. The study has used ARDL model to analyse the relationships between dependent (GDP) and independent (GDS, density, penetration, and FCA) variables. The results of unit root test confirms that all variables are stationary at mixed order of integration (both at level and at first difference). Furthermore, the current study has used of the AIC lag selection criteria to determine appropriate lag length for the dependent and independent variables. The F-statistics value of bound test is employed to analyse the co-integration among dependent and independent variables. Results from bound test show that there is existence of co-integration in long-run as well as in short-run. The findings of long-run and short-run indicate that GDS, penetration, density, and FCA are helps to increase GDP. Thereafter, stability tests (CUSUM and CUSUMSQ Test) have also proven the model stability.

Results indicate that insurance plays a vital role in economic development. Overall findings of the study recommend new policy suggestions for Indian economy. Indian insurance sector has shown growth from 2.7 per cent (in FY 2001) to 4.2 per cent (in FY 2021). But, India is still at tenth position in the world in context to Insurance. India's position in world can be improved by promoting insurance among people. The government should provide more tax benefits to the policyholders, so that the intention to purchase insurance as the best investment product can be improved. Increasing demand of insurance product enhance the growth of insurance sector and it leads to boost economic development of the nation. The current study limited is to insurance sector only and covers a limited range of data (from year 2001 to 2022) it needs time to time updation. The study assumed GDP as dependent variable. Further study may be conducted with other variables. The present study employed time series data; panel data may be taken in further studies. TJ

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Changing Face of Indian Insurance Sector-Shifting From a Push to a Pull Product

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The insurance sector has undergone unprecedented changes in response to the pandemic, necessitating rapid operational adjustments to minimize business disruptions. Insurers responded quickly to this crisis by increasing the digitalisation of sales, customer service, and claims management and enabling their staff to operate in a hybrid working model. India is on its way to become the sixth largest insurance market in the world, over the next decade with the insurance premiums growing at an average of 14% per annum in nominal local currency terms. With only six state-owned companies in 2000, we today have 57, mostly private, insurers. Premiums raised 20- fold from Rs. 46,000 crore in 2000-01 to Rs. 9 lakh crore today. The transformation was led by a regulator empowered by removal of limiting hardwired statutory provisions that enabled a focus on ease of entry with undiluted stress on fit and proper qualification and capital adequacy. Regulations which progressively promoted outcomes over prescriptiveness, enabled innovative business practices and products within a framework stressing financial prudence and consumer protection. Two decades of insurance reforms, which progressively enhanced the policy and regulatory environment and ushered in independent regulation, private participation and foreign capital, have created a sound insurance sector in India. Steps like use-and-file and the recent expense of management regulations are key milestones in this quest for arm's length regulation, along with measures like open distribution architecture, de-tariffing, regulatory sandboxes, and a technological emphasis through regulations for digital distribution, e-insurance, cyber-security and tele-medicine. A fresh landscape is being built towards achieving the goal of 'Insurance for All' by 2047. It is based on the foundation of ease of doing business, mainstreaming technology, lucrative opportunities and ecosystem revamp.

Insurance premiums in the Indian insurance market are predicted to grow on average by 14% annually in nominal local currency terms (9% per annum in real terms) over the next decade. A level playing field across service providers is the key to fair competition. Barring exceptions like incentivising rural services or higher costs in certain lines or regions or special circumstances of small new insurers, regulations must not favour particular business models or products, and should enable competition based on attributes and efficiencies inherent in them. Certain risks are un-insurable or insurable partially at prohibitive premiums. Cyber-attack and data breach risks, important in the digital age, are inadequately addressed. While steps like coverage of medical tele-consultation and pre-existing conditions like diabetes, hypertension etc., and standard demystified health and travel policies have been initiated, gaps remain in covering chronic conditions, specialised care, and mental disorders. While schemes like PMSBY and PMJJBY have drawn in weaker sections, further awareness about essential covers, customer rights, and uninsurable risks is needed. Investment regulation could consider globally prevalent approaches like portfolio risk-based capital provisioning for freer investment choices, to better achieve goals like long-term capital availability. Promoting reinsurance must also be a priority. The low insurance coverage, favourable demographics, increasing life expectancy and growing consumer awareness regarding financial protection bode well for the industry. Irdai has the unique opportunity to develop the insurance sector, which necessitates ensuring availability, accessibility and affordability of insurance products for every person.

Flash Report _Non-Life Insurers
Gross Direct Premium Underwritten Upto FY 21 & FY23

Insurers	FY 23	FY 22	FY 21	% Growth from FY 21 to FY 23
Acko General Insurance Ltd	1,508.81	988.21	422.39	257%
Go Digit General Insurance Ltd	6,160.08	4,673.94	2,417.62	155%
Zuno General Insurance Ltd (Edelweiss GI)	533.49	348.88	218.58	144%
Niva bupa health insurance company limited	4,073.03	2,809.97	1,750.78	133%
Aditya Birla Health Insurance Co Ltd	2,717.04	1,726.67	1,300.64	109%
Kotak Mahindra General Insurance Co Ltd	1,134.09	742.47	543.98	108%
Care Health Insurance Ltd	5,141.53	3,880.91	2,559.76	101%
Magma HDI General Insurance Co Ltd	2,534.12	1,757.17	1,283.58	97%
ManipalCigna Health Insurance Co Ltd	1,359.79	986.18	755.48	80%
Tata AIG General Insurance Co Ltd	13,176.00	10,024.97	8,042.07	64%
ICICI Lombard General Insurance Co Ltd	21,025.09	17,976.86	14,003.09	50%
Cholamandalam MS General Insurance Co Ltd	6,155.99	4,824.12	4,388.22	40%
Raheja QBE General Insurance Co Ltd	379.94	375.83	272.22	40%
Star Health & Allied Insurance Co Ltd	12,950.94	11,463.47	9,388.53	38%
Liberty General Insurance Co. Ltd	1,957.33	1,506.45	1,445.71	35%
HDFC Ergo General Insurance Co Ltd	16,635.81	13,497.55	12,295.09	35%
Universal Sompo General Insurance Co Ltd	4,103.09	3,456.12	3,052.17	34%
SBI General Insurance Co Ltd	10,828.40	9,166.22	8,264.86	31%
The Oriental Insurance Co Ltd	15,609.57	13,710.97	12,449.80	25%
Reliance General Insurance Co Ltd	10,339.01	9,408.96	8,310.28	24%
Bajaj Allianz General Insurance Co Ltd	15,336.64	13,688.59	12,569.54	22%
Agriculture Insurance Co Of India Ltd	14,643.69	13,940.21	12,052.60	21%
The New India Assurance Co Ltd	34,487.15	32,573.88	28,548.49	21%
Royal Sundaram General Insurance Co Ltd	3,379.42	2,866.59	2,822.28	20%
Future Generali India Insurance Co Ltd	4,546.24	4,137.98	3,835.22	19%
IFFCO-Tokio General Insurance Co Ltd	9,870.95	8,452.91	8,410.88	17%
ECGC Ltd	1,197.53	1,106.64	1,062.27	13%
National Insurance Co Ltd	15,155.76	13,125.52	14,140.83	7%
Shriram General Insurance Co Ltd	2,265.78	1,752.95	2,138.89	6%
United India Insurance Co Ltd	17,643.32	15,722.25	16,704.69	6%
Navi General Insurance Co. Ltd	70.59	106.57	104.40	-32%

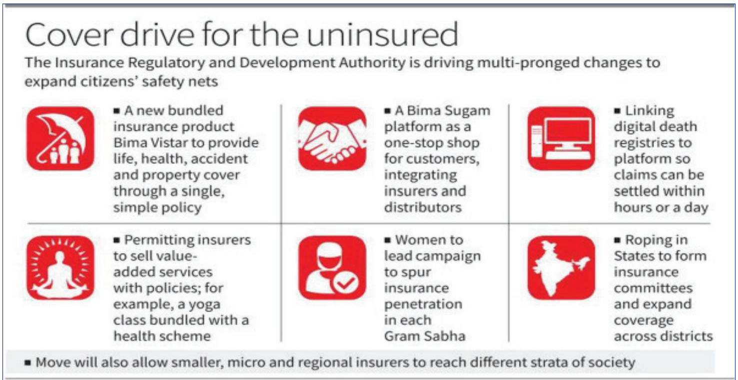
Source:https://www.linkedin.com/posts/compliance-digest-generalinsurance-healthinsurance-

Rear View Mirror

India is the fifth largest life insurance market in the world's emerging insurance markets, growing at a rate of 32-34% each year. In recent years the industry has been experiencing fierce competition among its peers which has led to new and innovative products within the industry. The insurance industry of India has 57 insurance companies - 24 are in the life insurance business, while 34 are non-life insurers. At least 65% of India's population resides in rural areas. Currently less than 10% of people in rural India have life insurance coverage while less than 20% of the rural population have health insurance cover. Apart from government schemes which cater to rural demographics, the life insurance industry also underwrote 6.5 million policies in FY 2022 in the rural sector. General insurers and standalone health insurers underwrote a premium of INR 283 billion and INR 33 billion respectively in the rural sector for the same period. This is primarily driven by regulatory mandates issued by the IRDAI to drive an inclusive agenda in the insurance sector. Over the years, insurance carriers have been adopting several self-initiated and regulator mandated reforms in their operational processes that place the customer at the centre of the insurance ecosystem. Simplification of policy wording and standardisation of terminology, ease of getting serviced by the carrier, hassle-free claims intimation and processing are some of the key interventions which have led to an improvement in the customer's experience with respect to their insurance policies. The insurance industry has undergone numerous transformations in terms of new developments, modified regulations, proposals for amendments and growth in 2022. These developments have opened new avenues of growth for the industry while ensuring that insurers stay relevant with changing times and the latest digital disruptions

Retail Risk Appetite

The insurance industry has been speedingly transforming ever since the pandemic. The rate of change has only accelerated in this volatile industry. Since the spread of COVID-19 in India, people have become more serious about their healthcare and want to plan better; hence, the general and health insurance companies have seen an escalation in health claims. To meet this increase in demand of working professionals and entrepreneurs who ensure their family's financial safety by investing in varied insurance systems, insurers are working around the clock to adapt to the new normal. In the traditional setup, agents were appointed by the insurance companies and exclusively worked for them. In a digital world, agents are also being appointed by brokers who work with multiple insurance companies and provide access to various customers coming to their platform. Insurance companies and brokers are now aggressively building their digital platforms. While insurance companies center their activities around their unique product offerings, brokers usually shed more importance on the needs of their customers by listing the products of multiple insurance companies.



Source:https://pwonlyias.com/current-affairs/all-in-one-policy-plan-to-spread-insurance-in India

Bima Sugam

Bima Sugam is an online marketplace that will house all companies selling life and non-life insurance on a single platform. The launch of the platform, which has already missed two deadlines, has now been rescheduled for June 2024. The demand is for easy accessibility, efficient communication, enhanced customer engagement, prompt issue resolution, and valuable data insights. Bima Sugam, the contemplated insurance e-marketplace, is a step in this direction. The aim is to integrate it with India Stack to ensure seamless delivery of insurance services. It envisages providing an end-to-end experience to prospects and policyholders. It is conceptualised to be a one-stop solution with the facility to purchase, service and settle insurance contracts. It will also enhance digital access and scope for insurance intermediaries and enable assisted purchases to be a very seamless process. The proposed portal will be a 'game-changer' and a 'UPI moment' for the insurance sector. Bima Sugam aims to simplify the process of purchasing insurance for consumers. All insurance requirements, including those for life, health, and general insurance (including motor and travel) will be met by Bima Sugam. This platform will help in the settlement of claims, whether its health coverage or death claims, in a paperless manner on the basis of policy numbers. The insights generated by Bima Sugam may lead to more prudent underwriting, information sharing, prevention of mis-selling and fraud. It is an attempt to universalise and democratise insurance and shift it from a push to a pull product. The larger intent is to slowly graduate towards building a financial market infrastructure to be rolled out in phases.

Insurance Packages for Farmers

Finance Minister and Agriculture Minister have inaugurated the 'Kisan Rin Portal' to help farmers avail subsidised loans under the Kisan Credit Card (KCC). According to the agriculture ministry, the Kisan Rin digital platform offers a comprehensive view of farmer data, loan disbursement specifics, interest subvention claims, and scheme utilization progress, fostering seamless integration with banks for more focused and efficient agriculture credit. There are about 7.35 crore KCC accounts as of March 30 with a total sanctioned limit of Rs 8.85 lakh crore, it said in a statement. As per the official data, the government has disbursed agri-credit of Rs 6,573.50 crore at subsidized interest rate during April-August this fiscal. To extend the benefits of KCC, the door-to-door campaign will reach non-KCC holders of beneficiaries of the central scheme PM-KISAN, under which Rs 6,000 per annum is given to each identified beneficiary farmer's bank account. In the case of the WIND portal, the ministry said the manual extends the impact of the Weather Information Network Data Systems (WINDS) initiative. The portal leverages advanced weather data analytics to provide stakeholders with actionable insights on weather for informed decision-making in agriculture. This comprehensive manual also provides stakeholders with an in-depth understanding of the portal's functionalities, data interpretation, and effective utilisation, empowering farmers, policymakers and various agricultural entities to make well-informed choices. It also caters to the parametric crop insurance scheme of the ministry, in addition to non-scheme parametric insurance programmes for crop risk mitigation and disaster risk reduction and mitigation being run by the insurance industry.

Innovations in Technology

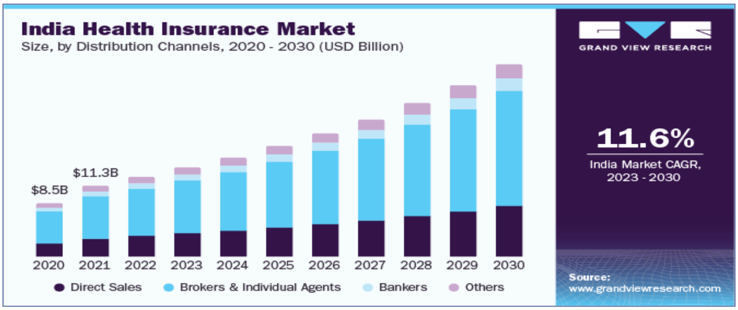
Digitization has become an integral part of modern life. The policyholders are investing only after ample research, unlike a decade ago when these avenues were just in the imagination. With global investments in insurtech estimated to have reached $26 billion between 2021 and 2022, the insurance landscape is projected to flourish at a Compound Annual Growth Rate (CAGR) of 20 per cent from 2021 to 2031. This promising growth trajectory underscores the increasing relevance of technological innovations in modernizing and streamlining the insurance industry in India. The Artificial Intelligence Revolution is a Paradigm Shift in Underwriting and Risk Assessment. This is a pivotal technology making waves in India's business insurance sector is Artificial Intelligence (AI). Corporate giants such as Aditya Birla Sun Life Insurance Ltd. are entering into strategic collaborations with specialized technology firms like Artivatic.ai to develop AI-powered underwriting platforms. These partnerships have given rise to cutting-edge platforms like AUSIS by Artivatic.ai, which are rewriting the rulebook for risk assessment. Traditionally, underwriting has been a laborious, time-consuming affair that could span several weeks. However, these AI-driven platforms have condensed the timeline drastically, enabling underwriting decisions to be made within hours or even minutes. Leveraging machine learning algorithms, these platforms rapidly analyze both structured and unstructured data, thereby mitigating the risk of manual errors and accelerating the policy issuance process. The advent of AI, however, brings its own set of ethical dilemmas and challenges, chief among them being the potential for biases in decision-making algorithms. A robust regulatory framework is imperative to monitor and correct such biases, ensuring that the technology serves as an enabler rather than a divider. Moreover, AI's role in enhancing customer experience is noteworthy. Customer service chatbots like HDFC Ergo's DIA and Reliance General Insurance's RIVA operate around the clock, leading to discernible improvements in customer satisfaction metrics.

Source: https://danfiehn.co.uk/what-are-the-4-main-areas-of-digital-transformation/

The Future of Predictive Modeling AI is not the sole technological catalyst in the insurance sector's ongoing evolution. Big data analytics is increasingly becoming the technology of choice for insurers keen on predictive modeling. According to a report by PwC, a majority of Indian insurance companies plan to incorporate big data analytics in the next two years. Predictive analytics empowers these firms to forecast future occurrences like natural disasters based on historical and real-time data, thereby potentially reducing claim costs by up to 20 per cent. This technology also enables a more nuanced customer profiling, laying the groundwork for personalized insurance plans tailored to individual needs. Balancing Innovation with Ethical and Regulatory Concerns As we contemplate the sector's future, it is vital to address looming challenges. Data security, privacy, and regulatory compliance continue to be pressing concerns. Recent statistics indicate that 25 per cent of Indian businesses have reported data breaches in the past year, signaling an urgent need for enhanced security measures. Firms that can strategically balance technological advancements with ethical and regulatory considerations appear to be best positioned for success. Collaborative initiatives like those between Aditya Birla Sun Life Insurance Ltd. and Artivatic.ai exemplify the type of partnerships that are likely to define the future trajectory of India's business insurance sector, setting the stage for a more efficient, equitable, and customer-centric ecosystem.

Nationwide Cashless Medical-Insurance Settlement

In the current landscape, the health insurance business is facing both challenges and opportunities. Insurance regulator IRDAI has mandated the Committee on Common Empanelment Process of Hospitals and 100 percent Cashless to submit a report on implementing fully cashless medical-insurance settlement in hospitals across the country. Currently, cashless settlement is available in 49 percent of the hospitals, numbering around 25,000. Around 400 million medical-insurance policyholders are likely to benefit once the plan is implemented. In the wake of recent clashes between insurance companies and hospitals, IRDAI has been exploring ways to resolve such incidents. According to an order issued by the General Insurance Council (GIC) dated August 1, the committee will provide weekly updates, with an aim to introduce nationwide cashless settlement. (Life and General Insurance) Councils are playing an active role in enabling common empanellement for hospitals and interoperability to provide seamless and frictionless claim settlement for customers. Embracing technological advancements allows insurers to navigate the evolving landscape, meet customer expectations, and provide enhanced services in a growing market.



Source:https://www.grandviewresearch.com/industry-analysis/india-health-insurance-market

insurance lifecycle. AI algorithms combined with machine learning models and predictive analysis will be leveraged to make underwriting an essential process in the insurance industry. Process automation will help increase the speed of traditional processes that require manual intervention. Further, conversational AI will be harnessed in the insurance industry throughout the value chain and will help customers by assisting them during various stages of insurance procurement to claim process. Today there is the need for DIY (do-it-yourself) products; several insurers have come out with such products. The present framework advocates for sufficient choice instead of providing any strict prescriptions, keeping the interests of policyholders central. It is safe to say that smart contracts, parametric triggers and decentralised insurance would be the future. Accessibility, availability, awareness, choiceness, healthy competition all led by technology is the way forward

Do-it-yourself Insurance Products

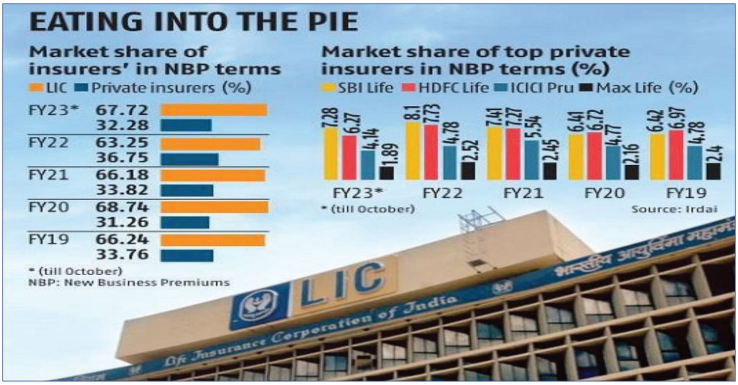
Insurance Industry was largely dominated by offline channels like corporate agents, offline brokers or banks. Today, rapid digitization, product innovation and progressive regulation policies have made it possible for consumers to buy insurance through multiple distribution channels with the click of a button. IRDAI is pursuing reforms in the insurance sector in order to explore and offer flexible, do-it-yourself insurance products. IRDAI is actively pursuing reforms in the insurance sector to enhance its adaptability and responsiveness. To meet these changes, the body is exploring flexible, do-it-yourself insurance products, leveraging advisory technologies and digital assistants. The Regulator anticipate a future where insurers can efficiently manage large and diverse data sources, harnessing quantum computing to revolutionize risk assessment and decision-making, thereby significantly improving the

Enhanced Products and Services

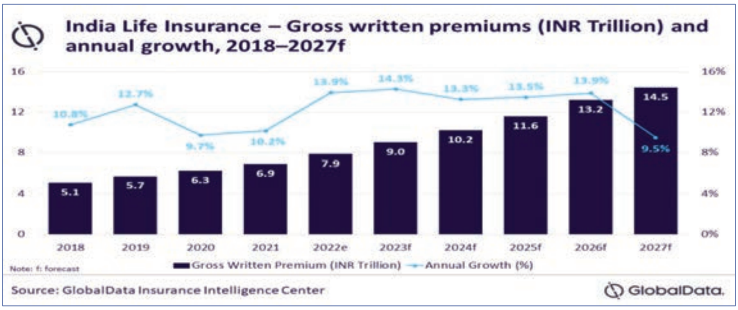
Insurance market in India is expected reach US$ 222 billion by 2026. The Indian insurance sector, with around 70 players, is inadequate to serve its 1.4 billion populations and the industry requires more insurance companies to meet the growing demand. Catering to the needs of the biggest population on the planet "cannot be done with a handful of players or with a handful of products. There is scope for insurance proliferation in the traditional risk areas — life, health, property, motor or crops. Also, as the world becomes increasingly tech-based and digital, the emergence of cyber risks and potential losses create a significant market opportunity in the insurance sector. The next 10 years are of utmost importance for the insurance sector since the industry will see change in the nature of insurance products as well as the way that companies distribute it given the rise in level of awareness. More customized products will be required and all of this will necessitate more players, more opportunity, more expertise, and most importantly more capital to be infused in the sector. The industry has to leverage AI and machine learning to enhance underwriting accuracy which can be used to tailor products based on customer risk profiles. IRDAI has plans to explore the 'Bima Trinity', which represents a comprehensive approach to insurance services. '

Principle-based Architecture

The insurance industry is moving towards a principle-based regulatory architecture. The adoption of Risk-Based Capital Framework (RBC) and Risk-Based Supervision Framework (RBSF) is expected to evolve, with insurers actively engaging in quantitative impact studies that is underway. A risk-based capital and supervision framework would mean that the extent of capital required and intensity of supervision would vary depending on the risk that a company undertakes. The State Insurance Plan (SIP) is positioned to play a pivotal role in extending insurance coverage across diverse regions. Insurance companies were also asked to collaborate with microfinance institutions and non-banking finance companies to promote financial inclusion. The central theme of all the reforms is protecting the interests of policyholders while moving towards a principle-based regulatory regime. That regime advocates laying down guiding principles and not providing strict prescriptions. Thus, the insurers have been permitted to exercise choice as per their respective marketing strategies based on dynamic and evolving demands of the market.



Source:https://www.business-standard.com/article/companies/lic-gains-market-share-in-fy23



Insurance Salespersons to Every Rural Nook Before End-2024

The IRDAI will deploy bima vahaks (BVs) in every gram panchayat (cluster of villages) before 31 December 2024. The BV channel is a women-centric insurance distribution avenue to enable insurance products to reach every nook and corner of a village, with each gram panchayat having a 'vahak' to sell and service simple insurance products. A BV would be a legal person registered in accordance with the relevant laws and engaged by an insurer. An individual BV could be any individual appointed by an insurer or appointed by a corporate BV. The guidelines stipulate, Every insurer shall endeavour to engage individual bima vahaks and/or corporate bima vahaks with the focus to progressively achieve coverage of every gram panchayat. There is no restriction on the number of insurers a BV is allowed to work with. BVs, both corporate and individual, will be authorised to undertake activities like the collection of proposal information and know-your-customer (KYC) documents and coordinate claims-related services. BVs are to be encouraged to adopt electronic payment modes facilitated by insurers to enable the direct remittance of premiums. The BV guidelines will come into force with the launch of Bima Vistaar, an all-in-one affordable insurance product offering life, health, and property cover for rural households with the aim of financial inclusion and social security. The regulator is finalising the details of the Bima Vistaar, which is expected to be launched soon.

InsurTech Start-up Receives US$24m in new funding round

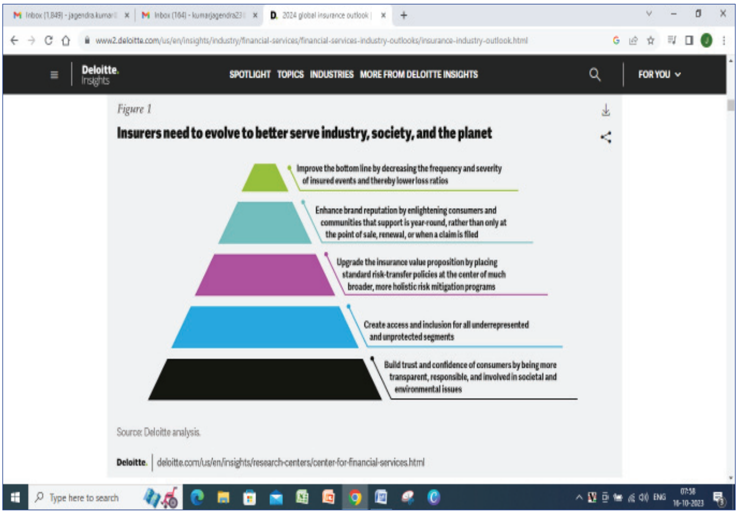
Onsurity, an Indian startup that offers monthly subscription-based insurance solutions to micro, small and medium enterprises, has raised $24m in a funding round led by the World Bank's International Finance Corporation (IFC). With the fresh funds, Onsurity aims to grow its customer base to over 50,000 companies, providing coverage to over 5m lives by 2026. The Series B round also saw the participation from existing investors Nexus Venture Partners and Quona Capital. With the fresh funding, the three-year-old startup has raised $40m in total. India has over 63m micro, small and medium enterprises (MSMEs), which hire close to 400m employees and support 675m families. Onsurity aims to fill the insurance gap with its suite of offerings designed specifically for MSMEs enterprises and emerging businesses. It also integrates healthcare and wellness benefits for enterprises — irrespective of their size — to let their employees' access health checkups, fitness membership, doctor consultation and discounted medicines, among other services.

Currently, Onsurity serves over 5,000 enterprise customers, reaching over 1m people across 26 Indian states and three union territories. Its members include business executives, startup employees and gig workers as well as their dependents. As much as 80% of Onsurity's total portfolio comprises SMEs, with over half its member base composed of blue-collar workers and close to 40% coming from Tier-II and Tier-III cities. Further, the Bengaluru-based startup, founded in 2020, recently expanded its product line by introducing cyber risk insurance to let businesses protect their online presence with a dedicated coverage against privacy and security breach instances. It also offers other business products including D&O liability insurance and commercial general insurance under Onsurity Plus. Onsurity works with about five insurance partners and four to five companies in the healthcare and wellness services space. Mr Yogesh Agarwal, founder and CEO of Onsurity, says that his company has partnered with some of the world's top reinsurers, without disclosing their names. Onsurity has also started partnering with hospitals directly, with more than 100 hospitals already onboarded, to facilitate claims processing and to boost healthcare integration.

