Insurance Practice

Italian insurance: Achieving scale in advanced analytics

Continued investment in advanced analytics will be vital for Italian insurers navigating the post-COVID-19 landscape.

by Andrea Comina, Giulio Perusi, and Elena Pizzocaro
Before the COVID-19 pandemic, the McKinsey Global Institute estimated that artificial intelligence and advanced analytics (AA)¹ could create $1.1 trillion in value for the insurance industry, representing almost 17 percent of the industry’s current total global revenues.²

The importance of AA is likely to increase in the postcrisis environment. Indeed, many people expect to use digital services more in the aftermath of COVID-19,³ and businesses such as banks will demand more advanced and integrated digital capabilities from their insurance partners. Flexibility and speed will be vital in the process of adapting to the next normal, as will the ability to take bold actions that are backed by a solid understanding of risk. For insurers, accelerating their AA transformation journey will be a key to success.

Although many insurance companies have invested significantly in AA capacity in recent years, the degree of advancement in AA varies significantly by market. To better understand the market in Italy, we interviewed executives at ten of Italy’s largest insurance players by measure of gross written premiums (GWPs). This sample size is too small to be exhaustively representative of the industry, but the companies interviewed account for approximately 60 percent of GWP and therefore provide a good indication of progress to date as well as key challenges.

Top Italian insurers are prioritizing investments in advanced analytics

Overall, the executives we interviewed have made significant progress in embedding AA within their organizations over the past few years and are therefore well positioned to accelerate their transformation journeys. When asked to describe their current position in their respective journeys, nine of the ten said they have at least reached the point of capturing value at scale, seven have a pipeline of AA use cases (with several already deployed at scale), one is using AA for most decisions, and one considers itself to be an analytics-driven organization.

Thus, AA remains a key priority going forward. Six of the ten respondents listed AA among their top three strategic priorities, and nine acknowledged the need to accelerate their AA efforts. Italian insurers continue to invest significantly to ensure that progress does not stall; four of the ten spent more than €1 million on AA in 2019, and six of the nine that answered questions about future budgets expect to spend more than €1 million in each year of the 2020–22 budget cycles (with four expecting to spend between €3 million and €8 million per year).

Discrete advanced analytics use cases are driving adoption across functions

Progress has been quickest in underwriting and pricing, but a majority of companies are still building the tools and resources needed to fully incorporate AA into their business models and operations. Half of the insurers interviewed are pursuing a use-case-driven integration approach, with AA initially deployed across two or three use cases and then scaled up progressively, rather than focusing on a comprehensive transformation or working sequentially by business area. AA is now being used across a broad range of use cases (Exhibit 1). However, the extent of implementation varies significantly; nine of the ten insurers use AA for enhanced fraud protection, but just two insurers use it for lifetime-based pricing, and one for steering to preferred providers.

Primary challenges to adoption span a lack of tools, talent, processes, and integration

The main obstacles to the widespread, comprehensive adoption of AA relate to the

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¹ Artificial intelligence is considered a subset technology of advanced analytics. Thus, when we mention insurers using advanced analytics, AI is an implied part of those capabilities.

² For more, see “Visualizing the uses and potential impact of AI and other analytics,” McKinsey Global Institute, April 2018, on McKinsey.com.

comparatively low levels of maturity around key AA-enabling capabilities (Exhibit 2). All ten companies have adopted modern modeling tools such as R and Python, have been adopted by all ten companies, but issues remain around operationalization and hiring skilled employees. Six of the ten executives said that lack of human resources is a key issue, and only three reported having "spaghetti silos" without data integration in place.

Another issue relates to data architecture and data governance. The development process is still in the early stages, with six players still working to address issues such as siloed systems and low-quality data. Larger, more established players need to integrate new technologies into legacy IT systems, which can impose severe limitations on the speed with which new use cases are rolled out. This places them at a disadvantage compared with faster and more agile players, such as direct insurers and insurtechs. Regulation is also a challenge, as regulators want to understand how insurance prices are constructed, and it is difficult to communicate the logic of machine-learning techniques. More needs to be done to explain AA techniques in nontechnical ways.

Finally, there are issues around business integration. Many insurers have established centers of excellence within their organizations but have struggled to scale up, which limits their ability to both create value and retain the most in-demand employees. Technology is partly to blame, but there are also ongoing cultural issues, including resistance to the adoption of AA on the part of agents and middle management. In fact, five insurers listed inefficient ways of working as one of their main issues.

### Paving a path forward in the next normal
Pressure to cut costs will continue to build as the full economic impact of the COVID-19 crisis becomes clear, but top Italian insurance players must continue...
to invest in AA to succeed in a post-pandemic world. Insurers could, for example, pursue an open innovation model by working with insurtechs, start-up incubators, and universities to boost their technical proficiency and scout for new opportunities.

Sourcing the right talent will also be necessary to take full advantage of the data insurers already possess; they will need to move beyond just recruiting data scientists to bring in data engineers, data architects, and business translators. Insurers should focus on building a base of top engineers, who are many times more productive than less accomplished developers. Universities are already starting to help with the recruitment and training of talent. A master’s degree in insurance innovation—recently launched by Intesa Sanpaolo, Reale Mutua, and the top universities in Turin—could provide a model for more partnerships across the country.

One of the main lessons from the Great Recession is that companies that move early and decisively in a crisis do best. The need for accurate and timely data has never been greater, and the ability to use AA flexibly and rapidly could be a distinguishing feature in the recovery period following the current crisis. Insurers need to channel their commitment to continued AA progress into thinking critically and systematically about the development of key capabilities and the sequencing of use-case scale-up. Companies that do so will have the best chance of thriving in the postcrisis world.

Exhibit 2

**IT complexity during model operationalization was identified as the top roadblock in an advanced analytics transformation.**

**Key issues**, number of companies surveyed that identified an issue as likely or very likely to deter transformation

| Model operationalization: IT complexity/lack of digital tools | 8 |
| Lack of human resources | 6 |
| Inefficient ways of working | 5 |
| Model operationalization: scale-up from the piloting stage | 5 |
| Other priorities/budget or resource constraints | 4 |
| Data capture insufficient | 4 |
| “Spaghetti silos” with no data integration | 3 |
| Model operationalization: final user not executing | 3 |
| Lack of impact on business problems | 1 |

Note: Respondents were asked to choose from a list of items and rate them based on level of criticality; they could choose as many options as they wanted.

¹“Spaghetti silos” refers to a complex organization structure in which different functions overlap or do the same things without integrating data or information.

Source: Responses from survey conducted with the 10 largest insurers in Italy

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