

A Study on Digital Transformation in Indian Insurance Industry

Dr. Rajender Katla

Associate Professor, Dept. of Commerce & Business Management, Kakatiya University, Warangal (T.S)

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ABSTRACT

The Insurance industry is facing the most significant economic, technological and competitive challenges in its history. The ever-growing demand for better insurance products and the growing consumer movement has put forth a lot of challenges for this sector. To succeed in this rapidly evolving business climate, insurance companies are compelled to investigate ways by which they can improve bottom-line operational efficiency and still meet and exceed the expectations of their customers. Because of the Information revolution, the Insurance companies are utilizing the Information technology applications for better customer service, cost reduction, new product design and development and many more. In the initial years IT was used more to execute back office functions like maintenance of accounts, reconciling broker accounts, client processing etc. At present, Insurance companies are giving customers a distinct claim id to track claims on-line, entertaining on-line enrollment, eligibility review, financial reporting, and billing and electronic fund transfer. The paper covers the technological trends being adopted by the insurance industry in India and the benefits being gained by inclusion of technologies.

1. Introduction

The insurance industry of India consists of 57 insurance companies of which 24 are in life insurance business and 33 are non-life insurers. Among the life insurers, Life Insurance Corporation (LIC) is the sole public sector company. Apart from that, among the non-life insurers there are six public sector insurers. In addition to these, there is sole national re-insurer, namely, General Insurance Corporation of India (GIC Re). Other stakeholders in Indian Insurance market include agents (individual and corporate), brokers, surveyors and third party administrators servicing health insurance claims.

Market Size:

Government's policy of insuring the uninsured has gradually pushed insurance penetration in the country and proliferation of insurance schemes.

Gross premiums written in India reached Rs 5.53 trillion (US\$ 94.48 billion) in FY18, with Rs 4.58 trillion (US\$ 71.1 billion) from life insurance and Rs 1.51 trillion (US\$ 23.38 billion) from non-life insurance. Overall insurance penetration (premiums as % of GDP) in India reached 3.69 per cent in 2017 from 2.71 per cent in 2001.

In FY19 (up to October 2018), premium from new life insurance business increased 3.66 per cent year-on-year to Rs 1.09 trillion (US\$ 15.46 billion). In FY19 (up to October 2018), gross direct premiums of non-life insurers reached Rs 962.05 billion (US\$ 13.71 billion), showing a year-on-year growth rate of 12.40 per cent.

Investments and Recent Developments:

The following are some of the major investments and developments in the Indian insurance sector.

- As of November 2018, HDFC Ergo is in advanced talks to acquire Apollo Munich Health Insurance at a valuation of around Rs 2,600 crore (US\$ 370.05 million).
- In October 2018, Indian e-commerce major Flipkart entered the insurance space in partnership with Bajaj Allianz to offer mobile insurance.

- In August 2018, a consortium of WestBridge Capital, billionaire investor Mr Rakesh Jhunjunwala announced that it would acquire India's largest health insurer Star Health and Allied Insurance in a deal estimated at around US\$ 1 billion.
- In September 2018, HDFC Ergo launched 'E@Secure' a cyber insurance policy for individuals.
- Insurance sector companies in India raised around Rs 434.3 billion (US\$ 6.7 billion) through public issues in 2017.
- In 2017, insurance sector in India saw 10 merger and acquisition (M&A) deals worth US\$ 903 million.
- India's leading bourse Bombay Stock Exchange (BSE) will set up a joint venture with Ebix Inc to build a robust insurance distribution network in the country through a new distribution exchange platform.

Government Initiatives:

The Government of India has taken a number of initiatives to boost the insurance industry. Some of them are as follows:

- In September 2018, National Health Protection Scheme was launched under Ayushman Bharat to provide coverage of up to Rs 500,000 (US\$ 7,723) to more than 100 million vulnerable families. The scheme is expected to increase penetration of health insurance in India from 34 per cent to 50 per cent.
- Over 47.9 million farmers were benefitted under Pradhan Mantri Fasal Bima Yojana (PMFBY) in 2017-18.
- The Insurance Regulatory and Development Authority of India (IRDAI) plans to issue redesigned initial public offering (IPO) guidelines for insurance companies in India, which are to looking to divest equity through the IPO route.
- IRDAI has allowed insurers to invest up to 10 per cent in additional tier 1 (AT1) bonds that are issued by banks to augment their tier 1 capital, in order to expand the pool of eligible investors for the banks.

2. Objectives of the study:

The following are the objectives for the present study:

- To identify the changing trends for Digital transformation in Indian Insurance Industry
- To exhibit the advantages of inclusion of technology in Indian Insurance Industry

3. Research methodology:

The present study is purely descriptive in nature. The data is collected from Secondary sources of Information i.e., form websites, magazines, News Papers etc.