Pay Claims Automatically

Claim Settlement is a much easier process than initial years; insurance companies are aiming towards positive customer feedback, for standing out in the competitive market landscape. With the help of technological tools, insurance companies could pivot to paying certain claims without the policyholder having to file them. It is time for the insurance industry to reinvent and introduce more responsive tech-led avenues to cater to the needs of over 140 crore Indians and their businesses. It is time to become future ready. There is a need for greater adoption of technology to increase insurance penetration, reduce frauds and provide better customer service. This is possible through smart contracts that make extensive use of technology. For instance, in travel insurance, a smart travel contract operating on a public blockchain will have all details of the booked flight… it would be programmed to monitor flight data continuously, triggering instant claim settlement in the case of delay or cancellation. Likewise, if a cyclone or hurricane were to hit a region at a certain speed, the compensation would get paid based on the policy terms and conditions for people in that area with decentralised insurance. AI algorithms combined with machine learning models and predictive analysis will be leveraged to make underwriting an essential process in the insurance industry. Process automation will help increase the speed of traditional process that required manual intervention. Further, conversational AI will be harnessed in the insurance industry throughout the value chain and will help customers by assisting them during various stages of insurance procurement to claim process.

The IRDAI is also looking to boost Insurance Information Bureau (IIB) as a one-stop solution for data needs of the industry – it will provide insights, early warning signals and analytics. All general and health insurance companies are now onboard the National Health Claims Exchange and are in the process of full integration

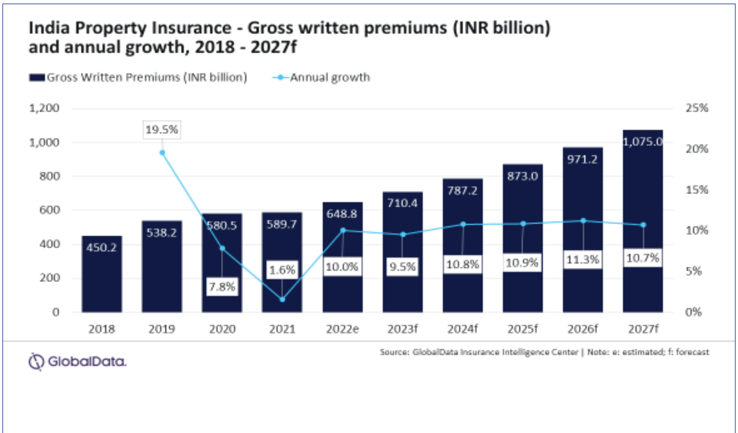


Source:https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-

India Set to be Reinsurance Hub

Insurance regulator is pushing for reforms to make India a reinsurance hub, but achieving this goal requires more comprehensive changes, including Order of Preferences and taxation. While progress has been made, the pace of reforms remains debatable. The recent changes in reinsurance regulations have signaled the regulator's resolve to transformative changes to develop the Indian reinsurance market. However, the IRDAI can't do the heavy lifting singlehandedly. There are aspects, such as taxation, that come in the way of making India an attractive destination for Foreign Reinsurance Branches (FRBs) though the GIFT City is aimed at solving these taxation woes. Building an ecosystem for FRBs will also involve the regulator to take tough calls on whether capping volume of business is necessary for insurer's cession with cross-border reinsurers (CBRs). Bringing a level-playing field on the tax rate front could be a game-changer and incentivise more FRBs to look at India.

While FRBs located in India must play the game with a tax rate of 42 percent, the Indian national reinsurer, GIC Re, is subjected only to 22 percent tax on income. A reason why many people are not coming to India is that tax rates are still penal. If they can move towards creating a single tax regime for all participants — for onshore and offshore — that will make it a level-playing field and attract much more participants in the country. If reforms can continue to be implemented at good pace over the next two to three years, then India can achieve reinsurance hub status within next decade. Lloyd's of London has been operating as a FRB in India since 2017. Notably, the FRBs — since 2017 when they started operations — have over the years steadily increased their share in reinsurance pie from about 13 percent to 30 percent in 2021-22. The business of the GIC Re is expected to be impacted in FY24 as the sectoral regulator scrapped the 'burning cost' model of pricing by reinsurers. The Insurance Regulator has advised all non-life insurers and reinsurers to ensure that the Insurance Information Bureau (IIB) published premium rates for fire and engineering policies are not embedded as the minimum rates within the reinsurance treaty agreements for the risks commencing on and after April 1, 2023. Simply put, the burning cost rate is arrived at by dividing claims paid by sum insured. In 2020, the GIC Re, decided to accept reinsurance placement only if their clients belonging to certain industries are charged a premium rate on burning cost basis as arrived by IIB. The industry is also expecting the Central government to hike the deduction limits under the Income Tax Act and a reduction in the Goods and Services Tax (GST) from the current 18 per cent on the premium paid.



Source: Global Data Insurance Intelligence Center

Proposed Amendments

The proposed amendments to insurance laws include rationalised capital requirements, composite registration, one-time registration for intermediaries, value-added services by insurers, sale of other financial products, etc. Additionally, initiatives such as an e-marketplace protocol, localised women-centric distribution force, and simplified benefit-based products are being considered to further enhance accessibility, availability, and affordability. These reforms are expected to significantly contribute to insurance penetration, promoting a more inclusive and robust insurance ecosystem in India. The amendments proposed to the Insurance Act 1938 and the Insurance Regulatory and Development Authority Act 1999 proposed by the Indian government alters the basic architecture on which the industry grew over the past 20 plus years. Scrapping of the statutory Rs 100 crore startup capital for life, general and health insurance business and Rs 200 crore for reinsurance business, allowing different kinds of insurers including captives, changing the investment provisions; allowing insurers to provide services related or incidental to insurance business and distribute other financial products as specified by and subject to regulations. are some of the major amendments proposed by the Indian government to the insurance laws. Another key change proposed is allowing insurance companies to distribute other financial services products. The proposed regulation on composite licences -- insurers allowed to sell life and general insurance policies -- may result in expanding business lines for insurers and a potential increase in M&A (mergers and acquisitions) activity.

Government Initiatives

The government is also playing a leading role in boosting the insurance industry. Some of the initiatives taken by the government are the National Health Protection Scheme under Ayushman Bharat to provide coverage of up to 500,000 rupees to more than 100 million families; Pradhan Mantri Jeevan Jyoti Bima Yojana provides life insurance policy of 200,000 rupees to the people who have no access to such services ; Pradhan Mantri Fasal Yojana benefited 47.9 million farmers in 2017-2018 ;Pradhan Mantri Suraksha Bima Yojana which provides an accidental death and disability cover and Rashtriya Swasthya Bima Yojana, are playing a big role in creating awareness and driving insurance penetration pan-India. The future roadmap of insurance in India looks bright and exciting as the industry is pegged to touch $280 billion by 2020. The evolution of India's insurance sector holds great promise for both customers and units that function within the industry. The last two years, 2021 in particular, have been a watershed period for the life and health insurance sectors because of the pandemic which fostered newer, virtual modes of medical evaluation and policy purchase as also claim settlement. The government of India recently formed a working group to develop a parametric solution for livelihood protection. These solutions could help mitigate losses by providing a safety net for businesses and individuals impacted by global and regional disasters and help them to recover quickly and reduce the overall impact of the disaster on the economy. It will also work towards reinforcing the customers' trust in the insurance sector.

The growth of the Indian insurance sector is important for the expansion of India's GDP. With customer requirements driving innovation in this space, insurance and reinsurance companies have globally experienced accelerated transformation by adopting emerging technologies. The insurance sector is perceived as an important contributor in reducing economic costs by providing further resilience in disaster risk reduction. IRDAI is actively working towards creating an attractive landscape in India's insurance sector, aligning with the country's resilient economy and business-friendly market. The primary objective of these efforts is to ensure the availability, accessibility, and affordability of insurance for all citizens and businesses. The initial reforms focussed on facilitating product launches, flexible capital raising, efficient management of expenses, expanding distribution channels, and enhancing reinsurance accessibility and facilitating setting up of new entities. The insurance sector is directly impacting India's economic growth. The time for 'Insurance 2.0' has arrived and it is all about evolving and reinventing the sector now into a more advanced and tech led avenue. India is a diverse nation which cannot work on the 'one size fits all' strategy; hence, unique Insurance solutions are required today. Insurance should leverage the technology stack fully to push products and look to create a UPI-like moment for the sector. While technology continues to play a pivotal role, the industry needs to deploy digital solutions to collectively work towards improving penetration of insurance in the country by adapting to customer requirements. Insurers need to strike a balance between digital adoption and human intervention that will not only help simplify the entire customer journey, right from search to purchase to claims to customer service, but it will also lead to building positive experiences.

The current Indian Insurance Industry needs more players, products, distribution partners, technology and integration. This is imperative, given India's very own motto of 'Insurance for all by 2047'. India certainly needs more reinsurance support and thereby more reinsurance capacity. Even the existing FRBs —largest in the world— may not want to or be able to absorb all the demand in the coming years. That's where the new regulation is bringing an additional incentive for people to come in and set up business in India and support the growth of insurance market in India. Another welcome change is the amendment on ceding company (insurer), which has been empowered not to cede with those reinsurers who decline to give a quote. This would apply to all reinsurers including GIC Re, FRBs, IIOs (IFSC Insurance Office) and CBRs. The IRDAI is on a mission to revamp and reform the insurance sector in the country and increase penetration, the emphasis is on lighter regulations and a consultative approach. Important government initiatives, strong demographic factors, a conducive regulatory environment, increased M&As, increased foreign direct investment limits in insurance companies, emergence of digital platforms for insurance products, global technology, processes, increased awareness, vibrant distribution channels and international best practices will support the growth of India's insurance sector. A fundamental mission underlying much of this change is that the industry's role is pivoting to that of a sustainability ambassador, influencing and propelling purpose-driven decisions and strategies of clients across industries to create a better workplace, marketplace, and society. TJ

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The Changing Face of the Life Insurance Sector in India

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Neeraj Kaushik, Principal Consultant, is a Product Manager for the Infosys® McCamish NGIN platform initiative at Infosys McCamish Systems. He is an innovative and effective leader recognized for achieving exceptional results in highly competitive environments requiring continuous improvement and has driven the business of large-scale technology projects based out of the US, UK, India, and China Geography for the last 18+ years. He has an excellent business domain, architecture, design, and implementation skills in various life insurance administration as well as producer management & compensation systems. He holds a master's degree in insurance & risk management from BIMTECH (India) and the designations of ALMI (LOMA) and Fellow (III India).

Abstract

The life insurance sector in India has experienced significant growth in recent years, driven by increasing awareness, rising income levels, and favorable demographic trends. Insurers have embraced digitization and technology, enhancing customer experiences and distribution channels. Regulatory reforms have fostered a more consumer-friendly environment, encouraging product innovation and competition. However, challenges persist, such as low insurance penetration and the need for skill development in insurance professionals. Looking ahead, the future of the life insurance sector in India holds immense promise. Insurers are likely to leverage data analytics, AI, and insurtech to personalize offerings and reach untapped markets. As India's economy grows, the sector will continue to evolve, addressing evolving customer needs and building a secure financial future for millions of individuals.

Keywords

Future of Life Insurance, Insurance Penetration, Customer Behavior, Challenges in Coming Decade Etc.

Introduction

The life insurance sector in India has witnessed a significant transformation over the past decade. Rapid technological advancements, changing consumer preferences, and evolving regulatory frameworks have all contributed to the changing landscape of the industry.

While Oriental Life Insurance company was the first life insurance company set up In India in 1818, it was in 1956 that Life Insurance Corporation of India (LIC), the country's first nationalized life insurance, came into being. LIC enjoyed a monopoly until private insurance players started entering the market in the late 90s. As a matter of fact, the entry of these new players completely changed the face of life insurance in India.

This article explores the key drivers of change, the impact of digitization, the rise of new products, and the growing role of insurtech in reshaping the life insurance sector in India.

1. **Technological Advancements Driving Change:** Advancements in technology have revolutionized the way life insurance operates in India. The rise of artificial intelligence (AI), big data analytics, and machine learning has enabled insurers to personalize policies, assess risks more accurately, and improve underwriting processes. Additionally, the adoption of blockchain technology has enhanced transparency and security in policy administration and claims settlement.

2. **Digitization and Its Impact:** With the increasing penetration of the internet and smartphones, digital channels have become essential for insurers to reach out to customers. Online platforms have

made it convenient for customers to compare and purchase insurance products, leading to a shift from traditional agent-based sales. The article explores how digitalization has improved customer experiences, reduced costs, and expanded market reach for insurers.

3. **Changing Consumer Preferences:** Millennials and Gen Z are a key demographic in India, and their preferences have prompted insurers to adapt their offerings. These younger generations seek flexible, transparent, and easily accessible insurance products. The article delves into how insurance companies are tailoring their policies to cater to the changing demands of these tech-savvy consumers.

4. **Evolving Regulatory Landscape:** The regulatory environment plays a crucial role in shaping the insurance sector. The Insurance Regulatory and Development Authority of India (IRDAI) has introduced several reforms to enhance customer protection, improve product offerings, and encourage innovation in the industry.

5. **New Products and Customization:** In response to changing customer needs, insurers are introducing innovative and customized products. Unit-linked insurance plans (ULIPs), term insurance with additional riders, and pension plans are gaining popularity. The life insurance sector has come a long way in terms of product offerings, services and operations. Globally the common goal across insurers has remained consistent – to provide financial protection and security to customers. Brands are now enabling this further by encouraging consumers to become partners in this journey of financial protection for themselves as well as their loved ones.

6. **Technology impact to Products & Services:** Technological advancement in the life insurance industry has helped enhance products and services provided to customers. For example, connecting wellness services to digital channels such as apps and wearable sensors that provide data tracking have benefitted customers alike to monitor their health journey. For the customer, this has enabled healthier lifestyle choices and savings in terms of reduced premiums. For insurers, this has helped in infusing greater customer engagement in this category along with offering premium discounts based on risk associated with lifestyle choices. Many life insurers now have a 'wellness score' on which they offer incentives, rewards and premium discounts to encourage customers to adopt a healthier lifestyle.

7. **Insurtech Revolution:** Insurtech startups have emerged as disruptors in the insurance industry. From AI-powered chatbots for customer support to mobile apps for policy management, insurtech companies are redefining the way insurance services are delivered. This section examines the role of insurtech in increasing efficiency, simplifying processes, and fostering greater inclusivity in the insurance sector.

8. **Shift of Demographic and Economic Trends:** Another crucial factor that will shape the life insurance industry in the coming years is a shift in demographic and economic trends. In India, life expectancy has consistently increased over time. The aging population is retiring and becoming reliant on government and employer-sponsored pension plans. This is a test, particularly when it is the sole wellspring of monetary security for the resigned populace. According to a World Economic Forum report, India is one of a select few nations with a large market for retirement savings but a significant savings gap. Additionally, the majority of retirees will outlive their savings, according to the report.

9. **Time and money investments:** Life insurance companies are already putting in time and money to customize products that allow customers to control their insurance journeys while maintaining their financial

security at all times. One-size-fits-all protection items are being superseded by far reaching and refined contributions that keep the client's interest and prosperity on a fundamental level. For example, extra security organizations are integrating liquidity and venture as a significant piece of their items by offering the adaptability to pull out cash sooner or add riders to top-up their particular insurance covers or change charge installment recurrence, as required. In addition, insurers must consider developing protection and income generation avenues that alternate protection and retirement asset accumulation phases.

"The IPO of Life Insurance Corporation (LIC) of India was the largest IPO ever in India and the sixth biggest IPO globally of 2022.As of November 2022, listing of LIC accounted for more than a third of resources mobilized in the primary equity market until November 2022. ("Budget 2023: India to emerge as one of fastest-growing insurance ...")

10. **Impact of Pandemic:** Coronavirus has generally reshaped the manner in which individuals approach their lives. The need to prioritize financial well-being over everything else has been reaffirmed by the global reset. Life insurance has the potential to meet the ever-evolving requirements of customers and establish long-term growth and loyalty channels. In order to help the insurance industry achieve its goal of providing financial security in the most difficult of times, insurers should strive to provide customers with a one-of-a-kind experience that enables them to lead a positive and secure life.

Seizing Opportunities in the Coming Decade

The Path to Growth for the Indian Life Insurance Industry

The Indian life insurance industry is poised for significant growth in the coming decade. With a growing economy, increasing consumer awareness, and favorable demographic trends, several opportunities are emerging that can reshape the industry. In this article, we will explore the key opportunities the coming decade will bring to the Indian life insurance sector and how insurers can leverage them to drive sustainable growth and meet evolving customer needs.

1. **Rising Insurance Awareness and Penetration:** One of the primary opportunities lies in increasing insurance awareness and penetration. As the country continues to develop, more individuals are becoming financially literate and recognizing the importance of life insurance for financial security. Life insurance carriers can capitalize on this trend by developing educational campaigns and personalized marketing strategies to reach untapped markets and potential customers.

2. **Expanding Middle Class and Affluent Segments:** India's growing middle class and affluent population present a significant opportunity for life insurers. As disposable incomes rise, individuals are looking for ways to protect their assets and secure their families' financial future. Carriers can develop customized products targeting this segment, such as savings-oriented plans, retirement solutions, and health protection policies.

3. **Digitalization and Insurtech Advancements:** The advancement of digital technology and the rise of insurtech startups open up new avenues for insurers to enhance their services and distribution channels. Embracing digitization can streamline processes, improve customer experiences, and reduce operational costs. Leveraging insurtech innovations, such as AI-powered chatbots for customer support and data analytics for personalized offerings, can drive efficiency and attract tech-savvy customers.

4. **Product Innovation and Customization:** The coming decade offers a fertile ground for life insurance carriers to innovate and tailor their product offerings. Insurers can design flexible policies that cater to diverse customer needs, such as unit-

linked insurance plans (ULIPs), microinsurance, and income protection solutions. Customizing products based on demographic data and customer preferences will be instrumental in gaining a competitive edge.

5. **Leveraging Data Analytics and AI:** With the vast amount of data available, insurers can leverage data analytics and AI to gain deeper insights into customer behavior, preferences, and risk profiles. By analyzing this data, carriers can offer personalized products, optimize pricing, and identify potential cross-selling opportunities. Harnessing the power of AI can also improve underwriting processes, leading to faster and more accurate policy issuance.

6. **Pension and Retirement Solutions:** India's demographic transition is resulting in a larger aging population, creating a demand for pension and retirement solutions. Life insurance carriers can tap into this opportunity by offering annuity plans and retirement products that address the financial needs of the elderly. Developing innovative solutions for post-retirement income can attract a substantial customer base.

7. **Rural and Semi-Urban Expansion:** The majority of India's population resides in rural and semi-urban areas, where insurance penetration is relatively low. This presents an opportunity for life insurers to expand their reach and provide affordable, accessible products to these underserved markets. Collaborating with microfinance institutions and leveraging technology for distribution can be effective strategies in this context.

8. **Focus on Health and Wellness:** Health and wellness are gaining prominence among the Indian population. Life insurance carriers can explore opportunities in the health insurance segment, offering comprehensive coverage and value-added services. Integrating wellness programs and incentivizing healthy lifestyle choices can create a positive impact and attract health-conscious customers.

9. **Bancassurance and Partnerships:** Collaborating with banks and financial institutions through bancassurance partnerships can significantly expand an insurer's customer base. Bancassurance enables insurers to tap into the existing customer networks of banks and offer life insurance products as part of bundled financial solutions.

10. **Customer Engagement and Retention:** In an increasingly competitive landscape, customer engagement and retention will be crucial for insurers. Building long-term relationships with customers through excellent service, proactive communication, and regular policy reviews can enhance customer loyalty and advocacy.

The coming decade holds immense potential for the Indian life insurance industry, driven by rising awareness, increasing disposable incomes, technological advancements, and evolving customer preferences. To leverage these opportunities effectively, life insurance carriers must adopt customer-centric strategies, invest in technology and innovation, and continuously adapt their product offerings to meet the dynamic market demands. By capitalizing on these opportunities, the industry can witness sustained growth and contribute to the financial well-being of millions of individuals across the country.

Key Challenges Faced By Life Insurance Carriers in India in Coming Decade

In the coming decade, life insurance carriers in India are likely to encounter several key challenges as they navigate through a rapidly evolving landscape. Some of the prominent challenges they may face include:

1. **Changing Customer Expectations:** With increasing digitalization and exposure to global trends, customers' expectations are evolving. They seek personalized and flexible insurance solutions that are easily accessible and tailored to their specific needs. Life insurance carriers will need to adopt customer-centric approaches

to meet these expectations and maintain customer loyalty.

2. **Intense Competition:** The life insurance sector in India is highly competitive, with numerous players vying for market share. New entrants, including digital insurers and insurtech startups, will intensify the competition further. Carriers will need to differentiate themselves through innovative product offerings, superior customer experiences, and efficient distribution channels.

3. **Regulatory Compliance:** Regulatory changes and compliance requirements are continually evolving in the insurance industry. Life insurance carriers will need to stay abreast of these changes and adapt their business processes to ensure compliance. Non-compliance can lead to penalties and reputational damage.

4. **Technology Adoption:** Embracing technology is crucial for insurers to enhance operational efficiency and improve customer experiences. However, implementing and integrating new technologies, such as AI, blockchain, and data analytics, can be complex and require significant investments.

5. **Cybersecurity Risks:** As insurers increasingly rely on digital platforms and data analytics, they become more vulnerable to cyber threats. Protecting sensitive customer information and maintaining data security will be paramount to maintain trust and avoid potential breaches.

6. **Low Insurance Penetration:** Despite a large population, insurance penetration in India remains low. Life insurance carriers will need to develop innovative distribution strategies and increase awareness to reach untapped markets and potential customers.

7. **Investment Challenges:** Insurers face the challenge of managing their investment portfolios effectively to generate stable returns while ensuring capital preservation. Market volatility, changes in interest rates, and economic uncertainties can impact investment performance.

8. **Talent Management:** With the rapid expansion of the insurance sector, there is a growing demand for skilled professionals who can navigate the complexities of the industry and manage innovative initiatives effectively. Attracting and retaining talent will be crucial for sustained growth.

9. **Demographic Changes:** India's demographics are changing, with an aging population and a rising middle class. Carriers will need to adapt their product offerings to address the evolving needs of different customer segments.

10. **Health and Longevity Risks:** As life expectancy increases, insurers will face greater challenges in managing health and longevity risks. Designing appropriate health and retirement products to cater to an aging population will become increasingly important.

Conclusion

As indicated by analysts at GlobalData, India's life coverage industry is expected to grow at a compound annual growth rate (CAGR) of 10.3% through 2026, driven by growing awareness and positive regulatory landscape.

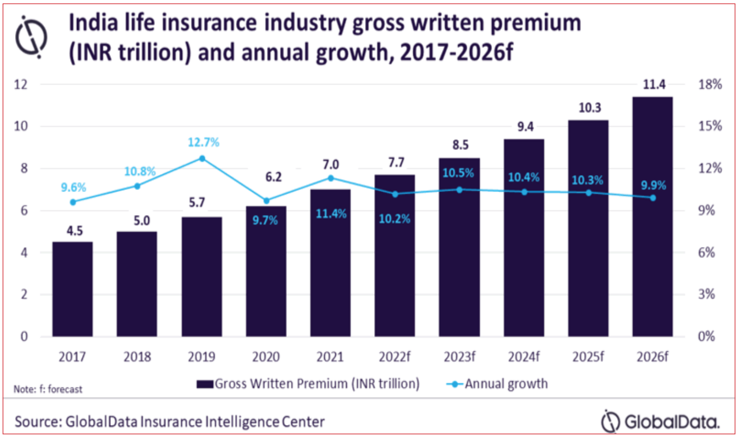

Table 1: Premium Growth in Indian Life Insurance Sector from 2017 onwards

It is forecasted to grow to $222 billion in 2026, in terms of gross written premiums.

In 2023, according to Insurance Analyst at Global Data, the life insurance industry is set to grow by 10.5%; driven by the development of digital distribution channels and product innovation.

Analysts at Global Data commented: "Supported by growing awareness, increasing demand for group policies, and a favorable regulatory environment, the life insurance industry in India is experiencing a significant post-pandemic growth.""

They continued: "Private insurers are also increasingly offering group life policies as an employee benefit. "Such policies, where the risk pool is diverse leading to lower premiums, are cost-effective employee retention measures."" ("Life insurance industry in India to grow at 10.3% CAGR through 2026 ...")

Path Forward

The life insurance industry in India will encounter various challenges in the coming decade. To succeed and thrive in this dynamic environment, carriers will need to embrace innovation, prioritize customer-centric approaches, stay compliant with regulations, and navigate the changing market landscape with agility. The life insurance sector in India is experiencing a transformative journey driven by technological advancements, changing consumer preferences, and supportive regulatory reforms. As the industry continues to evolve, insurers must adapt to these changes to stay competitive and deliver superior services to their customers. Embracing innovation, leveraging technology, and understanding customer needs will be key to shaping the future of the life insurance sector in India. TJ

The Changing Face of Indian General Insurance Industry

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Abstract

The general insurance industry in India, established in the late 19th century, has undergone significant transformations including nationalization and liberalization. Despite recent challenges, it is projected to grow at a CAGR of 15% over the next five years, aided by technological advancements like digitalization, AI, Blockchain, and Data Analytics. Digitalization, AI, Blockchain, and Data Analytics have significantly impacted the insurance industry. These technologies have streamlined processes, improved customer experience, increased efficiency, and enabled better risk assessment and fraud detection.

The study aims to understand the new face of the Indian general insurance Industry and comprehend the technological and general reforms of recent times.The research adopts a cross-sectional design to investigate the evolving Indian general insurance industry. Primary data is gathered through structured questionnaires, with statistical analysis employed for interpretation.

The findings reveal a positive impact of technology and digitalization on the Indian general insurance industry. However, there is a need for better communication with those who express uncertainty or perceive no significant impact. The study also highlights a diverse range of information sources used by individuals to stay informed about changes in the general insurance industry. Key suggestions include incorporating advanced technological solutions for personalized policies, leveraging technology for streamlined processes, enhancing customer services through digital technologies, and launching awareness and educational initiatives. The study acknowledges limitations such as restricted time for data collection and analysis, potential response bias due to flexibility in data collection methods, and feasibility issues that may have resulted in missed research papers or books.

Keywords

General Insurance, India, Nationalization, Liberalization, Data Analytics, Cross- sectional Design, Questionnaires, Technology Impact, Communication, Advanced Technological Solutions, Customer Services, Educational Initiatives.

1. Introduction

1.1 History of General Insurance in India

The roots of general insurance in India can be traced back to the late

19th century when the British rulers introduced the concept of insurance to safeguard their commercial interests. The first general insurance company, Triton Insurance Company Ltd., was established in Kolkata in 1850, paving the way for a structured insurance framework. However, it was in the post-independence era that the Indian government, recognizing the need for a robust insurance sector to support the nation's growing economy, nationalized the industry in 1972. This led to the creation of four primary insurance companies: National Insurance Company Ltd., New India Assurance Company Ltd., Oriental Insurance Company Ltd., and United India Insurance Company Ltd in 1973 under the apex body General Insurance Corporation (GIC).

Over the ensuing decades, these public sector entities played a pivotal role in providing insurance coverage to diverse sectors of the economy, from agriculture to infrastructure. The liberalization of the Indian economy in 1991 ushered in a new era of economic reforms, including the insurance sector. The Malhotra Committee, appointed in 1993, was a significant milestone in India's insurance sector reform. Chaired by former Finance Secretary R.N. Malhotra, the committee recommended liberalizing the insurance industry by allowing private companies and foreign investors to operate, leading to the enactment of the Insurance Regulatory and Development Authority (IRDA) Act in 1999. This liberalization injected a fresh wave of competition, innovation, and customer-centricity into the industry, reshaping its contours fundamentally.

