

Digital Insurance

How can AI boost commercial insurance underwriting

June 12, 2024

By [Sathish Kumar Manimuthu](#), CTO, NeuralMetrics

The world of commercial insurance underwriting is rife with challenges. One of the most pressing issues is the constant struggle to sustain profitable growth through proficient risk assessment. However, not all risks within select business classes can be underwritten effectively. This leads to underwriting teams needing to review all policies and portfolios to ensure consistent appetite alignment, a process that can be both time-consuming and resource-intensive.

The simple answer might be to hire more underwriters. But adding new underwriting talent isn't easy. Not only is there a recruiting challenge throughout the insurance sector, but accomplished, refined underwriting requires a unique skill set and experience level. It often takes years for underwriters to learn all of the nuances. However, with the emergence of [AI agents as the next evolution of generative AI](#), insurers have a powerful tool at their disposal. These agents won't replace humans, but they can learn and be trained to enhance underwriters' capabilities significantly, making the entire commercial underwriting process more effective and efficient.

AI agents are not just another tool in the underwriting process. They offer unique benefits that transcend traditional AI underwriting capabilities. For instance, they can effectively become risk assessment or content classification agents, bolstering underwriting workflows. Their real-time learning and adaptive capabilities, along with the ability to self-calibrate or be recalibrated for continuous optimal performance, make them a powerful addition to underwriting processes.

Incorporating AI agents into the workflow

New AI advancements often lead to concerns about replacement. While AI agents can learn the nuances of specific underwriting processes, they do not absorb knowledge in a vacuum. They need expert underwriters to train them in different underwriting rules and help them make the same inferences they would. It's important to note that AI agents are not designed to replace underwriters but to enhance their capabilities and efficiency. They are tools that underwriters can use to streamline their work and gain the flexibility to focus on more complex tasks.

Think of AI agents as interns, learning from underwriters and working alongside them. They can handle simpler processes, freeing up underwriters to focus on more complex issues. For instance, AI agents can streamline commercial underwriting applications. Typically, the underwriter has to manually review each application to determine if it falls within the insurer's guidelines. Now, the underwriter can train the AI agent to ingest the company's guidelines. Once trained, the AI agent can quickly and accurately determine if the applications are within or outside the insurer's appetite, allowing the underwriter to concentrate on those requiring intervention.

AI agents can significantly reduce the time needed to complete specific processes, relieving underwriters of some of their workload. For example, premium audit reports require underwriters to review the information submitted by the insured or field team, input that information into the system, and apply state guidelines to ensure everything is in order. This process can be time-consuming. However, by teaching AI agents state guidelines and parameters for conducting the audit, the AI agent can review the submitted documents, apply the guidelines, and identify any incomplete or missing information. This can move the report forward in several hours rather than weeks or months, providing relief to underwriters.

Training the AI agent

AI agents are not instant solutions to underwriting workflow challenges. Insurers cannot simply deploy them within their underwriting workflows and expect all problems to be solved. The effectiveness of AI agents relies on the time and effort put into training them on various role-based processes.

This is where underwriter feedback becomes crucial. It's not just about optimizing the delivery of accurate results by AI agents but also about making their integration a collaborative effort — where underwriters' expertise and insights are valued and integral.

When deploying an AI agent, starting with simple processes is essential. For example, an underwriter could begin with portfolio management. Usually, underwriters would look at a random sample of accounts and ensure that those accounts are in the insurer's appetite. They can teach these same parameters to the AI agent. Using the AI agent's computing power, the entire portfolio can be reviewed expeditiously instead of spot-checking by underwriting teams.

Next, underwriters can teach the AI agent more complicated tasks that require inferences. Consider an insurer focusing on food establishments with a guideline to insure establishments where alcohol amounts to 30% or less of total sales. Underwriters can train the AI agent to check the percentage of alcohol sales and assess discrepancies between data points that could signify an issue, such as reported alcohol sales and hours of operation. A seasoned underwriter would be wary of a restaurant applicant that closes at midnight and reports alcohol as 30% or less of its total sales. The underwriter can train this exact inference into the AI agent's workflow to ensure the alignment of both variables.

AI agents can provide much-needed assistance to underwriters. They are not intended to replace underwriters but to complement their work. Not only will they be able to complete tasks quickly, but once trained, AI agents can self-learn and harness some of the same nuanced logic underwriters apply to risk assessment. By incorporating AI agents into underwriting processes, insurers can grow their book of business faster while increasing the precision and productivity of their underwriting teams.