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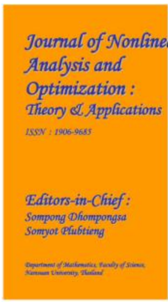

INFLUENCE OF INSURTECH ON INSURANCE PENETRATION: DEVELOPED VS DEVELOPING COUNTRIES

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Abstract
In order to identify the differences in influencing factors between developed and developing countries, this research article examines the elements that determine insurance penetration in each of these categories. The study compares the technological and regulatory considerations that have impacted the rise in Insurtech in different economies. The results show clear trends in the factors influencing insurance penetration, with developed countries showing higher penetration rates due to things like income levels, the efficacy of regulations, and financial literacy.
On the other hand, lower penetration rates are seen in developing nations due to a variety of issues such as unequal income distribution, low confidence in financial institutions, and restricted access to insurance products. However, the pace of growth is expected to be higher in developing countries by 2030. By providing insights for policymakers, insurers, and researchers to improve penetration tactics suited to particular country profiles, the study advances our understanding of the complexity underlying insurance penetration across a range of economic circumstances.

INTRODUCTION
Risk is an inevitable part of any individual. One cannot think of living life without getting exposed to risk. Perception of people vary a lot on how they choose to manage such risks. While certain individuals might opt to address risky situations as they arise, others may adopt a more careful approach, striving to anticipate and prepare for potential challenges. Insurance becomes a highly sought-after tool for those falling into the latter category.
In the past ten years, India's insurance sector has experienced a radical transformation characterized by rapid expansion and adjustment to new patterns. Due to factors like increasing earnings, urbanization, and government attempts to promote financial inclusion, the sector has seen a significant increase in penetration and awareness. Technological progress has been crucial, as the sector has embraced digitization to improve consumer experiences and operational effectiveness. In contrast to established nations, India's insurance sector is still developing and dealing with issues like lower penetration rates, complicated regulations, and a wide range of consumers with different degrees of awareness. Even though India's growth trajectory has been strong, there is still much space for growth, and the industry is well-positioned for additional development by utilizing worldwide.
Insurtech platforms have been instrumental in revitalizing the insurance sector during the last ten years. These technology advancements have brought vibrancy to a formerly stagnant industry, revolutionizing the distribution, acquisition, and administration of insurance products. Increased accessibility to insurance services, improved client experiences, and faster procedures are all benefits of insurtech. In addition to making risk assessment more effective, the integration of artificial intelligence, data analytics, and digital interfaces has created new opportunities for tailored insurance solutions. Unquestionably, insurtech is having a significant impact on the insurance sector as it

develops, representing a paradigm shift that is consistent with modern customer expectations and the larger context of digital revolution.
The insurance industry has seen a notable transformation in industrialized nations as a result of the maturation of insurtech platforms. With their successful establishment as essential parts of the insurance sector, these platforms have improved productivity, client interaction, and product innovation. In industrialized countries, insurtech currently represents a more stable and integrated ecosystem, having successfully navigated the early stages of disruption and adaptation. The broad adoption of cutting-edge technologies, smooth digital interfaces, and the creation of regulatory frameworks that permit and oversee insurtech operations are all signs of this maturity. Because of this, insurtech platforms in developed nations support the resilience and competitiveness of the insurance industry in these developed economies while also meeting the changing needs of consumers.
The perception of insurance in India differs from that in developed countries, reflecting diverse socio-economic contexts, cultural nuances, and varying levels of financial literacy. Here are some key differences in society's perception of insurance in India compared to developed countries:

Penetration and Awareness:
In developed countries, insurance penetration is often higher, with a greater proportion of the population holding various insurance products. There is a more ingrained understanding of the importance of insurance for financial protection and risk mitigation.
In India, while awareness has been increasing, there is still a significant portion of the population that remains underinsured or uninsured. Many individuals may not fully comprehend the range of insurance products available or their benefits.
Cultural Factors:
Cultural attitudes toward risk and financial planning influence insurance perceptions. In developed countries, there may be a stronger cultural emphasis on individual responsibility and long-term planning, contributing to a higher acceptance of insurance.
In India, traditional familial support systems and a different cultural approach to risk may impact the perceived necessity of insurance. Trust in joint family structures for financial assistance during crises could influence the perceived need for individual insurance coverage.

Government and Social Security:
Developed countries often have robust social security systems, leading to a complementary rather than a substitutive relationship between public and private insurance. Individuals may view insurance as additional protection beyond what the state provides.
In India, where social security systems are still evolving, there may be a higher reliance on personal savings and familial networks. This could affect the perceived urgency of purchasing insurance.