4. Technological Trends of Indian Insurance Industry:

“Insurtech”, similar to fintech, has become a buzzword, owing to the digital innovations and transformation disrupting the insurance industry. Rapidly changing customer behaviour due to the adoption of technology has led to an increasing need for insurers to rethink their strategies and business models.

Burdened by traditional processes, outdated systems and paper-based operations, insurtech has started making inroads more silently into the insurance sector. While the progress is slow, banks and insurance companies continue to embrace fintech innovation.

Many insurtech startups being launched, with investments from traditional banks and insurance firms, leveraging a combination of new technologies like IOT, Blockchain, Cognitive, Gamification, Chatbot, Augmented and Virtual Reality to reduce operational cost and ensure enhanced customer satisfaction.

Here are some technology trends:

Robotic Process Automation and Cognitive/Artificial Intelligence:

Insurers deal with large amounts of repetitive and rule-based tasks with structured/unstructured data. Robotics Process Automation (RPA) can help reduce manual operations costs while improving service and compliance. As RPA replicates human activity, it can be thought of as a set of software “robots”, forming a virtual workforce available 24 hours per day, with full audit and 100% accuracy. It can be implemented as:-

- Standard Robotics which perform the functions that a claim executive does. That is: - expedite claims processing, reducing operational cost and improving accuracy and compliance
- Intelligent Robotics that leverage machine learning and AI to allow processes to adjust and optimise for subjective decision making. For instance, deploying speech-recognition systems at call centres, using advanced analytics platforms
- Cognitive RPA can help transform insurance business functions like Customer Engagement, Insurance Sales and Customer Service, Underwriting and Risk Management, Claims Management, Fraud Handling, Marketing and Proposition (Product) Management, Regulatory Reporting.

Chatbots:

Chatbots, robo-advisors and virtual insurance agents leveraging cognitive RPA have proven to enhance customer engagement significantly. For instance, US Insurer Allstate has employed a chatbot called the Allstate Business Insurance Expert (Abie) to help insurance agents in the quotation process for complex insurance products. Chinese search engine Baidu also uses Artificial Intelligence systems to discover patterns that can be used in insurance underwriting. AIG has invested in a startup company called Human Condition Safety to offer a solution that combines wearable technology with AI to track workers' safety in factories

Gamification, Virtual Reality:

Businesses in many industries are adopting gamification and virtual reality technologies to engage customers and differentiate through experiences. The insurance industry hasn't been left behind. Insurtech companies use AR/VR technologies to create innovative solutions that would help them project real-life situations, identify damages and potential risks, train agents and even more. For instance, BioBall created by Cigna takes snapshots of the patients while playing ball to capture BP, Pulse rate and cholesterol readings. This data can be used by health insurance companies for preventive health care to detect claim risk.

Digital devices such as wearables enhance the gamification experience. For example, health insurers can invite customers to use their digital fitness wristbands to participate in real-time challenges with their peer groups. This can improve customer engagement, encourage competition, and promote physical activity within a specific time frame.

Blockchain:

Blockchain as a distributed ledger offers use case opportunities to insurers across the value chain from verified digital customers to automated underwriting, claim management and fraud prevention. It can be used as follows: -

- **Enhancing consumer experience** by leveraging customer identity data which is verified and available in the distributed ledger shared between a consortium of insurers, KYC databases and notary networks. This will reduce the burden on the customer to submit KYC documents multiple times
- **Efficiently and speedily process claims** - *Startup companies like InsurETH* built a flight insurance product using smart contract where the policy conditions were held on Ethereum blockchain. In the event of a delayed/cancelled flight, the smart contract would automatically initiate payouts increasing trust, transparency and customer experience
- **Bitcoins** can be leveraged as rewards and loyalty programs by insurance companies
- In **emerging markets**, P2P blockchains with smart contracts are applied to micro-insurances to automatically underwrite and handle claims to payout to insured farmers. For example, this might be triggered when drought conditions are reported by verified climate/weather databases.

Internet of Things (IoT):

Cars, home appliances can have their own insurance policies registered and administered by smart contracts in a

blockchain network, automatically detecting damage first and then triggering the repair process, as well as claims and payments.

Until this year, banks and insurance firms have been approaching Insurtech-led innovation cautiously, more in an experimental manner rather than as an organisational priority. However, as insurtech begins to demonstrate greater value additions to insurers, through cost reductions, process efficiencies and enhanced customer experience, there will be greater dependence on them from insurance companies in the coming year.

