WAVESTONE

Generative AI in insurance: From promise to performance

February 2026

Executive summary

2.5x
faster and more cost-efficient thanks to an industrialized AI foundation

Insurers that have structured a robust technological infrastructure deploy their use cases 2.5 times faster and at a lower cost (÷ 2.5). Industrializing this foundation becomes a key lever for scaling up.

25%
of Generative AI use cases actually scale

Out of more than 1,500 use cases identified, the majority remain at the experimental stage. An industrial organization is necessary to move beyond the POC and create a concrete and sustainable impact at scale.

21%
productivity gains across the value chain

Generative AI enables the optimization of multiple business processes and support functions. Pioneer insurers are seeing tangible benefits, particularly in operations, management, and customer relations.

‹20%
of insurers include HR and Finance to translate gains into measurable impact

Despite significant operational gains, few insurers are integrating Finance and HR functions into the approach. A 'Strategic Workforce Planning' framework remains essential to convert these gains into budgetary levers.

3/4
insurers already allocate a dedicated budget to Agentic technology

Agentic technology marks a new era of automation. 76% of insurers are already allocating a budget to this technology, anticipating rapid adoption to transform core business processes.

Foreword

Renaud DELA
Partner, Financial Services

For the past three years, Generative AI has marked a turning point for the insurance sector, going beyond the boundaries of traditional artificial intelligence. Its impact now extends across the entire value chain, unlocking new sources of productivity—from operations to customer relations.

As industrialization accelerates, the strategic challenge is shifting: it is no longer about stacking use cases but about embedding the technology at the heart of processes to sustainably reshape the operating model.

Based on factual data and interviews with industry leaders, this study analyzes the trajectory of this transformation—from the first implementations to the rise of agentic AI—around four key questions:

- **How can we move from experimentation to large-scale industrialization?**
- **How can productivity gains be converted into tangible economic value creation?**
- **What are the impacts on human capital and the necessary evolution of organizations and skills?**
- **Does the advent of agentic AI herald a reinvention of operational standards?**

Study methodology

This study was conducted by Wavestone, in partnership with **OpinionWay**, with the aim of assessing the maturity of the French, German and British insurance markets and analyzing the strategies implemented by industry players to make Generative AI a true performance lever.

A methodological approach combining data collection and interviews

To ensure the robustness of the findings, we adopted a dual approach:

- **Quantitative**, through a survey of 90 executives, providing numerical trends and key indicators.

- **Qualitative**, through around twenty in-depth interviews with General Management, Transformation Departments, CIOs, Chief Data Officers, Operations Directors or Operational Excellence Directors, etc., aimed at enriching the analysis with concrete feedback and contextual insights.

A perspective on the French, German and British markets

Exhibit 1

Breakdown of respondents by country

■ France ■ Germany ■ United Kingdom
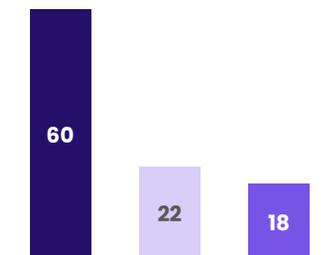
The study provides a comparative analysis of practices observed in France, Germany,

and the United Kingdom. This cross-country perspective helps challenge conventional notions of productivity and identify differentiating levers at the European level.

A representative panel for 360° view

Exhibit 2

Breakdown of respondents by profile

■ Executive Management ■ Data & Technology
■ Transformation/Business Functions
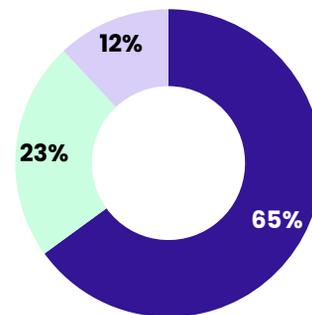
Respondents were selected to reflect the diversity of stakeholders involved in the transformation driven by Generative AI:

- **Those who design it:** technology experts, CIOs, data specialists, ensuring technological feasibility

- **Those who deploy it:** business managers, transformation leaders, and operational actors at the heart of change

- **Those who shape the vision:** members of Executive Management, driving the strategic outlook

Use cases and industrialization of Generative AI

Generative AI: An 'industry standard'

To establish an initial measure of the insurance sector's maturity regarding Generative AI, our analysis focused on the number and nature of use cases actually deployed.

