

IMPACT OF TECHNOLOGY AND INNOVATION IN INSURANCE SECTOR

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Abstract

Technology is the key to the insurance sector for its evolution and overall growth. It not only adds value to the industry but also to some extent directs its future with changing time and its requirements. Inventions and technology have its affects from influencing underwriting decisions to helping streamline business processes. The use of mobile devices, internet, GPS and other technical applications has played significant roles in various ways. It has helped the companies not only to market research, market penetration, and business promotion and market development but also to provide after sales service, understanding customer satisfaction and many more. Insurance companies' data collection and data analysis has become possible only using various software and hardware.

Key words: *Insurance, FinTech, Financial Services, InsurTech*

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Introduction

Insurance industry has become an integral part of an individual's life. With the increasing various risk factors importance of purchasing different products of insurance are also on rise. People are opting for insurance products and the question comes how or what channels they will choose to purchase insurance. Now at this age of digitalization it is obvious to find out how digital platforms play important roles in selling and purchasing of insurance.

Innovation, introduction and implementation of new technology are key drivers of change in the financial sector. This implementation of new technology will lead to efficiency gain even though these changes can initially have some uncertainty and doubt. This innovation has been initiated to develop new technologies and this phenomenon has been described as FinTech. Financial services deal in intangible products, so technological innovation will lower transaction costs and will expedite delivery of services. The spread of technology like recent proliferation of internet connection, home computing and mobile devices, and development of applications has enriched the impact of technology on insurance sector. New technology will lead to possibility of new method of service provision as well as greater opportunity for data collection. These new methods can be used for better risk identification and mitigation measures which are referred to as "InsurTech". InsurTech, as compared to FinTech, is more often related to service improvements for individuals, as opposed to businesses(OECD, 2017).

Technology in Communicating Customers

The insurance industry is trying hard how to interact with and retail customers in an effort to drive growth and profitability. There are few innovative technologies like social networking, telematics and SOA which are essential to companies that want to be industry leaders. Companies are adopting new business consistent strategies to seek new ways to growth and prosperity. These technologies are driving force in the transformation. Facebook, Twitter and YouTube are enabling customers as well as companies to improve interaction, to communicate product information and generate more sales. Telematics has the potential to expand more as this is entirely a new business models that blend insurance, technology and mobility. Service Oriented Architecture is becoming key to managing the complexity of integrating legacy and new applications (A T Kearney, 2011).

Apart from promotion, delivering right product to the target customer is important for the companies. Technology is helping companies to understand requirements of the customers and to offer him exact products which suit his requirement. Traditionally the agent must visit customer and offer him products. But on online platform customer can select his required product from wide range of products and can understand details of the products(Khristy, 2017).

Innovation in InsurTech

Insurance companies evaluate the type of technology they are using and its impacts on consumers for sustainable growth. Use of technology is adding value to the insurance industry. Besides technology and technical innovations are contributing a lot towards the overall growth of the sector. The use of mobile phones, internet and people's involvement in various social media have increased the possibility of use of digital technology for insurance companies. Various ecommerce companies as well as Bigtech companies are initiating to penetrate and develop new markets and new customer base for their companies. One obvious impact of technology on insurance sector is that it is replacing tradition middleman or agent-based concept. With increasing competition young and techsavvy insurers find the service not good enough. As consumer can directly interact with company and purchase the products and services from them, there is no opportunity of agents to get involved. Initial purchase is not the only area where buyers are opting for online service, they also want to manage their policy and check the claim status online (Westfall, 2017).

Unlike many other sectors particularly of FMCG, insurance sector has less variety of products. So, for them it is very important to increase their customer base. To have sustainable growth and to generate profit from the business digital or online marketing provides them to reach out directly to vast magnitude of online customers. Companies also find it easier to use online platforms for the marketing and promotional purpose. Instead of using traditional promotional options like banner, hoardings online advertisement is less expensive and more effective method. Online promotion thus reduces the market acquisition costs for companies.

