

# Following what works rather than just avoiding what doesn't: Data-driven underwriting

*The application of data analytics to the marine insurance sector relies on providing something which workers in the industry want, as well as something they need, was one of the messages put forward in a roundtable discussion at Marine Insurance Americas on June 2nd, hosted by AdvantageGo. Peter Birks reports*

The lead message of the roundtable was that current platforms and systems might not be agile enough to enable insurers to improve risk profiling and add new lines of business and products. Many marine insurers were operating on legacy platforms and these could make it difficult-to-impossible either to leverage data assets or to use analytics to improve underwriting decisions and risk selection.

The roundtable looked at how algorithmic-based underwriting could drive underwriting profitability and efficiencies through the use of multiple sources of data – internal and third-party-supplied – to help marine insurers maximize data insights, spot new and emerging markets, cross-sell opportunities and consider new business models.

The panelists brought a range of experiences to the table and provided insights into the practical implications of

## THE PARTICIPANTS

*Tom Anderson – Director of Sales, AdvantageGo*

*Andrew Kinsey – Senior Marine Risk Consultant, Allianz*

*Mike Karbassi – Chief Underwriting Officer, Corvus Insurance,*

*Drew Feldman – Head of Marine, CNA Hardy*

*Vitor Ribeiro – Head of Data, AM RE Syndicate Inc*

*Luke Wolmer, – Senior P&C Analytics Manager, Swiss Re*

*Susan Carr – AVP Technology and Operations, Great American Insurance – Ocean Marine Division*

trying to gain the benefits of data analytics, while not throwing out much valuable data that resided either within the legacy systems or even on paper-based records.

Moderator Tom Anderson, director of sales at AdvantageGo, asked the panel about the complexities, delicacy and specificities of the marine insurance sector. With global shipping networks growing ever more complex and “intelligent”, what were the implications for the marine insurance marketplace?

Andrew Kinsey, Senior Marine Risk Consultant, Allianz said that for him the key factor was addressing the human element, ensuring a service for the customer. “When we talk

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**Tom Anderson, AdvantageGo**



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***Andrew Kinsey, Allianz***



about the use of data, we have to give something that the client is interesting”, he said. Kinsey observed that ever since marine insurance started the decisions made by underwriters had been “written in blood”. By that Kinsey meant that action was taken after severe losses. But the result of this was that we had been teaching underwriters and customers what to avoid, rather than teaching them what to emulate. The reason for this was that, historically, collecting data had been expensive and difficult. Spending money on analyzing events where nothing went wrong was not seen as an efficient deployment of resources.

Now, however, with data analytics, it was possible to analyze successful voyages, using those as a pattern. Saying “do it this way”, rather than just saying “don’t do it this way”.

Mike Karbassi, Chief Underwriting Officer, Corvus Insurance, said that the company tried to think how data could be leveraged to benefit the client, the broker and the underwriter in the value chain. This made for better risk selection and for a better-informed policyholder. “I think that data aggregation has helped us become more precise underwriters, relying on objective analysis and the pro-active mitigation tools such as real time alerting that we can bring to policyholders to make sure a claim is avoided altogether”. Karbassi felt that, with data aggregation and analysis, the interests of all those in the insurance value chain were combined.

Drew Feldman, Head of Marine, CNA Hardy, observed that it was important to differentiate between data collection, aggregation, and analysis. He thought that it was important at the moment to look closely at the analysis part of data analytics. Data was arriving in huge quantities. The important

thing to do was to find out the right questions to ask. At the beginning one might not know what the right questions were to ask, so the analysis side tended to consist of asking a lot of questions, in order to find out what is relevant and what is not. After that has been done, the real analysis of the data can begin. “The data can tell us where we should ask more questions and where we can ask fewer questions”. Feldman said that everyone was looking to drive down combined ratios, and there were two ways to do this – lower the expense ratio or lower the loss ratio. Feldman said that it was probably less difficult to reduce the expense side by one, two or three percentage points than it was to knock four points of the loss ratio on a consistent basis.

Anderson asked Vitor Ribeiro, Head of Data, AM RE Syndicate Inc, about his company’s experiences through the past year and a half with the impacts of the Covid-19 pandemic. Ribeiro said that virtual meetings tended to be more focused, with “15-minute stand-ups” in the morning to define the key issues that needed to be addressed that day. However, some things were missed, particularly not being able to meet your colleagues face to face. Ribeiro noted that AM Re Syndicate had decided to generate its data analytics in-house, but they were a small well-knit team on target to write \$725m of business this year.