For the purposes of this study, a use case refers to a concrete, operational application of Generative AI—accessible and used by a significant number of users or integrated into business processes. This definition excludes limited experiments or prototypes confined to test environments. For example, access to a general-purpose chatbot deployed for all employees constitutes a large-scale use case.

The results highlight **widespread adoption: all insurers surveyed have deployed use cases over the past two years**. However, the volume remains highly uneven: only 22% of respondents report having implemented more than twenty use cases, revealing a significant gap in maturity and capacity for large-scale deployment.

Exhibit 3

Breakdown of insurers by number of use cases deployed
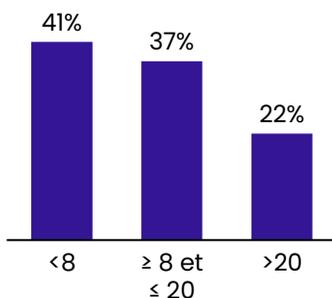
Varied targeting of use cases

This heterogeneity is also reflected in the processes targeted for the integration of Generative AI: players define distinct priorities, revealing contrasting levels of maturity across the different links in the insurance value chain. Deployments most

often begin with management and underwriting activities, where use cases are already well established. Conversely, initiatives aimed at direct customer-facing functions remain limited and experimental, while support functions are still at an embryonic stage due to their fragmentation and distance from the core business.

Claims management: Generative AI as a driver of automation

For many insurers, initial deployments focus on internal processes related to claims:

- Automated pre-analysis of reports to help claims handlers digest policies and documentation for complex cases
- Automation of simple cases, such as low-value non-bodily automotive claims, through the structuring of initially unexploitable data

Distribution: The augmented agent

For other players, experiments are starting on the front-office side to enhance the efficiency of agents in their daily activities:

- Assistance with underwriting, including drafting special conditions
- Automatic reactivation of complex cases in the context of claims (Next Best Action)Pricing optimization and score calculation (propensity, Customer Lifetime Value) to strengthen offer personalization

Direct customer interaction: Emerging pilots

Among a few pioneering players, Generative AI is gradually extending to direct customer contact, although these use cases remain relatively rare and mainly limited to targeted experiments:

- Voicebots for call routing and handling simple requests, enabling smoother, faster, and more consistent processing
- Partial automation of voice interactions to improve customer experience, reduce waiting times, and optimize the quality of exchanges

Conversely, some insurers have made the deliberate strategic choice not to deploy Generative AI in customer-facing roles, favoring a cautious, secure approach aligned with internal standards.

Support functions: Fragmented opportunities

Support functions (HR, Finance, Risk, etc.) remain less impacted by Generative AI to date. This situation is explained by their distance from the core business, as well as the strong fragmentation of very different activities and multiple decision-making chains, which make prioritizing use cases more complex and specific to each function, e.g.:

• Document understanding for regulatory compliance

• Automated generation of job descriptions based on key skills and internal frameworks

