

The First Monthly Journal on Insurance in India in Service Since 1981

₹85/-



THE INSURANCE TIMES

VOL.XXXIX - NO.09 - September 2019 - ISSN-0971-4480



In this issue

- Modern and Emerging Risk-Mental Illness
- How to Estimate Global Reinsurance Premiums
- Why Life Insurance is Important to Millennials?
- The Global Cyber Insurance Market is Flourishing Due to the Increased Demand for Cyber Insurance Policies
- The Role of Information Technology in Terms of Social Security Strategies for Women in Insurance



"Motor insurance is a challenge not only for us but for the entire industry. With drop in new vehicle sales we have to look at how the growth can come from other lines of business."

Pushan Mahapatra
MD & CEO
SBI General Insurance



"We should strive hard to increase growth and should not look at less than 15% growth in insurance."

Subhash Chandra Khuntia
Chairman
IRDAI



"We believe our customer centric approach and digitalisation initiatives, coupled with the growing needs of protection, savings and retirement for the country's young working population will continue to drive growth for us."

N S Kannan
MD & CEO
ICICI Prudential Life

The Insurance Times



The First Monthly Journal on Insurance in India in Service since 1981



Editor
CA Rakesh Agarwal
M.Com (BIM),
FCA, DISA, LLB, FIII,
PGJMC, MBA, FRMAI, PhD

Associate Editor
Shyam Agarwal
M.Com (BIM),
ACA, DISA,
FIII, PGJMC



Vol. XXXIX, No. 09, September 2019
ISSN - 0971 - 4480

From The Editor-in-Chief's Desk



Ram Gopal Agarwala
B.Com, LLB, FCA.



Editorial Advisory Board

Dr. B. K. Jha
Prof. (Dr.) Abhijeet K. Chatteraj

Resident Editor

Dr. K. L. Madhok, Gurgaon
Vazir Ahmed Khan, Secunderabad
V. K. Agarwal, Agra
R. K. Sharma, Jaipur
Shaik Gulam Afzal Biya Bani, Saudi Arabia
B. K. Gupta, Agra
C. K. Bhatia, Delhi
Ganesh Iyer, Mumbai
L. S. Rao, Hyderabad
R. Venugopal, Bangalore
Jaswanth Singh G, Mysore
Papia Rahman, Bangladesh

Correspondence Address

25/1, Baranashi Ghosh Street, Kolkata - 700 007, India
Phone : 91-33-2218 4184/2269 6035
Website : www.sashipublications.com
Portal : www.bimabazaar.com
E-mail : insurance.kolkata@gmail.com

Registered Office

31/1, Sadananda Road, P.S. Kalighat
Kolkata - 700 026, India

Customer Help Line

For non receipts/any other query please contact
E-mail : sashipublications@yahoo.com
Phone : 033-40078428, 40078429

Single Copy ₹ 85/-

Annual Subscription : ₹ 990/- (Ordinary Mail)
₹ 1340/- (Regd.) Foreign air mail US\$ 125

Contact for more details.

All the payments must be made by DD favouring Sashi Publications Pvt. Ltd. payable at Kolkata, India.

Please do not make any cash payments for journals/books to any person representing The Insurance Times and we shall not be responsible for the cash payments.

The Contents of this journal are copyright of The Insurance Times whose permission is necessary for reproduction in whole or in part. The views expressed by contributors or reviewers in this journal do not necessarily reflect the opinion of The Insurance Times and the journal can not be held responsible for them. All disputes subject to Kolkata jurisdiction only.

Publisher Sushil Kumar Agarwala, 31/1, Sadananda Road, P.S. Kalighat, Kolkata - 700 026, India.

Printed by Satyajug Employee Co Operative Industrial Ltd, 13, Prafulla Sarkar Street, Kolkata - 700 072.

India's political and economical scenario is changing fast since last general election in May, 2019 wherein Narendra Modi Government secured majority. The Modi govt delivered many poll promises like passing of triple talaq bill and abrogation of article 370.

