

Carrier Management

Critical Information for P/C Carrier Executives

InsurTech Summit Report: Capturing Data to Underwrite With AI

June 12, 2024

While they come to the property/casualty insurance sector with very different backgrounds, and currently participate in unrelated segments of the market, two InsurTech executives agree that harnessing uncaptured data is a key to underwriting success.

Max Bruner, founder and chief executive officer of Anzen Insurance, an InsurTech MGA in the executive risk insurance space, and **Marcus Daley, technical co-founder of NeuralMetrics**, an InsurTech data provider that delivers risk insights to small business insurers, discussed the transformative role artificial intelligence is playing in insurance underwriting during [Carrier Management's InsurTech Summit 2024](#) in mid-May.

Daley, a career technologist with three decades of experience in technology management—helping to set up analytics and large-scale international technology operations, to grow startups and transform technology behind giant operations like S&P Global, Microsoft, and Intel—told CM Deputy Editor Elizabeth Blossfield that he and his partners at NeuralMetrics started focusing on unstructured data to serve small companies back in 2017.

“We didn’t feel like [small businesses] were getting the kind of coverage they needed, the kind of opportunities they needed. This wasn’t just in insurance. It was across the board,” he said, citing loans and other small business needs.

For insurers, “the challenge has been historically that a lot of database technologies were always forcing companies to have this well-structured dataset. In fact, there was always competition to have the largest, most well-structured dataset. [That’s] very rigid, and as you go down that long tail of information from those big, very robust datasets to those things that are sparse, it’s really hard to structure,” he said.

“Getting comfortable with working with unstructured data is key,” Daley said. “This doesn’t mean doing away with the well-structured data, but it does mean feeling comfortable with that long tail of data, and then, instead of relying upon hard relationships that say A is related to B and B is related to C and so on, [alternatively relying] upon mathematics to be able to derive what you’re looking for.”

“Getting comfortable with working with unstructured data is key. This doesn’t mean doing away with the well-structured data, but it does mean feeling comfortable with that long tail of data.”
Marcus Daley, NeuralMetrics

Said differently, when focusing on small and micro-businesses, the historical problem for carriers has been generating accurate insights and risk assessments from sparse data, NeuralMetrics states in its marketing materials. The InsurTech works to extrapolate relationships from sparse, unstructured data, deriving intelligence using language transformers and analyzers, machine learning, computational graphs and other state-of-the-art technology, and tailoring results to meet the underwriting needs of small business insurers.

(During a 2022 interview with Carrier Management, NeuralMetrics Co-Founder and CEO Prakash Vasant offered similar observations, noting, for example, that large public datasets don’t directly answer underwriting questions—such as the percentage of liquor sales at a restaurant. The InsurTech relies on technology to turn public data into risk insights.

Related article:

[Small Biz Commercial Underwriting Needs Real-Time Data—and Transparency: NeuralMetrics CEO](#)

“It is a new way of thinking,” Daley told Blossfield at the InsurTech Summit session, “AI for Underwriting Unleashed,” referring to the shift away from structured datasets and toward the idea of trusting machine-generated mathematics to reliably return the results insurers are seeking.

“For somebody with my history, it can be hard to have a mind shift like that,” he said, going on to suggest that any small business insurer hoping to be successful—and to be able to dive deep into the space of using AI for underwriting with unstructured data—needs to seek out a technologist within its organization “who can be the SME [subject matter expert], that person who’s really excited about it and can carry the torch in the company.”

Bruner, working in the specialty insurance space of management and executive liability, also stressed the power of unstructured data. “Two years ago, there’s no way we would be building the same business we’re building today. It’s such a massively unstructured data problem”—starting from the fact that “most people transact [these lines of business] in PDFs, and a lot of business is done over the phone and over email. That is unstructured. It is just data everywhere that’s uncaptured,” making it very hard to do anything with.

“Two years ago, the improvements in AI completely blew the doors off of what’s possible, and that really is why it’s so exciting today,” said Bruner, who started his career in foreign and energy policy working for the government and found his way into the insurance industry by building companies focused on machine learning, AI and computer vision—moving from crop insurance to auto insurance (at Metromile) and now management and executive liability.

Speed Wins

Bruner described how AI is helping underwriters overcome struggles with talent also, as they try to find ways to scale their talent and also uncover “the right operational efficiencies to run a profitable business.”