5. Benefits of Inclusion of Technology:

While using technology as an enabler for generating growth, the future of a company depends heavily upon what type of technology it uses and how well it uses it. The better and more effective technology you use, greater will be the growth.

Generating new business:

Unlike FMCG businesses which a large variety of products to offer, insurance companies have fewer policy products to sell. So acquisition of new customer is always an important issue and companies are forced to increase their sales team to reach out to new buyers. To sustain growth and generate profit on a continual basis, online or digital marketing processes can aid insurance providers to reach out directly to the vast magnitude of online buyers. Traditional advertising methods such as hoardings, banner promotions, signage and TV commercial ads incurred substantial promotional expenses whereas the same objectives can be availed through online PPC advertising campaigns which are easily afforded and cost significantly less. Moreover, it's much easier to target new buyer audiences online rather than reaching out to them physically as was the case in the past. Technology helps to reduce customer acquisition cost.

Reduced operational overheads:

For any company it's always fruitful to save a few dollars and reduce expenses whenever possible to save for a rainy day. Operational overheads are a major concern to organizations and demand a large chunk of working capital to support business processes and operational activities. More and more fortune 500 companies now have in-house departments which oversee operational overheads and find innovative ways to reduce expenditure while expediting the organization's business processes. Process automation can go a long way in reducing workforce and employee cost by substituting humans for technology enabled processes and devices. It's more reliable and cheaper to store, retrieve and process documents electronically using PC networks and limited human intervention rather than employing a huge team of clerical personnel to physically move files and folders to different places in cabinets and storages situated in different parts of the building. In addition, you don't need several branch offices in different parts of the country and maintain staff for all of them. Technology helps to reduce operational cost.

Making policy underwriting easier and quicker:

The heart of any insurance company, policy underwriting policies and efforts put in by the evaluation agents directly

decide how well the insurance business will grow and whether the company shall make a good profit through the premiums or not. Insurance agents need to communicate and ask a lot many questions before they can give a clearance. One of the biggest hurdles faced by agents in the past was meeting a client at a particular location, or at a particular time and explaining the nitty-gritty of the policy. This consumed a lot of time and agents had to travel a lot to "close" customers and meet target deadlines. Nowadays, policies are clearly explained on portals and interested visitors can communicate directly with the agents using online chats tools and video conferencing facilities to inquire about eligibility aspects, answer queries and facilitate the agent in deciding the underwriting process. That way agents can respond to many customers in a day and decide which customer should be given the policy and which shouldn't. Technology helps to make the underwriting process easier and quicker.

Target ideal customers to enhance brand value:

MNCs spend billions of dollars to create and build powerful brands. As per market research the cost of branding activities in the U.S. rose to 5.5 percent in 2015 to reach more than \$560 billion. It gives an idea how much important branding is how much big MNCs are ready to spend for it. Branding is always expensive as it takes years to build a brand and a lot of advertising capital. The social media plays an important part in branding and insurance companies now don't have to spend exorbitant sums to create and maintain their brands - they use a fraction of the budget they used in the past to achieve the same objectives by promoting and advertising their brands on Facebook, Twitter, Instagram, Pinterest and other social media venues. The biggest advantage is you can target prime customers very effectively using marketing insights facilities and analytics tools which are often provided by the media portals. Moreover you can submit videos and adverts to cover all types of audiences as and when required. Technology helps to target ideal customers and enhance brand value since you can do more over social media by spending less of advertising and branding budget.

Achieve higher ROI:

All businesses strive to achieve high ROIs to increase profits. Businesses generally borrow capital from banks and investors at high interest rates or raise the money through public limited issues and incorporations. Technology helps to drastically reduce working capital and offer a tremendous opportunity for insurance companies to churn out higher profit margins through online activities, electronic funds transfer and process automation which are all made possible using reliable technologies.

There are many other significant advantages of using technology to boost sales by making it easier for consumers to avail insurance policies and expediting the underwriting process. Reputed insurance companies provide affordable insurance packages to consumers worldwide and even help them in their dire times.

6. Conclusions

It is found that the insurance companies are aware of most of the existing technologies and have considered the potential advantages and costs to their companies of utilizing such

technologies. Also, large insurers and high users tend to have a greater enthusiasm for new technologies. New trends may be spawned by new technologies. In summary, while most executives of top insurers are aware of the need to utilize new technologies to compete in future markets, the natural resistance to high tech changes because of their dehumanizing

characteristics, must be overcome because the speed of transition is indeed dependent on people-acceptance as well as technical capability. In the nutshell, the government, the insurance companies and the customers have benefitted from the use of information technology in the insurance sector.

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