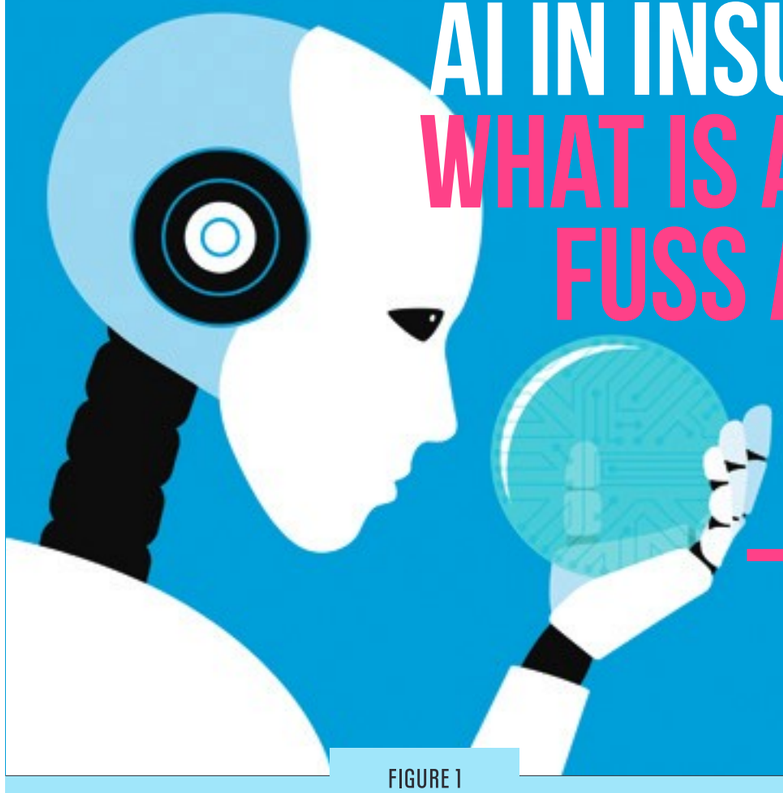
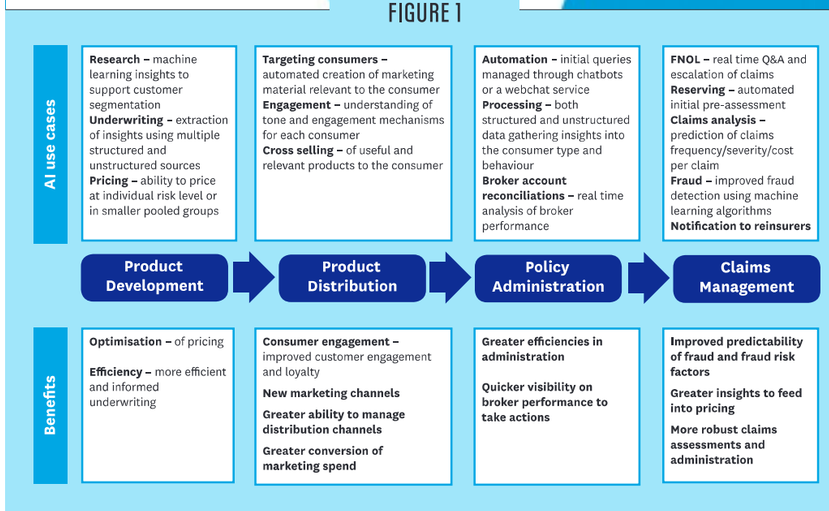
AI IN INSURANCE WHAT IS ALL THE FUSS ABOUT?



There has been a buzz around artificial intelligence and machine learning across the insurance industry – particularly in hyper-competitive markets such as the UK motor market and also in property and casualty insurance.

FIGURE 1



The evolution has been as a result of more data becoming available and enhancements in the way technology is used to harness its insights. Changes in consumer behaviour, access to quotes from price comparison websites, and the developments of the Insurance Act in the UK have put insurers under increased pricing pressures and the need to reduce their expense base.

IBM estimates that there will be 43 trillion gigabytes of data available this year – an increase of 300 times compared to 2005. The uses of machine learning, which is a sub-field of artificial intelligence (AI), can unlock data value and help insurance companies find better books of business, improve their pricing structure and continue to innovate, in order to comply with regulations and stay afloat. Today, if insurers are not using advanced data analytics and AI, they are likely to be selected against even in markets they understand very well.

However, the penetration of these new technologies in the insurance industry is still low. One of the major factors is that many in the industry are still in the dark on how they work and how to use the technology effectively.

WHAT EXACTLY IS AI?

The standard definition of AI says that '...it is the development of computer systems that perform tasks normally requiring human intelligence. The tasks performed can be things like visual perception, speech recognition, decision making and translation between languages'.

Machine learning involves training a mathematical model to find patterns and execute decisions autonomously or gain important insights that can help improve operational efficiency and performance. The machine learning algorithm has the capacity to analyse underlying data and find the most important data features or attributes that can help in building a predictive model. This process is not static, it is dynamic.

Essentially, we are using data to derive insights into the most pertinent factors that influence consumers and their behaviours in order to best service their needs and risk posed by them.

WHY IS THIS IMPORTANT?

Since the rise of the internet, consumer behaviour has been evolving. Consumers have access to information at a touch of a button – we no longer live rigid lives – we work flexibly to fit around preferred lifestyle choices and want our services to evolve as we do. The evolution of consumer behaviour has shifted consumer needs and therefore, a key service, insurance, needs to adapt.

WHERE CAN WE USE THIS IN THE VALUE CHAIN?

Figure 1 sets out some use cases for AI across the insurance value chain. We will consider pricing and claims handling in more detail.

PRICING

Insurers have long gathered data to understand the nature of the risks collected. Advances in computing power in conjunction with these new technologies offer a fundamental change in risk analysis. We can now perform a risk analysis at the granular level and on a continuous basis.

These new technologies could also have an impact on the related concept of risk-pooling. We are slowly moving away from risk-pooling, in which risks are shared between policyholders with broadly similar risk characteristics, to having the risk assessment at an individual level, so that each customer assumes and pays for the risk they pose to the insurer.

In the motor market, this is being achieved through the use of telematics devices – data points gathered from these devices coupled with traffic data and weather data can help better determine the customers' driving behaviours and help insurers better understand the risks involved.

The evolution in pricing and underwriting in motor has been the enabler for a shift from annual policies to monthly, weekly, daily or even hourly policies which are mostly useful for seasonal workers such as truck delivery drivers, Uber drivers etc.

CLAIMS MANAGEMENT

Claims handling and processing is a huge cost to an insurance company's bottom line. If an insurance company can decrease the response time of settlement for most of its claims, it can bring the costs down. The availability of data will reduce the need for costly audits and assessments as algorithms in the future can perform these tasks faster and at a lower cost.

Reducing the processing time of a claim and increasing the accuracy rate can translate into higher customer satisfaction and retention of customers at a time when both customer retention and customer loyalty is at a low. We have seen lots of work being done in this space with the use of chat-bots and conversational interfaces for customer on-boarding purposes and First Notice of Losses (FNOLS). Tasks such as pre-assessing claims while automating the damage evaluation process, automating fraud detection through rich data analysis or predicting patterns of claims volume could be more easily tackled.

FOOD FOR THOUGHT

While the benefits to insurers and the industry can be tremendous from implementing an AI-led solution, there are also risks that need to be managed and considered carefully. The use of all available data and historical information brings its own challenges and questions on ethics, and how we find a suitable balance in the way we use machines and involve 'human intelligence' to avoid consumer detriment or the creation of pools of customers who are discriminated against. ●

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