• Formalization of reporting and extraction of unstructured data

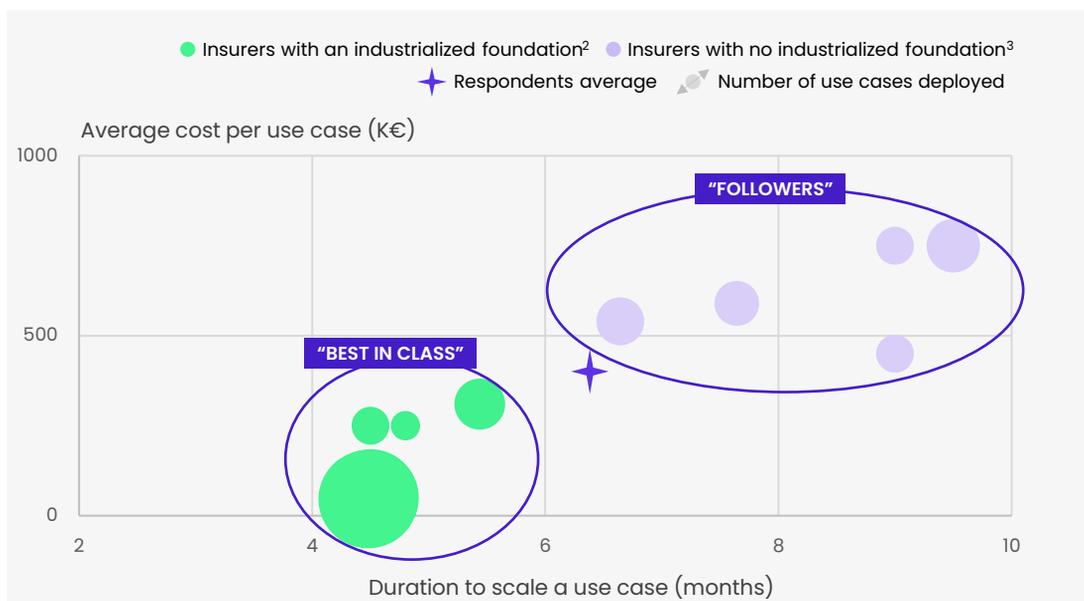## Industrialization: A prerequisite

To deepen the analysis of sector maturity, we cross-referenced the number of deployed use cases with two key indicators: the

average Time to Market for a use case (i.e., the average time to scale) and the **average cost per use case**[1].

The results are based on the analysis of more than 1,500 use cases identified in the study: 669 in France, 659 in the United Kingdom, and 176 in Germany, providing a representative view of current practices and maturity gaps among different players.

Exhibit 4

Average duration and cost to scale use cases by insurer

● Insurers with an industrialized foundation[2]   ● Insurers with no industrialized foundation[3]
✦ Respondents average   Number of use cases deployed

Average cost per use case (K€)

"FOLLOWERS"

"BEST IN CLASS"

Duration to scale a use case (months)

1. The analysis is based on responses from 63 executives – 44 in France, 12 in Germany, and 7 in the United Kingdom.; 2. Insurers that have implemented an industrialized foundation and/or have started deploying autonomous agents 3. Insurers that are not industrialized or only have a general-purpose chatbot

The market average, based on these results, highlights significant challenges: the time required to scale a use case is 6.5 months, while the cost exceeds €400K per use case. These figures reflect the inherent complexity of implementing Generative AI projects and the scale of investment needed to carry them out successfully. They also reveal that the ability to deploy these solutions quickly and cost-effectively remains, for most players, a difficult goal to achieve.

Insurers are distinctly segmented on either side of this market average. On one hand, the "best in class" stand out for their ability to deploy use cases faster and at lower cost. On the other hand, the "followers" progress more slowly and incur significantly higher costs. When examining the maturity of the players, it is clear that the "best in class" have established an industrialized technological foundation: RAG[1] platforms, AI competence centers, and MLOps pipelines. This structure enables leaders to standardize developments by ensuring asset reuse, thereby accelerating the deployment of use cases while reducing costs. Conversely, the "followers" rely on ad hoc IT developments, resulting in longer timelines, higher costs, and ultimately a more limited number of deployed use cases.

There is therefore a **strong correlation between the level of industrialization and the ability to deploy quickly and cost-effectively by leveraging existing assets**.

Only one-third of players have managed to establish an industrialized technological foundation in less than two years, illustrating the scale of the challenge for others and the need for a clear strategy to accelerate transformation.

> **The implementation of our industrialized foundation enables more than one-third of Generative AI initiatives to scale**

Chief Operating Officer and Head of the Customer Division of a banking and insurance group

Exhibit 5

Scale effect coefficient of the technological foundation

	FOLLOWERS Players relying on ad hoc IT developments		LEADERS Players equipped with an industrialized foundation / RAG Factory
Duration to implement a use case	10+ months	÷ 2.5	4 months
Average unit cost per use case	570K€	÷ 2.5	230K€
Number of deployed use cases	‹ 8	x 2.5	› 20

1. RAG : retrieval augmented generation

The scale effect coefficient driven by industrialization is 2.5: Leaders deploy their use cases on average 2.5 times faster and at 2.5 times lower cost

Technological maturity appears as a key factor for successfully scaling the largest number of Generative AI initiatives. The most advanced players demonstrate that a robust and industrialized technological foundation is a prerequisite for reducing costs and accelerating Time to Market. Conversely, those who remain in an opportunistic or fragmented approach risk seeing their ambitions slowed down. Today, the entire insurance sector agrees on one point: industrialization is an essential prerequisite to move from the experimental stage to large-scale deployment.

Industrialization disparities between France, Germany and the United Kingdom

A comparison between France, Germany and the United Kingdom reveals significant disparities in industrialization levels, highlight untapped potential across these markets.