The main drivers for the technological changes by the InsurTech companies are Cost Reduction, Customer Engagement, Data Analytics, Development and Boost in Innovation. Big Data

Analytics helped in marketing and sales by providing better understanding about the customer needs. It helped in product development to deliver maximum value to the customer at right price. Leveraging Internet of Things (IOT) companies are implementing usage-based insurance model. It helps to deliver personalised policies to the subscribers. Artificial Intelligence is enabling companies to handle enormous data. Smart machine learning helps to adopt an efficient business cycle for the InsurTech. Another significant aspect is Peer-to Peer technology. It drives insurance back to the roots by pooling people that can insure one another without a large insurance company to interfere in the process.(Partners, 2017).

Technology for Decision Making

Companies can capture data at once and process them in many ways. On other hand it has enabled consumers or insurers to move from traditional broker scenario to direct to market scenario(Vyas, 2015). So far insurance industry was labour intensive industry, but now what was done by human labour will be end up being done by technology(Strategic Risk, 2014). Insurer depends on actuarial analysis to make decisions on pricing, risk and capital management. Earlier when there was no availability of computer technology companies used simplified methodology in calculation and analytics. But doing precise and difficult analytics was a difficult task. Technological advances have brought step change improvement in analytics. So it has made risk and capital management simpler task. Insurer can get information faster to make better business decisions(Beardall, 2015).

Enhanced Customer Experience

Capgemini Voice of Customer survey reveals some aspects of customers' perception of the industry and report identifies that when it comes to delivering exceptional customer experience, insurers have a wide-open opportunity to catch up with retail and banking trendsetters. Financial services customers reported significantly less positive insurance experience and satisfaction within essential service parameters as compared with banks, likely because there are few customer touchpoints in insurance. However, that paradigm can quickly be changed as technology driven value added services allow insurers to engage more meaningfully and frequently with customers through individualized, memorable and digitally enabled products and services(Capgemini, 2018).

Agent based sales is one the preferred method for purchasing Insurance products. InsurTech start-ups are taking on this model and proposing new distribution models for insurance. These new models are more effective for new market penetration particularly for less developed markets where insurance penetration is low and conventional model of agent/broker may not be efficient and effective. In the less developed markets like Asia and Africa where there are huge opportunities for new investments, these new start up models can be effective. BIMA, Friendsurance, InsPeer and Guevara are all distribution-based new start up insurance models. They are providing new insurance services to less developed markets. BIMA operates in less developed markets and has had wide success in intermediating health insurance products through their model of combining agents with mobile platforms. (OECD, 2017)

Risk Management

The state-of art Information Technology infrastructure enables the InsurTech to minimise operational risk for the companies. Data Centres are equipped with advanced data security system to facilitate the centralised storage of data. Standard Information security protocols are followed in the organisation to safeguard the data. The business continuity planning, disaster recovery centre, back-up of data and effective contingency plans are some of the steps towards the operational risk management (Pathak, 2014). Internet and newly invented applications have expanded the opportunity for data collection. With the help of this technology more data can be collected from businesses and from individuals. Newly invented devices like Fitbit and Apple watch can be used to accumulate data of an individual's health and activity. While insurance has traditionally relied on quantitative data to make risk management decisions, data analytics goes beyond this remit and can be contentious in some occasions (OECD, 2017).

Conclusion

Technology has started having its impact on every aspects of life. When we think of financial aspect it is even more obvious. With invent implementation and spread of new technology there have been noticeable changes in insurance sector like any other sector of finance. Technology has enabled not only insurance companies to penetrate new markets, build up new customer bases and new methods of data collection, it has also enabled consumers to understand their requirement and make their decision regarding purchase of a product easier.

But there are still some sections of society particularly in developing nations, whose lives are untouched by advancement of technology. In such cases conventional models are still more popular and effective. But the barrier can be overcome by the introduction and implementation of more user friendly, easier and effective technology

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