The insurance sector in India underwent a significant transformation in 2002 due to the General Insurance Business (Nationalization) Amendment Act. Private companies were permitted by IRDA to operate in general insurance alongside existing government insurers. The amendment also restructured GIC's subsidiaries into independent firms, converting GIC into a national reinsurer. Notably, this period marked the introduction of brokers for the first time in the Indian insurance market, enhancing market dynamics and consumer choices.

1.2. Present

The general insurance industry in India has undergone a plethora of reforms and policy changes in the last three years. These reforms have been aimed at making the industry more competitive and efficient, and to provide greater consumer protection.

The COVID-19 pandemic had a significant impact on the general insurance industry in India, leading to a sharp increase in claims, particularly for health insurance. In 2020, the general insurance industry recorded a net loss of Rs. 13,000 crores, the first time in a decade. However, the industry recovered strongly in 2021, with net profits of Rs. 20,000 crores.

Despite the challenges posed by the pandemic, the general insurance industry in India is expected to continue to grow in the coming years. According to a report by CRISIL, the general insurance industry is expected to grow at a CAGR of 15% over the next five years.

The penetration of the general insurance industry in India is low, at 0.7% in FY2022. This is significantly lower than the global average of 4.9%. However, the penetration of general insurance in India is expected to increase in the coming years, driven by the various initiatives being taken by the government and the insurance industry.

Here are some key statistics about the general insurance industry in India:

1. The general insurance industry in India is the 10th largest in the world, with a gross premium written of Rs. 2.5 lakh crore in FY2022.
2. The public sector alone accounts for 60% of the market shares. The private sector accounts for the remaining 40% share.
3. The health insurance segment is the largest segment of the general insurance industry, accounting for a share of 25%. The motor insurance segment is the second largest segment, accounting for a share of 20%.
4. The rural market accounts for a share of 30% of the general insurance industry.
5. The digital insurance market is growing rapidly in India, with a growth rate of 20% in FY2022.

1.3 Technology

1.3.1 Digitalization

Digitalization is the result of information and communication technologies developing with its main aim being to create and use the knowledge and exchange information

(Manning, Stephenson, & Todd, 2007; Engel, 1985,) the insurance industry in today's world works on raw data analyzation and experience of the insurance company, with help of digitalization the process of giving as well as taking insurance has become a much easier task as well as brings new opportunities. However, this does not mean digitalization is easy. Digitalization of insurance is a big step for the insurance industry.

1.3.2. AI

Artificial intelligence is the new norm of the world that is used everyone around the world, AI works based on Machine learning, predictive analysis, pattern computing, Natural language processing and much more –

These can be seen in today's insurance industry in simple ways such as Chat bots, Premium prediction and so much more this not only makes task for Insurers but also the proposers to help them decide if they want the insurance or not, comparing the prices and features of insurance has become easier than ever thanks to AI.

1.3.3. Blockchain

Blockchain is a technology the makes financial transactions easier and increases efficiency. It allows editing and creating the transaction records that are managed by different computers. Blockchain is of specific interest to insurance because of the many ways it may improve operations and efficiency. The potential for blockchain is for increased security, reduction of fraud, increased efficiency, and records sharing.

1.3.4. Data Analytics

Much of the work involved in data analytics relies on data mining, data modelling, machine learning, and analyzing behavioral trends to produce business intelligence solutions. Incumbents want to employ this technology to enhance forecast and quantification of new hazards, as well as to make use of data acquired by sensors and communication technologies.

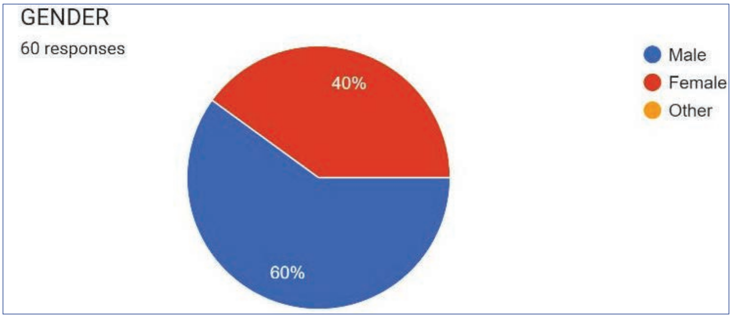
2. Objectives

1. To Study and understand the new face of the Indian general insurance Industry.
2. To understand the technological and general reforms of recent times.

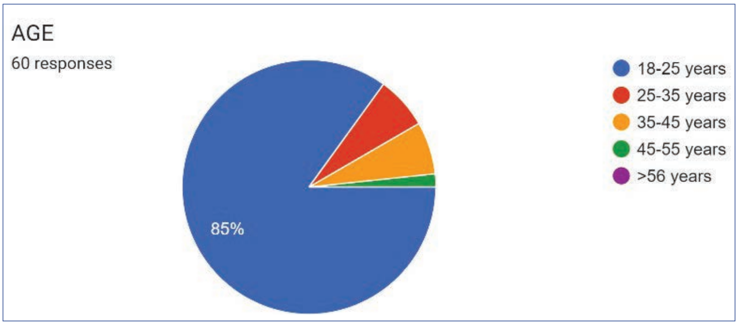
3. Research Methodology

This research employs a convenient sampling method, collecting primary data from sixty respondents aged eighteen and above in India's evolving general insurance industry. Data is gathered through a structured questionnaire distributed through diverse channels while adhering to ethical standards and data privacy. Statistical analysis is utilized to gain insights into industry changes, technology advancements, and consumer behaviors. Findings will be presented in a comprehensive research paper, with data analysis conducted using MS Excel and Google Forms.

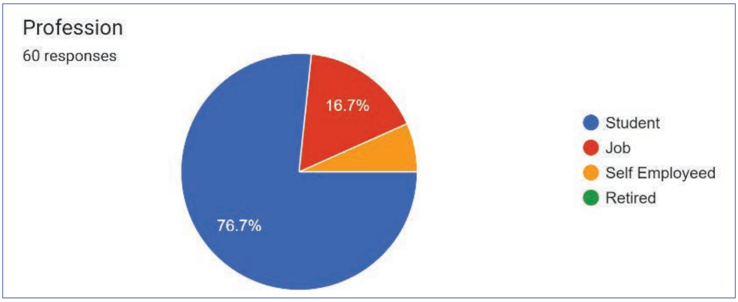
4. Findings and discussions



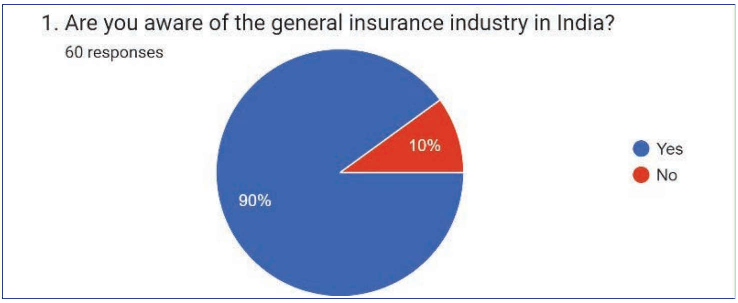
Categorizing respondents based on gender, we observed that 60% of the population were males and 40% pf the population were females.



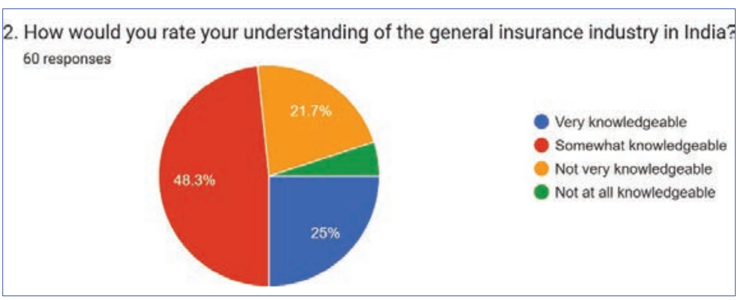
Categorizing the respondents by age, we observed that 85 % of the population were between 18-25 years, 6.7% of the population were between 25-35 years, 6.7% of the population were between 35-45 years and 1.7% of the population were between 45-55 years.



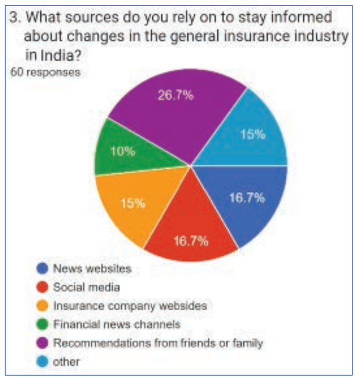
Categorizing the respondents based on profession, 76.7% of the population were students, 16.7% were employed and 6.7% of the population were self-employed.



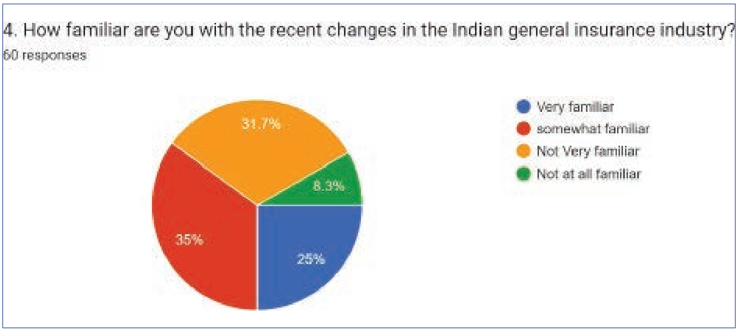
The analysis indicates that a significant majority of the population, comprising 90%, is well informed about the general insurance industry. This suggests a prominent level of awareness and familiarity within the surveyed population. On the other hand, 10% of the population lacks awareness about industry. While this group constitutes a smaller portion, it may present an opportunity for educational and outreach efforts to bridge the knowledge gap and increase overall awareness within the community. This data underscores the importance of targeted information dissemination and awareness-building initiatives for the general insurance industry.



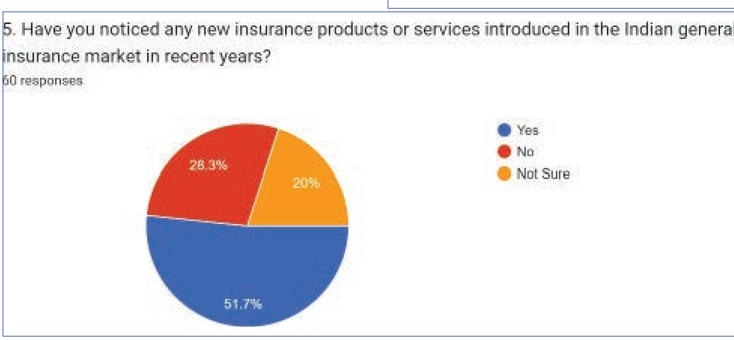
The analysis of respondents' bases on their understanding of the general insurance industry in India reveals a spectrum of knowledge levels within the population. Half, at 48.6%, consider themselves "somewhat knowledgeable," while a substantial 25% feel "very well knowledgeable." However, a significant 21.7% admit to being "not very knowledgeable," and 5% claim to be "not at all knowledgeable." These findings emphasize the importance of targeted education and information dissemination efforts to bridge the knowledge gap and enhance awareness, ensuring that all segments of the population have access to essential information about the general insurance industry in India.



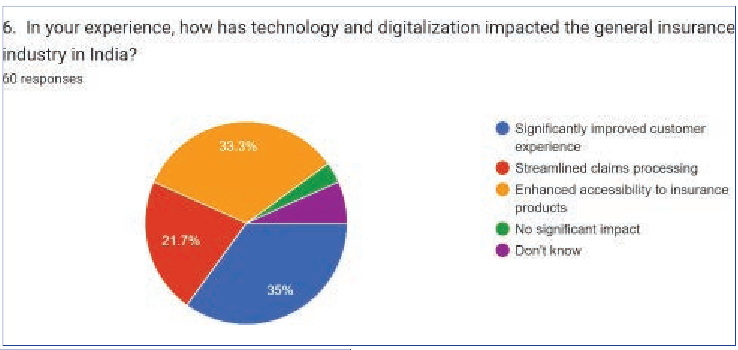
The analysis highlights a diverse range of information sources used by individuals in India to stay informed about changes in the general insurance industry. We observed that 26.7% rely on recommendations from friends and family, while 16.7% turn to news websites and an equal percentage Favor social media platform for insurance-related updates. Insurance company websites are trusted by 15% of respondents, and 10% rely on traditional financial news channels. Additionally, 16.7% explore "other options." This varied landscape emphasizes the need for a multifaceted approach to information dissemination, recognizing the influence of personal networks and digital media alongside traditional sources. Tailoring communication strategies to these preferences is vital for insurers, regulators, and stakeholders seeking to enhance industry awareness and understanding.



The analysis based on the familiarity of individuals with recent changes in the Indian general insurance industry in India reveal a mixed landscape. A substantial 35% of respondents are familiar, indicating a moderate level of awareness. However, 31.7% admit to being not remarkably familiar, signifying a significant knowledge gap that may require targeted education and awareness-building efforts. Encouragingly, 25% are remarkably familiar with recent changes, reflecting a well-informed segment, while 8.3% being not at all familiar highlights the necessity for increased outreach and educational initiatives. These findings underscore the importance of enhancing awareness and understanding of the evolving Indian general insurance industry, ensuring that comprehensive information reaches a broader audience.

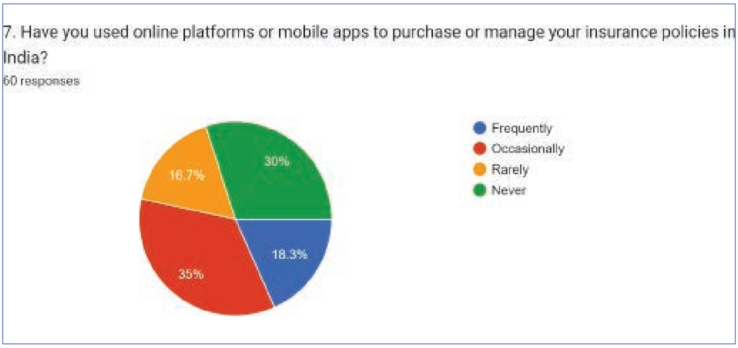


The analysis of respondents of new insurance product or services introduced to the Indian general insurance market in recent years reveals a mixed landscape. A majority, at 51.7%, is well-informed about these new offerings, highlighting an important level of awareness. However, a notable 28.3% were unaware of these products, signaling the need for improved communication and promotion. Additionally, 20% expressing uncertainty underscore the importance of providing clear and accessible information about the evolving landscape of insurance products to ensure a more informed consumer base. This data emphasizes the significance of effective marketing and communication strategies in the Indian general insurance industry to bridge awareness gaps and inform the public about new offerings.

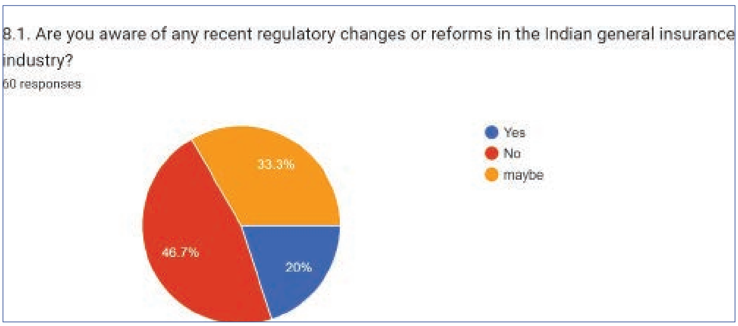


The analysis reveals a positive impact of technology and digitalization on the Indian general insurance industry. A considerable proportion of respondents note improved customer experience (35%) and enhanced accessibility to insurance products (33%). Additionally, 21.7% highlight streamlined claim processing.

However, there is a need for better communication with the 6.7% who express uncertainty and the 3.3% who perceive no significant impact to ensure a comprehensive understanding of the industry's evolving landscape. These findings underscore the importance of continued innovation and accessible communication within the sector.

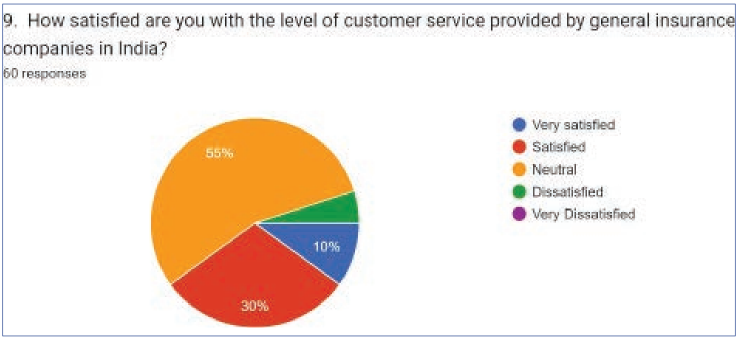


The analysis of respondent's usage of online platforms and mobile apps for insurance policies in India reveals a diverse spectrum of behavior. We observed 35% occasionally use these digital channels, suggesting a moderate level of adoption. However, a significant 30% never utilize online platforms for insurance management, highlighting the presence of a substantial segment that may prefer traditional methods. On the other hand, 18% frequently use online platforms, indicating a strong user base for digital insurance services. Additionally, 16.7% rarely use online platforms, underscoring the presence of another segment with infrequent digital engagement. These findings emphasize the need for insurance providers to cater to a range of preferences, from traditional to fully digital, to meet the diverse needs of their customer base.

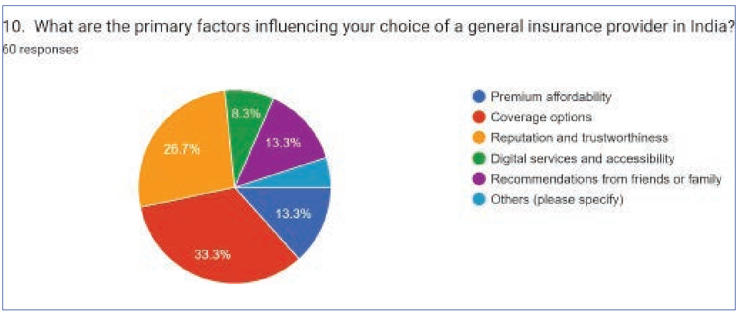


The analysis of respondents' awareness of recent regulatory changes or reforms in the Indian general insurance industry reveals a mixed landscape. A substantial 46.7% were unaware of such changes, highlighting a potential gap in communication or public knowledge. However, 33.3% can be cognizant of these developments demonstrating a significant segment that is well-informed about regulatory reforms. Additionally, 20% express uncertainty with a "maybe," indicating the need for more extensive communication on these industry changes. These findings underscore the importance of transparent communication and educational efforts to ensure that all stakeholders, including those who are unsure or unaware, are well-informed about regulatory reforms in the Indian general insurance sector.

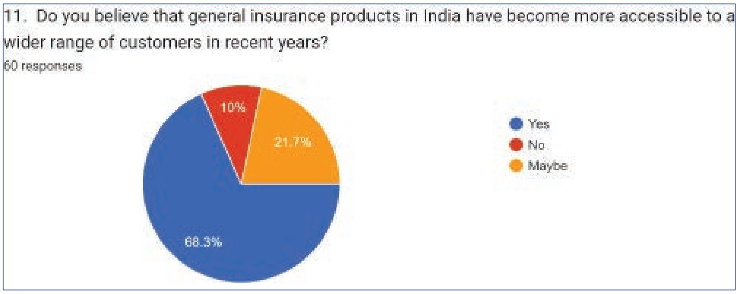
Responses to the option about awareness of changing regulations in the insurance industry include mentions of requirements like requesting birth certificates for various purposes, adjustments in motor insurance challan rates, and the mandatory implementation of Know Your Customer (KYC) procedures. Some respondents referred to consulting trusted sources in the insurance industry and the role of the Insurance Regulatory and Development Authority of India (IRDAI). Additionally, there is recognition of recent reforms like standardizing health insurance policies, increasing the FDI cap, adopting technology, introducing crop insurance schemes, health insurance regulations, and changes in motor insurance. These diverse responses underscore a broad awareness of regulatory changes and the importance of staying informed about evolving regulations, as they impact various aspects of insurance, from documentation to pricing and compliance. Such awareness is vital for both insurance providers and policyholders to ensure compliance and make informed decisions.



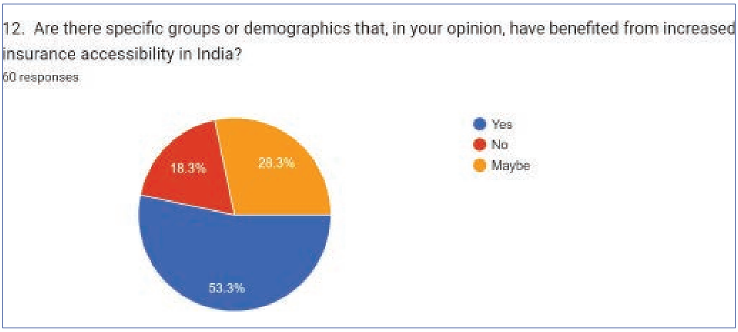
The analysis of respondents' satisfaction with customer service provided by general insurance companies in India reveals a nuanced perspective. A substantial 55% of the population adopt a neutral stance, suggesting room for improvement in customer service experiences. Encouragingly, 30% express satisfaction, while 10% are very satisfied, indicating that a sizable portion has positive views of the services provided. However, it is essential to address the 5% who express dissatisfaction, as enhancing customer service is vital for the overall industry's success. These findings underline the need for insurance companies to prioritize customer-centric strategies and continual improvement to meet and exceed the expectations of a diverse customer base.



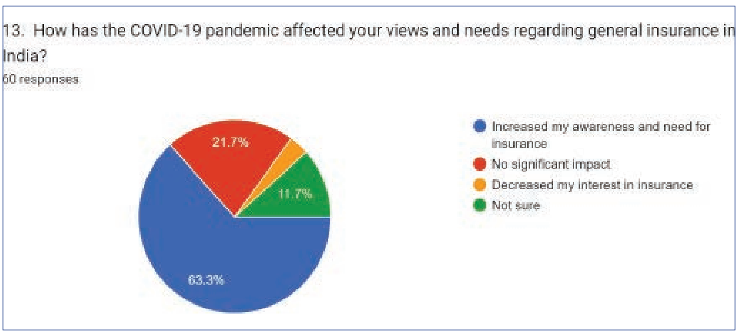
The analysis of factors influencing the choice of a general insurance provider in India reveals a multifaceted decision-making landscape. Notably, 33.3% of respondents prioritize coverage options, emphasizing the importance of comprehensive protection. Reputation and trustworthiness are crucial for 26.7%, indicating the pivotal role of a company's image and reliability. Premium affordability (13.3%) and recommendations from friends or family (13.3%) play key roles, underscoring the importance of competitive pricing and positive word-of-mouth. The growing significance of digital services and accessibility (8.3%) reflects the demand for convenience, while 5% opting for "other" options suggests a variety of preferences that may warrant further exploration. These findings underscore the multifaceted nature of consumer choices and the need for insurance providers to address a range of factors in their offerings to cater to diverse customer needs effectively.



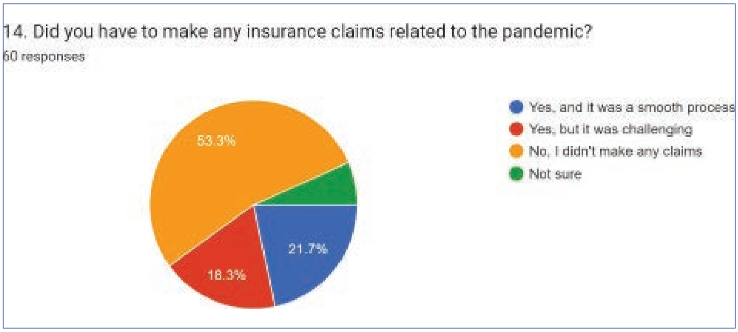
The analysis of respondents' beliefs regarding the accessibility of general insurance products in India reveals an overall positive outlook. A significant 68.3% passionately believe that these products have become more accessible to a wider range of customers in recent years, suggesting progress in extending insurance services to a broader demographic. Meanwhile, 21.7% express uncertainty with a "maybe," indicating room for further exploration and communication on this matter. A minority of 10% hold the view that accessibility has not improved, emphasizing the need for continuous efforts to ensure inclusivity and reach all potential customers. These findings underscore the importance of ongoing initiatives to enhance the accessibility and affordability of general insurance products in the Indian market.



The analysis of respondents' opinions on specific groups benefiting from increased insurance accessibility in India provides valuable insights. A majority of 53.3% believe that certain demographics have indeed benefited from improved access to insurance services, signaling a recognition of progress in reaching diverse customer groups. Another sizable portion (28.3%) expresses uncertainty with a "maybe," indicating the need for more precise data and communication to confirm these trends. However, 18.3% feel that no specific groups have benefited, underscoring the importance of continued efforts to ensure equitable access and outreach across all demographics. These findings emphasize the ongoing work required to make insurance services accessible to all in the Indian market.



The impact of the COVID-19 pandemic on views and needs regarding general insurance in India is evident in our analysis. A significant 63.3% of respondents report that the pandemic has heightened their awareness and need for insurance, indicating a growing recognition of the role of insurance during uncertain times. However, a substantial 21.7% believe the pandemic had no significant impact, and 11.7% express uncertainty, suggesting the need for more comprehensive communication about the relevance of insurance in crisis situations. A minority, 3.3%, indicate a decrease in interest, underlining the evolving landscape of insurance needs and the importance of insurers adapting to changing customer perspectives. These findings emphasize the role of effective communication and evolving customer needs in shaping the insurance landscape during and post-pandemic.



The analysis of insurance claims related to the pandemic reveals to the pandemic reveals varied experiences. A majority, 53.3%, did not need to make any claims, indicating a fortunate situation. However, 21.7% were able to make claims smoothly, demonstrating the effectiveness of some insurers in handling pandemic-related claims. On the other hand, 18.3% faced challenges during the claims process, suggesting room for improvement in the handling of pandemic-related claims. A smaller 6.7% express uncertainty, highlighting the need for more transparent and accessible information regarding insurance claims during such extraordinary circumstances. These findings underscore the importance of efficient and responsive claims procedures, particularly in the context of unique global events like the COVID-19 pandemic.

The diverse feedback and suggestions provided by respondents offer valuable insights for the general insurance industry in India. Key themes include the call for enhanced transparency, simplification of policies, and improved customer education to make insurance more accessible and understandable. Respondents also highlight the need for streamlined claims processing, affordability, greater digital accessibility, and innovations to cater to evolving customer needs. This feedback underscores the importance of customer-centric approaches, product customization, and education initiatives to build trust and meet the evolving demands of the market. By addressing these concerns, the industry can enhance customer experience, boost satisfaction, and ensure its continued growth and relevance in the Indian market.

The respondents' suggestions for change and innovation in the general insurance industry in India encompass a wide range of technology-driven improvements, customer-centric enhancements, and regulatory measures. Key themes include the integration of advanced AI and data analytics for streamlined claims processing and risk assessment, leveraging blockchain for secure and transparent policy management, a focus on personalized policies and digital solutions, and a stronger emphasis on financial literacy and awareness. These suggestions collectively underline the growing role of technology and data in insurance, the need for customer-centric approaches, and the importance of simplification, transparency, and accessibility. Implementing these innovative ideas would not only benefit customers but also position the industry for continued growth and relevance in an evolving and digital-focused world.

