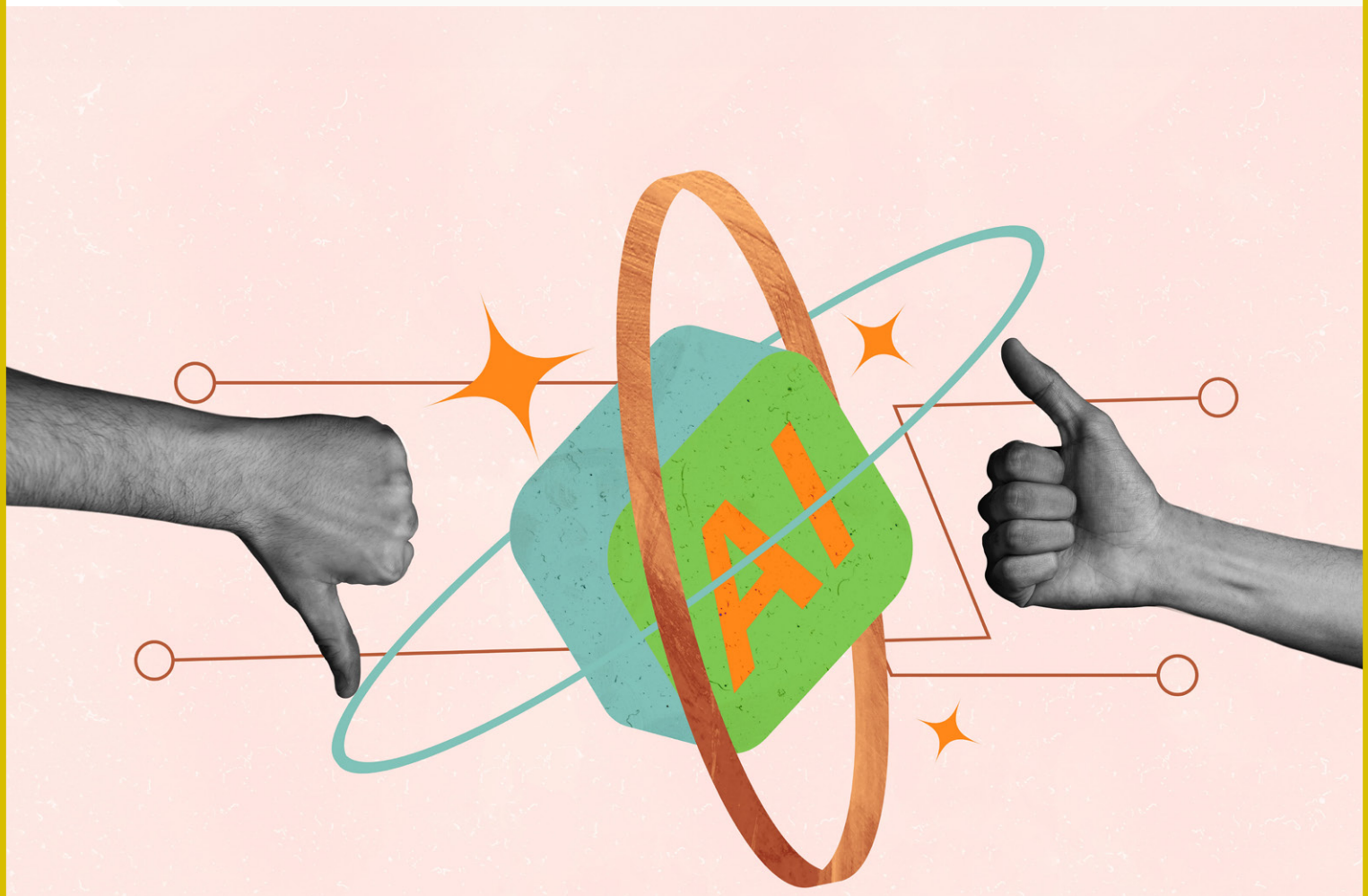
INTERVIEW

BY **JENNIFER BAKER**

ADDRESSING AI RISK IN THE INDUSTRY

Speaking to The European Actuary, Claudio Senatore Reso, Vice Chair of the AAE's data and AI working group, discussed the evolution of AI adoption in the insurance industry. He emphasised the need for updated actuarial standards and guidelines to address AI's rapid evolution and highlighted the importance of explainability, fairness and the need for a proactive approach to AI. >



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How would you describe the current state of AI adoption within the European actuarial profession?

'When I joined this working group around four years ago, it was definitely smaller because the mega trend of ChatGPT and AI was not there. I also see a difference in terms of interest before and after 2022. Our working group is primarily focused on AI adoption. But not only on adoption. We are also looking at education, use cases, regulation – really 360 degrees of attention on AI. We look at what insurance companies are doing from a more actuarial perspective. We also look at the underwriting world.

What we see are two trends: AI as a tool, sometimes from an external software provider, or in some cases, internally developed.

But in my opinion, there is a second trend of AI that is not the tool adoption, it is the change in how you see and shape the risk. This is conceptually different, because it's not the actuary waiting for the adoption of a new tool. It's the actuary as a figure that goes beyond what he studied at the university, beyond the usual professional courses that he has to do. We, as a profession, need to constantly update. So this second trend is more something based on the individual actuary that wants to push himself beyond the established model.

