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A study on impact of information technology in insurance sector in India

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Abstract
Insurance companies are unique in that the vast majority of their interactions with customers are handled by an agent. In effect, a portion of technology investment is going towards improving the agent exsperience. Insurance companies have developed systems to advise agents on products tailored to specific customers based on their past interactions with the insurer and income level. Bajaj Allianz Life Insurance has a mobile app for hiring agents. This is beneficial for training, exams, and licensure. In the previous year, an insurance company hired 15,700 people digitally, cutting hiring time in half.
Insurers have created mobile phone apps to make doing business with them easier for their customers. They are also gradually moving towards paperless claims. However, these are only the first steps in the process of digital transformation.

Keywords: Insurtech, blockchain, artificial intelligence (ai), digitization, human intellectual capital

Introduction

Instead of being driven as a service, the insurance sector is driven as a commodity. Offering a low price is essential, improving risk assessment is a preoccupation, and rapidly processing customers is a major focus. As a result, unlike in other industries, the digital transformation is still not given high emphasis. In the meantime, with the advent of the digital and everything online, the retail customer wants to be able to reach everything everywhere at all times in addition to being able to access anything, anywhere, at any time. The customer wants to purchase specialised goods and services that are promoted via mobile, tablet, or computer.
While this scenario might seem far off, such integrated user stories will start to appear more frequently over the next ten years across all lines of insurance. All of the aforementioned technologies already exist, and many of them are accessible to consumers. Artificial intelligence (AI) has the ability to fulfil its promise of imitating human perception, reasoning, learning, and problem-solving with the new wave of deep learning approaches, such as convolutional neural networks.
Insurance will undergo a radical change as a result of this evolution, moving from its current "detect and fix" mode to one of "predict and prevent," completely altering the business landscape. As brokers, consumers, financial intermediaries, insurers, and suppliers grow more skilled at exploiting cutting-edge technologies to enhance decision making and productivity, reduce costs, and optimise the customer experience, the speed of change will likewise quicken.
Even while these changes can initially be accompanied by fear and doubt, innovation through new technology is a fundamental driver of change in the financial sector and this has led to incalculable efficiency improvements. The insurance industry is not an exception to these trends, with the potential for new service delivery models as well as expanded capabilities for data gathering and fraud detection that can improve risk identification and mitigation strategies, together referred to as "InsurTech".
With concomitant competition policy considerations, innovation and new technology have the potential to impact the franchise value of insurance companies. Segments of society that up until now were unable to acquire financial protection can benefit from policies with specialised coverage and streamlined claims procedures. More competition and prudential needs may be bridged by regulatory initiatives, such as the regulatory sandbox being established by several jurisdictions, but maintaining a fair playing field as solutions advance to the whole market calls for some thought.
Even while these changes can initially be accompanied by fear and doubt, innovation through new technology is a fundamental driver of change in the financial sector and this has led to incalculable efficiency improvements. Recent technical advancements have fueled this type of innovation, which is why the term "FinTech" is frequently used to characterise the phenomena. Financial services are highly suited for technology innovation to reduce transaction costs and speed up service delivery because they deal with intangible products.
In spite of the fact that this has been occurring throughout the history of finance, the recent growth of internet connections, home computers, mobile devices, and application development has raised the possibility of lowering the entry barrier, opening the door for more competition or "disruption" of the financial industry. Yet, calling technological advancements and innovation "disruptive" might be deceptive because it is more likely to be an observation made in retrospect rather than via the constant trial and error that goes along with innovation and technical advancements.

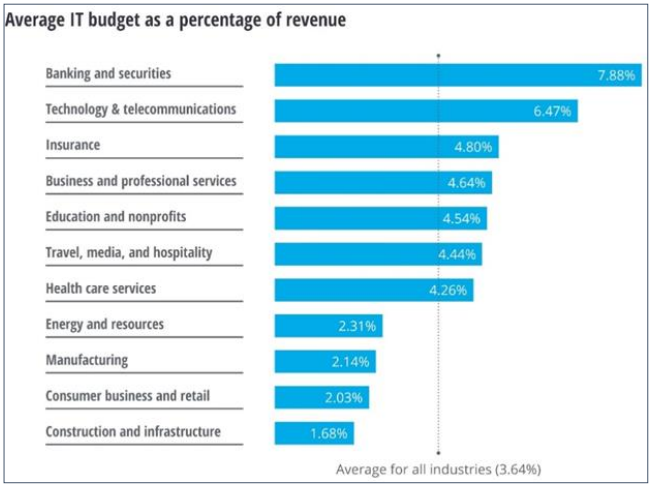
Literature Review

Meikanda, R. Dr. P. Anbuoli and Ganesh Kumar, This paper discusses various aspects of the use of IT in the insurance industry, such as integration technologies and standards, information security, claim management, insurance inclusion, CRM technology, and so on.

Research Methodology

- **Significance of the study:** The study covers few important benefits of business intelligence to study the impact of it on an insurance industry.