5. Sugguestions based on Interpretation

1. **Customization and Personalization:** Incorporate advanced technological solutions, such as AI- driven algorithms and data analytics, to enable insurers to offer more personalized insurance policies tailored to individual customer needs. Technological innovations can allow for dynamic policy adjustments, pricing based on real-time data, and personalized coverage options, enhancing customer satisfaction and loyalty.

2. **Efficient process:** Leverage innovative technology to streamline various insurance processes. Implement digital claims processing platforms powering Ai and machine learning algorithms to expedite claim settlements. Integrate blockchain for secure and transparent policy management, reducing fraud and administrative overhead. Such technological reforms not only improve operational efficiency but also lead to quicker service delivery.

3. **Improvement in customer services:** Enhance customer services through the integration of digital technologies. Invest in user-friendly mobile apps and chatbots that provide quick responses to customer inquiries. These digital tools not only offer 24/7 support but also ensure a consistent and efficient customer experience. Additionally, the use of data analytics can enable insurers to better understand customer needs and preferences, facilitating more personalized and responsive services.

4. **Awareness and educational initiatives:** Leveraging technology is crucial to enhancing awareness and financial literacy in the insurance industry. By creating engaging digital content, such as mobile apps, online courses, and webinars, and utilizing social media and digital marketing, we can reach a wider audience and make learning about insurance accessible and interactive. Bazaars like Policy Bazaar exemplify the effectiveness of technology in providing a transparent and user-friendly environment for consumers to compare policies and make informed decisions.

5. **Proposed Innovation:** Delving into technological innovations that could transform the insurance industry, it is evident that AI and data analytics have the potential to significantly enhance risk assessment and

fraud detection, streamlining the insurance process and improving overall efficiency. Blockchain offers secure and transparent transactions, reducing the risk of fraud and errors. Additionally, IoT and telematics, along with emerging technologies like chatbots and drones, enable real-time monitoring and assessment of risk, allowing for more accurate and dynamic pricing. Furthermore, the integration of advanced cybersecurity measures, including the protection offered by chatbots, drones, and other evolving technologies, can safeguard customers against the ever-evolving landscape of digital threats, ensuring the safety and trust of policyholders.

6. Limitations

1. The restricted time for data collection and analysis may have limited our ability to delve deeper into certain aspects of the research.
2. The flexibility in data collection methods may introduce response bias, potentially impacting the reliability and consistency of the study's results.
3. Because of feasibility issues some great research papers as well as books could have been missed in the research

7. Conclusion

This research paper has provided a comprehensive overview of the evolution and current state of the general insurance industry in India. It has highlighted the significant transformations that have occurred, from nationalization to liberalization, and the impact of technological advancements such as digitalization, AI, Blockchain, and Data Analytics. The findings underscore the positive influence of these technologies on the industry, improving processes and customer experience. However, they also emphasize the need for better communication strategies to address uncertainties among certain segments. The paper suggests incorporating advanced technological solutions, enhancing customer services, and launching educational initiatives as key strategies for future growth. Despite certain limitations, this study contributes valuable insights to our understanding of the Indian general insurance industry's past, present, and potential future trajectory. TJ

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Detecting Fraud Using Predictive Analytics in General Insurance – An Emerging Industry Dynamics

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Abstract

What is Fraud? The oxford dictionary defines fraud as "Wrongful or criminal deception intended o result in financial or personal gain". Fraud in connivance with advanced and latest technology has been leading to loss of huge wealth for every one every year throughout the world.

This paper aims to demonstrate how technology can also assist in detection of fraud. There are various variables in business rules; important one can lead to fraud detection.

Data analytics would be required to find important variables affecting the business model.

The business rules model thus derived; when applied to multiple incoming newer records flagg off doubtful ones.

An entity on being alerted would check further and deeper if the fraud indication is correct or not. This will lead to a development of a future framework for fraud detection which can be further used for fraud detection studies through predictive analysis method.

The organized manner in which fraud is perpetrated these days, makes it nearly impossible to be detected without precision in efforts, data analytics and predictive analysis.

The various machine learning models when applied on the datasets were able to single out the deemed fraudulent cases with a low false positive rate i.e. with a nearly correct accuracy.

The models developed should be such that it can adopt at the same pace of variations which occur in fraudulent methods. Predictive analytics is gaining importance as a game changer for underwriting and fraud claims monitoring in insurance industry.

Phua et. al. (2010) studies fraud detection with a focus on how to classify fraudulent claims using skewed data. Results from this study showed good accuracy with success rate as high as 87%. Business should therefore use continuous monitoring efforts to focus on narrow bands of transactions or areas that pose particularly strong risks".

Keywords

Insurance, Data Analytics, Fraud Prevention, Financial Services.

Introduction

Financial services focuses now on insurance sector, beyond banking industry as main criteria of economy in a developing nations (Paradi, Sherman and Tam, 2018). Moreover, insurance industry is main factor for growth of a country and an economy (Dalla Pozza et. al. (2014). Similarly, a concept which manages risks, secure economic growth and protect against uncertainty and losses is called insurance ((Sepideh Kaffash et al.2020). Insurance firm are looking ways for creating value. For creating of value for its market segment and to devise business strategies new angle is required in this age of digitalization ((Subramaniam, Iyer and Venkatraman, 2019). As well known, value is captured when profitable output is generated from input in a business ((A.Zeier Roschmann et al., 2022). Value generation is hindered by increasing instances of fraud claims and resulting huge outgo. Legacy systems which are old make it hard for incumbent insurers to start digitization from zero level ((Eling and Lehmann 2018; Pousttchi and Gleiss 2019) and hence tracking dubious claims becomes difficult for insurers.

In US industry itself around 10% claims are fraudulent and fraud detection units are able to prevent or recover only a small percentage of fraudulent claims. Indian insurance industry loses around Rs.4200 Crores in fraud claims i.e. around 8.5% every year. Generally around 10-13% are fraud claims in General Insurance sector. (Insurance Fraud; Institute of Actuarial & Quantitative studies by Dhruv Gupta, 2023)

Fraud can be committed by an individual or by an organized group with sole purpose to profit from a false claim from the insurance company. This could be in terms of

- Staging a false incident
- Camouflaging the situation and people involved
- Cause of incident
- Amplifying claim amount/adding unrelated losses

It is estimated by FBI that non-health insurance fraud in USA; the amount could be more than $40 billion annually. The important aspect to note here is that “Insurance fraud is not a victimless crime”- all the involved avaricious parties are affected leading to dynamic increase in premium scarcity of trust, impacting efficiency in work and ultimately marauding the industry.

Though importance of predictive analytics has been knocking on the doors for quite some time now, door seems to be opening now by newer version of insurance industry. Myriad of organizations are turning to Predictive Analytics to curb fraudulent claims, improve profits and so as to mend the dying trust in whole process. Predictive analytics is an advanced analytics which assist in making predictions about unknown future events. Predictive analytics is a gamut of data mining, statistics, modeling, machine learning and artificial intelligence to analyze current real time data to make predictions about future. Dynamic analytic model can recognize pattern and prevent criminal behavior. Consummate behavioral analytics examines all actions on a network in real time to spot abnormalities that may indicate fraud and advanced vexing threats.

What is Fraud in Insurance

‘Insurance fraud’ is not defined under the Indian Insurance At. On a lighter note can it be defined as “Magic”? The definition recently quoted by IRDA provided by the International Association of Insurance Supervisors (IAIS) which defines fraud as “an act or omission intended to gain dishonest to unlawful advantage for a party committing the fraud or for other related parties”.

Many definitions evolve such as “the obtaining of goods and/or money by deception” (Levi 2009: 224) to more explanatory ones “a human endeavor, involving deception, purposeful intent, intensity of desire, risk of apprehension, violation of trust rationalization etc.” (Raamoorti/Olen 2007, quoted in Yu, 2013: 44).

As has been recognized by a number of authors, fraud is among the most serious, costly, stigmatizing, and punitive forms of liability imposed on actors in modern corporations and financial markets (Buell 2011; Green 2007a).

Insurance fraud has become a dime a dozen concern for most insurers worldwide. Probably more integrated approach of all insurers; regulators and stakeholders worldwide would ameliorate the saturation and vitiate this parallel run fraudulent claims industry.

A social risk promoting financial subterfuge; penalizing society an draining tax payer's money which is required for the holistic and uniform developments of the nation.

Types of Fraud

IRDAI classifies insurance frauds as under:

a) **Policyholder Fraud and /or Claims Fraud** – Fraud committed by a policyholder during policy purchase and /or fraud during claim stage.

b) **Intermediary Fraud** – Fraud in which intermediary like agent broker, we aggregator, surveyor, investigator, TPA, panel advocate etc. is involved.

c) **Internal Fraud** – Fraud by an employee.

Example of claim in health insurance:

Non disclosure of pre-existing disease (PED) / chronic ailment, wrong findings in pre-policy health check-up/forged documents, duplicate/inflated /fake bills, impersonation, organized fraud groups, multiple policies, staged accidents and fake disability claims.

The agents, intermediaries and brokers are sometimes found providing fake policy to customer or a legitimate policy to a fake customer and draining wealth through fake claims. Fudging data in group health policies in turn inflating the amount during claims affecting the profitability of an insurer and its sustainability.

Data Analytics

"Data Analysis is a process in which raw data is organized and reviewed so that useful information can be extracted".

The data analysis can highlight details which could be used for infer conclusions which would assist in decision making.

Data analytics in current scenario assumes an important role in fraud detection. Generally it is difficult to infer a fraudulent claim without data analytics since there are more than thirty variables which are used in fraud analysis.

Artificial Intelligence (AI) and Machine Learning (ML) with data science try to infer about future possible scenarios through input data. Focus of Machine Leaning is to develop algorithms. A computational data model- Neural Network is a good computational data model which works on complex input/output relationships. Its application on data-intensive applications is used to make predictive analysis in fields of QC, marketing automation and detection of false claims etc. Losses can be controlled by way of frauds with the help of advanced analytics.

Big Data: It is a union of voluminous sand complex data. It is a five dimensional data with features of Volume, Variety, Velocity, Veracity and Value. Predictive analytics and other advance analytics technique are used to extract value from Big data.

One of the most important applications of Data Analytics is to predict claim reserves with fari amount of accuracy by comparing it with other similar past claims.

Important statistical technique for transformation of data in to knowledge based inferences are **regression, data visualization** and **predictive modeling**.

Data analytics could be used to develop model by its application on history of fraudulent claims, identification of type of claim, demographic pattern type of policies, pattern and sequence of claims and type of violation of rules.

The analytical model so developed can be used to identify and reduce/ restrict frauds which would lead too:

- High false positive in terms of fraud prediction and to keep pace with changing fraudulent pattern
- Apparent fraudulent claims found to be normal leading to increase in process cost.

What is Predictive Analysis?

Predictive Modeling

In this modeling we seek to predict the value of a variable ex: fraudulent/ not fraudulent. The predictive model once developed is applied on the new data. Statistics and analytic tools along with text and emotions analysis are combined to form Predictive analytics for predicting future events through big data (External Document, Infosys, 2018).

Predictive Data Analysis

It is basically an inference based analysis of different possibilities and scenarios in future. IT can be easily called a game changer for life insurance industry especially. The level of accuracy of this method may improve underwriting results of an insurer. It uses statistical and machine learning techniques for making predictions.

Various Studies on Predictive Analysis and Its Findings

A research has found that there are easily more than thirty variables that are used for the fraud analysis and which variables among them are significant for fraud detection.

Spathis et al. (2002) constructed a model to detect falsified financial statements. He employed a statistical method with two alternative input vectors containing financial ratios. The reported accuracy rate exceeded 84%. This study substantiates and supports our used of data analytics for fraud detection.

Costons M (2010), discusses how business rules and anomaly detection are typically the firs lines of defense in fraud screening, testing each claim against algorithms that are designed to detect known types of fraud by indentifying specific types of patterns. A KPMG Forensics' Fraud Risk Management report states [6], " unlike retrospective analyses, continuous transaction monitoring allows an organization to identify potentially fraudulent transactions on, for example a daily, weekly, or monthly basis.

Cotons [2010], concludes that the longer the data analytics techniques are used, there should be a reduction in the frequency of fraud and that the business overall should experience a reduction in average fraud analysis effort per clam handled and a reduction in total payments made, along with a reduction in unallocated loss adjustment expenses incurred to investigate fraud.

Predictive Analysis Framework

Data Collection:

This stage involves collection and classification of input variables. For insurance industry the dataset involves details like name of insured, details of policy, details of claims, details of vehicle etc. Categorical attributes include data such as type of Vehicle insured's gender, his marital status type of license etc. Data attributes includes date of loss, date on which claim is lodged, FIR date etc. Numerical input variable includes claim estimate. IDV of the vehicle, reinstatement value, market value, deductible etc.

Data Analysis:

At this stage various attributes of variable are identified in the sequence of their significance for the predictive analysis model. Attributes improving the performance of the model are selected and which lead to non performance are eliminated or in other words called as Feature Selection or Feature Elimination The features selected become input for the machine earning model which leads to development of the final analysis model.

Example of variable and its attributed showing a pattern in fraud claims:

Demographic features of the Fraud Group: mostly committed in urban, by males compared to female, committed within 2 years of policy issuance, claims without FIR.

Related to vehicle: where age of vehicle more than 5 years, vehicles with price is under Rs.30,000/-.

Characteristics of claims made by the Fraud Group: with history of 2 to 4 past claims, pattern with claims made during mid of the month.

A score is assigned to each attribute as 0 or 1. The total score beyond a particular limit is further examined. Results are consistently monitored and focused approach leads to a reduction in the count of significant variables.

Data Modeling and Data Evaluation:

This step involves developing models through construction of machine learning algorithms based on historical input variables. The predictive model thus developed is then applied on new unseen data to make further inferences and conclusions for tracing fraud claims.

Steps in model development:

Different models are tested on the data available.

Depending on its performance; various features are modified and model is again tested.

When all the features are fine tuned, the model is thus built and it is run on variety of values for different sets of features selected.

Different 'specific to fraud' type models are generated. Feedback is used to improve the model for ever evolving new data and to constantly adapt to consistent dynamic changes in the industry.

Deployment and Project Definition:

Once the model is developed it is applied on new data to assess the model performance based on different measures to assess whether a claim is a fraud claim or not.

One of the methods for assessing model performance is in a tabular format known as Contingency Matrix or Error Matrix.

Usage of Predictive Analysis in Insurance Fraud Analysis

Predictive analysis is a good example on how to leverage technology to implement measures **to** curb frauds.

Hence utility of algorithm prepared through data analytics can be channelized to determine a potential fraud threat; which can further be examined in details by a subject matter expert.

Hence the claim process would be stream lined and performance enhanced through Predictive Analysis along with utility and added experience of an individual.

The model so built on these algorithms with the capacity to recognize pattern would be able to detect frauds well in time.

Limitations of Predictive Analysis Model

Apart from various advantages this Predictive Analysis model has; there are certain limitations as well which are mentioned below:

Skewed Data: There are certain limitations to Predictive Analysis model in reference to its performance due to skew in the input data due to class imbalance since fraud occurrence are relatively less than the total claims. Moreover uniqueness of each fraud imparts some performance constraints to this model.

Missing Values: this would mean that incomplete output and hence inference would be affected. The effective solution lies in Rubin's (1987) multiple imputations procedure replaces each missing value with set of plausible values that represent the uncertainty about the right value to impute.

Categorical attribute:

A numerical value may be assigned to multiple attributes example Literacy attribute (with value 1 for literate and 0 for illiterate). Quality issues are faced during analysis due to it not being feature rich.

Partial set of data: In data set duplicate data may be present, some variables like policy number may be found invalid. Possibility of data entry mistakes cannot be ruled out and sometimes missing values may be replaced with arbitrary value would render the model ineffective.

Performance of Analysis: Dependent of Data or Algorithm:

Many research studies have found that quality and quantity of data has a more vibrant role on accuracy of predictive analysis rather than quality of algorithm itself.

Loss of clear prediction/result:

Due to complexity in model as well as in data; instead of getting a single branched solution a multiple branched solution is presented making it difficult to infer any single precise solution or inference.

Conclusion

In bygone days there was a limitation on capabilities of tools and techniques and data was not so complex compared to present times. Hence fraud detection was difficult. With the chaining times newer and advanced techniques developed and so did the pattern of frauds' which were largely perpetrated through a very well organized channel. Hence there arose a need to do sophisticated analysis without which it becomes difficult to recognize fraud clams and its exact pattern.

Since Machine Learning model with fairly good accuracy are able to predict fraud cases with a low false positive rate i.e., with a reasonable precision. This would mean that Predictive analysis model can be made more adaptable to understand and evaluate new emerging patterns of fraud scenarios.

However data quality needs to be good for better level of prediction. Companies not updating themselves with Predictive Analytic model would be easy targets of fraudster thus endangering their solvency ratios as well as other performance ratios. In a study by EY almost 80% insurers were not upgraded in analytics (External Document, Infosys, 2018). Predictive Analysis would minimize claim leakages and would lead to improvement in processes, reduction inc claims expenses, and improvement in loss ratios, deter fraudsters away, lead to improvement in bottom line and combined ratios, credibility of insurer would increase which will lead to brand image enhancement thus improving the sales of insurance products of the company. Hence Predictive Analysis would be the game changer for an insurance company and other stake holder in near future. TJ

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Adopting Global Health Insurance Models for Medical Tourists in India: Implications for Stakeholders in Digitalized Era

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Abstract

The purpose of this study is to incorporate the international health insurance model/models for a symbiotic benefits to medical tourists and health insurance companies. This study is based on the extensive analysis of articles published regarding health insurance for tourists and medical tourism. Objective of study is "to adopt the health insurance models for growth of health insurance premium and medical tourism in India". Content analysis has been adopted in this study. Literature confirms that the influx of medical tourism is positively related with growth of health insurance, when **innovative** model/models of health insurance are incorporated strategically for the medical tourists in India. According to the study results, adoption and implementation of international based model/models of health insurance for medical tourists is a trigger point for the growth of health insurance fund in India and it changes the perception of medical tourists towards India as economical destination in case of medical emergencies. The scope of study is to recognize international health insurance model/models in digitalized era for the growth of health insurance premium and medical tourism in India.

Keywords

Global, Health Insurance, Incorporation, Innovative Models, Medical Tourism etc.

Introduction

This study is secondary but qualitative in nature, based on the extensive literature review of more than 31 national and international indexed journals, reports, theses, websites, and published articles etc.

Contract of Health Insurance

It is a contract wherein insurer owes the financial risk of insured for medical expenses against paid premium and provides the financial cover at the time of untoward happenings like injury, surgery etc. (Ukale, 2020). Health insurance models are existing in many developed countries for their natives and foreigners. All such models increase the health insurance premium between tied countries and will facilitate the medical tourists at low premium. Hence health insurance models not only increase the medical tourism but also increase the market share of health insurance premium (Islam, 2020).

Overview of Medical tourism

Medical tourism covers all health related treatments starting from diagnosis to surgery, pre and post checkups after traveling from native to foreign country (Singh, 2016). Medical tourism is a tourism where treatment of sickness etc. is obtained in abroad by the people who suffer injury, sickness etc. at native country (Ghanbari, et al., 2014). Now a days for medical tourism, people are travelling from developed countries to developing countries because of high medical expenses in their home countries as well as unique type of medical services unavailable due to registration issues in their native countries but this trend was reverse in the past because of unavailability of infrastructure, doctors and medical advancement in developing countries (Islam, 2020).

Preferred hospitals and Medical tourists to India

The preferred hospitals include Medanta Medicity, Apollo, Max, Fortis Hospitals and other Joint Commission International accredited hospitals. More than 30% of the total number of medical tourists to India are SAARC patients including Afghanistan, the Maldives, and Bangladesh (Mittal, 2017).

Engaged stakeholders of study

Engaged stakeholders are hospital authorities as directors and administrators, Liaison officers, Chief executive officers of insurance companies, IRDAI staff, doctors, paramedical staff, medical tourists, attendants of medical tourists, TPA (Third party administrator) etc.

Health Insurers in digitalization

To minimize administrative expenses, health insurers are also increasingly implementing technologies like block chain, RPA, WhatsApp integration, and AI chat bots. These technological advancements could be crucial in lowering premiums and improving service delivery as the government works to attain Universal Health Coverage for all by 2030. Digitalization is the tool in the hands of engaged stakeholders that serve them as a facility in combating the issues relevant to health insurance and medical tourism in advanced age.

Review of Literature

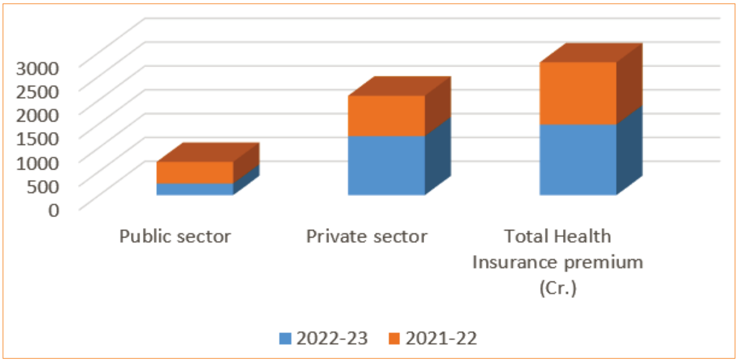
Extensive review of Health Insurance

In the present era, business of health insurance is launched by different sectors in our nation viz, Health Insurance offered by Government, Group Health Insurance offered by others and Individual Health Insurance offered by standalone health insurers and other insurers (Ukale, 2020).

Life Insurers and their growth in Health Insurance

Health insurance premium collected by life insurers during the year 2021-22 is Rs.1,303 Crore and for the year 2022-23 is Rs.1,483 Crores from various health insurance products with positive growth and their contribution in health premium during 2022-23 increased by 13.81%. Largest share of health insurance among life insurers has been captured by private life insurers with 83.47% market share and rest by Public sector insurer Life Insurance Corporation of India i.e., 16.52%.

Fig 1. Life insurers and their health insurance premium



Source: - IRDAI report, 2022-23

After extensive review, literature exhibits that the growth of health insurance premium for medical tourists in India is under developed and requires **innovative strategies, innovative international model/ models for better understanding** and quality perceptions of healthcare providers and other stakeholders because its market for medical tourists in India is based on the association of different sectors and organizations.

Health care market in digitalization

The healthcare insurance market in India is changing as a result of the use of technology. Health insurers' processes are changing as a result of the introduction of automation, AI/ML, wearables, and digital technologies for cost reduction, as well as digital health records and interoperability. The healthcare insurance market has benefited much from technology, and this is an exciting time for the sector. Digitalization will assist stakeholders in developing the international model/

models of health insurance for medical tourists.

International Models of health insurance

Health insurance for medical tourists in India saves the income of medical tourists from 65% to 90% (Mittal, 2017). Health insurance for medical tourists is promoted worldwide as more than 50 countries and their governments are taking part actively for the growth of Medical tourism with the facilities of insurance. Different policies and models pertaining to health insurance and Medical tourism are presently active like:-

- **Green Delta Insurance and Malaysia Healthcare Travel Council**

One of the important international health insurance model is working between Green Delta Insurance, (Bangladesh) and MHTC, a subsidiary to health ministry of Malaysia that enable Bangladeshi patients to get treatment in Malaysia. Green Delta Insurance's company, GD Assist, is responsible for this arrangement (Islam, 2020). GD Assist is dedicated to providing high-quality, cost-effective care in a clean, warm, and welcoming atmosphere. The new company's tagline is "*Services beyond Borders,*" and it aims to bring world-class value added services to people's doorsteps. GD Assist assists its customers in accessing medical services at six different Malaysian hospitals. By collaborating with Malaysia's top hospitals, GD Assist will be able to provide the best medical support for Bangladeshi patients. GD Assist can also handle all of the information, including consultation, VISA processing, and hospital admission ticketing, Transportation and Accommodation etc. This model will never end because of its strong association between the citizens of two nations and it is directly positive aspect between two nations for medical tourism and growth of health insurance premium (Islam, 2020).

- **Insurance model between US and LAC**

Insurance model between US and LAC is tied between 19 countries from the LAC and US. All 19 countries from the LAC (Latin America and the Caribbean) area are included in one of the products produced by an insurance company using this model. Patients who receive health insurance from an insurer in these countries are eligible for healthcare facilities in US. In LAC region, this universal Health Coverage is the foundation for analyzing a core collection of metrics on health, health systems, and inequalities. Country dashboards show how LAC countries compare to each other in five areas: population health, coverage and facilities, financial security, and governance, health inequalities, and quality of care. This overview offers a first look at the overall situation in LAC countries, as well as establishes linkages and dependencies among the countries' indicators (Gilardino, et al., 2022).

This model of insurance raised the health insurance fund of US with two fold as about US$120 billion in 2018 to a compound annual growth rate of 28.1% and a scale of over 169 billion US dollars. This progress has been accrued by compulsory health insurance coverage between the tied countries and US. This model of insurance has reduced the out of pocket expenses of LAC countries up to 66% as in the LAC region, 34% of health expenses are paid out-of-pocket on average. Only three nations are above the rank of 50.1% in the region as Venezuela (63%) has the highest percentage of out-of-pockets, followed by Guatemala (54%) and Grenada (52%) (Gilardino, 2022). Only five nations—Cuba (10%), Argentina (15%), Colombia (16%), Jamaica (17%), and Uruguay (17%)—are below the 20% mark. In LAC, the percentage of out-of-pocket payments in total health spending decreased by 0.243 percents in average between 2019 to 2022. Out of pocket expenses has reduced in maximum LAC countries in presence of compulsory health insurance coverage.

Table.1 Out of pocket expenses of LAC countries

S/No.	2019	2020	LAC COUNTRIES	2021	2022
1	23.94	21.76	Argentina	22.37	16.78
2	46.69	42.93	Barbados	38.92	29.19
3	24.88	22.77	Brazil	22.65	16.99
4	21.12	20.90	Bolivia	22.74	16.23

S/No.	2019	2020	LAC COUNTRIES	2021	2022
5	22.32	20.29	Costa Rica	20.74	17.06
6	10.85	8.92	Cuba	8.39	15.56
7	33.86	24.65	Dominican Republic	23.59	6.29
8	54.42	54.06	Grenada	53.68	17.69
9	55.99	56.29	Guatemala	60.98	40.26
10	39.04	46.90	Haiti	43.53	45.74
11	52.47	50.04	Honduras	51.71	32.65
12	16.44	14.75	Jamaica	13.08	38.78
13	42.28	38.76	Mexico	41.37	9.81
14	28.13	22.77	Peru	27.22	31.03
15	46.37	42.20	Saint Kitts and Nevis	38.85	20.42
16	42.85	35.66	Saint Lucia	37.22	29.14
17	17.35	21.11	Suriname	24.83	27.92
18	15.46	16.80	Uruguay	15.44	18.62
19	34.12	28.95	Venezuela (Bolivarian Republic of)	28.06	11.58

Source: 1. WHO Global Health Expenditure Database (2023)
2. ttps://apps.who.int/gho/data/view.main.GHEDOOPSCHESHA2011v
3. (Gilardino, et al., 2022)

➢ **US Insurers**

The four largest insurers in the United States viz, **Aetna, United Health, Well Point, and Humana**, are playing an important role in extending the risk cover by incorporating the insurance policies of international standard based on the availability of healthcare in other countries.

