# Will AI be a game changer in the financial sector and under what conditions


## Bruno Scaroni

Group Strategy & Business Accelerator Director, Assicurazioni Generali S.p.A.


### Assicurazioni Generali's AI Journey

Despite some years during which the insurance sector started to scout Artificial Intelligence solutions (AI), looking for big high tech and insurtech startup proposals, only in the last couple of years have we observed a more structured and selective adoption. According to rigorous process analysis and business cases, Generali is leading this journey by progressively integrating selected technical levers in daily business operations. AI has been mainly leveraged to accelerate internal procedures, support data analysis, reinforce and enhance existing channels for customers and distributors.

Several AI levers have been identified and embedded in AG's business processes, with Chatbot and Voicebot representing the most significant early successes. In addition, AI tools have been adopted to manage automated document analyses and management, image analytics with computer vision techniques, data analysis to support cybersecurity propositions.

We are aware that in a large and international group like Generali, only a broad adoption can bring AI at scale: specific programs are active in analyzing, measuring, and driving adoption. We have identified selected cases where the digital levers for automation, advanced analytics, and AI (three strongly interconnected areas) must be used at scale: as a reference for such combined solutions we are automating the entire document management process (i.e., email and document exchange during UW processes, document analysis during claim handling, claim image processing, automatic email processing, and dispatching).

In the coming years, AI usage will most likely expand to embrace other day-to-day business activities in traditional areas (like Finance or HR) and act as a crucial driver for process redesign: for example, software platforms will give suggestions to operators on how to respond to an email, how to classify information or will automatically send an alert if a claim related image is a suspected or a manipulated one.

We expect insurance companies to leverage AI more in the future, focusing on customer engagement and enhancing their customer journeys. Insurers that will leverage AI to anticipate customer needs (i.e. suggest better prevention and extended coverage for specific events or periods) and to introduce new services (i.e. virtual assistants, automatic savings) will surely gain a significant and lasting competitive advantage. ●

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## Chris Bartz

Chief Executive Officer & Co-Founder, Elinvar


### Machine Learning will not replace the advisor, rather significantly enhance them

**Machine Learning is a powerful tool – however, it's the combination with human capabilities which unleashes its maximum potential.**

As of now, real AI that passes the Turing test does not exist. Currently this term regularly refers to Machine Learning (ML) instead: Classic algorithms, trained with data. ML allows identifying significant information from large data sets, recognizing patterns, and finding relevant solutions by objective criteria. ML is a key technology with potential: As per a study by IDG, 71 percent of ML projects bring an economic benefit within 3 months.

According to German Bitkom though, only 6 % of companies use so-called AI today: Mostly in marketing or payments; very rarely for advanced applications. Particularly in the financial services sector, due to lack of proper conditions, this is unlikely to change soon.

**Where and how can ML create additional value?**

The focus and quality demanded by clients are certain to keep growing: Clients ask for perfect individualization based on information and data they share. This can only be attained by a combination of high-quality ML processes

and human capabilities. ML alone is not sufficient for maximum individualization – but it significantly improves the chances of getting there. ▶

"If AI is the new electricity, the fuel that powers these plants is data," says Oren Etzioni, CEO of the Allen Institute for AI. For companies to benefit from ML at scale, they must create suitable conditions: End-to-end digitalized infrastructure that allows accessing and analyzing all substantial data.

The currently widespread on-premise structures of data silos, disjoint systems and divergent formats without standardization or sufficient processing power, make the application of ML virtually impossible. A cloud-based infrastructure, covering the entire value chain and ensuring high data quality, addresses all these problems at once. Cooperating with regulated fintech can speed up the replacement of legacy IT.

High-quality ML can then be used to deliver automated, uniform processes or pre-identify the top five out of 500 possible results. Evaluating large data streams in real time provides decision support in previously unattained quality.

**The human capabilities for advice and trust, emotional and social intelligence stay the decisive USP**

Regardless of how effective ML will be, to maximize individual customer value, financial services do need – and will always need – humans. In complex tasks such as wealth management for a family unit, every single member, their emotional and professional requirements are of utmost relevance to find the perfect solution.

Does the solution proposed by ML really fit? Given the current emotional state, the immediate reaction, the history of the client? Considerations a non-human algorithm is unable to integrate for the foreseeable future, if ever.

There is no absolute objective truth with regard to financial decisions. Advisors with intuition and experience have to decide in the face-to-face personal contact, if the theoretically best decision is also factually best.

The model for success clearly lies in the ideal combination of data-driven resources and human decision-making power. If real AI ever manages to elicit the authentic trust that can arise between humans today, it might take over. Until then, human mental power and empathy will remain indispensable. ●


# Dominique Laboureix

**Secretary General, Autorité de Contrôle Prudentiel et de Résolution (ACPR)**


## Artificial Intelligence: a new frontier for the financial sector?

When the ACPR published its first report on Artificial Intelligence (AI) in the financial sector (December 2018), one element clearly stood out: half of the R&D projects already included the use of AI). Facilitating the work of employees, managing relationships with customers, monitoring or pricing risks, enhancing fraud or anti-money laundering prevention, AI potentially applies to a wide range of activities. The industry appears to be on the brink of a set of innovations that will profoundly transform it. The same holds true for the supervisors themselves.

Envisaging AI as a "new frontier" may therefore make sense. To reach a new frontier means questioning past organizational habits but also accepting that not all promises will be fulfilled as and when expected. However, the journey is worth it. Supervisory authorities are facing an additional challenge here: to foster and monitor the adequate regulatory and governance environment so that the journey can be made in safe conditions with regard to financial stability.

The first condition for wider adoption is to overcome overly innovation-averse mindsets, as institutions might be prone to prolonging the life of legacy systems - and methods! A cultural shift is however taking place year after year, thanks to the increasing reliance on data scientists or hybrid business/data profiles. This may help the market meet the current challenge of transitioning AI to production.

Technical constraints inherent to AI should also be addressed: reproducibility of machine learning models (ML) is not often built into their design, and their robustness needs to be carefully monitored. AI systems would also greatly benefit from the lessons learned in software engineering, for streamlining development, reliably delivering products and managing third-party risk.

A key lever for the implementation of AI in high-stake processes (for instance, financial transaction monitoring) is access to adequate training data. One recent European initiative aims to shape common data spaces wherein data from public and private bodies can be used safely and fairly, while another one considers guaranteeing supervisors' access to supervised entities' data.

Against this background, regulation does not appear as a significant obstacle. In fact, regulating too early such a changing area carries the risk of being irrelevant or creating undue hurdles. The same holds true for alternative options like voluntary "quality labelling".

However, the market needs guidance on how sector-specific regulation applies to AI-driven processes. Explainable AI (XAI) is thus in the interest both of the financial institution which builds it and of the supervisory body which audits it.

A recent discussion paper issued by the ACPR last June casts explainability as a fundamental pillar on which other AI design principles such as fairness, performance or stability should rely: not only does it distinguish AI the most from traditional algorithms, it is also – when adopted for internal control or external audit – a keystone of responsible AI. XAI is therefore central to the reflection conducted by the ACPR along with other supervisory authorities and the financial sector on how to build, monitor and audit AI. ●