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Parametric insurance: the future of insurtech?

AUTHORS



Tim Pavlov



Jaidyn McEwen

Hear from prominent industry experts on the state of play and what's next for the sector in our feature Q&As from [Michael George](#) of Tokio Marine Canada and [Marcus Daniels](#) of Highline Beta.

Insurers, intermediaries, and other businesses are increasingly leveraging technological innovations, known as insurtech, to improve the efficiency and delivery of services within the insurance industry. These advances are powered by software, algorithms, AI, Internet of Things, and blockchain technologies.

Parametric insurance has gained traction, with Canada being among the first mature markets to have advanced it. As climate change and its associated risks become more pronounced and supply chain vulnerabilities emerge, parametric insurance is expected to see sustained growth going forward.

How does parametric insurance work?

Most commonly, rather than replacing traditional insurance, parametric insurance is used to fill gaps in coverage for a wide range of risks, such as natural disasters, extreme weather events, and supply chain disruptions. Parametric insurance offers risk management solutions that are uniquely structured to provide rapid payouts based on predefined, measurable parameters as opposed to more traditional approaches to loss assessment. While traditional insurance depends on a claims adjuster to assess the cause or loss and level of damage and related payout, parametric insurance draws upon an objective data set to determine what will trigger a payout—and what the value of that payout should be.



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If it is a personal lines product, such as travel insurance, once the criteria for the trigger are met the insurer may provide real-time assistance or remediation based on the parametric assessment, removing traditional barriers caused by delays. The assistance may be financial or in the form of certain services, such as providing lounge access or a new hotel booking. If the product is a commercial lines product, and the trigger criteria are met, a monetary payment is promptly made without the need for a lengthy adjustment process.

A new way forward for high-volume insurance claims

In 2022, the extratropical cyclone, “Winter Storm Elliott”, caused massive disruptions across most of the United States and parts of Canada, with 40,000 flights delayed or cancelled¹, lost luggage² and \$5.4B in losses³. To this day, travel insurance companies are still clearing backlogs related to the event.

Situations such as this, with high-volume, low-value claims, could be efficiently managed by a surge-proof approach—illustrating how parametric insurance can help streamline processes and expedite outcomes for consumers.

Parametric insurance can be integrated alongside traditional insurance models, can be embedded into parts of them, or can serve as an optional or standalone offering and, depending on the level of integration, presents several commercial benefits. These include clarity, speed and coverage provisions for losses that are traditionally seen as difficult to quantify and, therefore, insure.



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How does it work in practice? With parametric insurance, an insurance company would provide the insurtech solution provider with relevant details, which the insurtech monitors and, in the instance of a qualifying event, issues a payment or provides other options in real-time to the insured.

In addition, providing claims handlers and underwriters with real-time access to independent data removes opportunities for fraud. For example, a data feed can be used to verify the temperature of a specific location, thus triggering a payout if the temperature rises or drops below a certain pre-determined level. Blockchain technology then

automatically triggers payouts to policyholders when this event occurs, thereby significantly reducing the time, costs and risks associated with the manual claims process and settlements.

What's next?

The market's future development continues to [focus on providing efficient and reliable coverage](#) for emerging risks, giving insurtechs and those in the parametric insurance space opportunities to launch products to cover a broader array of risks. An example of this is parametric flood insurance, which may address some of the challenges and coverage gaps left open by the traditional market. As flood risk grows and traditional insurance market capacity continues to decrease, parametric insurance may offer risk mitigation options that can provide an efficient approach to insuring flood risks. Unlike traditional insurance policies, parametric flood insurance products do not require loss adjustment after an event because they automatically pay out if a pre-agreed trigger has been met (e.g., river water height or the amount of rainfall). Traditional insurance can be more exposed to uncertainty as it's difficult to determine the true value of damage caused by a disaster ahead of time—and this uncertainty may often lead to higher premiums. With a parametric insurance policy, the amount to be paid out can be decided before any damage occurs, resulting in less uncertainty ahead of a claim.

Parametric insurance can be a valuable addition to a [risk management strategy](#), offering greater transparency, quicker claims service and greater data sets to inform future claims assessments. It also reaches more and more risks—from earthquakes to crop loss, software downtime to drought. As methods for data collection and analysis improve, the possibilities for this type of cover will only grow. Of course, as with the integration of any new technologies, insurance organizations must ensure all legal and regulatory requirements in all applicable jurisdictions are met, such as privacy, data protection, IP, record-keeping and so on.

FOOTNOTES

- [1.](#) Leslie Josephs, “FedEx and UPS warn storm could delay holiday packages, airlines cancel thousands of flights” (December 23, 2022): <https://www.cnbc.com/2022/12/23/storm-elliott-fedex-ups-warn-on-delays-airlines-cancel-more-flights.html>
- [2.](#) Rachel Sharp & Joe Sommerlad, “What happens to lost luggage? US winter storms cap off nightmare year for travellers” (December 29, 2022): <https://www.independent.co.uk/travel/news-and-advice/lost-luggage-airports-airlines-baggage-b2253079.html>
- [3.](#) Claims Journal staff, “KCC: Bomb Cyclone Caused \$5.4B in Insured Losses” (December 29, 2022): <https://www.claimsjournal.com/news/national/2022/12/29/314515.htm>

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