But this is key because in AI, there might be very, very different models. As actuaries, we need to take this opportunity to view the risk from a different perspective, to be able to shape the risk in a different way, to deconstruct and reconstruct the statistical signal in different ways using these models.'

The AAE has been actively engaging with regulators. What are the key messages actuaries are trying to convey to policymakers on AI governance? You contributed to the AAE's response to EIOPA's Opinion on AI Governance.

'So since the early discussion about the AI Act, there was the observation arising from across Europe that the AI definition adopted in the regulation is so large that to some extent, it covers very well established statistical models that we have used for 30 to 40 years – like the generalised linear models (GLM). Actuaries have been concerned from the very beginning that an additional burden of regulation on these models would not really help the profession.

In fact, in a letter from EIOPA clearly stated that in its opinion, some statistical models, like the GLMs, should not be considered in the AI Act for several reasons. The first is that they are already regulated by many regulations – Solvency II, GDPR, etc. The second is that, although they may fall under the definition of AI, they are not comparable with the complexity of LLM or similar models. We are actively engaged with the open and working group of data and AI, and this is an occasion to revitalise the discussion about this subject.' >

> ***What we are doing on principles is okay. But in our opinion, it's not enough, because we always want to raise the standards.***

In an AI-driven environment, how should responsibility be divided between actuaries, data scientists, and management when it comes to model outcomes?

'That's the $1 million question. Internally, we are doing research about that: Could the actuarial function be responsible for the risk of AI models? How to compute this risk? How to monitor AI models? My personal opinion is that AI is an opportunity for the actuary. It's an opportunity to enlarge the responsibilities of the profession and we are really well equipped to do that, because we know how to deal with risk.

Obviously, this brings pros and cons. The con is that the burden of work, of responsibility, is increasing, but you also have the pro that the exposure of actuaries within a company is increasing. So, it's not just a matter of responsibility, it's also a matter of expanding your influence and that's the point. Think about also to Agentic AI, a single agentic workflow simultaneously involves Model Provider, System Integrator, Deployer no single party sees the full chain. The reality is that the ownership of AI is not a handoff, it is an integration of all C-levels.'

Do current actuarial standards provide sufficient guidance for AI-based models, or is there a need for new professional standards at the European level?

'We did extensive research about Standards Guidelines, and we saw that some organisations have already updated their guidelines. Codes of conduct and guidelines with respect to AI are not easy, for several reasons, among which is the pace at which the AI is evolving. It's moving so fast, that in one week guidelines might be outdated.

In Europe, the principles set out in codes of conduct and professional guidelines – although not always explicitly referring to AI are grounded in such strong ethical, moral, and professional standards that they already encompass many of the key issues and risks associated with artificial intelligence. From this perspective, the foundational principles are sound and sufficiently robust. However, in our view, this is not enough: the objective should not be merely to rely on existing standards, but to continuously strengthen them and raise the level of responsibility and governance in response to the new challenges introduced by AI.'

Supervisors increasingly emphasise explainability. In your view, what level of explainability is realistically achievable for complex machine learning models in insurance?

'Explainability is definitely a key subject. The European Actuarial Association has devoted an entire paper to explainability, and we are talking about thousands of researchers working on that. To us as actuaries, we always have to explain models and functioning to less technical people. We are used to that, but obviously the level of complexity and complexity of the explainability of these models, went up. >

> *I don't think that you could really ever be replaced by AI*

There are already some good standards in the profession in terms of explainability. But we still have different approaches, depending on the country, depending on the regulator. We should aim to have a more standardised approach with respect to explainability across countries, so if you are adopting an LLM in Germany or in France or in Italy, you use the same maximum explainability indicators everywhere. This should simplify work for everyone. Obviously, in parallel, the profession needs to figure out which are the four or five main models. A common reporting framework could also really help on that, but we are not yet there.'

Looking ahead, what are the challenges and what would success look like for the AAE's work on AI over the next five years?

'There are different types of barriers that could make AI adoption more difficult and in some cases not possible. The AI Act is categorising some models as high risk. But this does not mean that it's making AI adoption impossible. From an infrastructure and IT perspective, there are the usual barriers that we had 5 years ago. In many cases, you have really old, fragmented or siloed IT architecture that does not make it easy. But AI definitely gives you a push.

The second barrier is the mindset. You have to change the mindset. If you only think about the new risks that AI brings to insurance companies, you will have problems. I see a lot of investment in trying to adopt AI, but not as much in education and people. We need a big investment, because we do need a change in mindset. Change in how you do things, and changing the everyday work of people is something really, really difficult.

But looking ahead, I'm absolutely optimistic. AI expands what you can understand, what you can do. What you would have understood, maybe in two weeks, now you need two hours. So I'm absolutely optimistic with respect to AI. But you need to be proactive in how you leverage it, not just in a passive way. If you leverage it proactively, actively, not lagging behind, then I don't think that you could really ever be replaced by it.' <

CLAUDIO SENATORE