Product Perception:
In developed countries, insurance products are often seen as essential financial tools, covering various aspects of life, health, property, and liability. Consumers may actively seek diverse insurance solutions to manage risks comprehensively.
In India, there might be a more transactional approach to insurance, with a focus on traditional life insurance policies. Awareness and uptake of specialized insurance products such as cyber insurance or critical illness coverage may be comparatively lower.

Regulatory Influence:
Developed countries often have well-established regulatory frameworks that foster consumer trust and confidence in the insurance industry. Regulatory stability can positively impact how insurance is perceived.
In India, ongoing regulatory changes and evolving frameworks may contribute to fluctuations in public perception, with consumers sometimes cautious about the reliability and transparency of insurance products and providers.

Understanding these differences is crucial for insurers, policymakers, and advocacy groups to tailor education and outreach efforts to the specific needs and perceptions of their respective populations. As India's insurance market continues to mature, bridging these perception gaps will be essential for fostering greater financial resilience and inclusion.

In developed countries Insurtech have been classified as under:
Full Stack Insurers: Full stack Insurers that underwrite policies, take on the risk (or split it with an insurer or reinsurer), and, for the most part, oversee the entire process are known as insurers.
Agents: Agents are platforms that function as an existing carrier's extension by acting on their behalf.
Brokers: Sites that give clients access to a range of policies from rival InsurTech companies as well as established carriers. Commission payments for policies sold through these platforms may or may not be made to these platforms. Customers may need to scroll through the several policies available on the platform interface, or it may connect them automatically to a chosen policy based on a user's response to a specific set of questions and various algorithms used on the back end.

In developing countries e.g. India, the Insurtech companies can be categorized as below:
Digital brokers such as Paytm, PolicyBazaar, Ditto, and TurtleMint.
Brokers of corporate insurance, such as Nova Benefits
SaaS providers for insurance such as Ensuredit and Riskcovry
Digital underwriters for insurance such as Acko and Digit
Health clubs such as Kenko and Even

LITERATURE REVIEW
(Susanto, 2022) Stated that Indonesia's technological digitization has propelled the growth of InsurTech's industry. PasarPolis, Qoala, and Simas Insurtech are important participants in this market. Low insurance penetration and the growth of InsurTech start-ups are two factors contributing to InsurTech's great potential in Indonesia. The primary obstacles faced by InsurTech stem from the extant regulations, which do not explicitly address the industry.
(Khoon, 2022) Studied the customer's perspective on development of Insurtech in Malaysia. It stated that the findings of his research indicated that Malaysian Millennials had a very high awareness on insurance, however a low awareness of insurtech. It also stated that most of the Millenials showed strong interest in accepting insurtech. Based on the UTAUT model, it is claimed that effort and performance expectations enabling circumstances, ease of use, confidence, and regulatory expectancy all have a big influence on insurtech adoption. Apart from that, females are more likely to accept insurtech due to the influence of convenience, trust, and regulatory expectations.
(Eti, Hasan, Hasan, Serhat, & Yasar, 2024) Analysed the indicators for improvement of insurtech systems in European countries. According to the survey, the most important element influencing how well insurtech investments succeed is pricing. It also reveals that, in this regard, policy management is the second most crucial thing. Moreover, big data is the best approach to raise the return on European Insurtech investments. Other important options in this case are block-chain and smartphone apps. Insurtech businesses can increase price accuracy by gathering and evaluating client data.
(Imam, McInnes, Colombage, & Grose, 2022) studied the opportunities and challenges for FinTech in SAARC and ASEAN Countries. FinTech services have the potential to grow in the ASEAN region, however there are additional challenges when trying to expand in the SAARC region. Additionally, the areas offer varying degrees of opportunity for various FinTech sectors. With the favorable views towards entrepreneurship and asset investments, the ASEAN area presents a strong growth potential for services like crowdfunding, neobanking, and InsurTech. Neobanks, LendTechs, and InsurTechs with a connection to healthcare have significant potential in the SAARC regions. Furthermore, we observe that in order to encourage cohorts that are less likely to utilize FinTech services, creative marketing strategies and user education regarding the advantages of technology are required in both locations. In order to help allow further insights into the potential and obstacles to FinTech progress, we also build an opportunity index.

