Accelerating Performance

Risk management systems are taking on a power and prominence that were previously unimaginable.

By Alex Wright



Risk management systems, boosted by AI, are performing at a level not seen before.

isk management systems have improved insurance processes beyond recognition over the past decade.

Whether it's deploying them to track policy issuance or assisting in claims management, or any number of administrative functions, they have proved to be a game-changer for brokers, carriers and insureds alike.

And thanks to significant investment and advances in automation, artificial intelligence (AI) and machine learning (ML), a new wave of smart technology is taking risk management systems (RMS) to a whole new level.

This new breed of RMS is providing risk managers and insurance professionals with a broader view of exposures, assets and valuations, while enabling them to mitigate against emerging risks and to control losses much more effectively.

"Artificial intelligence and machine learning are significantly transforming risk management and insurance practices, offering unparalleled advantages in understanding, managing and transferring risk," said Travis MacMillian, president, Americas at Xceedance.

"These technologies, while new to the insurance ecosystem, are changing daily with an increased ability to impact the risk management process and they contribute in numerous ways such as: enhanced risk assessment and prediction; improved efficiency in claims processing; personalized policy offerings; dynamic risk management; advanced data analytics for risk mitigation; regulatory compliance and reporting; and customer experience and interaction."

However, as businesses are undergoing accelerated digital transformation and given the ever-evolving nature of risk, these systems need to keep pace to ensure that they continue to provide the best solution.

The biggest driver of this technological revolution is AI, with AI technologies expected to add up to \$1.1 trillion in potential annual value for the global insurance industry, according to McKinsey. Essentially, the technology can be used to make workflow processes far quicker, and more efficient and cost-effective, as well as providing more accurate and insightful data analytics.

Incorporating AI and machine learning into insurance processes can also improve an insured's overall understanding of its asset values, enabling the company concerned to make more informed decisions about its coverage, risk management and financial planning.

To this end, the technology can be used in a range of ways, including automated valuation models, predictive analytics, portfolio optimization, fraud detection, natural language processing, market intelligence, personalized risk assessments, financial planning and forecasting, and continuous monitoring.



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By streamlining the entire pricing and underwriting ecosystem, digital tools can enable actuaries to build, deploy and refine their models in a matter of hours and days rather than weeks or even months. Through eliminating the need for rekeying, they can reduce binding times by up to half, allowing underwriters to respond faster to brokers and focus more on value-added work. They can also ensure more robust governance, including automated testing and built-in peer review processes.

RISK MITIGATION AND MANAGEMENT

AI and data science is enabling vast improvements in risk mitigation and management. By using the technology to quickly and accurately assess risks and better predict outcomes, it has become an invaluable tool for risk managers.

But in order to be effective, algorithms need to be correctly trained on the relevant data sets. That is particularly important when dealing

SUMMARY

- Artificial intelligence is supercharging the performance of risk management systems.
- **One key function** of a risk management system is identifying network breach threats.
- **Better pricing decisions** and workflow improvement are additional traits of good RMS.





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with newer and more dynamic risks such as cyber and climate change, given the vast amounts of data that are now available.

Ryan Dodd, CEO of Intrangic, said that risk management systems must provide the best way to assess a company's exposure. This is paramount when managing cyber risk, he said.

"The first and most valuable question that a risk management system must answer is 'How likely are we to experience a large breach?'" said Dodd.

"If you have a continuous, reliable, data-driven answer to that question, then the other risk management systems (like cyber risk quantification or automated detection and response with cyber controls) offered by the broker or carrier in the market become even more relevant to the insured."

Rather than looking merely at a firm's standard metrics such as number of employees, topline revenue, IT security budget and type of cyber controls, Intrangic focuses on the most predictive factors of not just the likelihood of a breach, but also the material impact on financial performance. By assessing and validating the risk based on a combination of cyber and financial factors, it looks at its security posture in real-time based on current threats.

CL AIMS

Traditionally, claims management has been a manual, time-consuming and expensive process. But due to the advent of AI, ML, data analytics and the cloud, it's now far faster, more efficient and less costly.

For example, AI-powered chatbots and virtual assistants can be used to engage in real-time interactions with claimants, answering their questions, guiding them through the claims process and providing them with updates on their claim. ML algorithms can also be used to analyze historical claims data to detect patterns of fraud, while cloud technology enables greater claims processing efficiency, scalability and security.

"Insurance data can now be analyzed intricately to extract actionable insights," said Maha Santaram, director of Aspire Systems' insurance practice. "Insurers can collect, store and analyze vast amounts of structured and unstructured data from sources such as customer profiles or social media, among others."

ALL-IN-ONE SOLUTION

Guillaume Bonnissent, CEO of Quotech, has developed a platform that brings all of these various systems together. By recording all of the data in one place, it links all parts of the insurance value chain, including policy

administration, document and wording repositories, claims, accounting and compliance, to make the process more efficient and accurate, and less expensive, with less room for human error.

Bonnissent said that, using the right data, AI can improve the performance of such risk management systems markedly. He identified three key advantages that the technology

can bring: to determine the best underwriter or loss adjustor for a particular risk; to improve an insurer's rating model; and to provide better data analysis.

"AI can be used in a host of different applications," said Bonnissent. "For example, it can be used to assess the geographical features around properties and the quality of roofs

and construction, as well as keeping insurers informed of large events that have happened or are likely to have happened in the world, such as floods, wildfires and tornadoes, by using algorithms to analyse potential

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