➢ **Aetna,** is one of the renowned insurance company of US that has teamed up with "Apollo Hospital in India" to develop an insurance package for Americans seeking medical attention there. "Employees of Serigraph Incorporation" are sent to "Apollo Hospital" under this insurance coverage by Aetna for basic routine procedures. Similar health insurance package model/ models are required for the world wide medical tourism in India.

➢ **BlueCross BlueShield**, is an insurance corporation that has teamed up with health insurers in US, Singapore, Turkey, Costa Rica, and Thailand to build low-cost, high-deductible insurance policies aimed for employees of low income who are saving conscious. Blue Cross Blue Shield offers insurance plans that enable the people to travel abroad for medical procedures at affordable cost instead of costly medical procedures in their home country.

➢ **VHI (Voluntary Health Insurance) in the European Union**

VHI is a European Union project that serves 34 countries viz, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Austria, Belgium, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France etc. and has a lot of potential in terms of generating medical tourism between them. VHI also serves the bridge of friendship in between the 34 nations and either directly or indirectly generates the economical inflow of the concerned countries when tourism influx increases.

Table. 2 Analysis of Gross premium earned in EURO

S/No.	Health Insurance Premium	2021-2022	2022-2023
1	Gross written premium	1594.4	1605.9
2	Gross earned premium	1588.9	1599.7

Source: - 1. *VHI Annual report 2022*
2. https://www.vhi.ie/annual-reports/english/annual_report_2022.pdf

VHI Scheme in European Union has proved successful in increasing the health insurance fund and served the people of concerned nations very well. When data of two financial years is compared, it is analyzed that there is positive growth in the health insurance premium under the said scheme.

Medical tourism and Literature

India is at 10th position and has experienced a boom in medical tourism over the years and the number of international travelers (medical tourists) coming to India for medical treatment scaled from 1.83 lakh in 2020 to 3.04 lakh in 2022. Data suggests that medical tourism offers huge chances for doctors to profit from it as well as the best chance for India to adopt the international health insurance model/ models for medical tourists in India (Bajaj, 2023).

Medical costs are a growing problem for people living in foreign countries, who are often forced to pay for treatment with their own money (Singh, 2016). Patients from developed countries, especially the US and the UK, have been forced to seek care in alternative and more cost-effective locations. The Indian Medical tourism industry has tremendous growth and development potential for the future (Sharma, 2013). This implies its growth is best possible in presence of international health insurance model/models for medical tourists.

In comparison to other nations, India's medical expertise is unparalleled. The key reason for medical tourism to India is the strong reputation of Indian health centers, which are well-known around the world. International visitors admire Indian doctors and nurses for their nurturing demeanor, which they compare to motherly care. (Rao, 2005) studied at the cost of medical care around the world and discovered that India has the best quality and cost-effective treatment.

(Mohanty and Madhav, 2006) studied that medical industry of India has begun to appear as a major destination for medical tourists in comparison with countries around the globe because the industry of such caliber is enhancing the expertise, ability, as well as framing its image in terms of cost-effectiveness**.** Hence the technological advancement and team work of **techno savvy** stakeholders will increase the potential of medical tourism and health insurance in India in less span of time (Singh, 2016).

Factors that attract Medical tourists to India

Medical tourism is increasing in India steadily every year. Chennai is called the "Health capital of India" wherein 40% of total medical tourists (who visit India) gets treatment because of its quality infrastructure and best facilities. Different factors that attract the medical tourists to India are

- Insurance Cover
- Cost effectiveness
- Quality Standard
- Travel, Infrastructure etc.

Role of digitalization in medical tourism

Digitalization serves as an opportunity for producing value based serves in less span of time as it assists the medical tourists to book the choice hospitals at their native place without leaving their domicile place and it makes them ease to take online consultation with the doctors.

Role of IRDAI in Health Insurance

- ➢ It can regulate the guidelines for the multinational insurance corporations to review the joint venture policies and models of health insurance with foreign insurance companies so that the medical tourists get the treatment and surgeries with best facility in India on affordable health insurance premium.
- ➢ IRDAI plays an immense role as watchdog for all types of insurance within the territory of India.

Gap of the Research

Different studies have been conducted across the globe in number of countries towards health insurance model/models for foreigners and natives viz, Malaysia, Bangladesh, United States of America, nineteen LAC countries, thirty four European Union countries etc. but India has been literally overlooked, so a variation of research methods is necessary to generate the **innovative** insights or to avoid distorted findings (Jacobs, 2011; Muller- Bloch & Kranz, 2014; Miles, 2017).

Number of studies are available directly or indirectly in the context of health insurance model/models for medical tourism across the globe but studies in the context of India are lacking in the repository of literature and there exists different types of research gaps in consonance with current study viz, **Knowledge, Empirical and Population gaps etc.** Studies have been conducted among different nations for the variables/ constructs of study but direct linkage between health insurance and medical tourists is not existing in the literature. Hence a **knowledge gap** is there which provides the scope to conduct this research on international health insurance model/models for the medical tourists in India. Therefore the existing gap will be bridged by conducting the research under the title "*Adopting Global Health Insurance model/models for Medical Tourists in India: Implications for Stakeholders in digitalized era.*" Further, there is a scope for conducting the study with reference to other research gaps identified in current study.

Constructs of study viz, C_1 and C_2 are mutually benefitted by the international health insurance model/ models because out of pocket expenses of medical tourists is reduced by the facility of health insurance. Similarly, insurance premium of the health insurance companies in India increases by increased medical tourism influx. This indicates that international health insurance model/models work as moderator between health insurance (C_1) and medical tourism (C_2). A moderator is a third variable (M) that affects the linkage between the constructs or factors or variables of the study. In this study moderator variable (international models of HI) influences the strength of Health insurance (C_1) and Medical tourism (C_2) positively. This clarifies that incorporation of international health insurance models for the health insurance coverage of medical tourists is enormously required in this scenario.

Objective

- To adopt the health insurance model for growth of health insurance premium and medical tourism in India

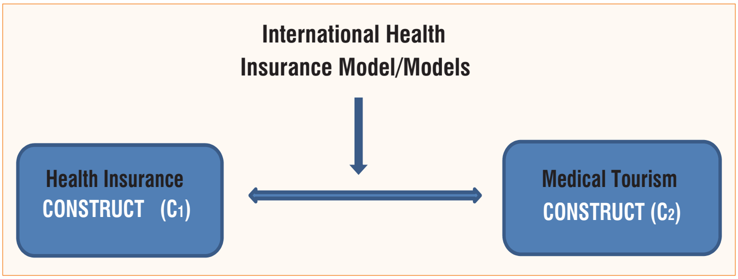


Fig 2. ***Model of the study***

Research Methodology

Content analysis is actually the analysis and examining (Drisko & Maschi, 2016) of content that seeks the meaning of concepts, words and sentences within the corpus of text available in the repository of literature and generates the thematic data from the identified literature for meaningful themes and categories (Prasad, 2008).

In this study more than 95 words were developed and validated by researcher in the area before entering into the next level of data analysis, including frequency analysis, keywords grouping, and inductive content analysis. Sub categories for each of these words have been established. It was consequently used to extract relevant terms from the content data using the frequency analysis technique in this study. Twenty nine relevant keywords or sub categories that appeared at least ten times (threshold for a minimum co-occurrences) during the frequency analysis were ultimately retained. Critical clustering of the Twenty nine keywords or sub categories was done based on how closely they relate to health insurance and medical tourism.

After that, inductive content analysis was applied. Sub-themes or keywords connected to health insurance and medical tourism were categorised from the original textual data and from key word analysis, which were re-evaluated as :-

S/No.	Categories	Relevant Words/Keywords/Sub-categories (Table 3)
1.	Implications of health insurance on Medical tourism.	Minimum out of pocket expenses, Mental relief, Treatment at choice hospital, Free from financial liability, Best treatment at affordable costs, Quick decision making for treatment, saving of income etc.
2.	Health Insurance Plans protects medical tourists : An overview of plans	Health Premia, Critical Illness Plan, Universal health coverage (UHC), Family Health Insurance, Senior Citizen Insurance, Individual Health Plan, Re-Assure Plan, Accidental Health Plan, Family Health Insurance, Health Gain Insurance etc.
3.	Relationship between service organizations	Intangible services, Mutually benefited, Synergetic relationship, Social interdependence, Comprehensive package, Positive comparative strength, Symbiotic relation, Social bond etc.
4.	An overview of International models of health insurance in digitalization	International model between Green Delta Insurance (Bangladesh), and Malaysia Healthcare Travel Council (MHTC), Insurance model between US and LAC, VHI (Voluntary Health Insurance) model of European Union etc., Digitalized era, Techno savvy, Online services and applications.

Final outcome of this study is presented into **four themes** which are based on 95 words, 29 keywords or sub categories and 4 categories generated after frequency analysis of secondary data.

Thematic Analysis

An Overview of Health Insurance Coverage on Medical Tourism (Theme 1)

It is an agreement between a policyholder (medical tourist) and the insurer (Health insurance Company) that pays for potential medical costs resulting from a disease, injury, or accident etc.

By the advent of health insurance coverage to medical tourists, out of pocket expenses of medical tourists is reduced, their savings are increased, they are free from financial liability and they feel comfortable and relaxed. Health insurance enables them to take quick decision for quality treatment at affordable costs on right time without any delay (Monika, 2017). Furthermore, medical tourists are able to take treatment as per their choice hospital when health insurance cover is readily available to them.

Literature confirms that the majority of medical tourists nearly 95% came to India for treatment of a critical ailments, while only 5% medical tourists came for diagnosis and majority of patients pay treatment expenses out-of- their pocket. Maximum patients avail a loan facility to fund their treatment (Monika, 2017). A very small fraction of medical tourists have insurance cover at their end, so need arises for incorporation/adoption of international model/models of health insurance with foreign insurance companies and that will not only benefit medical tourists but also benefit the health insurance companies in India. Such model/models save the medical tourists from financial liability and similarly health insurance companies accumulate positive growth with the increase of health insurance premium and health insurance fund.

Health Insurance Plans ensure Peace of Mind to Medical Tourists (Theme 2)

Health insurance cover not only provides the risk cover at the time of medical emergencies but also ensures the peace of mind to insured ones (medical tourists). Different health insurance plans are available in the market of India for providing the health insurance cover to different sects of people. Availability of different competitive health insurance products satisfies the deemed policy holders to think peacefully for choice of product but there is lack of health insurance plans for medical tourists in India so there is the need of **international health insurance plans** for the medical tourists at the destinations of India. Such type of insurance plans not only save the income of the medical tourists but also ensure peace of mind to medical tourists and this peace of mind enable them to take right decision at right time.

Industrial Relationship between HI and MT: A Synergistic Approach (Theme 3)

Health insurance and Medical tourism are **intangible services** as both the services cannot be touched, smelled and seen. Synergetic relationship exists between the health insurance and medical tourism because both are mutually benefited from the course of activity. There is the combo effect of health insurance and medical tourism for their individual growth which is greater than the individual effect of each variable of study.

Examining International Health Insurance Models: Implications for Policy and Practice in digitalization (Theme 4)

By the advent of digitalization, different International model of health insurance are presently in vogue between different countries for facilitating the medical tourists at their end as International model between Green Delta Insurance (Bangladesh), and Malaysia Healthcare Travel Council (Islam, 2020), Insurance model between US and LAC, VHI model of European Union. Digitalization inspires new model/models of business and new business ecosystems.

All such models provide the package of benefits to medical tourists and serve as a track for escalation of medical tourism and health insurance premium in India, so there is need of robust policy formulation for adoption and implementation of international health insurance model/models for medical tourism in India under the pattern or framework of international models.

Further, it is studied that the outcome of this research will serve as policy guidelines to the **Government of India and** engaged **stakeholders** for development and implementation of international health insurance model/ models for medical tourism in India.

Discussion and Interpretation

In this study the apt approaches of discussion and interpretation for growth of health insurance premium and medical tourism in India are:-

- Recognition of innovative international health insurance models.
- Digitalized world will assist the stakeholders in policy formulation for international models of health insurance.
- Similarly development of applications or apps for using the services provided by your hospital is necessary for improved service accessibility.
- Techno-user friendly websites and blogs are required for easy online marketing.
- Versatile marketing practices by availing the medical camps are required in the country of medical tourists where healthcare facilities are very costly.
- Awareness camps and campaigns, advertisements offline and online regarding the eligibility, values, benefits, need of health insurance should be availed.
- Launch of Global health insurance plans in the pattern of international models of health insurance are required.
- Thoughts, ideas, and glimpses of engaged stakeholders should be integrated for quality inference.
- Consultation of international health insurance experts for formulation of international model/models of health insurance at our national level are required.

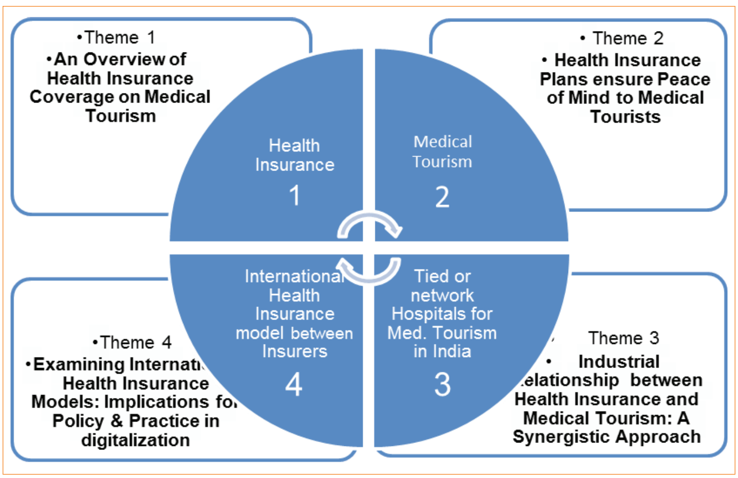


Fig. 3 Structural model of study

This structural model of study elaborates the impact of themes generated from the study by content analysis. **Theme 1** sum ups that only 5% of medical tourists who visit India have health insurance coverage at their end and emphasis that if **health insurance** facility would be framed for medical tourists in India that facility not only increase the health insurance premium but also recognize India as the destination of choice for all medical tourists.

Similarly, **Theme 2** particularizes that availability of different health insurance plans ensures peace of mind and time saving decision making to **medical tourists** and this handiness of competitive products assists tourists to take the insurance plan as per the choice and demand. This theme generates the pro-activeness among the engaged stakeholders towards their industries.

Theme 3 visualizes tied **association** between **health insurance and medical tourism**. It indicates that when insured medical tourists visit network hospital for treatment, once treatment is over, the bills are submitted to TPA chamber within the hospital, after that TPA submits the claim challan to insurance company for payment in favor of hospital on the basis of agreement between the insurers of two countries under the banner of "international health insurance model for medical tourists". This synergistic approach satisfies the medical tourists who circulate the positive message to new comers and suggests them for health insurance cover as per international agreement between the countries.

Theme 4 suggests that implementing and adopting the **international health insurance model/models for medical tourists in India** is game changer in the field of insurance and tourism. When the model/models of health insurance between the insurers of native and foreign counties is operationalized that circulates the message of motivation and prosperity among the medical tourists in the digitalized era.

Conclusion

- Health insurance is the insurance that covers all risks of heath care facilities and reduces the out of pocket expenses, increases the savings of medical tourists, enable medical tourists to take right decision. In addition, relaxes the low lying medical tourists from bankruptcy and enables them to take the effective decisions which confirms that financial security and certainty is enabled to medical tourists in the presence of health insurance (Monika, 2017).
- Incorporation and implementation of global health insurance model/ models will save the out of pocket expenses of 95% medical tourists who visit India for healthcare treatment and services (Monika, 2017).
- "Heal in India" and "Heal by India" schemes launched by government of India infers growth of medical tourism in India and it is need of hour to launch the scheme of health insurance for the medical tourists in India on the same pattern in consultation with the experts of insurance and with the guidance of IRDAI.
- Adoption and implementation of international health insurance model/models between the tied countries on the framework of active international model/ models of health insurance is/are **required in this digitalized era**.

TJ

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The Impact of Common Empanelment of Hospitals on the Quality and Cost of Health Care in India

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Abstract

This paper investigates the effects of common empanelment of hospitals by all insurers on the quality and cost of healthcare in India. Common empanelment is a process of selecting and accrediting healthcare providers by insurance companies and government agencies to ensure high-quality and cost-effective services. The paper examines the role and challenges of the Health Network Management Organization (HNMO) in managing the empanelment process and ensuring standardization, accreditation, and regulation of empaneled hospitals. The research methodology consists of a literature review and analysis of primary and secondary sources from various international organizations. The paper identifies the challenges faced by HNMO, such as a lack of adequate resources and expertise, unclear guidelines and protocols, limited coordination and cooperation among insurers, a lack of trust and transparency among hospitals, insufficient incentives and sanctions for hospitals, and a lack of data and information systems. Despite these challenges, the paper demonstrates that HNMO plays a crucial role in ensuring standardization, accreditation, and regulation of empaneled hospitals. To address the challenges, HNMO should focus on improving its resources, expertise, guidelines, protocols, coordination, cooperation, trust, transparency, incentives, sanctions, data, and information systems. The paper concludes with policy implications and recommendations for implementing common empanelment of hospitals by all insurers in India, emphasizing the need for HNMO to address its challenges and enhance its effectiveness and efficiency in managing the empanelment process.

Keywords

Common Empanelment, Hospitals, Quality, Cost, Healthcare.

Introduction

Health care is a basic human right and a vital component of social and economic development. However, access to quality and affordable health care remains a challenge for many people in India, especially the poor and vulnerable sections of the society (Hanson et al., 2022). According to a Lancet study (NCBI), India ranks 145th out of 195 countries in terms of health system performance, and spends only 3.6% of its gross domestic product (GDP) on health, which is much lower than the global average of 9.9% (Indian Brand Equity Foundation, 2020). Moreover, out-of-pocket expenditure (OOPE) accounts for 62.4% of the total health expenditure in India, which is one of the highest in the world (Basu et al., 2020). OOPE can lead to catastrophic health expenditure and impoverishment for many households, especially those who seek care from private providers, which constitute 74% of the total health care providers in India (Peters et al., 2008).

One of the major factors that contribute to the high OOPE and low quality of health care in India is the lack of standardization and regulation of the hospital sector (Sharma & Joshi, 2021). Hospitals in India are heterogeneous in terms of ownership, size, infrastructure, services, quality, accreditation, and pricing (Prinja et al., 2020). There is no uniform policy or mechanism for empanelment of hospitals by different health insurance schemes or programs, which leads to fragmentation and inefficiency in the health care delivery system (Hanson et al., 2022). Empanelment is the process of selecting and contracting hospitals by health insurance schemes or programs to provide health care services to their beneficiaries at predetermined rates and quality standards system (Khetrapal et al., 2019). Empanelment can have significant implications for the accessibility, affordability, quality, and equity of health care services (Hooda, 2020).

In this context, the General Insurance Council (GIC), the industry body of non-life insurers in India, has proposed a policy of common empanelment of hospitals by all the insurers in India. The objective of this policy is to create a common platform for empanelment of hospitals by all the insurers, which would facilitate standardization, accreditation, and regulation of the hospital sector. The policy also envisages the creation of a hospital network management organization (HNMO), which would act as an intermediary between the insurers and the hospitals, and would be responsible for managing the empanelment process, monitoring the quality and cost of health care services, and resolving disputes and grievances. (Report of Network Hospital Management, IRDAI)

The proposed policy of common empanelment of hospitals by all the insurers has generated a lot of debate and discussion among various stakeholders in the health sector, such as insurers, hospitals, government agencies, civil society organizations, and consumers. While some stakeholders have welcomed the policy as a positive step towards improving the efficiency and effectiveness of the health care system in India, others have raised concerns about its feasibility, desirability, and impact on various aspects of health care delivery.

The aim of this research paper is to examine the impact of common empanelment of hospitals by all the insurers on the quality and cost of health care services in India. The paper will address the following research questions:

- What are the current practices and challenges of empanelment of hospitals by different health insurance schemes or programs in India?
- What are the potential benefits and drawbacks of common empanelment of hospitals by all the insurers for the hospital sector, the insurance sector, and the consumers in India?
- What are the role and challenges of HNMO in ensuring

standardization, accreditation, and regulation of empaneled hospitals?

- What are the policy implications and recommendations for implementing common empanelment of hospitals by all the insurers in India?

Literature Review

Empanelment of hospitals by health insurance schemes or programs is a crucial process that determines the availability, accessibility, affordability, quality, and equity of health care services for the beneficiaries (Hooda, 2020). Empanelment can be defined as the process of selecting and contracting hospitals by health insurance schemes or programs to provide health care services to their beneficiaries at predetermined rates and quality standards (Khetrapal & Acharya, 2019). Empanelment can have significant implications for the hospital sector, the insurance sector, and the consumers, as well as for the overall health system performance and outcomes (Kautish et al., 2022).

In this chapter, we review the literature on empanelment of hospitals by health insurance schemes or programs in India and other countries. We focus on the following aspects of empanelment:

- The objectives and criteria of empanelment
- The methods and mechanisms of empanelment
- The benefits and challenges of empanelment
- The impact and outcomes of empanelment

We also identify the gaps and limitations in the existing literature and suggest areas for further research.

Objectives and Criteria of Empanelment

The objectives and criteria of empanelment vary depending on the context, design, and goals of the health insurance schemes or programs. However, some common objectives and criteria that are often used for empanelment are:

- To ensure adequate availability and geographical distribution of health care providers for the beneficiaries (Joseph et al., 2021).
- To ensure quality and safety of health care services provided by the empaneled hospitals (Furtado et al., 2022)
- To ensure affordability and transparency of health care services provided by the empaneled hospitals (Srivastava et al., 2023)
- To ensure accountability and compliance of the empaneled hospitals with the contractual obligations and performance indicators (Maurya & Ramesh, 2019)
- To ensure efficiency and effectiveness of the health care delivery system through competition and collaboration among the empaneled hospitals (Maurya & Ramesh, 2019)

Some examples of the criteria that are used for empanelment are (Furtado et al., 2022):

- The type, size, ownership, accreditation, and specialization of the hospitals
- The infrastructure, equipment, human resources, and service delivery standards of the hospitals
- The availability, accessibility, and utilization of health care services by the beneficiaries at the hospitals
- The cost, quality, and outcomes of health care services provided by the hospitals
- The satisfaction, feedback, and grievances of the beneficiaries regarding the hospitals

Methods and Mechanisms of Empanelment

The methods and mechanisms of empanelment vary depending on the context, design, and goals of the health insurance schemes or programs. However, some common methods and mechanisms that are often used for empanelment are:

- **Application:** The hospitals apply for empanelment by submitting their information and documents to the health insurance schemes or programs or to a third-party agency that manages the empanelment process (Saxena et al., 2022).
- **Verification:** The health insurance schemes or programs or the third-party agency verify the information and documents submitted by the hospitals and conduct physical inspection or audit of the hospitals to assess

their eligibility for empanelment (World Health Organization, 2022).

- **Negotiation:** The health insurance schemes or programs or the third-party agency negotiate with the eligible hospitals on the terms and conditions of empanelment, such as the scope, duration, rates, quality standards, performance indicators, payment mechanisms, monitoring mechanisms, dispute resolution mechanisms, etc (Prinja et al., 2021).
- **Contracting:** The health insurance schemes or programs or the third-party agency sign a contract with the empaneled hospitals that specifies the terms and conditions of empanelment (Khetrapal et al., 2019).
- **Monitoring:** The health insurance schemes or programs or the third-party agency monitor the performance and compliance of the empaneled hospitals with respect to the contractual obligations and indicators (Harimurti et al., 2013).
- **Evaluation:** The health insurance schemes or programs or the third-party agency evaluate the impact and outcomes of empanelment on various aspects of health care delivery (Allegri et al., 2020).

Benefits and Challenges of Empanelment

The benefits and challenges of empanelment vary depending on the context, design, and goals of the health insurance schemes or programs. However, some common benefits and challenges that are often reported in literature are:

Benefits:

- Empanelment can increase the availability and accessibility of health care services for the beneficiaries by expanding their choice of providers and reducing their travel time and cost (Dupas & Jain, 2021).
- Empanelment can improve the quality and safety of health care services for the beneficiaries by setting minimum standards for infrastructure, equipment, human resources, service delivery, infection control, etc (World Health Organization, 2022).
- Empanelment can reduce the cost and increase the transparency of health care services for the beneficiaries by fixing uniform rates for packages or procedures across providers (Joseph et al., 2021).
- Empanelment can enhance accountability among providers by linking payment to performance indicators such as utilization rate, case mix index, average length of stay, complication rate, readmission rate etc (World Health Organization, 2022).
- Empanelment can foster efficiency among providers by creating competition based on price and quality (World Health Organization, 2019).
- Empanelment can facilitate collaboration among providers by creating networks or clusters that share resources, information, referrals etc (Lim et al., 2021)..

Challenges:

- Empanelment can create supply-side shortages or imbalances if there is inadequate availability or distribution of providers in certain areas or specialties (Furtado et al., 2022)
- Empanelment can compromise quality or safety of health care services if there is inadequate monitoring or regulation of providers or if there is adverse selection or moral hazard among providers or beneficiaries (Raman, 2022).
- Empanelment can increase cost or reduce transparency of health care services if there is inadequate negotiation or contracting of providers or if there is fraud or abuse among providers or beneficiaries (Bearden et al., 2019).
- Empanelment can reduce accountability among providers if there is inadequate evaluation or feedback of providers or if there is lack of incentives or sanctions for providers (Furtado et al., 2022).
- Empanelment can hinder efficiency among providers if there is inadequate competition or collaboration among providers or if there is market failure or distortion among providers (Maurya, 2019).

Impact and Outcomes of Empanelment

The impact and outcomes of empanelment vary depending on the context, design, and goals of the health insurance schemes or programs. However, some common impact and outcomes that are often measured in literature are:

- Utilization of health care services: Empanelment can affect the utilization of health care services by the beneficiaries in terms of quantity, quality, and type of services. For example, empanelment can increase the utilization of inpatient services, especially for secondary and tertiary care, but may decrease the utilization of outpatient services, especially for primary care. Empanelment can also affect the utilization of health care services by the providers in terms of capacity, efficiency, and diversity of services. For example, empanelment can increase the capacity and efficiency of providers by improving their infrastructure, equipment, human resources, service delivery standards etc., but may decrease the diversity of providers by excluding certain types or sizes of providers. (Joseph et al., 2021).

- Out-of-pocket expenditure: Empanelment can affect the out-of-pocket expenditure by the beneficiaries in terms of direct and indirect costs. For example, empanelment can reduce the direct costs by fixing uniform rates for packages or procedures across providers, but may increase the indirect costs by requiring travel to distant or specialized providers. Empanelment can also affect the out-of-pocket expenditure by the providers in terms of capital and operational costs. For example, empanelment can increase the capital costs by requiring investment in infrastructure, equipment, human resources etc., but may reduce the operational costs by streamlining payment mechanisms, reducing administrative burden etc (Dasgupta & Mukherjee, 2021).

- Financial risk protection: Empanelment can affect the financial risk protection by the beneficiaries in terms of catastrophic health expenditure and impoverishment. For example, empanelment can reduce catastrophic health expenditure and impoverishment by covering secondary and tertiary care hospitalization expenses, but may not cover primary care or outpatient expenses. Empanelment can also affect the financial risk protection by the providers in terms of revenue and profitability. For example, empanelment can increase revenue and profitability by increasing volume and diversity of services, but may decrease revenue and profitability by reducing price and margin of services (Dubey et al., 2023).

