

CASE STUDY

Improved underwriting performance with Location Intelligence

Company: Hiscox

Headquarters: Bermuda

Industry: Primary Insurance

Moody's Products:

→ Location Intelligence API



The goal

DRIVING UNDERWRITING INNOVATION TO DELIVER BETTER RESULTS

Hiscox is a leading international insurance company, headquartered in Bermuda. It is also a well-established provider of primary insurance in the U.S. market through its managing-general agent (MGA) partner network. The company covers traditional catastrophe perils such as hurricane and earthquake alongside more recent expansion into the growing private flood market.

As its U.S. MGA book expanded, Hiscox sought to solve key challenges inherent in delegated authority business, including:

- How to ensure rigor and consistency in underwriting, especially in the selection and pricing of cat-exposed risks

- How also to provide fast and efficient service to MGAs, their agents, and their insureds that keeps pace with changing customer demands

Traditional approaches to delegated authority involve the use of spreadsheets, with rates given to MGAs by carriers. These rating tables are difficult to maintain, slow to update, and cannot account for the granularity in the pricing of an individual risk that a carrier would typically use when underwriting direct business.

Rating tables are not used because they provide the best answer but because they are relatively simple and fast for MGAs to work with. This is especially true for quick-moving lines where speed to quote is a key factor in successful conversions. In short, spreadsheets are a sub-optimal approach to underwriting made necessary by the limits of legacy technology.

Changing the game on delegated authority required Hiscox to fundamentally rethink the technology and process used to underwrite the business. Innovation meant moving away from spreadsheets to an e-trading platform that could deliver high-quality underwriting decisions to MGAs at speed and scale with full automation of quote and bind.

The objective

FASTER RESPONSES, RETAINING CONTROL, AND RAPID GROWTH

In transitioning its U.S. MGA business from traditional delegated authority to an e-trading model, Hiscox had several key requirements that were essential to realizing the projected improvements in underwriting performance:

- **Faster responses:** All underwriting inputs must be delivered in a more timely manner. Customers increasingly expect quotes in seconds, and failure to respond in this time frame would mean an agent might not even present the quote for consideration.
- **Superior analytics:** The analytics must generate an underwriting edge over competitors who use legacy approaches. This includes the ability to more accurately screen a risk according to defined risk appetite and move to quote with pricing inputs tailored to the attributes of each risk, in terms of peril exposure and building vulnerability.
- **Consistent view of risk:** The analytics should enable much greater consistency with the view of risk used by Hiscox in underwriting, and also in portfolio management, reinsurance allocation, and capital allocation. This allows all risk decisions to

be made on a common basis and without surprises – as risks make their way into the bound portfolio.

- **Built for scale:** The underlying technology must scale reliably. Hiscox expects significant expansion in its MGA business and is migrating to software as a service (SaaS) technologies that can support this growth while meeting quoting time frames on each and every deal.

The solution

LOCATION INTELLIGENCE API

Hiscox has a long-standing relationship with Moody's insurance solutions and uses probabilistic catastrophe models to provide a foundation for its view of risk. While the models offer essential insights that serve many use cases, including portfolio management and risk aggregation, they are not designed for low-latency underwriting. Hiscox wanted to be able to return a quote to customers within five seconds.

The combination of Hiscox's strategy to both enhance digital capabilities and access quality data at speed made Moody's Location Intelligence API an obvious fit:

- **Speed:** As a SaaS solution, Location Intelligence API removes the need to host an on-premises solution and replaces it with cloud-based API technology that returns results in real time. This allows Hiscox to reliably meet the five-second threshold, eliminate the overhead of system maintenance, and employ more sophisticated underwriting rules and algorithms.



Daniel Alpay
Line Underwriter for Flood

We're now able to provide quotes that are tailored to the individual risk and ensure we achieve price adequacy on every policy.



- **Quality:** Improved performance is possible through most APIs, but Moody's is uniquely positioned to deliver model-derivative analytics that provide the location-level refinement required for technically sound peril-specific rates and profitable growth.
- **Consistency:** Through access to Moody's insurance solutions data and analytics across the decision chain, Location Intelligence API together with Moody's RMS™ Models provide truly unified underwriting and portfolio and capital management, eliminating surprises as risks move through the insurance life cycle.
- **Scale:** Moody's Location Intelligence API was built to support exactly this kind of high-volume, fully automated underwriting that leverages cloud-native technologies, so insurers and MGAs can rapidly increase throughput with no impact to performance or availability.

The outcome

IMPROVED UNDERWRITING PERFORMANCE, STRONG GROWTH, PROACTIVE COLLABORATION, AND EFFICIENCY GAINS

Using Moody's Location Intelligence API, Hiscox realized tangible business value with notable improvements in results while delivering a better customer experience to its MGAs. There were real impacts to core business performance metrics, including percentage point

improvements on loss ratios and consistent year-on-year growth.

Qualitative benefits to MGA relationship management were also achieved. Improved and up-to-date analytics enabled productive, proactive conversations about how and where to grow the business and improve risk composition, instead of backward-looking discussions on addressing overexposure. Hiscox issues more than 30,000 quotes per week via U.S. MGAs, and it expects this number to double in 2022, having implemented a solid foundational architecture that can scale with the business. Although the upfront investment should not be ignored, the experience delivered through Hiscox's e-trading platform is paying dividends.



Paul Butler
Partner & CTO

Previously, it would take months to roll out pricing changes. Now we can do it almost instantly.

It offers significant competitive advantages over standard market approaches while driving down the cost per quote over time.

Additionally, using Location Intelligence API with the e-trading platform created a more dynamic way of working and had multiple benefits: determining areas for improvement, implementing the right changes, and tightening the mesh between underwriting and the management of capacity and exposure.

Historically, the latency in bordereaux reporting meant it would take months to spot areas for improvement, determine changes, and roll out those changes to MGAs and their underwriters. Now, Hiscox has a live view of quoting activity and of the bound portfolio, which feeds into the cat modeling workflow to provide current exposure concentrations and capacity utilization.

Hiscox now has the ability to fine-tune portfolio growth by quickly adjusting rules, parameters, and pricing depending on exposure concentrations and quotes not taken up – and to rapidly implement those changes. There is also a much more proactive, collaborative relationship with cat modeling teams, who now play an integral role in both managing the unfolding business and decision-making on required adjustments.

Location Intelligence API also provides significant improvements to customer experience. These benefits are not simply related to the ability to deliver real-time quotes every time but also in reducing the number of non-renewal conversations.

Previously, cat modeling output was not available until post-bind during roll-up – meaning some policies were placed at unfavorable terms, leading to difficult conversations with MGAs at renewal. By using Moody's, Hiscox already has a good understanding of how the risk will model, enabling improvements to point-of-quote pricing and greater alignment with MGAs through more consistent communication of risk appetite.

Hiscox have developed a solid foundation on which to continue to build on the successes of the last year and a half, and are well positioned to continue their growth and deliver high-quality performance through 2022 and beyond.



Hiscox is a global specialist insurer, headquartered in Bermuda and listed on the London Stock Exchange (LSE:HSX). Their ambition is to be a respected specialist insurer with a diverse portfolio by product and geography. They believe that building balance between catastrophe-exposed business and less volatile local specialty business gives us opportunities for profitable growth throughout the insurance cycle.

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