Making the potential of data and analytics in insurance a reality

Data and analytics have a significant role to play in the insurance industry, but insurers have not methodically invested in their capability to use them to their advantage.

by Rui Neves and Karthi Purushothaman

In 2018, the McKinsey Global Institute estimated that the insurance industry has an opportunity to capture €1.1 trillion in value worldwide by using data and analytics, including artificial intelligence. Which companies capture that value—and when and how they do so—will determine the industry's maturity in this space.

The overall maturity of the industry's data and analytics capabilities is unclear despite a surge of interest among industry executives. The industry has also struggled to answer a crucial question: how should companies invest in data and analytics?

Over the past four years, we connected with insurance executives in the United States, Asia, and Europe to discuss their perspectives about the maturity of data and analytics in their firms and the elements that made the data and analytics successful. We filtered the findings from interviews and surveys through McKinsey's proprietary methodology for assessing a company's data maturity to learn what separates the top performers from the rest, as well as the value these firms have derived by being industry leaders.

Leading insurers focus on three main business aspects

Respondents rated their organization's data and analytics stature and capability using a scale that gauged maturity from the most elementary to the most robust. Almost none of the firms considered themselves to be at either end of the spectrum, and the majority of respondents said their firms are accelerating plans to implement an array of data and analytics use cases at scale. Respondents also affirmed that their commitment to data and analytics runs between 30 and 100 percent based on their starting point—which is a huge range.

Companies that ranked as top performers in the space had a clear grasp of fundamentals across three dimensions: operating models, talent, and technology and tooling.

Operating models

Forty percent of the top performers place the authority and accountability for AI strategy and operations on an executive at the C-level. By design, the structure is both pragmatic and symbolic: the CEO can work with a CIO, for example, who has direct knowledge and insight into all data and analytics operations and their strategic impact, which leads to better decision making. Also, C-suite authority and engagement sends a clear message to the broader organization that data and analytics is a top company priority. Building a better culture of analytics operations accelerates rates of delivery, and people on the front lines can be coached to better integrate these processes into their daily work.

Talent

The demand for people with technology skills is booming. The data skills gap in Europe alone is enormous. Our analysis estimates that 800,000 data specialists were needed across all industries in 2020, which is double the figure from just two years prior. Companies with smaller analytics departments are in direct competition with top performers for this critical talent. The average staff size of AI teams in Germany, India, and the United States was smaller than that of top performers.

Unsurprisingly, the average staff size in general for top performers was nearly three times higher than less prepared companies, and they have planned to expand even further in the same time span. Top performers also consider their talent to be at a higher quality. On a scale of one to five for gauging talent quality, top performers registered an average of 3.4 points in contrast to other firms' average of 2.5 points.

High-performing organizations also had a data and analytics translator on staff. This person unites the business and data science disciplines, similar to a product manager in the digital space. Eight of every ten top performers have clearly defined a data and analytics leader who is charged with implementing the strategy and delivering results, which helps the company achieve goals that are tied closely to its bottom line. Indeed, all top performers embrace data and analytics as one of their top ten business priorities, with a clear focus on how it contributes to the bottom line.

Technology and tooling

The tools to support data and analytics implementation are imperative. Top insurance performers have adopted the star performers of a rapidly expanding stack of technologies and services, enabling them to move from a manual, build-from-scratch, and development-focused approach to one that's more automated, modular, and repeatable across the spectrum of data and analytics, from managing incoming data to monitoring and building insightful applications.

Successful insurers take advantage of tools offered by start-ups and open-source software companies, which now offer everything from products that translate natural language into code to automated underwriting model–monitoring capabilities. They also use machine learning tools from cloud providers, which help optimize and automate processes.

Scaling effectively and educating insurance teams

According to our research, insurance leaders that add the latest continuous integration and delivery (CI/CD) tools and mobilize frontline workers move quicker in piloting use cases for new data and analytics rollouts.

The first step in identifying use case opportunities is to assess one or two rollouts that can deliver the biggest prospective gains in productivity for customers and employees. The most common use cases at scale are cross-selling and upselling, advanced underwriting, making decisions on first notices of loss, straight-through processing, and optimized routing and fraud detection. With these potential highest-impact winners in their sights, companies can move forward with greater speed, intensity, and confidence rather than spreading resources unevenly over too many projects.

It can be beneficial to build a use case within a specific function within a business—such as underwriting, pricing, or fraud management—and then scale it efficiently using CI/CD tools that build a set of reusable assets as the rollout unfolds. Companies can target and measure customer satisfaction and retention as well as team learning and sophistication in applying AI tools, increasing revenue per employee, and reducing costs.

Because new data and analytics tools and methods advance quickly, all insurers regardless of AI maturity need to selectively choose the techniques they wish to adopt. Leaders should then coach people on the front lines to apply this technology to their workstreams.

The data and analytics teams with more mature capabilities have opportunities to continuously improve their rollouts. They can assess which of the core use cases can improve rankings in key areas quickly, such as in market-pricing leadership, customer-value management, claims fraud, and straight-through processing performance. Executives should advocate for innovation in these areas and aim to stay aligned with global benchmarks and achieving common KPIs.

Focusing on leaders' success factors in data and analytics

On the one hand, data and analytics in insurance can help give customers pricing that is more fair and product distribution tailored more precisely to their specific needs. On the other, industry employees will find they can shed repetitive tasks as they increase productivity and enhance their in-demand skills.

The ongoing advance of data and analytics in insurance will push innovation and surface new business opportunities, even as it creates new challenges to gain a competitive advantage. Increasingly, as companies invest in new capabilities and build on current ones, their success in data and analytics will sharply influence their ability to identify and make the most of the latest market trends.

The goal over time should be to build organization capabilities toward maturity. This means having enterprise-wide analytics in place and driving operations essential to the company's productivity and profitability. CEOs should anticipate a future in which the industry's top performers will have developed data and analytics and have encoded them firmly into their core DNA.

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