Luke Wolmer, Senior P&C Analytics Manager, Swiss Re, observed that insurers tended to have a pricing plan that they had been using for some time, not fully integrating new data into existing pricing plans. “The greatest lift we have seen in delivering value to clients is introducing new data ▶



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***Drew Feldman, CNA Hardy***



models”, he said. This was achieved both by making better uses of clients’ internal data. Wolmer noted that a number of insurers had a considerable amount of information provided to them by their customers, sitting there in text form but not collated or analyzed in group form. Applying text mining to this could compile useful data sources for analysis. Also, new third-party data had been introduced to help primary insurer clients. Satellite data had been useful in certain lines.

Looking at the data submission/data ingestion side, Susan Carr, AVP Technology and Operations, Great American Insurance – Ocean Marine Division, said that Great American had just implemented a new workflow system. She said that the quality of incoming submissions was “fair, but we could do better”.

Great American was automating the basics of it, with the intention of allowing experienced employees to classify the risk and determine the product it might be good for. One possibility that Carr said might be considered was augmenting internal data with external sources, which would mean that brokers would not be pressed to supply information that was available relatively easily from third-party sources. “That is something on the radar screen. But there is definitely room for improvement to free up time for higher value things in the chain”, she said.

Anderson noted that in the Marine Insurance Nordics conference there had been an interesting discussion around the thorny topic of data sharing. Drew Feldman said he thought that the marine industry did a better than average job of sharing data.

Andrew Kinsey said that the important thing with the data was to incorporate it and use it. Some metadata was not always being utilized; for example, near-miss reporting. Kinsey also said that progress with the analysis of data worked better if it was incremental, both in terms of efficiency and acceptance. “Rather than reinvent the wheel, find out how it will fit best with what exists. There’s a wealth of knowledge in the legacy systems and you can’t just throw that out.”

Another topic that generated conversation was third-party software versus internally developed software. Carr said that Great American had experimented with building its own software but that it was now coming down heavily on the side of buying it. The idea was to let the external source provide the packaged stuff which could easily be tweaked to be company-specific, leaving Great American the time to focus on the products being sold and the needs of the customer. She said that she had been “very pleased” with the quality of third-party products – ease of use and ease of configuration. “It was quite rapid for us to get in there and build the nuts and bolts of a project”.

Ribeiro said that AM Re decided to develop its own proprietary software, but without a single overriding focus. “We try to help the specialists do the best they can”, he said. This meant that data literacy was important. The specialists needed to understand the data that was being gathered and what it represented to generate questions on the data that we hold. “We can create relevant bespoke dashboards for employees to help us here. The small team could iterate quickly, which meant that, although the right answer might not be arrived at first time, it took only a short time to iterate again.”



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Feldman observed that differentiating between key information and noise was a growing issue. “I spend time with our data analysts and it is incumbent on me to educate them as to what we do. The more they understand about the industry, the more likely it is that they will avoid the wrong paths.” He noted, for example, that it might be observed that people with three vowels in their name had been making a larger number of claims. If you didn’t understand the industry you might say “we’ll stop writing policies for people with three vowels in their name”, but that would not be a sensible way to go, as anyone with any familiarity with insurance would know. Feldman also noted that the bigger the move to telematics, the more the insured began to understand how important information was when it came to solid underwriting.

Wolmer agreed that domain expertise was a challenging matter. For data analysts, there was a certain system shock when it came to insurance when compared with, for example, manufacturing. In the latter, the cost and expense elements tend to be relatively clear-cut and predictable. But in insurance the data was messy. When you add in limits and deductibles, it gets messier, and this could lead data analysts not familiar with the business down the wrong paths. “Data scientists can be brilliant with data but if they lack the insurance context what they build might not suit the adjusters or the underwriters”, he said.

Kinsey observed that connecting the data correctly was vital. The key was to make sure that the data was supporting the experts.

On the topic of future developments, and disruption, Karbassi said that he anticipated new and existing markets leaning

more on data for product launches. It could perhaps be used to cross-sell. One area for example was that of cyber-liability, something which many in the marine sector were not buying as a separate product, but for which they were not covered in their marine insurance policies.

Feldman saw the future as being underwriters needing to raise their game. By that he meant, just as data analysts working in the insurance sector need to gain some familiarity with the business to become effective, so did underwriters need to transition towards the concept of portfolio management rather than just individual risks, and to understand the basics of data analysis – regression and p values, etc. Wolmer agreed, adding that the presence of portfolio metrics on an underwriter’s “dashboard” would improve the efficiency of underwriting in the company.

The general conclusion of the panel was that data collection, aggregation and analysis had much to offer the industry on a macro and micro level. It could give insurers ideas for potential new products, it could tell them which of their customers would benefit from such products. And it could help in the correct pricing of those products.

From an individual standpoint, data analytics and application could help automate some tasks, freeing up staff for more high-value work. And the presence of “dashboards” meant that the role of individual underwriters would expand far beyond that of just writing individual risks within a certain limit. By connecting the dots of information, every underwriter could see the position of the company, thus facilitating more effective and speedy decision making, generating lower costs and lower losses in tandem. ⚓

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