

INSURANCE IN THE FACE OF GLOBAL CHANGE - THE FUTURE PROOF



**DEPARTMENT OF COMMERCE
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**“Insurance in the Face of Global Change – The
Future Proof”**

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TECHNOLOGY INNOVATION IN THE INSURANCE INDUSTRY

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ABSTRACT

Technology is altering the nature of risk and enabling new products, services, and channels. Insurance businesses can employ digital platforms and algorithms to make the process considerably faster and less tiresome. Startups are utilizing technology to lower operating expenses and improve the user experience of their clients by improving convenience, transparency, timeliness, simplicity, personalisation, and customer involvement. This paper aims to know the technology innovations in insurance industry. The innovations covered in this study include predictive analytics, robotics process automation, artificial Intelligence, and IoT devices including wearable technology, telematics, smart homes and block chain technology. Insurers are risk-averse by nature, and they aim to minimize risk and also safeguard their consumers. Innovations in digital technology have led to enhanced customer experience in the Indian insurance industry. Industry that are reluctant to adapt to new technologies will likely face continuous low growth and diminishing profits as a result of their incapacity to compete effectively with

tech-savvy incumbents and digital entrepreneurs.

Keywords: Technology ,Automation, Block chain, Telematics, Artificial Intelligence

INTRODUCTION

Technology has changed every aspect of our world and is likely the single most powerful driver in transforming human demands and the nature of business. In this regard, the Insurance sector is not an exception. The major players in the insurance industry have begun adopting the latest technology that will enable them to improve their operational efficiency and be customer-focused. Since Covid 19, the Indian insurance industry, with the help of InsurTech, the insurance sector in India has quickly embraced digitization, new technologies, and distribution methods to reach customers. The insurance sector is implementing technologies like automation, big data, Artificial Intelligence /Machine Learning, block chain, etc. to enhance efficiency in areas like personalized product design, digitally enabled salesforce, proactive risk management. The employment of modern technologies can also improve pricing, risk selection, and, naturally, the general efficiency of insurers' operations. There are a variety of emerging technologies

that have the potential to transform the insurance industry and the nature of risks insured.



OBJECTIVE OF THE PAPER

- To understand the various technology innovation in insurance industry

INNOVATION IN TECHNOLOGY

- **PREDICTIVE ANALYTICS**

Many Insurers utilise it to collect a wide range of d

ata in order to better understand and forecast client behaviour. Insurance companies can use predictive analytics for Pricing and risk selection, Identifying customers at risk of cancellation, Detecting the risk of fraud, Triaging claims, Finding outlier claims, Anticipating trends . Many insurers have found that using predictive modelling strategies increases revenue and accuracy.

ROBOTICS PROCESS AUTOMATION

Robotic Process Automation (RPA) automates the regular process of the insurance industry.

As a result, it decreases the effort and operational costs and increases customer satisfaction. It also shortens the claims process by automating data collecting. Manual data collection and entry is a demanding task that can lead to inconsistencies and errors in data management. RPA significantly speeds up the data management process. It is expected that in 2022, insurers will make large investments to introduce automation to other parts of the insurance value chain, such as underwriting, core policy admin systems, risk management, and claims.

- **ARTIFICIAL INTELLIGENCE AND IoT**

A machine would be considered “intelligent” when it takes into consideration its environment and takes action to maximise the possibility of achieving its given goal. It is widely used when computer programs are developed to have cognitive functions such as learning and problem-solving. AI research is taking place in fields including reasoning, knowledge, planning, learning, natural language processing, perception, and moving/manipulating objects. Advancements in Artificial intelligence enable companies to automate more complex processes, such as responding to all types of client questions

The advancement of AI in insurance is not only shortening the time for the clients’ to

acquire a policy or to settle a claim, but it is also gathers clients' historical and behavioural data, like driving record, and creates more customised packages In addition Internet of Things (IoT) technologies can help to eliminate manual interventions in claims and pricing. Insurers can use data from IoT devices such as the various components of smart homes, automobile sensors, and wearable technologies to better determine rates, mitigate risk, and even prevent losses in the first place.