- **Scope of the study:** As business intelligence is the advanced concept of information technology for achieving the competitiveness of businesses with effective decision making to get organizational growth by the Indian insurance companies.
- **Objective of the study:** The main objective of this paper is to study the benefits of business intelligence to know the impact of it on insurance industry.
- **Research Gap:** The study's goal is to focus on the impact of business intelligence in order to understand the benefits of using it to make effective decisions in the Indian insurance industry in order to gain a competitive advantage from the insurer's perspective.
- **Research type:** Conceptual paper
- **Sources of data:** For the study the data has been collected from secondary sources.



Predictive analytics

Many insurers use predictive analytics to collect a variety of data in order to analyse and forecast client behaviour. It does, however, have new applications that can improve data accuracy. Insurers will be able to use predictive analytics for the following purposes by 2021.

Insurers can use predictive analytics in 2021 for the following purposes:

- Identifying customers at risk of cancellation
- Identifying fraud risk
- Triaging claims
- Identifying outlier claims

Many property and casualty insurers have discovered that using predictive modelling tactics increases revenue and accuracy. Companies that used analytics and predictivemodelling improved their loss ratios by 3% to 9% more than companies that did not, according to a 2018 Valen Analytics study.

Customers expect personalised experiences all the time, especially when purchasing something as important as property and casualty insurance. AI enables insurers to create these one-of-a-kind experiences while meeting modern consumers' high-speed demands. The key is to use AI to create personalised experiences based on an individual's behaviour and habits by leveraging massive amounts of consumer data.

AI can also help insurers improve claim turnaround times and fundamentally change the underwriting process. AI also enables insurers to gain faster access to data, and eliminating the human element may result in more accurate reporting in less time.

Machine Learning

AI can also assist insurers in improving their operations. The overlapping of various technologies in the name of improving accuracy will be a Machine Learning Insurance technology trend in 2021.

Machine learning has the potential to improve as well as automate claim processing. When files are digital and accessible via the cloud, they can be analysed using pre-programmed algorithms, resulting in faster and more accurate processing. This automated review has the potential to affect more than just claims; When it comes to implementing machine learning capabilities, you don't want to take any chances**.**

- **IoT:** The Internet of Things (IoT) has the potential to automate much of this data sharing. Insurers can benefit from data from IoT devices such as smart home components, automobile sensors, and wearable technologies, better determine rates, mitigate risk, and even prevent losses from occurring in the first place. Forecasts predict a $42.76 billion global IoT insurance market by 2022, so P&C insurers cannot afford to delay in leveraging IoT capabilities.
- **Insurtech:** Insurtech, or insurtech companies, use the most recent insurance technologies to reduce costs for both customers and insurers, improve operational efficiency, and enhance overall customer experience. While this may sound similar to existing digital insurance offerings, insurtech elevates those capabilities.

Data Obtained from Social Media

Social media's role in the insurance industry is evolving products in a timely and accurate manner. Previously, this process required the use of a skilled developer or an IT team; however, advances in software-specific coding platforms have made it simpler.

1. Chatbots

Using AI and machine learning, chatbots can seamlessly interact with customers, saving everyone in an organisation time - and ultimately saving insurance companies money. A bot can guide a customer through the policy application or claims process, with human intervention reserved for more complicated cases.

2. Telematics

Telematics capabilities will continue to influence auto policies. Cars can now be outfitted with monitoring devices, such as Progressive's Snapshot, that measure a variety of indicators such as speed, location, accidents, and more, all of which is monitored and processed with analytics software to help determine your policy premium.

Telematics offers numerous benefits to both insurers and insureds.

Property and casualty insurance telematics will:

- Reduce insurer claims costs; and
- Transform carrier-customer relationships from reactive to proactive.

3. Low code

Low Code Insurers must now be able to manage software platforms, deploy updates, and launch new products in a

timely and accurate manner. Previously, this processrequired the use of a skilled developer or an IT team; however, advances in software-specific coding platforms have made it easier than ever before.

Low-code configuration tools enable business stakeholders, not just IT professionals, to update and manage apps and software with a simple drag-and-drop interface. Insurers with moderate or even basic app and software experience will be able to quickly implement new interface features.

Low code development are as follows:

- Significantly shorter time to market
- Widespread app development across organisations

4. Drones

They can be used at various stages of the insurance lifecycle, such as collecting data to calculate risk before issuing a policy, assisting in preventative maintenance, and assessing damage after a loss. Farmers Insurance is an excellent example, as they use Kespry drones to assess risk and damage to homes. These drones conduct roof inspections and other assessments, and their data is sent to the cloud for analysis. This is another example of IoT and other technologies collaborating in the insurance industry.

Conclusion

Insurers are already utilising these technologies in a variety of ways. Several startups are focusing on the use of advanced data analytic tools to more accurately determine risks, detect fraud, and identify coverage expansion opportunities in specific micro-segments of various industries. Some trends include expanding insurance distribution in rural areas and Indian insurance companies. However, frauds, high lapse rates, and unfavourable changes in macroeconomic factors such as trade breakdown, unemployment, and regulatory uncertainty could be characterised as key challenges to industry growth. The increase will be driven by a number of factors, including increased demand for retirement products such as pensions and annuities, as well as the limited availability of government-sponsored social security mechanisms, rising awareness of retirement planning, and increased urbanisation.

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