AI advancements in the last two years have provided Anzen with “an opportunity to inject tools into our workflow, whether it’s underwriting new risk or it’s placing risk with other markets. We are a wholesaler of executive liability, meaning cyber insurance, professional liability and management liability. These are incredibly complex lines of coverage. They take a ton of time for insureds to apply for. They take a ton of time for brokers to place and they take a ton of time for underwriters to underwrite. And the risk is enormous when you get it wrong.”

“Being able to basically build a copilot and streamline a lot of that workflow to enable everyone to get more time and leverage, and ultimately provide a better service to the end customer, [is] really our objective. And that’s the opportunity that we see today and on the very, very near horizon,” he stated.

“Amazingly, even in the executive liability space, which is known for weeks-, months-long underwriting times to get a quote, we’re seeing that speed really does win,” he said later in the session. “Some of the more successful carriers in our space are the ones that quote first, right? They underwrite fully. They don’t leave data. They look at everything. They don’t cut corners, [and] they’re really good at using third-party data. They’re really good, probably partnering with firms like NeuralMetrics and others, who offer bolt-on services that are necessary for them to be more streamlined.”

“Ultimately they are efficient, and they’re fast,” he said. “A lot of what we’re doing is working with those carriers to take baby steps, help them bite off pieces...like providing more structure with the submissions that come in, building APIs to help integrate the submission process and the quotes that come back into our quoting flow,” he said, responding to a question from Blossfield about how the InsurTech is helping insurers who are hesitant about AI to adjust their mindsets.

“Like many technology transitions of the past, I think we’re going to see this very incremental but very, very consistent, and I think much faster progression than we’ve seen over the last 20 years,” he predicted.

“Watching the insurance industry innovate has been like watching the tortoise slowly catch up to the hare, right? They’re going to win. You just don’t know when. They have the data, they’ve got all the resources, and I think we’re now in a really, really exciting moment for the industry,” Bruner said.

Data Wins

The two executives also offered advice about getting visibility into datasets and architecture used by the third-parties carriers are working with to uncover biases, advice about countering cyber attacks now being launched with AI tools, and described some existing AI use cases, like uncovering claims fraud.

Carrier claims data feeds back into underwriting, Bruner said.

“There are companies out there that have been doing this in a very manual way, [with] just massive [claim] datasets that they’ve collected over a long, long period of time,” Bruner said. “They haven’t really been using any sophisticated machine learning, and they have been successful.

“So, the thing that you always have to remember is that the data really matters. If you have the data, machine learning and artificial intelligence just make it easier to get to an answer, and [to] build it into an underwriting process,” he said. “That’s really where we focus. When we’re working with carriers and when we’re building our own tools, it really is all about collecting [data at] every step....It’s not just the standard stuff you might expect. It’s things like the clicks that go into a process. It is tagging and labeling data well so that you know how to use it, and you know how to find fraud...”

“This is frankly why the carrier datasets [of] people who’ve been underwriting for years, why what they have is so valuable, even if they don’t even know how to tap that value yet. And that’s probably the opportunity both for partnership with new tech companies and also for technology leaders within carriers as we move into the future—is for them to better understand that road map, to understand and label the data they have, to bring structure around it, and then to build the tools and the user experience for their underwriters to access that data and make it part of their underwriting process.”

Daley agreed. Talking about AI trends currently in the news, the NeuralMetrics executive said that there’s a competition for GPUs (the technology that processes the data for AI), and there’s a second race that’s all about data.

“One of my favorite sites, for example, Reddit, suddenly locked down,” he said, suggesting that users now have to login on the social news site to get questions answered. “They did that to gate the data because they’re now off selling that data—because there’s obviously huge value in the data that they collected over the last couple of decades,” Daley said.

“I think it’s very similar here in terms of the carriers. They have massive datasets, and I think a lot of times those have been discarded because they’re unstructured or whatever.”

That’s not a good idea in his view. “All data is valuable in a world where ultimately computing [power] will become a commodity. And expertise most certainly will become a commodity. Then obviously the data becomes the most valuable thing that you have,” he said.

The point, he stressed, is often overlooked. “People get fixated on that well-structured dataset, and they really need to expand beyond that to *everything*,” he said.