Aim AI Investment at the Loss Ratio

John Hele, Executive Chair of Portage AI, said the first wave of insurance AI improved the expense ratio, and the next wave—built on data carriers already own—should improve the loss ratio. Following are excerpts from an interview.

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John Hele
Executive Chair, Portage AI

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Scan or click to watch an interview with John Hele.

Carriers have several years of AI spending behind them. Where are the results?

Mostly in the expense ratio, and I do not want to be dismissive about that—taking cost out of a business is real work. But it is the smaller portion of the opportunity. The loss ratio is the number underwriters get paid to manage, and almost none of that first wave of spending targeted it. That is the gap I care about, and closing it starts with the data.

Which milestone in AI has the most impact on insurance to date?

I start with the board game Go—an ancient strategy game, far more complex than chess, and until 2016 no computer had beaten a top professional. That March, against world champion Lee Sedol, [Google] DeepMind's AlphaGo played a move classical theory considered inefficient. Commentators assumed a malfunction. Its own network rated it at roughly 1 in 10,000 odds of being played by a human. It won, and we now remember the move simply as Move 37. Underwriting is not a board game, but Move 37 is the best example I know of what AI can do with enough clean, structured data. It finds the pattern that was always there, and that nobody could see. Insurance holds exactly that kind of history—more of it, in more detail, than almost any other industry. The question is whether the data is usable.

If carriers already hold this data, why haven't they put it to work?

Three reasons come up in almost every conversation I have with carrier leadership. First, the data is genuinely messy: submissions and claims arrive in Excel, PDF and scanned form, from many brokers, coverholders and cedents, each describing the same data element differently. Second, cleansing projects rarely finish, because the hard part is not infrastructure but building a common ontology that maps every variant to the correct element. Third, even a carrier that gets through the archive once cannot keep it clean without an army of people. It does not scale. Personal lines carriers, digital from day one, have shown the payoff: measurable improvement in both expense and loss ratio.

How does Portage make AI-extracted data something a board and a regulator can rely on?

By giving the same answer from the same document every time. We built the extraction on purpose-trained models rather than a general-purpose generative one, so it flags anything it cannot resolve for a human reviewer instead of producing a plausible but wrong answer. Every figure traces back to its source document, which is exactly what a regulator, reinsurer or rating agency will ask to see. And we stand behind it commercially: We front the investment in our solution, and our fees are tied to the accuracy goals we agreed—typically around 95%. The remainder is not a black box: we flag exactly what requires review.

What is the path from a digitized data archive to a better loss ratio?

Start with one line of business. Delegated authority and bordereaux are where we usually begin, because that archive is the largest and least usable today. Once it is digitized and mapped to a common ontology, you point predictive models at it—inside your own secure environment—and they find patterns across policies, customers and claims that nobody could see before. It shows up in three places. Claim leakage and fraud get caught earlier, with evidence a special investigations unit can act on. Underwriting requirements get tightened or relaxed against actual loss experience rather than rules of thumb. And pricing reflects your own book rather than an industry-average proxy. The advantage compounds as the model learns with every policy and claim you add. Improve your loss ratio, not just your expense ratio.