The new Motor Vehicles act which includes higher penalties for Traffic violation will be implemented w.e.f 1st September, 2019.

Nonlife insurers have will use the Aadhaar Data of policy holders to build a KYC registry and track claims data to prevent fraud.

IRDAI has invited applications to make use of the 'Regulatory Sandbox Approach' for innovation and growth in the insurance sector. A sand box is a methodology where insurers and other stakeholders can experiment, test and innovate financial products without worrying about regulatory norms for a specific period of time.

IRDAI has recently fined the web aggregator Policybazaar for a huge sum of Rs. 1.11 crore. The case pertained to the year 2016 wherein many violations were observed by the regulator. It took more than 3 years for the regulator to pronounce the judgement. IRDAI should expedite the audit and observations as soon as possible so that companies may implement corrective measures.

The fraudulent calls for selling insurance policies in name of Insurance Verification department are continuing relentlessly. IRDAI has not been able to stop the Insurers/Intermediaries from misselling. IRDAI should take some stringent criminal action rather than issuing advisories to stop this menace.

Contents

NEWS

General Insurance News	05
IRDAI News	07
LIC News	09
Health Insurance News	11
Private Life Insurance News	13
International News	15

ARTICLES

Modern and Emerging risk-Mental Illness <i>Sanjay Singh</i>	17
'Rainstorms- Floods- Deluge' ... Are Insurable? <i>K. L. Naik</i>	20
Artificial Intelligence in Life Insurance Industry <i>Ganesh Iyer</i>	22
Why life insurance is important to Millennials? <i>Paramesh Kumar S</i>	25
The Role of Information Technology in Terms of Social Security Strategies for Women in Insurance <i>Manisha Mathur</i>	33

PRODUCTS (Life-Non-Life)

Jeevan Amar <i>from Life Insurance Corporation of India</i>	37
Individual Cyber Safe Insurance Policy <i>from Bajaj Allianz Allianz General Insurance Co. Ltd</i>	39

FEATURES

BIMTECH tie-up with BFIN for Executive Education in Nepal	29
Seminar on "liability Insurance - Underwriting and Claims Settlement" by Kolkata Insurance Institute	30
PABL & Financial Express - Roundtable Session	31
Kolkata Insurance Institute holds seminar on "Motor Own Damage - Quick Relief to the Victim"	38
LEGAL	41
IRDAI Circular	43
Car owners to have more flexibility in choosing their insurers	46
Let AI do the health check	48
Statistics - Non Life	51
Gross direct premium underwritten for and upto the month of July, 2019 ..	53
Statistics - Life Insurance	54
Glossary / Poll	56



ARTIFICIAL INTELLIGENCE IN LIFE INSURANCE INDUSTRY




Artificial Intelligence, popularly known as AI, is a very commonly used word for the last few years in the insurance industry. As the name suggests, "Artificial" is not "Natural / Human". But it is important to understand that Artificial Intelligence is a human designed modelling, it is not a different system in itself. It's a logic used to learn from the past experiences of the available data and create intelligence therefrom because by definition, Intelligence is ability to acquire and apply knowledge and skills. Knowledge means facts, information, and skills acquired through experience or education; the theoretical or practical understanding of a subject.

So Artificial Intelligence is about repeatedly and seamlessly aping human intelligence and knowledge based on experience and applying logic as it would have been applied

by a human being. There are various tools and applications of AI. Machine Learning (ML), Natural Language Processing (NLP), Robotics Process Automation (RPA), Speech Recognition (SR), Vision Systems (including Face Recognition) are all different types of Applications / Tools of AI. Machine Learning (ML) is about an application / logic that can automatically learn on its own without being specifically programmed to do like that.

It learns from the past experiences and trends and actually improves with experience. AI and ML are the buzz words in the last couple of years and there are many myths and notions about AI, ML etc. Though ML is an application of AI, which is technically nothing but acquisition of knowledge or skill, it is very commonly and often used as a conjunction or conjoint of AI in normal communications.