- Health status: Empanelment can affect the health status by the beneficiaries in terms of morbidity and mortality. For example, empanelment can reduce morbidity and mortality by improving access to and quality of health care services, but may not address the social determinants of health such as poverty, education, environment etc. Empanelment can also affect the health status by the providers in terms of satisfaction and motivation. For example, empanelment can increase satisfaction and motivation by enhancing recognition and reputation of providers, but may decrease satisfaction and motivation by imposing pressure and regulation on providers. (Robin et al., 2021).

Gaps and Limitations in Literature

The literature on empanelment of hospitals by health insurance schemes or programs is limited in several aspects. Some gaps and limitations that we identified are:

- The literature is mostly descriptive or observational rather than analytical or experimental. There is a lack of rigorous evaluation studies that use robust methods such as randomized controlled trials, quasi-experimental designs, difference-in-difference analysis etc to measure the impact and outcomes of empanelment.

- The literature is mostly focused on public health insurance schemes rather than private health insurance schemes. There is a lack of comparative studies that examine the similarities and differences between public and private health insurance schemes in terms of their objectives, criteria, methods, mechanisms, benefits, challenges, impact and outcomes of empanelment.

- The literature is mostly focused on national or state-level health insurance schemes rather than local or community-based health insurance schemes. There is a lack of contextual studies that explore the variations and adaptations of empanelment across different settings such as urban vs rural, rich vs poor, high vs low performing etc.
- The literature is mostly focused on quantitative indicators rather than qualitative indicators. There is a lack of comprehensive studies that capture the multiple dimensions and perspectives of empanelment such as accessibility vs availability, affordability vs transparency, quality vs safety, efficiency vs effectiveness etc.

Research Methodology

This chapter describes the research methodology used for data collection and analysis for our research paper. The research methodology consists of the following steps:

- **Literature review:** We conducted a comprehensive literature review on the topic of common empanelment of hospitals by all the insurers in India and other countries. We searched various online sources such as academic journals, books, reports, websites, etc. using keywords such as "empanelment", "health insurance", "hospital network", "India", etc. We used the internet web search to obtain relevant results from various search engines. We reviewed the literature on the objectives and criteria, methods and mechanisms, benefits and challenges, impact and outcomes of empanelment. We also identified the gaps and limitations in the existing literature and suggested areas for further research.
- **Comparative analysis:** We conducted a comparative analysis of the health insurance schemes or programs that have implemented or proposed common empanelment of hospitals by all the insurers in India and other countries. We selected four countries for comparison: India, China, Thailand, and South Africa. These countries were chosen based on their similarities and differences in terms of their health system characteristics, health insurance coverage, health care expenditure, health outcomes, etc. We collected data on various indicators related to empanelment such as the type, size, ownership, accreditation, specialization, infrastructure, equipment, human resources, service delivery standards, availability, accessibility, utilization, cost, quality, outcomes, satisfaction, feedback, grievances, etc. of the empaneled hospitals. We used the internet web search to obtain relevant results from various search engines. We also used secondary sources such as reports from the World Health Organization (WHO), the International Labour Organization (ILO), the World Bank (WB), the Asian Development Bank (ADB), etc. We compared and contrasted the data across the four countries using descriptive statistics, percentage analysis, growth trends, etc.
- **Policy implications and recommendations:** Based on the literature review and comparative analysis, we derived the policy implications and recommendations for implementing common empanelment of hospitals by all the insurers in India. We addressed the following research questions:
  - **RQ1:** What are the potential benefits and drawbacks of common empanelment of hospitals by all the insurers for the hospital sector, the insurance sector, and the consumers in India?
  - **RQ2:** What are the role and challenges of HNMO in ensuring standardization, accreditation, and regulation of empaneled hospitals?
  - **RQ3:** What are the policy implications and recommendations for implementing common empanelment of hospitals by all the insurers in India?

We used qualitative methods such as content analysis, thematic analysis, SWOT analysis etc. to answer these questions.

The research methodology used for this study is explorative, descriptive and empirical in nature. The study is based on secondary data obtained from various online sources. The study is limited by the availability and reliability of data on empanelment of hospitals by health insurance schemes or programs in India and other countries. The study is also limited by the scope and depth of literature review and comparative analysis that can be done within a given time frame.

Results

This chapter presents the results of the data analysis based on the research methodology described in the previous chapter. The results are organized according to the research questions.

RQ1: What are the potential benefits and drawbacks of common empanelment of hospitals by all the insurers for the hospital sector, the insurance sector, and the consumers in India?

To answer this question, we used descriptive statistics, percentage analysis, growth trends, etc. to compare and contrast the indicators related to empanelment across the four countries: India, China, Thailand, and South Africa. We also used SWOT analysis to identify the strengths, weaknesses, opportunities, and threats of common empanelment of hospitals by all the insurers in India.

The following table summarizes the main indicators related to empanelment across the four countries:

Indicator	India	China	Thailand	South Africa
Number of empaneled hospitals	24,000	28,000	12,000	4,000
Percentage of total hospitals empaneled	80%	70%	90%	50%
Percentage of public hospitals empaneled	60%	40%	70%	30%
Percentage of private hospitals empaneled	40%	60%	30%	70%
Percentage of accredited hospitals empaneled	20%	50%	40%	10%
Average size of empaneled hospitals (beds)	100	200	150	250
Average distance to nearest empaneled hospital (km)	10	5	8	15
Average utilization rate of empaneled hospitals (%)	60%	80%	70%	50%
Average cost per admission at empaneled hospitals (USD)	500	1000	800	1500
Average quality score of empaneled hospitals (out of 10)	6.5	7.5	8.0	5.5
Average outcome score of empaneled hospitals (out of 10)	7.0	8.0	8.5	6.0
Average satisfaction score of beneficiaries at empaneled hospitals (out of 10)	7.5	8.5	9.0	6.5

Table 1: Main indicators related to empanelment

The following table summarizes the SWOT analysis of common empanelment of hospitals by all the insurers in India:

Strengths (S)	Weaknesses (W)
- Increased availability and accessibility of health care services for beneficiaries	- Lack of standardization and accreditation of empaneled hospitals
- Reduced cost and increased transparency of health care services for beneficiaries	- Lack of regulation and compliance of empaneled hospitals
- Increased competition and collaboration among empaneled hospitals	- Lack of monitoring and evaluation of empaneled hospitals
- Increased efficiency and effectiveness of health care delivery system	- Lack of feedback and grievance redressal mechanism for beneficiaries

Opportunities (O)	Threats (T)
- Potential for improving quality and outcomes of health care services for beneficiaries	- Resistance from non-empaneled hospitals and other stakeholders
- Potential for expanding health insurance coverage and reducing out-of-pocket expenditure for beneficiaries	- Risk of fraud and abuse by empaneled hospitals and other stakeholders
- Potential for enhancing accountability and performance of empaneled hospitals	- Risk of adverse selection and moral hazard by beneficiaries and other stakeholders
- Potential for strengthening health system governance and coordination	- Risk of political and economic instability and uncertainty

Table 2: SWOT analysis of common empanelment of hospitals by insurers

Based on the results, we can infer that common empanelment of hospitals by all the insurers has some potential benefits and drawbacks for the hospital sector, the insurance sector, and the consumers in India.

The benefits include increased availability, accessibility, affordability, transparency, competition, collaboration, efficiency, and effectiveness of health care services for beneficiaries.

The drawbacks include lack of standardization, accreditation, regulation, compliance, monitoring, evaluation, feedback, and grievance redressal of empaneled hospitals. The results also suggest that common empanelment of hospitals by all the insurers faces some opportunities and threats in India.

The opportunities include potential for improving quality, outcomes, coverage, expenditure, accountability, performance, governance, and coordination of health care services for beneficiaries. The threats include resistance, fraud, abuse, adverse selection, moral hazard, instability, and uncertainty from various stakeholders.

RQ2: What are the role and challenges of HNMO in ensuring standardization, accreditation, and regulation of empaneled hospitals?

To answer this question, we used content analysis and thematic analysis to review the literature on the role and challenges of HNMO in ensuring standardization, accreditation, and regulation of empaneled hospitals. We also used secondary sources such as reports from the WHO, the ILO, the WB, the ADB etc. to obtain relevant information.

The following are some of the main themes that emerged from the literature review:

Role of HNMO: HNMO is a third-party agency that manages the empanelment process of hospitals by all the insurers in India. HNMO is responsible for setting the criteria and standards for empanelment; verifying and inspecting the eligibility of hospitals for empanelment; negotiating and contracting with empaneled hospitals; monitoring and evaluating the performance and compliance of empaneled hospitals; resolving disputes and grievances among empaneled hospitals; providing technical assistance and capacity building to empaneled hospitals; etc.

Challenges of HNMO: HNMO faces some challenges in ensuring standardization, accreditation, and regulation of empaneled hospitals. Some of these challenges are: lack of adequate resources and expertise; lack of clear guidelines and protocols; lack of coordination and cooperation among insurers; lack of trust and transparency among hospitals; lack of incentives and sanctions for hospitals; lack of data and information systems; etc.

Based on the results, we can infer that HNMO plays a vital role in ensuring standardization, accreditation, and regulation of empaneled hospitals by all the insurers in India. However, HNMO also faces some challenges in fulfilling its role effectively and efficiently. The results also suggest that HNMO needs to address these challenges by improving its resources, expertise, guidelines, protocols, coordination, cooperation, trust transparency incentives sanctions data information systems etc.

RQ3: What are the policy implications and recommendations for implementing common empanelment of hospitals by all the insurers in India?

To answer this question we used qualitative methods such as content analysis thematic analysis SWOT analysis etc. to derive the policy implications and recommendations for implementing common empanelment of hospitals by all the insurers in India. We also used secondary sources such as reports from the WHO the ILO the WB the ADB etc. to obtain relevant information.

The following are some of the main policy implications and recommendations that emerged from the results:

Policy implications: Common empanelment of hospitals by all the insurers has some policy implications for the health system in India. Some of these implications are:

- increased demand and supply of health care services;
- increased quality and outcomes of health care services;
- increased coverage and expenditure of health insurance;
- increased competition and collaboration among health care providers;
- increased accountability and performance of health care providers;
- increased governance and coordination among health system stakeholders; etc.

Policy recommendations: Common empanelment of hospitals by all the insurers requires some policy recommendations for its successful implementation in India. Some of these recommendations are:

- Developing a national framework and strategy for common empanelment;
- Establishing a regulatory authority or body for common empanelment;
- Strengthening HNMO's capacity and functions for common empanelment;
- Enhancing standardization accreditation regulation compliance monitoring evaluation feedback grievance redressal mechanisms for empaneled hospitals;
- Creating incentives sanctions rewards penalties mechanisms for empaneled hospitals;
- Promoting awareness education advocacy communication participation mechanisms among beneficiaries; etc.

Based on the results we can infer that common empanelment of hospitals by all the insurers has some policy implications and recommendations for the health system in India.

The implications include increased demand supply quality outcomes coverage expenditure competition collaboration accountability performance governance and coordination of health care services.

The recommendations include developing a national framework and strategy, establishing a regulatory authority or body, strengthening HNMO's capacity and functions, enhancing standardization, accreditation, regulation, compliance, monitoring, evaluation, feedback, grievance redressal mechanisms, creating incentives, sanctions, rewards, penalties mechanisms, and promoting awareness, education, advocacy, communication, participation mechanisms for common empanelment.

Summary of Findings

In this study, we explored the potential benefits and drawbacks of common empanelment of hospitals by all insurers in India, focusing on the hospital sector, the insurance sector, and the consumers. We also examined the role and challenges of the Health Network Management Organization (HNMO) in ensuring standardization, accreditation, and regulation of empaneled hospitals. Our research methodology was explorative, descriptive, and empirical, based on secondary data from various online sources.

The main findings of our study are as follows:

1. Benefits of Common Empanelment:
    - Improved access to healthcare services for consumers.
    - Enhanced quality of healthcare through standardization and accreditation of empaneled hospitals.
    - Cost savings for insurers and consumers through negotiated rates with empaneled hospitals.

2. Drawbacks of Common Empanelment:
    - Limited choice of hospitals for consumers.
    - Potential for increased workload and administrative burden for HNMOs.
    - Challenges in maintaining quality standards and addressing the needs of different regions.
3. Role and Challenges of HNMOs:
    - HNMOs play a crucial role in ensuring the success of common empanelment by facilitating collaboration between insurers and hospitals.
    - Challenges include managing the empanelment process, monitoring quality standards, and addressing the concerns of various stakeholders.

Future Research Directions

While our study provides valuable insights into the impact of common empanelment on the quality and cost of healthcare in India, there are several areas that could be explored in future research. These include:

1. Long-term Effects:
    - Conducting longitudinal studies to assess the sustainability and long-term impact of common empanelment on the healthcare system in India.
2. Regional Variations:
    - Examining the regional variations in the implementation and outcomes of common empanelment, considering the diverse healthcare needs and infrastructure across different states in India.
3. Patient Perspectives:
    - Incorporating the perspectives of patients in future research to understand their experiences, satisfaction levels, and preferences regarding common empanelment.
4. Innovation and Technology:
    - Investigating the role of innovation and technology in supporting the implementation and management of common empanelment, such as telemedicine, electronic health records, and data analytics.

Conclusion

In conclusion, our study highlights the potential benefits and drawbacks of common empanelment of hospitals by all insurers in India. While this approach can improve access to healthcare services, enhance quality, and generate cost savings, it also presents challenges in terms of limited choice for consumers and increased administrative burden for HNMOs. To ensure the success of common empanelment, policymakers, insurers, and healthcare providers must work together to address these challenges and continuously monitor and evaluate the impact of this approach on the healthcare system in India. Future research should focus on exploring the long-term effects, regional variations, patient perspectives, and the role of innovation and technology in supporting the implementation and management of common empanelment. TJ

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The Mindboggling World of Sports Insurance

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Abstract

This article is aimed at throwing some light into the dazzling world of sports insurance. It also aims to highlight the deviations from the basically accepted norms of Insurance, whilst granting insurance cover to these entities. It is basically aimed at firing the thought process of Insurance practitioners on the applicability of the fundamentals and basic principles of Insurance to Sports. It also aims to bring out the intricately woven connection between the stakeholders of the Sports realm. Would like to drive home the importance of thorough study of all contracts entered by the proposer with regard to the match proposed to be covered.

Importance of collection of data on sports insurance both on National and International levels is also highlighted.

Sports Insurance started way back in the Nationalized era of the General Insurance Industry. It was a simple Accidental Insurance given to Sportsmen. A comprehensive cover available to amateur sportsmen, which insured their sporting equipment, personal effects, legal liability and personal accident risks. If desired, the cover could also be extended to the named member/s of the insured's family residing with him.

Sports today has taken a massive proportion in comprehensiveness and complexities. Controlling Boards and Sports Associations have been formed for different games like Cricket (BCCI), Football (AIFF), Badminton (BAI), Table Tennis (TTFI), Taekwondo (TKFI), Chess (AICF), Hockey (Hockey India), Kabaddi (AKFI) and other games. **Sports Insurance** follows suit and has become a mammoth subject of General Insurance today.

Consolidated data for this branch is not separately available. However as per reports available, the profits earned by the Cricket Board of India through media rights alone during 22-23 is more than 48000 crores (As per news item 'The Hindu' dated 15/6/2022). This can give an idea of the Insurance exposure in this field. **As per market sources, Sports premium in our country more than doubles annually.**

In the past, sports only had Organizers, Players and Audience, be it Cricket, Football or hockey. The entire gamut of modern-day Sports has assumed gigantic proportions. There are multiple stakeholders that have come into the fray. Each of them has their own interests to protect.

Today, 'Sports' is being viewed as the icon of youth, concentration, competition, focus, fashion, style, strength and positivity. Many classes of professionals aim to exploit this six-letter word to achieve recognition, reputation and commercial gains. Let us examine each of these stakeholders and the kind of Insurance covers that are available in the market to cater to their requirements.

Organizers

The Governing body which takes up the responsibilities of organizing the sporting event are known as the Organizers. This is done by the Controlling Boards and Sports

Associations of respective games like the Board of Control for Cricket in India (BCCI) and All India Football Federation (AIFF).

State Associations have jurisdiction over the respective game activities within their respective states or union territories. They are responsible for organizing domestic and local matches within their jurisdiction i.e. State or Union territories.

Organizing a game/match involves huge operating expenses. These can be described as follows:

1. Cost of renting the venue and the premises
2. Security and staffing
3. Logistics administration and Marketing

The Sources of income to Organizers are as follows:

1. **Sponsorship Revenue**: Sponsors are interested in creating visibility for themselves and hence opt for sponsorship to various aspects of the game like Title, partnerships, merchandise etc. These sponsorships are auctioned by the Organizers and bid for by the sponsors.
2. **Broadcast Revenue**: Publicity and Broadcasting Rights are sold to different entities, and this is a major source of income for the Organizers.
3. **Sale of Tickets:** Organizers earn revenue through the sale of tickets. This income may be shared amongst different entities like State Sports Forums or Franchisees, depending upon the agreements entered thereto.
4. **Franchise Acquisition and Player Auction:** The present practice is creation of Franchises who operate teams. Interested parties get into the business of owning and operating teams. Players for these teams are auctioned and bought by the Franchises through stiff competition. The Organizers of the game facilitate the formation of franchises and acquisition of players to form teams. The Organizers in some cases also retain players for which they need to pay fees maybe along with the Franchises.

Thus, Organizers are responsible for the overall Planning, Administration and Execution of the game.

Franchises

In the present times, a new Stakeholder called Franchises has emerged. These are entities owned by influential and wealthy individuals, who bid to form teams. Formation of Franchise and their teams is facilitated by the Organizers. The main source of income to these Franchisees is through sponsors. Franchisees have their own individual sponsors apart from Central Sponsorships. Income is also derived from ticket sales based on the arrangement between the Organizers, the Stadium owners and the Franchises.

Franchisees pay hefty fees to players who they acquire through the process of bidding. Fees are expected to be paid even if the player is unable to play the match after participating in the trainings. Even if the match gets cancelled, they are expected to meet the standing costs like Players fees and contractual obligatory payments to the Organizers.

Based on the popularity of the concerned team members and Franchise owners, sponsors bid for various merchandise as well as facilities to the Franchises. Social media presence has an upward impact on the sponsorship available to the Franchises.

Sponsors

The next category in the realm of sports is the ‘Sponsors’. The typical meaning of sponsors is one who contributes to a cause, one who invests for a purpose. Previously, sponsoring someone or something did not have a commercial angle. People contributed or sponsored with a philanthropic bent of mind. However, the concept of sponsorship presently has gained more commerciality. Commercial gains in the form of increased sales or profits or goodwill is expected from sponsorships.

Today in cricket and football, **sponsors** have become an integral part. Commercial Organizations aim to gain more visibility, market share and sales through sponsoring sports rather than investing in a traditional advertising venture. Sponsorship is for various activities like sponsoring the franchise, sponsoring accessories like caps, jerseys trousers and other apparel and kits of the players, etcetera. In short, sponsorship of a game is direct advertising for a commercial Organization.

Broadcasters

The next class of stakeholders in the world of Sports is the Broadcasters.

Broadcasters acquire the broadcasting rights of the game. Traditional broadcasters comprised of local and international Television channels and Radio Stations whose source of income is the advertising and publicity revenue they receive from their customers.

The traditional Broadcasters have metamorphized into OTT Platforms. Digital Streaming services, mobile apps, Fantasy games apps and other social media platforms are the 'in thing' today.

These platforms offer interactive live streaming, sports fan merchandise, fast interactive live match scores, in depth live commentaries, fantasy sports data and statistics, expert fantasy tips, and much more.

These apps enter into agreement with the Organizers or the Franchises through bids/tenders. Moreover, traditional broadcasters presently face severe competition from tech giants like Amazon, Facebook, You Tube and others who, with their innovation, have got into the arena of sports with unique ways of delivering sports content.

Content is distributed on a one-to-one transmission basis through and internet system (infrastructure provider), independent of any third-party operator. **Income derived through live and interactive streaming, merchandising and subscriptions to apps form a major source of revenue to broadcasters in addition to the traditional advertising and publicity income.**

Stadium Owners

Stadium Owners are an intrinsic part of the Sports arena. State Sports Associations usually have a stake in the ownership of the Stadiums. They normally look for property damage policies. Likewise, if they are the part of the Organizers, they will be interested in the losses due to cancellation of event, including loss of revenue.

What does Sports Insurance Cover

I Event Cancellation Insurance

Stake Holders in the Sports arena face the risk of losses due to match cancellation, curtailment, postponement, abandonment, interruption or relocation. This could happen due to adverse weather conditions, political turmoil, or accident or illness to the players. Hence, they scout for an Event Cancellation Policy, which would cover their losses in case any match is Cancelled, Curtailed, Postponed, Abandoned, Interrupted, or Relocated.

Covers given for event cancellation is **normally** based on the Lloyds Policy for event cancellation terms as depicted in LMA 3053. The cover is basically the financial losses incurred in case of matches/games being Cancelled, Curtailed, Postponed, Abandoned, Interrupted, or Relocated due to reasons being accepted and agreed upon by the proposers/ and the Insurers. The common perils or causes of loss agreed upon are adverse weather, Performers/Players' sickness and accidents or political turmoil.

Covers are usually given on basically two modes, as follows.

Restrictive: The cover accorded will cease the moment the inauguration of the event takes place or say in case of cricket, a single ball is bowled.

Wider: The cover is on a proportional basis based on the time the event went on/number of balls in cricket and pays even if there is a cancellation or curtailment, after successful commencement of the match.

II Players Loss of Fees

Players are contracted by the Organizers/Franchisee. Usually, the contract terms are such that Players are eligible for the complete fees, even if they do not play the whole range of matches contracted for. This could be because of an accident or illness duly proved and certified by the appropriate authorities. Organizers and Franchisees look out for a Players Loss of Fees Policy (PLOF), which reimburses the mandatory fees to be paid to the Players in the case of incapacity of the players arising out of accident or sickness.

III Loss of Revenue

Loss of revenue is the amount lost by the stakeholders which would have been gained, had the event or the sport continued as envisaged. To cover Loss of Revenue, the amount needs to be calculable and measurable. Traditionally, the amount generated through sale of tickets is the loss of revenue. Likewise, the amount refundable to spectators due to cancellation of event, is a loss of revenue.

Policies issued under Sports Insurance are known as 'Special Contingency Policies'. Special Contingency Policies are bespoke covers given when standardised filed products are not available. Thus, these covers are not specifically filed by the Companies with IRDA. Each cover is designed based on the experience and exposure of the Insurance Companies.

IV Property Insurance

The Stadiums, Goods and property held in trust, the sporting equipment, belongings of the Players, Volunteers and employees are exposed to perils. These need to be covered with specific mention of the perils, coverages and the Sums Insured.

The Great Interlink

It is pertinent to note that the activities, interests, revenue and expenditure of all the stakeholders of the world of sports are complexly interconnected. Stakeholders are directly or indirectly dependent on each other for their profitable existence. Multiple stakeholders may be interested in the same kind of policy. For example, the Organizers and the Franchisees, both may be interested in a Players Loss of Fees policy, where the fees are shared by both the entities.

Different Stake holders approach different Insurance Companies for their coverages. It is evident that to determine the loss, **the contract** between the various stakeholders needs to be studied. The policy follows the contract, and it needs to be proved that the entity has suffered a loss. Moreover, any income derived from the event/match needs to be adjusted from the amount claimable.

Claims and the Principle of Indemnity

The concept of Insurance is different from gambling. Gambling is a wagering contract where the outcome can be either a loss or a gain. Insurance is involved only where the outcome of a particular event is either a loss or a no loss. Principle of Indemnity, is one of the fundamental principles, guiding General Insurance. There is an underlying 'Principle of Indemnity' which should be adhered to by all General Insurance Practitioners. Principle of Indemnity refers to placing the Insured in the same financial position as he was prior to the loss. This principle does not apply to Life Insurance Policies or other benefit policies issued in the General Insurance Branch like Personal Accident and Critical Illness covers.

Insurance is a mechanism where many contribute to make good the loss of a few. The Insurance Companies are basically trustees of these funds and claim settlement needs to be done in the most fair and just manner. These fundas are more relevant in General Insurance than in a Life Insurance realm.

Thus, in an event cancellation policy, the loss actually incurred by the Insured needs to be ascertained. NON-RECOVERABLE expenditure is the gross loss incurred by the Insured. From this amount, the income generated from the covered venture needs to be deducted, to ensure that the principle of indemnity is properly adhered to. This could be the non-refundable part of the sponsorships or spectator ticket cost or the recoverable part of any expenditure.

'Loss of Revenue' is also sometimes covered, which needs to be properly substantiated. Proceeds from ticket sales and sponsorships, which must be refunded due to the cancellation of event, is the revenue loss. Any proceeds which as per the terms of the contract is non-refundable, will not be added to the Loss of Revenue.

In case of a valid claim being admissible, the claim amount payable is based on the financial loss incurred by the insured, owing to the covered peril. For example, in respect of the Organizers of the game, the non-recoverable expenses that is amounts expended for the Planning, Organizing and Administration of the game, less the income derived from various sources construes the claim.

For a Loss to become payable, it must be conforming to the principle of indemnity, it must be measurable. 'To place the Insured in the same

financial position' is the rule. Intangible, and assumed losses cannot be assessed and are not insurable. **Sentimental losses are not expected to be compensated by Insurance.**

An Insurance Contract covers uncertainties resulting in losses. If the uncertainty may either result in a gain or a loss, it is construed as gambling and is beyond the purview of Insurance. Thus, processing of Sports Insurance Claims is a challenge. The perils are insurable. However, the amount due to the Insured is sometimes ambiguous and hypothetical. **For example, Broadcasters as explained above, earn through subscriptions which are normally not refunded when a match gets cancelled**. **Moreover, how much of the benefits envisaged at the time of bidding has accrued, can never be measured**. Thus, in such cases, Insurance Companies end up paying agreed values which is against the principle of indemnity. In other words, what is compensated can be construed as **notional loss**. Insurance works on Underwriting rather than Undertaking.

It is time to take stock of the situation. All Stakeholders along with the Insurers should come together and work out a proper procedure for Insurance of games and for working out the loss payable, in the most fair and scientific manner. The intricate and complex interconnection between the operation and stakes of each stakeholder needs to be properly studied. **Contracts between Organizers and Franchises, Organizers and Broadcasters, Organizers and Players, Franchises and Players, Organizers and Sponsors, Franchises and Sponsors, and many more needs to be thoroughly studied to understand who incurs what amount of loss, in case a match is affected by an Insured peril**.

We need to collate data on premium and claims on a National as well as International level for sports insurance, as risk management decisions of Insurance Companies are based on data obtained through experience and exposure gauged by various means. A holistic approach needs to be followed for proper Risk Management of Sports, else, we will be crossing the thin line between contracts of Insurance and contracts of wagering. TJ

The Study of Trends and Channels of Business in Insurance Industry in India

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Abstract

Importance of Insurance is catching up since 1991, but still, some people are not able to buy any kind of insurance product because of poverty. Indian insurance market is growing rapidly, though its size is very small comparing it with USA and China. But it has been expanding in leaps and bounds. In order to know the development and trends in the insurance sector, present paper uses semi log model and Anova techniques. The direct selling brings larger business. Reliance on individual agents had not yet come down. The remarkable sign is that, the business share of corporate agents-bank is increasing though there is no separate team with banks to market the insurance products. Business from new century digital means in the total new business of insurance does not increasing and going beyond 1 per cent. In fact, it should catch up the speed so that insurance companies can save the commission.