According to (Omondi & Malia, 2021) only 3% of Africa's GDP is driven by insurance with industry valuation of $68 billion. In addition to this, the reach of insurance is not widespread which is evident from the fact that 91% of premiums are concentrated in ten countries. Digital revolution in insurance sector is encouraged in Africa to increase the penetration and reach across all countries.
(Rudden, 2023) reported that in 2022, United States ranked first in terms of Insurance penetration and value of insurance premiums accounted for almost 12% of GDP. It also reported that Taiwan experienced increase in the number of potential insurance customers since 2010 with 11.4% insurance penetration in 2022.
(Global Insurtech Market Size, Share, and COVID-19 Impact Analysis By Type, By Service, By Technology, By End- User, and By Region, Analysis and Forecast 2021 – 2030., 2022) mentioned in its report that in 2021 North America lead the global insurtech market with a market share of 38.4. It also reported that Asia Pacific market is expected to grow rapidly until 2030. This growth will be driven by fast growing economies, increasing literacy level and increasing use of technology in the field of finance. Increase in use of smartphones is also cited as a catalyst in this growth.

OBJECTIVE

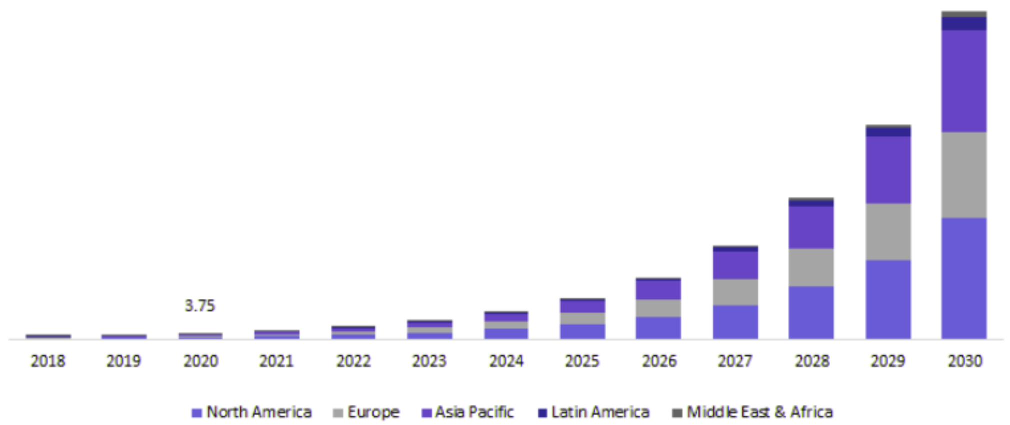
The objective of the research is to analyse and compare the influence of Insurtech companies on insurance penetration between developed and developing countries.

1. Examine how consumers in developed and developing nations feel and act when it comes to Insurtech goods and services.
2. Examine the potential and problems that insurance companies and Insurtech entrepreneurs in developed and developing nations are facing.
3. Examine the extent to which industrialized and developing nations are currently using Insurtech.
4. Examine the variables affecting the adoption of insurance in developed and developing nations.

ANALYSIS AND FINDINGS

The insurtech market is expected to grow from a minimal market value of US$ 12.5 billion in 2021 to a net worth of US$ 165.4 billion in 2032, according to Future Market Insights (FMI). Over the course of the forecast period, an excellent CAGR of 25.9% is anticipated.
With around US$ 6 billion in insurtech capital as of 2022, the US market continues to keep its leading position in the worldwide market. With a projected CAGR of 25.6%, it is also the best-performing nation and is expected to raise the net worth of the regional insurtech market to US$ 58.6 billion by the end of the projection period.
The global insurtech market, estimated by InsurTech Sector Overview 2022 to be worth USD 3.75 billion in 2021, is anticipated to expand at a compound annual growth rate (CAGR) of 50.4% over the course of the forecast year. The rising use of social media and mobile devices has resulted in a tremendous surge in data generation.

Insurtech market size, 2018-2030



Source: beinsure

The market is divided into five regions: North America, Europe, Asia-Pacific, Latin America, the Middle East, and Africa. The two most significant insurtech markets are those in North America and Europe. Client spending on insurance-related products is driving up demand for insurtech solutions. Second, these solutions offer adaptable and flexible options for health and property insurance. The market expansion in North America is also fueled by the increasing number of Insurtech companies.
Owing to investors' growing reliance on data-driven analysis, Asia-Pacific is anticipated to have one of the fastest rates of regional market growth. Companies from growing economies like Thailand, Singapore, India, and China will probably benefit from the regional market.
The digitalization of business has profound effects on employment, education, and regional economies across Latin America, the Middle East, and Africa, among other areas. Saudi Arabia has prioritized digital transformation in its 2030 Strategy and National Transformation Program (NTP) 2020 to create jobs in the private sector and foster partnerships. In the near future, an economy with such rapid growth would most likely provide unmatched market potential.
Trends in insurtech reported by beinsure in its report (Johnston, 2023) clearly indicated that level of insurtech funding raised as well the number of such deals is highest in United States in the year 2022 with a significant margin over and above the second highest country i.e United Kingdom. Other developed and developing countries though may qualify as top ten countries in the list are far behind in the race.