While the words analysis and analytics are also interchangeably used, there is a wide difference between the same. Analytics is not same in any way as a trend analysis or analytical reports generated through spreadsheets. Analytics has the ability to use all available data including unstructured information and putting it in the right context of prediction. Also, unlike spreadsheets

	<i>About the author</i>
	Ganesh Iyer B.Sc. (Chem.), A.C.A. Chief Executive Officer Iyer's Pro-Risk Group

and normal SQL queries, it has an ability to analyze a large number of variables. The biggest advantage of AI is technically customer one view and avoidance of multiple data versions.

AI is going to be future in many industries. The future of the Insurance industry will be heavily dependent on Artificial Intelligence in the years to come. AI will play an important role right from business planning to product designing to customer acquisition to customer onboarding to servicing to claims & risk management. Infact, the application of AI is already begun both in the Life and General Insurance Industry. We bring forth some of the major applications in the Life Insurance industry in this article.

The Life Insurance industry is already using AI in the fields of Client Acquisition&Onboarding,Pre-Approved Sum Assured to clients, Customer Propensity identification, Product Pitch prediction, Persistency Management, Cross-sell/ Up-sell, Risk Management through predictive modelling of bad claims etc. Companies have created dedicated Analytics &Business Insights functions to look at business in a very specific microscopic view.

Amrit Singh, Senior Vice President & Head - Strategy, Investor Relations and Analytics for Max Life Insurance says "we have created a dedicated and specialized team "AI works" which is responsible for developing and delivering cutting edge Business First AI solutions. This shows our commitment and focus to ensure Max Life remains an Analytics focused organization.

Client Acquisition & Onboarding :

AI has the ability to identify the right customer, his preference and his financial capabilities. "We have models that predict customer propensity to buy, recommend the right product as well as the optimum ticket size" says Francis Rodrigues, who is an SVP, Business Insights, Data Labs&Innovation for HDFCLife Insurance. "The predictive models that we have used at the time of onboarding have helped us to save more than 6 Crores on an annual basis (increased conversion and lower early claims)" continues Francis on the onboarding process.

Cross-Sell/Up-Sell & PASA Campaigns :

AI can be used to predict the customer behaviour from his past dealings with the companies and through various business transactions and stages of life analysis. This assists companies in designing more scientific and data driven campaigns for cross-sell / up-sell and Pre-Approved Sum

Assured (PASA) business. "We use different types of interactions and transactions with customers, payment details, CRM data, credit bureau ratings etc. and understand the customer sentimentsbased on which we have created our Aureus SentiMeter," says Dr. Nilesh Karnik, who is a Data Scientist with Aureus Analytics.

Amrit Singh states that they run several PASA campaigns with their Banca partners, using a comprehensive ML predictive model engine, which not only filters most suitable customer profiles with pre-approved sum assured for PASA offers but also recommends the most suitable product. Francis Rodrigues says "We do have cross sell models that take customer demographics & interactions as inputs and decides the best segment for cross sell. Our Cross Sellpropensity models have provided a 42% lift in the appointment ratios".

Persistency Management :

Usage of AI took a big leap in the Persistency Management process of most Life Insurance Companies in the country. This is clearly visible through the published persistency reports, which shows significant improvement in persistency ratios of various insurers in all the buckets from 13th month to 61st month. AI tools and techniques have assisted companies in identifying their priorities and right set of customers through very good predictive models.

Francis says that theyhave a host of models that predict customer's propensity for renewals and decides the persistency strategy that is to be employed for different segments of customers. Amrit states that their models are built using advanced machine learning algorithms like gradient boosting, support vector machines and deep neural nets.

Post issuance we are using host of predictive models to enhance customer servicing, retention efforts and cross-sell / up-sell campaigns. "We use predictive models with artificial intelligence based customer retention solution, which enables the renewals team to make intelligent decisions by optimizing customer retention effort through focus on high risk customers. At the heart of our artificial intelligence solution is combination of Deep Learning classification algorithms - FNN (Feed Forward Neural Network) and LSTM (Long Short TermMemory) algorithm and is able to deliver 99% accuracy," says Amrit.