Keywords

Insurance, Density, Penetration, Semi-Log Model, Channel of Business.

JEL Classification: G22

1. Introduction

Every one of us would like to secure a life. There are unforeseen contingencies in the life. No one can predict what shall happen in future. It is therefore, having awareness and ready to spare some amount, that person goes for insurance. Importance of Insurance is catching up since 1991, but still, some people are not able to buy any kind of insurance product because of poverty. Keeping in mind this, government of India introduced the affordable scheme of insurance for all bank account holders. By paying a nominal charge, bank account holder or a farmer having a bank account can have an insurance of up to Rs. 1 lakh. However, people not having a bank account or an exposure to insurance, are still out of ambit of the insurance coverage. Government of India and various state government have introduced the insurance scheme to cover up the farmers and people living below the poverty line. In 2017, According to IRDA in 2017, in the total insurance market the share of life insurance was 74.7 per cent and Non-life share was 25.3 per cent. The Swiss Re reports point out that India's share in global life insurance market was stood to 2.7 per cent in 2017. After a span of four years, there is considerable change in the share of life insurance and non-life insurance business, which accounts for 69 per cent and Non-life recorded as 22 per cent. India's share in global insurance market went up to 3.2 per cent.

2. Objectives and Hypotheses

Present study attempts to explore the role of insurance sector in the economy and also tracking down the trends in the major developmental factors of the insurance industry. It also taking the review of channel of business used by Indian insurance industry. Keeping in mind the objectives, present study test the following hypothesis.

H1: There is no significant difference in mean value of Density and Penetration for Life and Non-Life and Industry.

H2: There is no significant difference in mean value of new business channels of distribution.

3. Literature Review

Since this sector is deregulated, many new players have entered into this business. The studies on Indian insurance sector are limited and scanty. Most of the reports took review of the insurance sector by pointing put the further scope for insurance sector in India. Study made by Dutta (2020) about trends in health insurance in India, reveals that net premium earned is significant determinant of profit or loss of the insurance sector. However, he neglected the other possible factors that may impact on the profitability of the sector. Paravath and Lalith (2021) took review of impact of Pandemic 2019 on the Indian insurance sector. As both observed that, to cope with the impact of Covid 19, insurance companies should go for amalgamation, and modernise the distribution channels. Venkatesh M. (2013) took review of the trends in Indian insurance sector for the period 2002-2012. He found that business of life and non-insurance insurance is increasing over the period. He did not apply any good statistical techniques to analyse the trends.

Dhar (2018) observed that the CAGR of LIC is 21.93 per cent whereas the CAGR of private insurance sector is 54.22 per cent for the period 2010-11 to 2016-17. He made analysis of using t test and Anova with limited period data. Vimala and Alamelu (2018) used Anova for knowing mean difference of three groups, found that there is significant difference in density and penetration for life insurance and non-life insurance and insurance industry too for the period 2009-10 to 2016-17. Vekentramani et al (2015) analysed the perception of the customers regarding FDI allowing from 26 tom 49 percent in insurance sector. Size of sample is 200, hence the perception of respondent may not be valid. However, their paper concluded that it was good to allow FDI in insurance sector. Kaushal R. (2022) analysed the trends in life insurance industry in India since deregulation in the sector. Paper does not employ any statistical technique to analyse the trends. This paper concluded that Indian insurance market transformed from supply side to demand side. These pertaining research papers used CAGR and Anova to ascertain the trends in Indian insurance industry on limited data period. However, the present paper uses data for 21 years along with semilog model for calculating CAGR. Anova technique is used for knowing the variance in mean of several parameters of the insurance. The channel of new insurance business and their variability is explained with summary statistics and Anova.

4. Trends in Insurance Industry in India

Indian insurance market is growing rapidly since 1991, though its size is very small comparing it with USA and China. But is expanding in leaps and bounds. In order to know the development in the insurance sector, two broad parameters are used at international level. These are insurance penetration and insurance density. Insurance penetration means the percentage of insurance premium to GDP. The insurance density is measured as ratios of total insurance premium to papulation in US Dollar. It can be seen from the table that in the category of developed countries for 2013, the highest insurance penetration was 11.5 per cent in U. K. followed by 9 percent in France and the most developed country the USA had 7.3 per cent.

Table 1. Overview of Insurance Penetration in the Selective Countries of the World

(In per cent)

Countries	2013	2014	2015	2016	2017	2018	2019	2020	2021
Developed countries									
France	9	9.1	9.3	9.23	8.95	8.89	9.21	8.60	9.50
Germany	6.7	6.5	6.2	6.08	6.04	6.03	6.33	6.80	6.50
United Kingdom	11.5	10.6	10	10.16	9.58	10.61	10.3	11.10	11.10
United States	7.5	7.3	7.3	7.31	7.1	7.14	11.43	12.00	11.70
African Countries									
South Africa	15.4	14	14.7	14.27	13.75	12.89	13.4	13.70	12.20

Countries	2013	2014	2015	2016	2017	2018	2019	2020	2021
Asian Countries									
Japan#	11.1	10.8	10.8	9.51	3.69	8.86	9	8.10	8.40
PR China	3	3.2	3.6	4.15	4.57	4.22	4.3	4.50	3.90
South Korea#	11.9	11.3	11.4	12.08	11.57	11.16	10.78	11.60	10.90
Taiwan	17.6	18.9	19	19.99	21.32	20.88	19.97	17.40	14.80
India	**3.9**	**3.3**	**3.4**	**3.49**	**3.69**	**3.7**	**3.76**	**4.20**	**4.20**
World	**6.3**	**6.2**	**6.2**	**6.28**	**6.13**	**6.09**	**7.23**	**7.40**	**7.00**

Source: Swiss Re, Sigma various volumes, and Data on Insurance Statistics of India 2021-22.

After nine years, USA dominates the insurance penetration by recording 11.70 per cent, followed by UK 11.10 per cent and France stood on third number by showing the 9.50 per cent. In the African countries' category, insurance penetration in South Africa in 2013, was 15.4 per cent and in 2021, it becomes 12.20 per cent by showing declining trends. In the category of Asia, Taiwan had highest insurance penetration 17.6 per cent followed by 11.9 per cent in South Korea and Japan 11.1 per cent in 2013. However, insurance penetration in India is recorded as 3.9 per cent which is better than China. In 2021, the in Asian category, the Taiwan and South Korea shown highest insurance penetration as 14.80 and 10.90 per cent respectively.

The India and China have shown an improvement in the penetration percentage as 4.20 and 3.90 per cent respectively. The overall world figures of insurance penetration was 6.3 per cent in 2013, which marginally grown to 7 per cent. Comparing India with the other counties in respect of penetration, India is far behind because of size of population. But still there is vast scope for improving insurance penetration in India. The uninsured people should be brought in the ambit of insurance market by free play and awareness. An affordable insurance products are to be worked out by asking to pay minimum premium. Govt. of India has initiated the programmes in this regard from 2014.

The insurance density is measured as ratios of total insurance premium to papulation in US Dollar. The following Table 2 exhibits the trends in life and non-life and industry density for the period 2013 to 2020. Over the period of 7 years, the life insurance density rose in India 41 to 58 USD. However, non-life insurance density does not increased substantially, little change is occurred from 11 to 19 USD. Comparing it with developed and Asian countries it is very low. Globally, insurance density was 360$ for life and 449$ for non-life respectively in 2020. The following tables compares density across the selective counties in the world.

Table 2: Density across the Selective Counties in the World

Country	2013			2020		
	Life	Non-life	Total	Life	Non-life	Total
USA	1684	2296	3979	1918	5754	7673
France	2391	1345	3736	1959	1359	3317
Germany	1392	1585	2977	1281	1827	3108
UK	3474	1087	4561	3574	949	4523
India	**41**	**11**	**52**	**59**	**19**	**58**
China	110	91	201	241	214	455
Japan	3346	861	4207	2329	951	3280

Source: Swiss Re, Sigma various volumes and Economic Survey of India, 2021-22.

The highest density of life insurance found in UK i.e. 3574. In the Non- Life insurance category, density in USA was 5754, which seems to be highest in the world. The total density (life and Non-life) was 3979 in USA in the year 2013 and 7673 in 2020 respectively. China is much ahead of Indian insurance density. Life and non-life insurance density in China was 241 and 214 respectively in 2020 where as in India, it was very low for life and non-life together 59 and 19 USD. In Asia pacific region, Japan has highest density of life and non-life insurance 2329 and 951 USD in 2020. Taking into account the density of insurance in India, there is much scope for business. The following table shows trends in life, non- life and insurance industry for the period of 21 years. The compounded annual growth rate is calculated for each category. It shows that density and penetration rate are expanding slowly.

5. Data and Methodology

To write this paper, secondary data is used, it is collected from Annual Report of Swiss Re, Sigma various volumes, and IRDA publication- Data on Insurance Statistics for the year 2021-22. Study period is starting from 2001 to 2021. Latest and authentic data on the insurance sector in India is available till the year 2021-22. Some data is also complied from the Economic Survey of India for the year 2022-23. To know and comparing the trends, compounded growth rate and percentage is calculated. In order to calculate compounded annual growth rate, we used log-linear model. In this model parameters β_1 and β_2 are liner. Regressand Y is natural logarithm and regressor is time which takes value 1, 2, 3….etc. The natural log of dependant variable Y is taken and regressed on time variable (Year) 1, 2,3, 4…it is written as follows. After taking antilog of β_2, from the value of antilog minus 1 is deducted and multiplied with 100, so we arrive at Compounded annual growth rate (CAGR).

In $Y_t = \beta_1 + \beta_{2t} + \mu_t$ .... (1)

Model (1) is known as semilog or log-lin model. This model takes into account all the figures mentioned in the series instead of beginning and last values of the series. This gives correct picture of the compounded annual growth rate (CAGR). To calculate the compounded growth rate of insurance- density and penetration in the case of life and non-life and industry log linear model is used. Anova (Analysis of variance) is a technique is used for knowing the difference of variance and finding out any mean difference or comparing various group data (More than two groups). Anova is an extension of t test. The purpose of this test is to find out difference in class more than two group's mean. The Anova test uses the following null hypothesis: the following hypothesis presumes no significant difference in mean of two or more groups. The new insurance business channels' contribution in the total business of insurance is same. In fact, to test this hypothesis Anova exercise is done. The following Tables 4 and 5 shows summary statistics and calculation of Anova.

$H_0 = \mu_1 = \mu_2 = \ldots\ldots \mu_k \ldots\ldots..$ (2)

Alternative hypothesis is:

$H_1 = \mu_1 \# \mu_2 = \ldots\ldots \mu_k \ldots\ldots..$ (3)

Table 3: Life, Non- Life and Industry insurance density and penetration in India

	Life		Non-Life		Industry	
year	Density USD	Penetration in%	Density USD	Penetration in%	Density USD	Penetration in%
2001	9.1	2.15	2.4	0.56	11.5	2.71
2002	11.7	2.59	3	0.67	14.7	3.26
2003	12.9	2.26	3.5	0.62	16.4	2.88
2004	15.7	2.53	4	0.64	19.7	3.17
2005	18.3	2.53	4.4	0.61	22.7	3.14
2006	33.2	4.1	5.2	0.6	38.4	4.7
2007	40.4	4	6.2	0.6	46.6	4.6
2008	41.2	4	6.2	0.6	47.4	4.6
2009	47.7	4.6	6.7	0.6	54.4	5.2
2010	55.7	4.4	8.7	0.71	64.4	5.11
2011	49	3.4	10	0.7	59	4.1
2012	42.7	3.17	10.5	0.78	53.2	3.95
2013	41	3.1	11	0.8	52	3.9
2014	44	2.6	11	0.7	55	3.3
2015	43.2	2.72	11.5	0.72	54.7	3.44
2016	46.5	2.72	13.2	0.77	59.7	3.49
2017	55	2.76	18	0.93	73	3.69
2018	55	2.76	19	0.93	74	3.69
2019	59	2.74	19	0.97	78	3.71
2020	59	2.82	19	0.94	78	3.76
2021	69	3.2	22	1	91	4.2
CAGR	**21.06**	**0.42**	**27.64**	**6.37**	**22.35**	**1.58**

Source: Swiss Re, Sigma various volumes, and Data on Insurance Statistics of India 2021-22. Note: author calculated CAGR.

Table 4 Summary statistics of Life, Non- Life and Industry insurance density and penetration in India

Groups	*Count*	*Sum*	*Average*	*Variance*
life Density USD	21	849.3	40.44285714	303.5885714
Penetration in %	21	65.15	3.102380952	0.508039048
Non-life Density USD	21	214.5	10.21428571	37.28228571
Penetration in %	21	15.45	0.735714286	0.019995714
Industry Density USD	21	1063.8	50.65714286	524.0815714
Industry Penetration in%	21	80.6	3.838095238	0.48431619

Source: Author's computation

Table 5 Analysis of Variance (Anova)

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F Crit.*
Between Groups	49375	5	9874.951032	68.42045727	0.000	2.289851
Within Groups	17319	120	144.3274633			
Total	66694	125				

Source: Author's computation

It can be seen in the Table 4 and 5 that mean value of density and penetration are not same for life and non-life and also industry together. Using Anova, result of f test shows that the null hypothesis is rejected at 0.000 per cent level of significance.

6. Data analysis and Discussion

The compounded growth rate calculated for the 21 years is reported in the last row of the Table 3. It is observed that in the case of life insurance CAGR for density and penetration was 21.06 and 0.42 per cent. In the non-life insurance density and penetration CAGR was recorded as 27.64 and 6.37 per cent. The insurance industry average for life and non-life together CAGR for density and penetration was recorded as 22.35 and 1.35 percent insurance.

The growth rate of density for both life and non-life shown remarkable growth over the period of 21 years but the penetration growth rate is subdued and stuck to less than 2.

Channels of New Business

In the last decade, the changes took place in the technology, environment, ownership structure and pattern, and operational system of the organisation forced to alter existing and adopt new distributive channels of business. Insurance companies are not exception to this. Not only insurance, but almost all types of industries have adopted the changes in the marketing channels of business from the traditional to new evolving platform for sustaining its existence. Traditional channels are no doubt important but not that much cost effective, hence to survive in the competitive insurance market, the marketing and business channels are evolving such as tie-up with banks and financial institutions, social media owner, educational institutions and entertainment places from where the data is gathered through analytics for offering the insurance products. The online platform such as internet, social media, mobile or telephonic insurance platforms are significantly used for attracting new and existing customers. Many insurance companies are effectively using new technology platforms and started analytics division for fetching probable customers' data base for marketing the products. The radical changes in the technology based marketing platform offers them to maintain profitability and save the commission.

The Table 6 and 7 overview the trends in business by the Indian insurance industry channel wise. Top five channels are: individual agents, corporate agents- banks, corporate agents-others, brokers, and direct selling. The contribution of individual agents has been declining from 40.64 in 2013-14 to 25.03 per cent in 2021-22. The share of corporate agents- banks has increased from 9.43 to 14.76 per cent during the same period. In spite of introducing the new avenues of channels like MI Agents, Common service centre, web aggregates and point of sale, IMF, on-line, their share does not even cross the 1 per cent in the business by all channels together. The CAGR of all channels for the period 2013-14 to 2021-22 is calculated, the figures shown in the last column of the Table 4 shows

Table 6 Channels of New Business

(In Crore Rupees)

Channels	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	CAGR
Individual agents	48831.45	41246.7	41,175.78	54983.81	61706.45	63039.55	63381.95	69666.94	73510.91	**4.65**
Corporate agents-Banks	11327.2	12830.52	15,253.83	20049.29	25599.46	31351.09	34814.21	41096.06	51188.53	**18.25**
Corporate agents-Others	1252.36	1421.01	1,582.02	1335.6	2553.18	3775.07	3901.28	3815.28	5163.15	**17.05**
Brokers	1267.42	1451.03	1,441.65	1757.9	2130.26	2503.43	2870.69	3153.24	4652.60	**15.55**
Direct selling	57477.59	56218.38	78,970.87	96451.74	101248.9	112476.4	151726.9	157509.88	176892.43	**13.30**
MI Agents		17.19	21.26	20.22	53.19	146.42	459.3	554.42	602.65	**55.99**
Common Service Centres(CSCs)		0.32	1.00	1.54	2.24	2.28	1.26	7.41	11.71	**56.83**
Web-aggregators			0.03	46.36	68.48	161.7	270.06	385.27	236.51	**31.20**
IMF			0.03	14.52	40.67	62.76	68	160.87	207.27	**55.75**
On-line			302.83	418.06	498.91	1105.57	1470	1794.90	1698.12	**26.31**
Point of sale					30.81	54.93	41	55.92	42.33	**6.56**
others if any			-1.13	-1.12	0.85	-0.16	0	144.05	0.11	**-33.65**
Total	120156.02	113185.2	**1,38,748.17**	175077.9	193933.4	214679.1	259003.7	278344.25	314206.31	**11.27**

Source: Swiss Re, Sigma various volumes, and Data on Insurance Statistics of India 2021-22. Note: author calculated CAGR

that, in first five traditional channels of business, corporate agents-banks shown the 18.25 percent CAGR. Second highest performer remains corporate agents-others and third one is brokers. Least performer is individual brokers. However in term of aggregate percentage, contribution of each channel in the respective year' new business is different.

The new emerging channels' CAGR is excellent but in the aggregate business, their contribution is insignificant. Monopoly of direct selling channel remains intact. The percentage of direct selling in the total new business is on highest level. New emerging business channels do not perform well, hence their share in total new business does not even crossed 1 per cent. The digital drive of the insurance companies may change the scenario in near future.

Table 7 Channels of New Business (In percentage)

Channels	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Individual agents	40.64	36.44	29.68	31.41	31.82	29.36	24.47	25.03	23.40
Corporate agents-Banks	9.43	11.34	10.99	11.45	13.20	14.60	13.44	14.76	16.29
Corporate agents-Others	1.04	1.26	1.14	0.76	1.32	1.76	1.51	1.37	1.64
Brokers	1.05	1.28	1.04	1.00	1.10	1.17	1.11	1.13	1.48
Direct selling	47.84	49.67	56.92	55.09	52.21	52.39	58.58	56.59	56.30
MI Agents	0.00	0.02	0.02	0.01	0.03	0.07	0.18	0.20	0.19
Common Service Centres(CSCs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Web-aggregators	0.00	0.00	0.00	0.03	0.04	0.08	0.10	0.14	0.08
IMF	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.06	0.07
On-line	0.00	0.00	0.22	0.24	0.26	0.51	0.57	0.64	0.54
Point of sale	0.00	0.00	0.00	0.00	0.02	0.03	0.02	0.02	0.01
others if any	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
Total	100	100	100	100	100	100	100	100	100

Source: Author calculated on the basis of table 6.

Table 8 Main Channels of Insurance Business

Groups	N	Mean	Std. Dev.	Std. Error
Individual agents	9	**57504.838#**	11723.302	3907.7675
Corporate agents-Banks	9	27056.688	13685.786	4561.9287
Corporate agents-Others	9	2755.4389	1446.8347	482.2782
Brokers	9	2358.6911	1086.5792	362.1931
Direct selling	9	**109885.91***	43807.745	14602.582

Note: *highest business contributor channel is Direct selling and #second largest business contributor channels is Individual agents. Author's computation

Table 9 Anova Summary

ANOVA Summary					
Source	**Degrees of Freedom**	**Sum of Squares**	**Mean Square**	**F-Stat**	**P-Value**
	DF	**SS**	**MS**		
Between Groups	4	7.346E+10	1.836E+10	40.862	0.000
Within Groups	40	1.798E+10	449425811		
Total	44	9.143E+10			

The Table 8 show the mean, standard deviation and standard error. The column three shows that the largest business contributor is Direct selling followed by Individual agents. The third contributor is Corporate Agents –Banks and corporate agents-Others figured out as fourth. Fifth contributor is Brokers. Table 9 point out the Anova summary. The F test is significant at 0 level and reject the null hypothesis that mean of these, major channels of business are equal. It is proved that contribution of each channel is not equal or same. Contribution of direct selling is highest and excellent.

7. Conclusion

Indian insurance sector is growing in terms of business and many players. No doubt that, many new companies are coming up every year. The govt. of India has already declared 100 per cent foreign FDI in insurance intermediaries. The cap of 49 percent of FDI in insurance sector is revised to 74 percent recently. But no progress has made in this regard. The status of Indian insurance sector in terms of density in and penetration, it lags far behind of developed and some Asian countries too. The so far channel of business are concerned, the direct selling brings larger business. Reliance on individual agents had not yet come down. The remarkable sign is that the share of corporate ages-bank is increasing though there is no separate team with banks to market the insurance products. Business from The new century digital means in the total new business of insurance do not increasing. In fact it, should catch up the speed so that insurance companies can save the commission. This would be helpful them in exceling the profit. TJ

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Profitability matrix of Standalone Health Insurance Companies in India

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Abstract

The paper titled "Profitability matrix of Standalone Health Insurance Companies in India" is an attempt to gauge the performance of standalone health insurance companies in India. During 2022-23, the non-life insurance industry underwrote a total direct premium of 2.57 lakh crore in India registering a growth of 16.40 per cent from previous year. Out of which, 27 private sector insurers (including standalone health insurers) have underwritten 1.58 lakh crore as against 1.30 lakh crore in 2021-22 Several market dynamics are fuelling this growth, including strong distribution channels, democratic factors, government programs, and a favourable regulatory environment. Among various segments under non-life insurance business, health insurance business is the largest segment with a contribution of 38.02 percent (36.48 percent in 2021-22) of the total premium. Health Insurance Segment reported growth of 21.32 percent (26.27 percent growth in 2021-22) with the premium amounting to 97,633 crore from 80,502 crore in 2021-22. The net incurred claims under health insurance business of general and health insurers stood at 64,631 crore in 2022-23 reported an increase of about 2 percent from previous year. However, during the year 2021-22, the net loss of general and health insurance industry was ₹2,857 crore as against the net profit of ₹3,853 crore in 2020-21. Health Insurance Industry in general and Standalone Health Companies in particular are loss making on an accumulated basis which is the cause of concern.

Keywords

Profitability, Profit, Profitability Matrix, Performance, Health Insurance, Insurance.

Introduction

Every country always prioritizes "health" of its citizens. This is evident in the Millennium Development Goals and the Sustainable Development Goals, wherein "good health and well-being" is one of the goal that is meant to be achieved by 2030.

Standalone Health Insurance companies, which have been expanding at a rate of 20% per year, are essential to the growth of general insurance industry. These Standalone Heath Insurance companies have grown and succeeded in just a short period of time and successfully captured approximate 10% of the market share. Operating expenses of these companies are Rs.8178.09 crs which was 42.63% of total operating expenses of all general insurance companies in the year 2022-23. With drastic reduction in underwriting losses from -3263.34 crs. in 2021-22 to -528.80 crs in 2022-23, these companies has able to achieve a positive growth in the year 447.27 crs in 2022-23 as against negative growth of 1808.01 crs in 2021-22 (source: IRDAI Annual report – 2022-23).

Numerous internal and external factors impact the company's profitability. The pandemic has altered the overall environment of general insurance business, including the needs, desires, and expectations of customers, which has had a significant impact on the profitability of standalone health insurance firms as well. An analysis of the profitability matrix of stand-alone health insurance companies is crucial in the current context, as these companies have the potential to significantly impact the general insurance market.

Review of Literature

Segundo Camino-Mogro, Natalia Bermúdez-Barrezueta (2019) 1 studied on "Profitability Determinants of Non-life and Life Insurance companies with a special reference to Ecuador". Researchers studied to data between 2001 and 2017 to comprehend the factors influencing profit through standard errors regression. Researchers finally concluded that technical reserves, score efficiency, capital ratio and net premium are the key factors of life insurance sector. Among macro determinants, authors opined that the interest rate plays a vital role in profitability.

Kiran ahd Chaudhary (2011) 2 keenly assessed the prevailing state of insurance sector due to certain regulatory changes the Insurance Regulator and Development Authority. By researching various varieties, outcome has shown that industry has registered exponential growth from year 2000 onwards on branch expansion, distributor strength, number of policies and top line which is the new business premium basis various measurement tools. Studies have shown that in spite of active participation from private players, LIC continued to registered growth on all parameters.

Mike Adams (1996) 3 studied that factors pertaining to size of the organization, right risk acceptance are highly correlated and inevitably impact earnings of investors in New Zealand Stock exchanges. Paim Limpaphayom and Thomas Connelly, J., (2004) in case of Thai health insurance are of the opinion that the structure and strength of the board is impacting profit of companies. At the same time, profit has a negative correlation with risk of writing.

Objectives of The Study

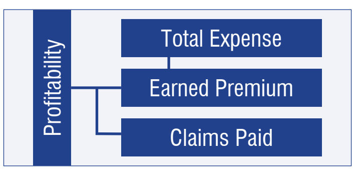
- ✓ This study seeks to examine the influence of Total Expense, Earned Premium and Benefits Paid on Profitability
- ✓ This study aims to understand the relationship between Total Expense and Profitability
- ✓ This study seeks to assess the impact of Earned Premium on Profitability
- ✓ This study aims to understand the significance of Claims Paid on Profitability

Statement of Problem

- ✓ With more than 8,300+ crore deployed as capital and over 440+ branches becoming operational Health Insurance companies are still grappling to wipe out accumulated losses.
- ✓ We still have all standalone health insurance companies incurring losses which is an alarming situation.
- ✓ Accumulated losses of all Health Insurance Companies is close to 4958 crores.

Conceptual Framework

- ✓ While we have many determinants which impact profitability for simplicity sake we will emphasize on the following **key attributes** which influence the profitability of Standalone Health Insurance Companies.



Hypothesis

We have profitability as the Dependent Variable and Total Expense, Earned Premium and Claims Paid as Independent Variables. Hypothesis for the proposed research will be as follows.

- ✓ H0: Profitability has not correlation with Total Expenses, Earned Premium and Claims Paid
- ✓ H1: Total Expense has a strong correlation with Profitability
- ✓ H2: Earned Premium has a strong correlation with Profitability
- ✓ H3: Claims Paid has a strong correlation with Profitability

Impact of Multicollinearity

Initial model was to have Earned Premium, Commission, Operating Expense, Capital and Claims Paid as independent variables. But due to presence of multicollinearity between variables and high Variance Inflation Factor (VIF), researcher adopted centering of variables, dropped capital due to high correlation value and clubbed Commission and Operating Expense as Total Expense thus reducing the VIF factor to minimal level.

Standardization of Data

Data is standardized in order to get understand whether the distribution is normal hence Z score arrived to comprehend the dispersion and data outliers. Basis the below data, it is evident that all the values fall between -3 and 3 Standard deviation.