INDIA:
In the past few years, the insurance sector has seen significant changes. An industry that has always been branch-led since its inception turned its attention to technology and launched new goods, improved distribution, and the utilization of developing technologies while negotiating quickly evolving regulatory environments. The changes have created new opportunities for expansion and assisted insurance in connecting with customers in a decentralized manner. The sector and IRDAI are committed to achieving India's goal of "Insurance for all by 2047."
To make insurance seamless, new products, digital channels, distribution procedures, and risk assessment techniques have been brought to the market. Man-machine collaboration is being used by an increasing number of participants, guaranteeing increased value for stakeholders and customers. Another important reason driving the rapid expansion of Insurtech is consumer behaviour. Consumers have realized the need of insurance, particularly after the pandemic, and as a result, there has been a great demand for life, auto, and health insurance products.
Together, the sector is meeting customer expectations and, most crucially, enabling insurance to reach India 2 and India 3, who reside in outlying areas and smaller cities. A significant change in consumer wealth is also occurring, particularly in Tier 2 cities and beyond, which will encourage Insurtech to develop new ideas.
With the emergence of new consumer segments (in Tier 2/3 cities and beyond, growth in women consumers, and corporate insurance growth across SMEs), the emergence of National Health Stack (creating a data bank for health insurance in the country), the rise of data and analytics as core capabilities, and the creation of data around consumer behaviour and experience, India has seen growth in the InsurTech landscape over the past two years.
During and after the pandemic, insurtech companies—which were founded on the idea of utilizing technology to facilitate paperless and contactless processes—made the most of their models. For instance, in the last two to three years, the InsurTech business RenewBuy doubled the number of insurance advisors in its network, quadrupled the number of districts, towns, and cities it served, and expanded its employment by about 40%.
Artificial intelligence (AI), machine learning (ML), internet of things (IoT), automated claims, e-commerce insurance marketplaces, web aggregations, and software/white label/application programming interfaces (APIs) are among the industries that are expanding quickly in India, according to the India Fintech Report 2022.
India has demonstrated a very strong momentum in terms of finance, with funding for InsurTech having doubled over the last two years. A unicorn was created after the plague. From FY 20, funding

for insurtech has increased at a 34% CAGR. More money was raised in 2021 for equity funding than was raised in 2019 and 2020 put together—nearly $800 million.
Incumbents need to continuously modifying their business models to accommodate emerging technology in order to stay in the InsurTech game. To connect insurance businesses with consumers, advanced automation, trust architecture, well-connected digital infrastructure, and applied AI must all be in motion. To guarantee end-to-end data protection, the sector must also address cybersecurity. Indian insurance is undoubtedly gaining attention. In the upcoming years, the industry is expected to grow at a faster rate than the global insurtech market.

AFRICA:

Less than half of the global average of 7%, only 3% of the GDP of Africa is insurance driven. However, insurance acts as a safety net against a variety of outside risks, including health risks, natural disasters, and economic disturbances.
The insurance market in Africa is estimated by McKinsey to be around $68 billion in Gross Written Premium (GWP), which is less than that of other developing regions like the Caribbean and Latin America. With 91% of premiums concentrated in just ten nations, the uptake across the continent is likewise uneven; 70% of premiums in Africa are accounted for by South Africa, which has the largest and most developed insurance market.
According to a 2019 report by the Insurance Regulatory Authority (IRA), insurance penetration in Kenya decreased over the previous nine years from 3.44% to 2.34%, suggesting that the industry has not been able to take advantage of the prospects brought about by the growing economy. These figures unequivocally show the protection gap that has made homes and companies exposed to shocks brought on by a variety of hazards.
Undoubtedly, the pandemic has increased the necessity of implementing supervisory technology (suptech) and regulatory technology (regtech) to improve the effectiveness of reporting and oversight procedures. Some of these most creative ideas are the result of bold start-up enterprises that have the backing of established players in the industry. For instance, Lami's flagship mobile application, which allows Kenyans to pay for insurance in installments and suspend coverage if they travel overseas, was developed in early 2020 in collaboration with over 25 Kenyan underwriters.
Furthermore, Bluewave and APA insurance have introduced a low-income community with an affordable digitally distributed health cover that costs less than $2 per month and offers up to $500 in burial expenses and a cash benefit for hospitalization.
Kenya's Insurance Regulatory Authority and its partners introduced BimaLab, a trial accelerator program, in 2020 to take advantage of these developments. The purpose of this move is to increase awareness of and demand resources for bright insurtech entrepreneurs leading early- to mid-stage start-ups.
Automobile insurers can now do precise risk evaluations for automobile insurance thanks to AiCare. This lowers insurance premium costs and increases underwriting efficiency. A peer-to-peer micro-insurance and savings network called Chamasure allows people who save through unofficial social organizations to get insurance through the groups in the event of an accident or death. Sprout Insure made it simpler for farmers to purchase policies and get timely pay-outs by creating a quicker claim processing system for crop insurance.
Regulators must strike a balance between the need to foster innovation, consumer protection, and effective risk management as technology improves in the insurance industry. Kenya's insurance business, which has been around for almost a century, is being revolutionized by insurtech, making its financial system more accessible to the country's low-income citizens. Technology is changing the competitive landscape and posing a challenge to established structures in order to greatly improve access to insurance, a trend that is being observed globally.