He continues by stating that the outcomes of their AI based customer retention model indicate a substantial reduction

in renewal costs without any drop in renewal income. Amrit says "Reaching out to the customers for reminders, only when necessary, has resulted in enhanced customer experience reflected in higher customer satisfaction and better NPS scores".

Assisting Business Processes:

Life Insurers have also started using AI in Sales Team Recruitments and Agent Onboarding process. Also, they have started using various AI tools in improving business quality and revenues through right pitching. Francis says, "Apart from customer analytics, we use predictive modelling and machine learning to identify agents / FLS who are at the risk of attrition. This enables us to run proactive interventions to reduce the attrition and retain talent".

Amrit reaffirms that even Max Life uses AI techniques for the same and also adds further, "By using AI techniques like Deep Learning and NLP, we have now reached new levels of entire value chain to enable revenue enhancement activities, to reduce operational cost, to reduce friction and enhance customer experience and to acquire superior quality of book. We run smart prospecting campaigns across various digital platforms which have affinity towards financial services to create insurance awareness among the relevant audience.

We use algorithm based targeting and purchase models that allows us to reach out/re-market to our target audience at the most optimized costs. We have tie-ups with leading Web Aggregators and Digital Brokers like Policy Bazaar and Cover Fox to reach out to customers looking for purchasing life insurance online".

Advanced & Scientific Risk Management

Risk Management has been the core of all insurance companies and there has always been a focus on this aspect. While Underwriting is the major filter before issuance and the Claims is the final filter before a claim settlement, AI has brought in a new flavor to these filters using a more scientific logic. Now insurers use a trend analysis and past experience using multiple variables and are able to predict probable frauds. Thanks to Artificial Intelligence. As this matures further, this will be the real future of underwriting in the coming years.

At HDFC Life, the risk fraud claims are calculated to screen customers using early claims models at the customer onboarding stage itself. "Apart from the early claims models, we have made few in-roads in building in-house artificial

intelligence capabilities, which are in various stages of testing and deployment, like Face-Sense and Emolyzer / Sentylyzer," says Francis. He further adds, "Face-sense uses computer vision capabilities to identify customers & compare them against their KYC images, acting as an additional layer of risk mitigation while processing payouts at branches, while Emolyzer/Sentylyzer uses Voice and text analysis capabilities developed to identify the emotions or sentiments basis their voice-calls & email communications".

Similarly, the policy issuance process of Max Life also uses a predictive underwriting engine which assesses the 360 degree risk of likelihood of an early claim, lapsation and likelihood of fraud upfront and recommends policies which may require additional verification by an underwriter. Amrit says, "We have a two pronged approach towards reducing frauds - one at the Underwriting stage, as mentioned above and the second, at claims stage, where we are aiding our claims team to identify possible fraudulent claims and thereby focusing investigation only on such claims rather than on all claims.

This has enabled us to not only proactively catch risky and fraudulent policies at the issuance stage rather than rejecting them at the claims stage as this comprehensive engine includes models for medical risk, financial risk, Persistency and customer propensity to buy LI policy, but also in becoming industry number one in claims paid ratio".

This is just the beginning. Lot more to happen in this area. While Robotics (RPA) is already started in the Banking sector, probably we shall see more of that in the Insurance sector as well. A combination of various tools of AI, including RPA, may play a major role in Financial Underwriting going ahead. We may see more of mathematics and statistics based AI in future which will be used to design various insurance products. Let's look at more of AI and the confusing interchangeably used term ML in the next edition as well.

To conclude the first part, let's understand that Machine Learning is a basic logical application of Artificial Intelligence which is a study of various algorithms which automatically improve by learning each experience. So let's not forget one basic philosophy. There are limitations to Artificial Intelligence as well. It is about learning from existing. If existing is an error, the resultant will be an error. It is just common sense that an Artificial Intelligence or an Artificial Superintelligence is just a hypothetical replica of the thoughts of the person/s involved in the designing of the same.

..... to be continued □