Profit	Z Score
-17930946	-2.855
-13482886	-2.010
-4471696	-0.297
-3662753	-0.143
-2800967	0.020
-2664061	0.046
-2279551	0.119
-1995835	0.173
-1174282	0.330
-1088563	0.346
-1074675	0.349
-1053069	0.353
-332954	0.489
-25903	0.548
12368	0.555
12765	0.555
4572440	1.422

Significance of The Study

Most of the studies focused on life insurance companies and multi-line GI companies

Few studies focused on analysis of financial performance/ratios

Very few studies on factors influencing the profitability of Health Insurance Companies

Stakeholders would benefit from the result that will emerge from this study

Investors are curious in such studies in order to protect their investment and directing it to the best investment

Customers intended in seeing the ability of insurance companies to pay their obligations based on the indicators of success of the companies

Research Methodology

An investigative study was carried out through a search of the available literature to identify the exact components of the model

Purposive sampling deployed so as to incorporate all health insurance companies established

The secondary data sources for this study are individual health insurance company's Annual Report that contain detailed consolidated balance sheets and income statements

Tools and Techniques Used For Analysis

Considering that data is continuous and normal distribution, researcher applied the below parametric tools for testing the null hypothesis.

- ✓ Mean
- ✓ Standard Deviation
- ✓ Covariance
- ✓ Correlation Coefficient
- ✓ Multiple Regression Analysis

Findings

Researcher applied parametric tests considering the data is normally distributed. Researcher used statistical tools like Descriptive Statistics, Covariance, Correlation, and Multiple Regression to complete the analysis. Researcher faced issue of multi collinearity and handled by them by clubbing variables and dropping few variables with high collinearity.

Analysis of Data

Data collected from secondary source have been analyzed using the appropriate statistical tools. The statistical tools used to examine the given facts include i) Statistics which are descriptive ii) Correlation Coefficient iii) Multiple Regression Analysis

Variables Influencing Profitability

Three Independent Variables have been selected to test whether Profitability is getting influenced by these factors and those are i)Total Expense ii)Earned Premium iii) Claims Paid

Major Findings of Health Insurance Companies through Descriptive & Inferential Statistics

Profit	
Mean	-2908269
Standard Error	1276054
Median	-1174282
Standard Deviation	5261307
Sample Variance	27681349727011
Kurtosis	4
Skewness	-2
Range	22503386
Minimum	-17930946
Maximum	4572440
Sum	-49440568
Count	17

Profit as Response Variable: Mean profit for **Sample Group** is **-2908269** for the data analyzed between **FY 2006-07 to 2022-23**. Mean is the average profit for all years. Median profit for the **group** is at **-1174282**. Median will help us if we notice any anomaly in the values basis, which the average profit is being enhanced. Descriptive statistics reveal a huge sample variance of **27681349727011** with a minimum profit of **-17930946** and maximum profit of **4572440**. Total profits generated by the **group** between **FY 2006-07** and **2022-23** is **-49440568**. The Standard Error(S) for profit is **1276054,** which reflect the accuracy of sample mean from population mean. When the Standard Error(S) increases, it depicts that the means are more spread out. It also highlights the mean deviation within the given dataset. On the other hand, Standard deviation is **5261307** which is also on a higher side. Kurtosis is a measure to understand the disposition of data whether it is heavy-tailed or light-tailed relative to normal distribution. It is a measure of the sharpness of data peak. The acceptable value of kurtosis is between **-10** and **+10**. Kurtosis is **4** for profit, which is also called as leptokurtic, which means the data has a value >3. Leptokurtic also indicates many outliers which stretch the horizontal axis. Skewness is **-2** for profit, which is again a measurement to check whether the data is symmetric or asymmetric. Skewness of -2 is asymmetric data which is due to accumulated losses of health insurance companies over a period of time. It is negatively skewed due to higher losses. Range for profit is **22503386**. Range is defined as the difference between the highest and lowest value. Count is the number of observations, which is **17**. Higher the observations, better the predictability.

Regression Statistics	
Multiple R	0.996
R Square	0.991
Adjusted R Square	0.989
Standard Error	544330.37
Observations	17

From the above data of **Table,** it is obvious that the **Multiple R,** which is the correlation coefficient, is **0.996(closer to 1)** which means we have a perfect positive correlation between response variable and predictor variables. In addition, **R2**, which is the squared version of **R,** is valued at **0.991**, which means **99%** of the variance in response variable can be clarified by the linear model. Since we have more than one predictor, the **adjusted R2** would be the most appropriate one. **Adjusted R2** enhances its value only when predictor variable is significant and affects the response variable. On the other hand, **R2** may increase the value even if predictor variable is insignificant. Hence, **adjusted R2** would be the right measure when we have multiple predictor variables. **Adjusted R2** is also at **0.98**, which means **98%** of the variance in response variable, which is profit, can be elucidated by this Linear Regression model through predictors. Standard Error(S) in the model is at **544330.37**. Standard Error(S) provides the measure of the distance that fall between the data points from the Linear Regression line. It reveals us the strength of Linear Regression model on an average using the units of response variable. A smaller Standard Error(S) indicates the accurate reflection of sample mean with the population mean. On the contrary, a larger one denotes a higher variance in sample mean from the population mean. We need to consider fitment of model, factoring all measuring units than relying on a single parameter. Higher Standard Error(S) can also be the outcome of a low sample size. Our sample group is with **17 observations** for the industry data between **2006 and 2023**.

ANOVA					
	df	SS	MS	F	Significance F
Regression	3	4.3905E+14	1.4635E+14	493.93	1.22168E-13
Residual	13	3.85184E+12	2.96296E+11		
Total	16	4.42902E+14			

Now let us dissect the ANOVA table, which captures degrees of freedom. They are the freedom to vary the predictor values. Higher degrees of freedom mean more accuracy in rejecting null hypothesis. Degrees of freedom in Regression are **3**, which mean we have **3** predictor variables. Degrees of freedom in Residual are **13**. Residual is the sample size minus the number of parameters. Significance of **f** is denoted at **0.000**. If the significance level is less than **0.05,** which is our level of significance then we can conclude that the data is significant and this is one of the measurements to reject null hypothesis. Significance of **f** is the aggregate **p** value for all the variables together. Significance is checked at both the levels viz. individual variable level and at the aggregate level before we conclude in not accepting null hypothesis. Rejecting null hypothesis is to confirm that there is no correlation between profit, which is response variable and Earned Premium, Total Expense and Benefits Paid, which are predictor variables.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-423994.83	192116.28	-2.21	0.05	-839036.83	-8952.84
Total Expense	-0.83	0.05	-15.07	0.00	-0.94	-0.71
Benefits Paid	-0.70	0.02	-32.54	0.00	-0.75	-0.65
Earned Premium (in 1000s)	0.79	0.03	30.15	0.00	0.74	0.85

In regression, coefficients are the values, which multiply the predictor values, and on the contrary, intercept is the expected mean value of **y**, which is our response variable profit. Here the intercept is valued at **-423994**, which mean the regression line reached downward until it crossed the **y-axis**. **T statistics** is the coefficient divided by Standard Error(S). It is one way of measuring the precision of the model. T-value with bigger value only indicates greater confidence on predictor variables. In the case of intercept, it is **-423994/192116**, which is **-2.21**. Similarly for Total Expense it is **-0.83/0.05,**which is **-15.07**, Benefits Paid is **-0.70/0.02,** which is **-32.54** and Earned Premium is **0.79/0.03** with an output of **30.15. P value** of all the three predictor variables is **0.000** which clearly is**<0.05** significance level. This gives us enough evidence in not accepting null hypothesis. If significance level is **5%** then the level of confidence is at **95%**. Significance of **5%** is the threshold level, which we will be comfortable to accept the result by chance. A **p value**, which is less than 5%, depicts that the result by chance is only **5%** and the balance **95%** is matching with the statistical predictions. "**Lower 95%**" and "**Upper 95%**" value reiterates **95%** level of confidence for slopes. **95%** confidence interval for slope coefficient Total Expenses from output is **(-0.94, -0.71)**, Benefits Paid is **(-0.75, -0.65)** and Earned Premium is **(0.74, 0.85).**

RESIDUAL OUTPUT		
Observation	Predicted Profit	Residuals
1	-519343	493440
2	-416630	429395
3	-264884	277252
4	-299799	-33155
5	-852739	-235824
6	-2239229	-424832
7	-2851388	50421
8	-3753592	90839
9	-4327132	-144564
10	-1333483	-662352
11	-1740783	687714
12	-1845436	671154
13	-1582538	-697013

RESIDUAL OUTPUT		
Observation	Predicted Profit	Residuals
14	-42652	-1032023
15	-13589769	106883
16	-17962737	31791
17	4181566	390874

Residual is the difference between observed values which is the actual profit vs. the predicted value which the model had built-in. Residuals are positive if they are above regression line and negative if they below the regression line. Higher negative residual value depicts that the model prediction is much higher and positive value that the prediction is too low. Residual plot can be a good fit if it is random than forming a pattern.

Regression Equation

A regression line is denoted as **Y=b0+b1x1+b2x2+b3x3+ei** where x is the predictor variable and **b** is the slope, which measures the rate of change in response variable as the predictor variable changes. The regression equation for sample group is as follows.

Profit=-423994-0.83Total Expense-0.70Benefits Paid+0.79 Earned Premium

The regression coefficient specifies that Earned Premium positively impacts the level of Profit. It states that the unit increase in Earned Premium shall increase profit by **0.79 units.** Top line which is revenue is directly contributing to profitability which is bottom line. Higher amount of expense leads to lower level of profit. Regression coefficient indicates that Total Expense has a strong negative correlation with profitability. A unit spend in Total Expense is impacting profit negatively by **0.83 units.** Similarly the unit decrease in benefits paid is reducing profit by **0.70 units.**

Considering that both Total Expenses viz. Commission and Operating Expenses and Claims paid are outgo from the books, they are having a direct impact on profitability since higher outgo leads to lower profitability.

Basis the output from Regression Analysis, it is evident that the p-value for individual parameters is <0.05 and the F value is larger than the critical value thus making it statistically significant to reject null hypothesis.

H0/ Ha	Hypothesis	Status
Ha1	Profitability has not correlation with Total Expenses, Earned Premium and Claims Paid	Rejected
H1	Total Expense has a strong correlation with Profitability	Accepted
H2	Earned Premium has a strong correlation with Profitability	Accepted
H3	Claims Paid has a strong correlation with Profitability	Accepted

Conclusion and Suggestions

In conclusion, the analysis of the five companies reveals a notable distinction in their market tenure, with three having established a presence for over a decade, while the remaining two are relatively new entrants with a five-year track record.

It's crucial to emphasize that both internal and external factors contribute to a company's profitability. However, this study focused specifically on internal factors—operational costs, commissions paid, and claims paid—that adversely affected the profitability of Standalone Health Insurance companies. Notably, the analysis highlighted that significant operational expenditures across Standalone Health Insurance companies primarily comprised employee compensation, advertising expenses, legal and professional fees.

To enhance profitability, insurers must exert control over internal variables. Understanding and managing factors such as operational costs and optimizing key components like employee compensation and advertising expenses are vital steps for companies, regardless of their tenure in the industry.

❖ **Reviving Enterprise Strategies**

It is recommended to take another look at the enterprise-specific plans. Suggested a comprehensive reassessment of the strategies and frameworks that guide the company's operations. Specifically, this would include a reconsideration of pay scales. Instead of relying solely on fixed compensation, the suggestion encourages incorporating more variables into the pay structure. By doing so, the company can align compensation more closely with performance metrics, providing incentives for employees to contribute to the organization's success.

Furthermore, the idea recommends lowering legal costs by thoroughly analyzing the loopholes. This could include conducting a thorough evaluation of legal and professional fees, looking into ways to expedite legal processes, negotiating better terms with legal partners, or implementing cost-effective legal initiatives.

Additionally, it is advised to allocate advertising spending in relation to earnings. This indicates a strategic approach to advertising budgeting in which expenditures are linked with the revenue-generating capabilities of the organization. The corporation can optimize its marketing efforts by distributing advertising resources based on earnings, assuring a more cost-effective and targeted strategy.

The proposal essentially calls for a comprehensive evaluation and modification of the business's plans in order to reduce legal expenses, optimize the impact of advertising expenditures, and develop a more adaptable and performance-driven pay structure.

❖ Strategic Pricing Analysis

In light of the company's overall financial health and customer portfolio, the advice for a Standalone Health Insurance companies to "examine the pricing advantage while keeping an eye on the loss ratio and current portfolio composition", promotes a strategic assessment of the pricing structure in light of the their overall financial health and customer portfolio.

First of all, the recommendation demands a careful examination of the cost advantage. This entails a thorough analysis of the premium rates offered by the business in relation to competitors and industry norms. It motivates the business to find any possible price differences that it could use to its advantage to gain a competitive edge in the marketplace.

The importance of monitoring the loss ratio is also emphasized in the suggestion. The loss ratio, a critical figure in the insurance industry, shows the proportion of premiums paid out as claims. By closely monitoring the loss ratio, the company can ensure that its pricing strategy is sustainable, matching premium rates to the actual claims experience and maintaining profitability over time.

Essentially, the recommendation pushes the Standalone Health Insurance companies to use a data-driven strategy. It recommends a careful analysis of pricing dynamics, close observation of the loss ratio to preserve financial stability, and a sophisticated comprehension of the current portfolio composition to enhance pricing strategies for long-term profitability and competitiveness in the ever-changing health insurance market.

❖ Innovative Expansion

Launching of value-added product means expanding the scope of standard health insurance coverage. These could consist of extra features or advantages that improve the clientele's experience in general. Preventive health screenings, telemedicine services, and customized health management tools are a few examples. These added-value offerings help the business stand out in a crowded market and foster client loyalty and satisfaction.

In today's consumer-driven market, customizing products to meet specific customer needs is essential. This suggestion implies a thorough comprehension of client preferences and requirements, resulting in the creation of insurance products that appeal to the intended market. This could include plans with flexible payment schedules, policies tailored to particular life stages or demographics, or customizable coverage options.

The business might implement measures to encourage and assist policyholders in leading healthy lives. This could be reimbursement for wellness initiatives, savings on fitness-related costs, or incentives for reaching certain fitness and health benchmarks. By encouraging wellness, the insurance company may be able to lower long-term claims expenses while simultaneously improving the health of its clients.

❖ Fortifying Against Fraud

It is suggested to tighten administrative controls to prevent fraud. The significance of implementing strong anti-fraud measures within the health insurance industry, such as enhanced verification processes, advanced data analytics, strict access controls, education and training programs, collaboration with industry partners, and continuous monitoring and evaluation. This could result in a comprehensive defense against fraudulent activities, limiting claims outlays and saving funds.

- **Digitization and strategic modernization**

It is advisable to "focus on modernization and digitization to reduce service costs. Prioritizing modernization and digitization entails using technology to upgrade and streamline internal processes. Implementing advanced software solutions for claims processing, policy management, and customer service is part of this. Digitization not only improves operational efficiency, but it also provides a more pleasant customer experience by reducing manual errors and paperwork. Routine and repetitive task automation can significantly reduce operational costs. The health insurance company can reduce labor costs, minimize errors, and speed up service delivery by implementing automated systems for tasks such as data entry, claims processing, and customer inquiries.

AI-Driven Customer Service Excellence Improves engagement with Cost-Effective Solutions. In the current era, embracing cost-effective, AI-powered customer service delivery has the potential to revolutionize customer engagement. In the complex and vital realm of healthcare coverage, the combination of instant accessibility, personalization, proactive health management, and efficiency in claims processing contributes to a positive and satisfying customer experience.

- **Outsourcing Success: Scalability, Expertise, and Risk Mitigation**

While the suggestion emphasizes modernization, it also recognizes the financial benefits of outsourcing specific operations selectively. Outsourcing non-core or a few core functions to specialized third-party service providers can be a strategic move. It is suggested that claims processing be outsourced to a third-party administrator, which could result in faster turnaround times, fewer bottlenecks, and fewer claimant grievances. The standardized claims processing system may prevent situations that could result in legal action, saving money on legal fees.

Outsourcing may reduce the need for significant investments in technology, training, and personnel, resulting in a more cost-effective approach to claim processing. The Standalone Health Insurance Company can redirect their internal resources and focus on other core competencies such as product innovation, strategic planning, and customer relationship management by outsourcing few functions. This strategic shift enables the organization to focus on activities that contribute directly to its competitive advantage and market positioning.

- **Strategic Alliances for Service Excellence - Fostering Partnerships for Consistency and Financial Efficiency**

Partnerships with a network of healthcare service providers, such as hospitals, clinics, and diagnostic centers, can broaden policyholder coverage options. By emphasizing partnerships, health insurance companies can ensure a diverse and comprehensive network that meets their customers' diverse healthcare needs. This improves not only customer satisfaction but also the overall quality of healthcare services.

By collaborating with healthcare service providers, Standalone Health Insurance companies can able to negotiate favorable pricing and secure discounts for medical services. Bulk negotiations and long-term partnerships can result in cost savings that can be passed on to policyholders in the form of lower premiums or better coverage while maintaining service quality. Strong partnerships promote consistency in service delivery. Health insurers and service providers can collaborate closely to establish and maintain standardized practices, ensuring a consistent and high-quality experience for policyholders across the network. Building and maintaining customer trust requires consistency in service delivery.

Collaboration with service providers can extend beyond claims handling to include preventive healthcare initiatives. Partnerships can be used to provide discounted or subsidized preventive health examinations, wellness programs, and health education campaigns. This proactive approach aligns with the industry's shift toward preventive care, which helps to reduce long-term costs. Health insurance companies and healthcare providers can work together to integrate technology for seamless data sharing. These collaborations not only save money but also promote consistency, efficiency, and a holistic approach to healthcare service delivery.

- **Exploring New Market Horizons with Government-Supported Initiatives**

Standalone Health Insurance companies can look into participating in government-sponsored health insurance programs that cover a large portion of the population. Governments may be eager to solicit private insurer initiatives in order to broaden their reach. Participating in government-sponsored schemes allows Standalone Health Insurance companies to expand their market reach. This strategy strengthens the insurer's market presence while also contributing to greater healthcare accessibility. By aligning with public health goals, insurers contribute to the overall social impact and may gain market favor. Collaboration through public-private partnerships (PPP) between health insurance providers and government entities can benefit them in the long run.

- **Diversifying from Core Health Insurance to Personalized Individual Business Lines**

The overall health insurance industry may experience fluctuations as a result of factors such as regulatory changes, economic downturns, or unanticipated health crises. The Standalone health companies can spread its risk exposure and reduce its reliance on a single line of business by offering products in other insurance segments.

Cross-selling personalized products to existing health insurance customers presents a revenue opportunity. The company can use its existing customer base to promote additional coverage options, providing individuals with a more comprehensive insurance package. A diverse portfolio can help the Standalone Health Insurance companies to maintain financial resilience and face challenges by balancing revenue streams. Staying on top of market trends and consumer preferences allows the companies to spot new opportunities.

Standalone Health Insurance Companies have traditionally focused on covering medical expenses. These companies, however, can strategically expand their offerings to include personalized products other than health insurance in order to improve their business resilience and profitability. By diversifying into related lines of business, they can capitalize on new market opportunities and mitigate potential losses in the health insurance sector. This growth enables them to meet a broader range of needs, attracting customers who might not have considered their services solely for health insurance.

Limitations of The Study

- ✓ The Scope of this study is confined to a limited number of Health insurance companies which includes year of operation during the same period
- ✓ The information collected from the secondary data carries all the limitations inherent with the secondary data.

Scope For Further Research

- ✓ Data available on public disclosures is limited
- ✓ Companies need to share health tables followed by them during premium fixation, surplus mortality reserve kept during covid, covid expeirence as a whole.
- ✓ IRDAI and IIB should give enough data points to carry advance research

TJ

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In the Supreme Court of India

New India assurance Company others versus Mudit Roadways
Civil appeal number 339 of 2023

This was an appeal against the order of the NCDRC directing the insurer to pay for claim with interest. The Honourable Supreme Court dealt with many issues raised and upheld the decision of the NCDRC.

The first point was about the location and coverage of the premises under the policy.

After examination of documents the honourable court decided that the affected businesses were indeed the ones named under the policy.

The second point was regarding rejection of the claim by the insurer, taking recourse under clause 3 of the policy, which states that the policy would cease to operate if there is alteration to the risk without prior sanction from the insurer.

Here, repairs to the roof to prevent water leakage, was carried out by the insured. This was claimed to be alteration to the premises by the insurer. The Honourable Court held that such essential repairs cannot be considered to be an alteration and therefore the claim cannot be rejected under this clause.

The third point was about the cause of loss. There were nine reports from different agencies. Seven of them reported the cause of loss to be due to short circuit. The forensic agency appointed by the insurer said the loss could have been due to sparks flying during the welding process while repairing the roof. The second surveyor appointed by the insurer adopted the findings of the forensic report.

The Honourable Court noted the CCTV records which showed that there was a gap of four hours and 19 minutes from the time the welding process ended and the fire started. It also noted that there was a 26-minute gap after the last sheet was removed by the workers and the starting of the fire. There was also no evidence of any welding work being done at the time of removal of the sheets from the roof. It found the forensic reports' conclusion without taking these aspects as also not considering the possibility of a short circuit, illogical.

The fourth point addressed was about the value of a surveyor's report. After an examination of section 64 (UM) (4) of the Insurance Act, the Court observed that the insurer has the discretion to settle the claim for a different amount, than what is assessed by the Surveyor. Reference was also taken to the case of New India Assurance Company Ltd, V. Pradeep Kumar, where it was held that that a surveyors report is not sacrosanct that it cannot be departed from. It is not conclusive. The approved Surveyors report may be the basis or foundation for settlement of a claim by the insurer in respect of loss suffered by insured, but such report is neither binding upon the insurer nor insured.

The fifth point dealt with the extent of liability, when cause of fire is in determinable. The court believed that "while it is difficult to go by the reports, relied upon by the insurance company, the reports furnished by the claimants, being consistent, and logical, are more acceptable in ascertaining the true cause of the fire. " Reference was also invited to the decision in Canara Bank, V.United India insurance Company Limited, where it was held "whether the fire took place by a short circuit, or any other reason, as long as insured is not the person who caused the fire, the insurance company cannot escape its liability in terms of the insurance policy ". Hence, the court held that the precise cause of a fire, whether attributed to a short circuit or any alternative factor, remains immaterial, provided the claimant is not the instigator of the fire.

The sixth point was about the applicability of customs duty and unjust enrichment. Here, the goods were stored in the customs bonded warehouse by the transporter, who was the Insured. The customs authorities raised notices on the insured towards duties.

The insurer took the stand that customs duty should not be included to the claim because the customs act specifies that only the importer of goods is liable to pay customs duty when they file a bill of entry. As no bills of entry were filed and no assessed goods were lost in the fire, the insurer said there is no customs duty liability

The insured claimed that the customs authorities had sent notices to them for the duty. Again, the public warehouse license and regulations, 2016, mandate that public warehouses licenses must agree to pay all duties, interest, fines, and penalties related to store goods. It was for this reason that customs duty package was obtained by the insured from the insurance company so as to indemnify themselves for the goods destroyed or damaged in the warehouse. Thus, the insured is duty bound to pay the taxes and hence the insurance company has to compensate the insured for the said amount.

Regarding any unjust enrichment, towards the insured, it had been stated, specifically by the insured that the insurance company may directly remit the said component of duty to the authorities, instead of giving it to the insured. The court also took note of it and in order to ensure that there is no confusion in this regard ordered payment of this amount direct to the customs authority.

It is a judgement dealing with many questions and the points of a wider nature-regarding the sanctity of a surveyors report, and also about payment of a claim where multiple conflicting causes are there have been discussed in detail throwing considerable clarity.

Guidelines for contributors of the Journal

Note to the Contributors:

"The Journal" quarterly publication of Insurance Institute of India, Mumbai. It is published in the month of Jan/April/July/Oct every year. "The Journal" covers wide range of issues related to insurance and allied areas. The Journal welcomes original contributions from both academicians and practitioners in the form of articles. Authors whose papers are published will be given honorarium and two copies of the Journal.

Guidelines to the Contributors:

1. Manuscript submitted to the Editor must be typed in MS-Word. The length of the Manuscript should be 2500-5000 words.
2. General rules for formatting text:
   - i. Page size : A4 (8.27" X 11.69")
   - ii. Font: Times New Roman - Normal, black
   - iii. Line spacing: Double
   - iv. Font size: Title - 14, Sub-titles - 12, Body- 11 Normal, Diagrams/Tables/ Charts - 11 or 10.
3. The first page of the Manuscript should contain the following information of the Author(s) –
   - (i) Title of the paper
   - (ii) The name
   - (iii) Email address
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   - (v) Brief profile - The profile will include 2 to 3 lines about author's professional qualification and experience in the field.
4. **Abstract:** A concise abstract of maximum 150 words is required. The abstract should adequately highlight the key aspects or state the objectives, methodology and the results/major conclusions of analysis. The abstract should include only text.
5. **Keywords:** Immediately after the abstract, provide around 3-6 keywords or phrases.
6. **Tables and Figures:** Diagrams, Tables and Charts cited in the text must be serially numbered and source of the same should be mentioned clearly wherever necessary. All such tables and figures should be titled accurately and all titles should be placed on the top after the number. Example: Table 1: Growth Rate of Insurance Premium in India (1997-2010).
7. **References:** all the referred material (including those from authors own publication) in the text must be appropriately cited. All references must be listed in alphabetical order and sorted chronologically and must be placed at the end of the manuscript. The authors are advised to follow American Psychological Association (APA) style in referencing.

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  Example: Rogers, C. R. (1961). *On becoming a person.* Boston: Houghton Mifflin.

- **Reference to a Journal publication:** Author(s). (Year). Title of the article/ paper. *Journal name*, volume (issue), page number(s).

  Example: Smith, L. V. (2000). Referencing articles in APA format. *APA Format Weekly, 34(1),* 4-10.

- **Reference to a Web Source:** Author. (Date published if available; n.d.--no date—if not). Title of article. *Title of website*. Retrieved date. From URL.

  Example: Landsberger, J. (n.d.). Citing Websites. In *Study Guides and Strategies.*

Retrieved May 13, 2005, from http://www.studygs.net/citation.htm.

8. Usage of abbreviations in the text should be avoided as far as possible and if used should be appropriately expanded.

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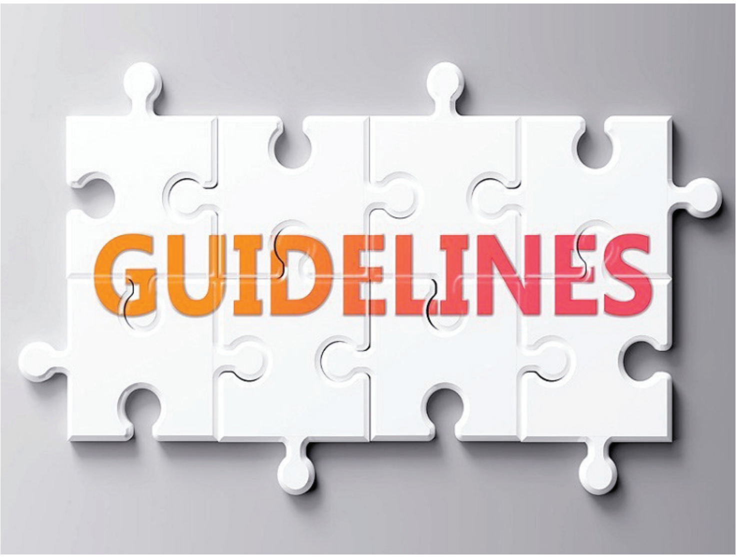

Appendix I

Declaration by Authors

I/we (Full Name of the Author(s)) ....
.. hereby declare that I/we are the author(s) of the paper titles
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I/we undertake to accept full responsibility for any misstatement regarding ownership of this article.

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(Signature Author I)	**(Signature Author II)**
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NOTES

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