Exhibit 6

Percentage of initiatives scaled by country
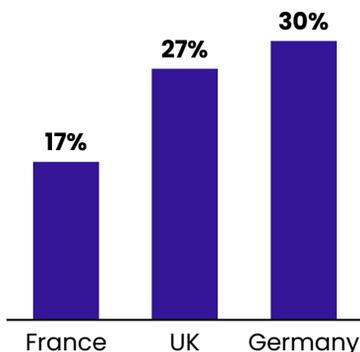
France shows a relatively limited level of industrialization, with 17% of initiatives scaled, compared to 27% in the United Kingdom and

30% in Germany. This places France behind its European neighbors, but this gap mainly reflects significant catch-up potential. Ongoing initiatives – such as the implementation of industrialized foundations – should accelerate convergence towards the standards observed in neighboring countries.

This difference is not due to structural, regulatory, or cultural constraints specific to France, but rather to the degree of systematization in approaches and the speed of project execution. French players have launched relevant experiments, but these remain confined to limited scopes, without a rapid shift to industrialized models at scale. Conversely, Germany and the United Kingdom have adopted more methodical approaches, enabling early standardization and faster integration into business processes. This observation highlights that the gap is cyclical rather than structural and can be closed through increased maturity in practices and accelerated deployments.

Beyond productivity, unlocking value creation

Measurable productivity gains with strong growth potential

After addressing the level of industrialization, it is essential to focus on what truly drives transformation: productivity gains. This topic is now at the heart of insurers' concerns, as they actively seek to measure the tangible impact of Generative AI on their organizations. The approach reflects a clear intention to project and objectively quantify the benefits.

> ❝
> ## An impact analysis of Generative AI has been launched for all 70 job categories identified across the group
> ❞

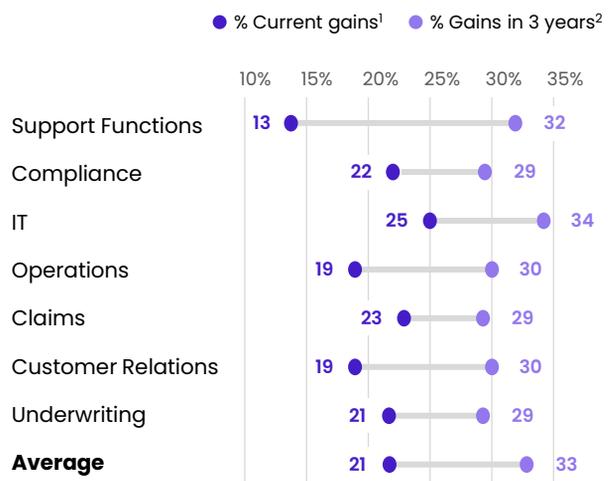COO and Head of the Customer Division, Provident Institution

To provide an objective assessment of this topic, we specifically surveyed 63 insurers in France, Germany, and the United Kingdom, consolidating more than 1,500 use cases. Each participant was asked about the average gains observed across its various processes.

In France, the results highlight significant disparities depending on the process, ranging from 13% for support functions to 25% for IT, which currently captures the highest productivity gains. On average, current gains in France stand at 21%.To assess the medium-term potential and put these results into perspective, we extended the analysis to Germany and the United Kingdom. Based on feedback from 90 respondents, the average projected gains over a three-year horizon reach 33%,

underscoring strong momentum and a substantial potential for productivity gains to be captured.

Exhibit 7

Current average productivity gains and 3-year gains across the value chain

● % Current gains[1]   ● % Gains in 3 years[2]

	Current	3 years
Support Functions	13	32
Compliance	22	29
IT	25	34
Operations	19	30
Claims	23	29
Customer Relations	19	30
Underwriting	21	29
Average	21	33

To further deepen the analysis of the potential for gains across the entire insurance value chain, we measured, for each process, the gap between current gains and projected gains over a three-year horizon, weighted by the number of respondents in each country. This analysis highlights a clear hierarchy:

- Support functions stand out significantly, with a potential of +19%. This indicates that, beyond the gains already observed, these activities still have substantial room for optimization through Generative AI.

- Processes related to Operations, Customer Relationship, and IT display an intermediate potential of around +10%. While these gains are meaningful, they reflect a more gradual transformation dynamic.

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1. Current gains observed in France 2. Average gains at the 3-year horizon represent the average gains reported by insurer respondents to the survey (44 in France, 12 in Germany, and 7 in the UK), weighted by the number of use cases per country (669, 176, and 659 respectively).

