NeuralMetrics™

Transforming Commercial Lines Underwriting with AI and Cognitive Technologies

In a roundtable dialogue, NeuralMetrics CEO **Prakash Vasant** and technical co-founder **Marcus Daley** discuss how property/casualty insurance organizations of all sizes can leverage AI to quickly classify and evaluate commercial risks, and price and quote policies with precision.

Prakash Vasant

Marcus Daley

Q: How is commercial underwriting being impacted by technology, specifically artificial intelligence and natural language processing?

Prakash Vasant (PV): The digitization of commercial underwriting is becoming increasingly significant. Traditional risk-assessment workflows, static data sourcing, and legacy systems are no longer sufficient for insurance organizations to remain competitive in the modern economy. With the advancement and refinement of intelligent technologies, we have entered a new era of underwriting — where human knowledge is combined with real-time data and responsive automation, to deliver quicker and more accurate underwriting judgments for evaluating, pricing, and quoting all types of commercial risk.

In the past, agents and insurers had to search manually for risk data, and even then, would often have only limited information to understand commercial exposures. Now, insurers can get classification codes and deep risk insights about businesses with just a company name, address, and email or website.

Marcus Daley (MD): Traditionally, commercial underwriting has been a labor-intensive and time-consuming process. Underwriters required a thorough and detailed understanding of insurable businesses and their risk factors. This was especially challenging in the small and medium business sector, where data was often scarce and costly to obtain. The process often involved a manual and systematic approach to research, including gathering information on the business location and its surroundings, conducting virtual or in-person inspections of the property, reviewing the business operations and practices, and more.

By utilizing AI at NeuralMetrics, we can provide more comprehensive and rapid risk assessment, almost in real time. We also design predefined risk qualification questions for specific business segments, which can be further tailored for risk appetite and other unique insurer requirements by insurers. Our AI must cater to each insurer's specific requirements. However, personalizing the solution does not necessarily mean incurring high costs. If an insurer is looking for a specific answer to a question, and the data is available, we can deliver it with confidence.

Q: What's more important: understanding the risk faster or getting better information on the risk quality?

PV: In today's competitive insurance landscape, speed is of the essence for insurance organizations. The traditional turnaround time of weeks or even days to evaluate, quote, and bind policies is no longer acceptable. However, accuracy in underwriting is equally critical. Even if the technology works quickly, speed becomes irrelevant if an insurer cannot obtain accurate risk-evaluation information. For example, an underwriter may use an automated data-delivery solution to prefill underwriting questions. Still, if the answers provided contain errors or inconsistencies, the underwriter will have to spend hours doing manual research to find the correct information.

Carriers must prioritize both speed and accuracy in sourcing dependable underwriting data for precise risk evaluation. With the help of today, cognitive technology, a range of useful, timely data becomes available to strike a good balance in delivering comprehensive and fair policy pricing for both insurers and their commercial policyholders.

Q: How important is transparent data sourcing in AI-assisted commercial underwriting?

MD: Insurance organizations must actively govern AI systems due to increasing regulatory pressures. All organizations must have an AI governance platform to prevent privacy and data protection law violations, discrimination or bias allegations, and unfair practices.

At NeuralMetrics, we ensure complete transparency for the data used by our platform to determine risk factors. Underwriters can scrutinize risk assessment questions and examine each information source. If they have any concerns, they can confirm the suitability of the data in real time.

Q: How can AI and other cognitive technologies benefit uninsured or underinsured commercial enterprises?

PV: The small and medium business sector (SMB) represent a significant force in the economy, and many have unique risk profiles and face a variety of hazards and exposures. From the insurer's perspective, the task of its underwriters — who must assess risks for all types of small/medium and larger businesses, and reliably collect an array of information — can be an enormous challenge. Overall, in the commercial sector, not just small and medium businesses, there is often a limited amount of readily available risk data, which can be a significant roadblock for fast, complete underwriting.

At our company, we leverage AI and natural language processing to address this challenge effectively. With very little identifying input, we can extract critical information to classify businesses and ascertain their risks. Our innovative and transparent approach to risk data extraction from public sources in real time adds value to an evolving commercial underwriting process and competitive environment where traditional tools do not suffice.

MD: Small and medium-sized businesses present an intriguing opportunity for agents and insurers. This market segment is often neglected and can encounter difficulties obtaining insurance. Insurers may not have the tools and data for accurate risk assessment, and the businesses may not have the knowledge and motivation to secure appropriate coverages, especially if they perceive comprehensive insurance as an additional expense.

MD: At our company, we view SMBs as a high-volume market that can generate high-margin profits for insurers, while providing suitable coverage for policyholders. Through our open and unbiased processes, we can offer a solution to insurers looking to serve uninsured and underinsured SMBs. We can help drive insurance adoption by SMBs and support the growth of insurance organizations by streamlining underwriting processes, boosting straight-through processing, and ensuring accurate and fair premium pricing, based on transparent and verifiable data sources. It's also worth noting many of the same benefits apply to workflows for large commercial lines of business, where underwriters are much more hands-on for personalized coverages and pricing, but nevertheless still require real-time access to reliable and transparent risk data.

Q: What do these technological advancements mean for the future of underwriting?

MD: When conducting risk assessment, underwriters usually analyze historical trends to determine loss incidences, exposures, and risk characteristics related to a line of business. However, the next step in underwriting evolution may involve shifting from exclusively focusing on historical loss information to adopting a more data-driven decision-making process. This approach can allow underwriters to leverage data analytics to identify viable price points for accepting and writing specific risks, rather than avoiding business classes altogether.

AI-enabled technology can offer access to vast reservoirs of structured and unstructured data, mostly available in the public domain and easily accessible to underwriters. As a result, insurance organizations could more accurately classify their markets, identify risk attributes, and confidently decide their appetite for expanding or competing in diverse business classes to boost productivity and profitable growth.