ART OR SCIENCE? CULTIVATING THE NEXT GENERATION OF UNDERWRITING TALENT HOLDS THE KEY

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Today, humans make the underwriting decisions with some help from machines. Tomorrow, machines will make the underwriting decisions with some help from humans.

Two centuries ago, life underwriting was pure art: the underwriter would interview the client in person and make an assessment. The concept of evidence-based underwriting emerged about a century ago when the science of health data gained credibility.[1] Underwriting, at present, is a fine balance of art and science.

The trend, however, is toward a fact-based scientific approach. Underwriting risk scoring is becoming increasingly evidence-based, with advances in the digitization of health care data and exponential improvements in predictive models. This is step one toward automation. In 1990, an actuary predicted that as health data became structured and digital in nature, underwriting risk calculations would become more automated, and the art of underwriting would gradually "die."[2] Thirty years later, that prediction is worth re-examining.

Future Automation and the Role of the Underwriter

Let us establish that an automated future for underwriting is a reality and a business necessity. In economics, a concept called the Balassa-Samuelson Effect explains how countries that do not adopt innovative technologies eventually experience higher prices (inflation), lower interest returns and lower currency exchange rates.[3] Similarly, the industries, professions or corporations that do not adopt emerging technologies experience higher costs, lower margins and eventually lower returns.[4]

Executive Summary *Life underwriting professionals are experiencing a paradigm shift in modus operandi, driven by the introduction of automation initiatives. Multiple consulting studies and analyses indicate that automation in underwriting is a valid business need. It will transform the role of the underwriter, so it assumes an even more valuable function within the industry. New technologies will enable the underwriter to better engage with clients, conduct research and develop innovative processes. The coevolution of humans and technology must be supported by business strategies that focus on identifying necessary underwriting skill sets, training machines and underwriters to become future-fit, and retaining the right talent. The convergence of the art of underwriting and the science of technology presents many challenges. Insurers and reinsurers must plan accordingly.*

For example, in 1913, Ford Motor Company introduced the innovative assembly line concept to manufacture cars. This technology reduced car production time from 12 hours to 2.5 hours, a 500% productivity boost.[5] Compared to the competition, Ford produced more cars at lower costs and improved the quality of each car, as well. At that time, Ford also offered the highest wage rate in the industry. The underwriting equivalent would be the automation of tasks increasing the underwriting capacity of an organization, lowering the underwriting costs, improving the quality of underwriting decisions, and boosting the earning potential of every underwriter with the right skill set.

A common concern associated with the coevolution of robotic automation and underwriting processes is automation could put underwriters out of their

jobs. Let us look at an example from a closely related industry to assess this concern. In the late 1960s, automated teller machines (ATMs) were introduced for retail banking.[6] Bank employees feared the teller/cashier jobs would vaporize. The reality was bank teller jobs more than doubled in the first decade of ATMs and have since grown at 2% (equal to the rate of GDP growth) annually.[7]

What triggered the explosive increase in teller jobs? The banks re-trained their tellers to do more than just cash counting. Tellers learned to spend more time in customer engagement, product upselling and daily branch management. This made tellers more valuable to a bank compared to the pre-ATM era. Similarly, automation in underwriting will enable underwriters to focus on valuable tasks beyond just risk scoring. This will increase the worth of their skills and lead to higher demand. In addition, according to the 2017 ALU Life Underwriter Census, half of the life underwriters will retire in the next 10 years.[8] With automation and a retiring workforce, underwriting promises to become a highly sought-after profession.

Three Challenges to Effective Coevolution

The established consensus is automation in underwriting is a necessary boon. To achieve the future state combining robots and underwriters, however, the industry needs to address a few challenges and think through the long-term implications.

The first challenge: If robots do the risk scoring, then what will underwriters do? An Ernst & Young (EY) study suggests the future underwriter will be the custodian of the whole process. The underwriter will be an eclectic mix of sales executive, data scientist, customer advocate and innovator.[9] As this becomes the norm, current underwriters should consider upskilling themselves to become "future-fit." McKinsey & Company has projected the future underwriter will move away from today's commoditized role and instead act like the Chief Underwriter of his/her domain.[10]

The second challenge concerns the training of underwriters. Machines are going to take over the simpler cases, and experienced (human) underwriters will handle the complex cases containing extensive medical charts. The question is, where would junior underwriters work, and how would they receive training to become experienced professionals? In the near future, companies with a sound strategy and capability to cultivate the right talent will thrive. Underwriter training will need to include departmental rotations to understand aspects of customer engagement, data science, innovation philosophy and digital platforms.[11]

The third challenge in this future is inherent to the technology itself. Machine learning platforms that automate risk scoring are developed using past data. In the future, newer data sources like social media, the internet of things,[12] genetic testing[13] and even newly discovered health conditions will be available for underwriting decision making. While researchers and underwriters will understand the implications of this new information on risk scoring, machines will have to undergo a lag phase to accumulate enough data to be effective. In other words, the art of underwriting would still be more relevant than the science of automation in these newer cases. The artistic underwriters would chart the unknown territories and then train the machines to do their jobs.

The Winding Road Ahead

It is difficult to imagine a future of underwriting without a human touch. While today humans do the risk scoring and decision making in underwriting, machines/robots help them make these decisions faster and better. In the future, underwriters will be training the robots to analyze client applications, develop risk scores, apply underwriting guidelines and issue policies. As with bank tellers years ago, these future human underwriters will need to adapt and develop the skills to serve as the guardians of complex, scientific and robotic-based underwriting processes. The focus should be on recruiting, training, cultivating and retaining the right underwriting talent. Future underwriting teams will be more than just groups of medically savvy individuals. They will be a mix of technology enthusiasts, data scientists, medical professionals, management intellectuals and "super smart robots."

Notes
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About the Author

Rahul Garg, MD, is a physician turned management professional who is passionate to facilitate the transformation of life and health related professional services. A degree in medicine and an MBA have enabled Rahul to wear multiple hats as a clinician, health care strategist and an executive consultant for the insurance organizations. Rahul's work in digital health has facilitated governments, private corporations and insurance providers in transforming the legacy practices into sustainable digital cultures. Previously, Rahul authored thought leadership white papers addressing the future outlook of life underwriting, challenges of implementing blockchain in health care, fail-and-success factors for digital health, and the possibilities created by artificially intelligent solutions. Rahul is currently working on the RGA Underwriting Solutions Team, based out of Toronto.