CHATBOTS

Chatbots can connect with customers effortlessly using AI and machine learning, saving everyone in an organisation time and, ultimately, saving insurance firms money. A consumer can be guided through an insurance application or claims process by a bot, with human assistance reserved for more complex circumstances.

WEARABLE TECHNOLOGY AND HEALTH AND LIFE INSURANCE

Wearable technology grows more popular, insurance firms are learning that they can benefit just as much as individuals. Wireless-enabled wearable technology device that measures data such as the number of steps walked, heart rate, quality of sleep, and other personal metrics involved in fitness. It provides information to the insurers about insured health. It monitor heart rate, breathing, calorie intake, hydration, sleep, and even pain management.

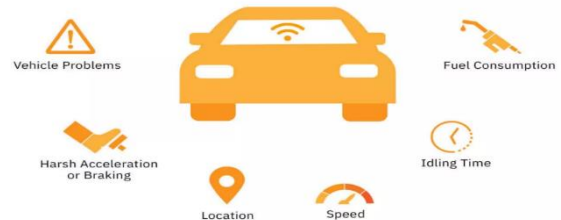
TELEMATICS AND CAR INSURANCE

A Telematics device is installed in the vehicle that captures information about its route, engine, mileage, performance, and so on and sends it to a cellular network, where it is then transmitted to the company's assigned server and displayed on a device used to monitor the vehicle's movement. Advanced analytics includes records related to hand braking, rapid acceleration, pattern of acceleration and braking, etc. All this information is analysed by the insurance company to arrive at the car owner/driver' risk profile and the premium is charged according

A typical vehicle insurance policy's payable premium is mostly determined by the car's model rather than the driver's driving abilities. Insurance companies will understand the car owner's risk profile based on the distance travelled, the average speed of the vehicle, the frequency with which the vehicle is used, and average driving skills using telematics motor insurance or UBI. This information is used to calculate a suitable premium. As a result, a careful driver will pay a lower premium than someone who drives recklessly and frequently, increasing the odds of an accident and, thus, a claim.

How Does the Telematics System Work?

The tracking device collects data on:



SMART HOMES AND PROPERTY INSURANCE

Smart home monitoring systems will provide homeowners and their insurers with information and control over major risks. This is intended to reduce premiums when claims and losses are reduced. The Internet-connected doorbell enables users to see and speak with visitors at their door using their mobile phone from anywhere in the world –

. These smart doorbells also have night vision, motion detection, and the capacity to video record activity spotted near someone's front door, which can be shared with others via the cloud. As homes become smarter, the severity and frequency of claims, the risk of underwriting insurance, and premiums will certainly decrease.

BLOCKCHAIN TECHNOLOGY

Blockchain technology will enable data to be transmitted in real-time between numerous parties in a trusted and traceable manner, resulting in considerable efficiency advantages, cost savings, transparency, speedier payouts, and fraud reduction. Block chains can also help new insurance companies create better products and marketplaces.

Usually the claims process begins with a consumer submitting a claim request through phone to a customer service centre or via notification via a mobile app. Instead of this time-consuming process, a direct link can be established between the claimant, insurer, and

third parties, with all data directly uploaded and an audit trail provided. Making the claims process an insurance company-centric process would not require much buy-in from external stakeholders.

Blockchains with smart contracts could be used to offer consumers claim submissions at a cheap handling cost.

When a claim is filed, payments to the insured consumers can be made conveniently by accessing verified databases, sophisticated rules that take the user's social media profile into account, and market fluctuations that can help with any potential fraud forecasts. It will also streamline payments between parties for claims, lowering administrative costs for insurance firms. Blockchain technology enables data visibility and make the process transparent and secure. By logging each transaction, it is simple to eliminate suspicious and

duplicate transactions.

CONCLUSION

Innovation in digital technology have led to enhanced customer experience in the Indian insurance industry. Insurance executives are fully aware that the present technological transformation is both a threat and an opportunity for the old industry. Traditional businesses that are reluctant or unable to adapt to new technologies, learn from new market

entrants, and modify business models will likely face continuous low growth and diminishing profits as a result of their incapacity to compete effectively with tech-savvy incumbents and digital entrepreneurs.

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