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Insurance Marketing Through AI: Real-World Examples

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As professionals, actuaries often hear of the enormous interest by both investors and company executives in the opportunity to leverage artificial intelligence, powered by statistical predictive modeling and machine learning, to transform the way that companies do business, both inside and outside of the financial services sector. As a part of our focus on Marketing Analytics, the SOA Marketing and Distribution Section shall provide insight into this exciting and emerging space for actuarial and insurance professionals.

This "interest" is not just hearsay. Last year, 1,356 AI-related startups in the U.S. raised a record $18.5 billion, according to the National Venture Capital Association.[1] A recent study by Research and Markets placed the total value globally of the Big Data Analytics market at $37.34 billion,[2] with North America accounting for 35 percent of the share of the overall market. While the buzzwords of this sector may be fluid over time, the focus does not appear to have changed: **companies are looking to optimize their business model by leveraging more information about their target customers.**

As the concepts and capabilities of this practice morph over time, it is paramount for professionals in the insurance sector, and actuaries in particular, to understand how artificial intelligence may be applied in their own business. Below, we'll discuss several such emerging examples within the financial services sector.

SERVICE RECOMMENDATIONS FOR HEALTH CARE

Common users of Netflix, Hulu, or Amazon reading this article may likely be familiar with these companies providing recommendations for new content or items to purchase. It is fairly common for these platforms within retail and media to use one's consumption history, other sources of information about the user, and models based on similar behavior of other users to provide such recommendations. The end goal is to drive more engagement and use of the platform, or higher sales of a product, leading to more revenue per user.

But, how would this fit in the insurance world, and what would be the proper objectives for our industry? One such example comes in improving health plan costs and performance.

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In 2017, U.S. technology company Accolade released its intelligence platform, Maya, for the group health insurance sector. According to their website,[3] Maya leverages a combination of artificial intelligence capabilities, including natural language processing and machine learning, to connect data across a broad range of medical data and customer interactions. The Maya engine then uses this information to develop insights and actionable recommendations for individual members within a group health plan.

An objective in this instance is to improve care through making these insights and recommendations available to clinicians and the member, such as escalating a high-risk member to a nurse care manager to prevent an adverse medical event. Not only can these types of capabilities create improved cost savings but also a much stronger experience for the health care user from improved quality of care. As per Accolade's website, in one case study for a large university health plan, the platform demonstrated an 11 percent reduction in hospital days leading to substantial savings in annual costs for the plan. The platform also reported 97 percent user satisfaction for the group.

CHATBOTS—FROM CUSTOMER SERVICE TO DIRECT MARKETING

However, focusing beyond customer satisfaction and service decision making of consumers, AI technologies also look to impact how consumers interact with companies at various points of the user journey. How might this look in the area of insurance?

For those familiar with online banking, it is no secret that AI is already having an impact on the customer experience through the proliferation of chatbots used for initial customer interactions. Defined better as a computer program designed to simulate conversation with human users using natural language processing, a chatbot enables scale and has primarily seen use in addressing upfront customer service questions related to questions around transactional items. Today, several banking institutions are using such bots to field simpler user questions such as how to view an account, transfer funds, or pay bills.

In the insurance sector, chatbots such as GEICO's Kate and Allstate's ABIE, have been introduced over recent years to assist users with varied aspects of customer service. Geico's Kate, as per GEICO's[4] website, helps customers obtain important but commonly requested information such as insurance cards. Allstate's ABIE, originally an internal tool used by Allstate agents to assist in the quoting and issuance of business insurance, is now available externally for small business owners to use for questions related to their business insurance needs.[5]

In addition to the customer service use-case, however, we are also seeing more direct involvement of such technologies in the way of the insurance sales cycle itself. In the past, online sales have largely been driven by a mix of self-service applications and live, human customer support. However, in 2017 Next Insurance, an InsurTech carrier focused in the business insurance space, launched its own chatbot to market small business insurance to targeted groups such as physical trainers and photographers. The bot, developed through a partnership with developer SmallTalk,[6] used Facebook messenger to communicate with prospective buyers and possessed functionality for quoting and purchasing of coverages.

In 2018, an InsurTech known as LeO launched its chatbot designed to serve as a virtual assistant for independent insurance brokerages. LeO's platform used natural language processing algorithms specifically designed for the insurance industry and included functionality for scheduling calls and meetings, collecting sales leads, and answering customer questions.

CUSTOMER PERCEPTION OF AI AND THE FUTURE WITHIN INSURANCE

A common question in all of these developments is how consumers feel about purchasing financial products, like insurance, through AI. After all, it is one thing to rent a movie or pick a brand of paper towels, it is completely another thing to determine how much life insurance one needs, or whether to refinance one's student loans.

An experimental study in 2019[7] of outbound sales calls by an Asian financial services company, conducted by researchers at Temple's Fox School of Business, Sichuan University, and Fudan University, indicated that disclosing the identity of the caller as being a chatbot reduced the purchase rate by 79.7 percent. Interestingly enough, the study also indicated that the chatbots, when not disclosed at the start of the call, performed well with a purchase rate nearly five times higher than "below average" human salespeople and nearly as high

as "proficient" salespeople, defined as the top 20 percent of sales personnel. These results indicate both opportunity and challenge for the expansion of chatbots—customer perception of the chatbot often is at odds with the effectiveness of the technology in practice.

This is a viewpoint seemingly echoed by the industry as well. As from a 2018 survey by Accenture,[8] 70 percent of insurance executives will seek to gain customer trust and confidence by being transparent in their AI-based decisions and actions.

Between these use-cases already in practice today, and the continued investment across the sector, many experts agree we shall observe more utilization of AI within the marketing and user experience of the insurance business models. However, the use-cases that materialize within the insurance sector may not be what everyone expects from other spaces such as retail. With the need to foster "trust" in the end consumer, as well as the complexity of regulation and product design, we may see AI used to enhance the activities of skilled staff and allow such teams to prioritize their focus and activities, rather than replace human professionals. Perhaps rather than picturing C3PO from Star Wars as your insurance agent, the correct analogy may be Iron Man from The Avengers—AI platforms would seek to empower the trained marketing professional to do their work better instead of replacing the business model altogether. ■

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ENDNOTES

1 *https://venturebeat.com/2020/01/14/ai-startups-raised-18-5-billion-in-2019-setting-new-funding-record/*

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3 *https://d10j0m6hqftivr.cloudfront.net/Accolade-Maya-One-Sheet-May2018-.pdf*

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5 *https://www.allstatenewsroom.com/news/just-ask-abie-allstate-business-insurance-shares-an-innovative-tool-to-help-small-business-owners-consumers-with-top-of-mind-questions/*

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7 *https://pubsonline.informs.org/doi/pdf/10.1287/mksc.2019.1192*

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