MALAYSIA:

As of 2022, there are 32 active firms in Malaysia's insurtech market, up from just 16 in 2019. This information is based on the Fintech Malaysia Report 2022. This indicates that the demand for digital insurance products in Malaysia is increasing, as is their potential.

The significance of digital transformation has grown in the ever-changing insurance industry, particularly in light of the COVID-19 epidemic. As individuals were compelled to adjust to a digital lifestyle, insurance firms realized how critical it was to embrace digitalization Although a large number of insurance companies had already started the process of digital transformation, the pandemic made it clear that more progress was needed, and the opportunity existed for committed insurtech companies to partner with established players to provide distinctive, even exclusive, digital insurance products in Malaysia.

The following are a few of the digital insurance products available in Malaysia:

Digital insurance that may be purchased and activated on-demand via a website or mobile app at anytime, anyplace, and for any amount of time. Examples include PolicyStreet, which provides life, health, pet, auto, and business insurance, and Tune Protect, which provides travel, automobile, personal accident, and gadget insurance.

Insurance solutions based on a social network of policyholders who pool their premiums and share their risks are known as peer-to-peer, or P2P, insurance. Examples from other countries include Canada's Besure, which provides health, travel, and gadget insurance, and Germany's Friendsurance, which provides liability, house, and auto insurance. TREVO Shield and Allianz General collaborated to introduce P2P car-sharing coverage in Malaysia.

Insurance products known as telematics employ data from sensors or other devices to track an insured person's performance or behaviour and modify premiums accordingly. Examples include Allianz airline Care, which provides travel insurance based on airline delays or cancellations, and AXA FlexiDrive, which provides auto insurance based on driving behaviours.

Micro insurance refers to insurance plans that offer affordable coverage to underserved or low-income populations. Examples include GKash, which provides health and personal accident insurance using e-wallets, and Axiata Digital, which provides life, health, and accident insurance through mobile platforms.

CONCLUSIONS

The insurtech industry is expected to grow significantly between 2021 and 2032, based on current forecasts. This rise is being driven by factors including growing digitalization, growing data collection from mobile devices and social media, and the need for flexible insurance solutions.

North America is the market leader in the worldwide insurtech space, with the US continuing to hold the top spot. Still, data-driven analysis and the rise of insurtech companies in Thailand, Singapore, India, and China are likely to generate one of the fastest growth rates in Asia-Pacific.

Initiatives like Saudi Arabia's 2030 Strategy and National Transformation Program are propelling the digital transformation of emerging economies in Latin America, the Middle East, and Africa.

The Insurtech funding rate is the highest in US in the year 2022 followed by huge margin by United Kingdom.

India's insurance industry has turned its attention to technology-driven solutions by utilizing new products, online platforms, and methods of distribution. The financial landscape for InsurTech in India has seen a significant influx of capital, with funding having doubled in the past two years.

It is anticipated that the Indian insurance sector will grow at a faster rate than the global InsurTech market.

Africa has a disparate rate of insurance uptake, with most premiums being concentrated in a small number of nations, most notably South Africa. Regulatory bodies, including the Insurance Regulatory Authority of Kenya, are promoting innovation in the insurance industry. The goals of programs like BimaLab are to assist insurtech business owners and hasten the creation of cutting-edge insurance solutions.

The digital insurance market in Malaysia provides a range of options designed to satisfy various customer demands and preferences. A dynamic and changing market is being shaped by partnerships between insurtech startups and traditional insurers, as well as a wide spectrum of digital insurance products, with the goal of enhancing insurance accessibility, affordability, and convenience for all Malaysians.

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