- Other processes (e.g., Claims and Regulatory) show more limited residual headroom, at around +6%, suggesting that they are either approaching a maturity plateau or that the remaining improvement levers are more constrained

After identifying the major global trends, we will now focus on the details of the processes to compare the trajectories between the three countries. The objective is to assess the relative positioning of each in its transformation and automation dynamics for these processes. This comparative approach aims to answer two strategic questions: **Which processes offer the greatest potential over the next three years for each country, revealing significant room for improvement? Which processes, on the contrary, have already reached their maturity threshold, limiting additional gains**?

Exhibit 8
Processes ranked by additional gain potential over 3 years, by country
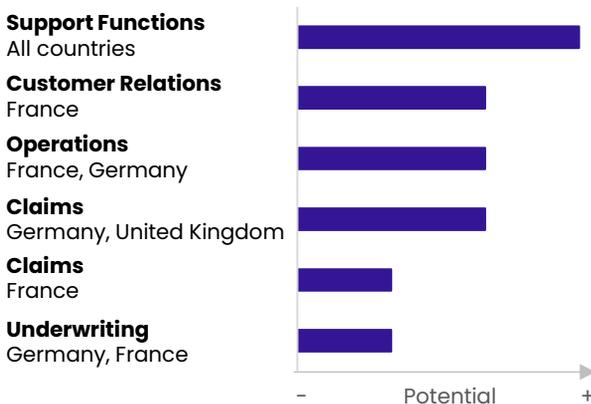
For processes with the greatest potential for additional gains, there is convergence across the three countries around support functions, confirming these as high-potential areas with significant gains still to be captured – either due to limited deployment of use cases or, at best, utilization that does not yet reflect the full extent of the potential. Conversely, other processes with the highest potential vary by country. This differentiation highlights areas where there is still room for improvement in each market and reflects each country's unique transformation trajectory and maturity level in adopting Generative AI: Customer Relations for France,

Claims for Germany and the United Kingdom.

Other processes with low potential for additional gains are considered "mature": observed gains are close to projections, limiting further improvement opportunities. This situation indicates advanced adoption of Generative AI use cases, with widespread deployment and optimization, leaving few additional levers to boost productivity.

Across the three countries, the analysis reveals a dual logic:

- **Significant pockets of gains remain in support functions and, depending on the country, in management or customer relations**
- **Areas of maturity where Generative AI has already delivered its impact, notably in IT, leaving little additional potential**
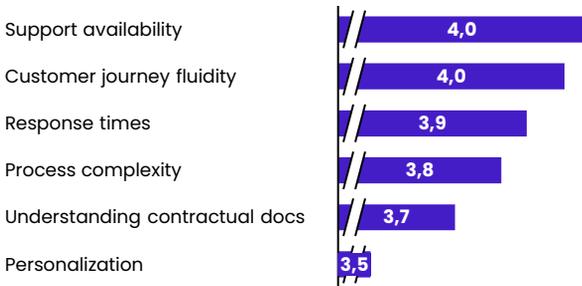
This segmentation provides a useful guide for investment decisions: prioritize high-potential processes while consolidating achievements in mature domains. The comparative analysis shows that some processes already considered "mature" in Germany, or the United Kingdom still hold strong potential in France. This reveals a relative lag to be addressed and underscores the value of drawing inspiration from the trajectories of these more advanced markets to accelerate transformation and maximize gains.

Customer Relations: a key driver of value creation

Among the processes analyzed, customer relations stands out for its dual potential: significant productivity gains and tangible improvement in the customer experience. Current interactions are still marked by recurring pain points – lack of support availability, poor journey fluidity, and long response times – which degrade experience and satisfaction. These are precisely the friction points that technology addresses with the greatest added value.

Exhibit 9

Added value of Generative AI in customer relations, on a scale of 1 to 5

Support availability	4,0
Customer journey fluidity	4,0
Response times	3,9
Process complexity	3,8
Understanding contractual docs	3,7
Personalization	3,5

Generative AI emerges as a powerful lever to enhance the customer experience and strengthen the value proposition. It enables smooth and rapid interactions while automating low-value tasks to free up time for managers to focus on activities with greater impact on service quality. But Generative AI goes beyond optimization: it redefines the relational promise by placing responsiveness and simplicity at the heart of the value proposition.

Materialization of gains

While the potential of Generative AI for productivity is proven, the financial materialization of these gains remains a challenge. Certainly, the technology accelerates processing and optimizes workflows, but these advances do not always translate into tangible budgetary margins. In high-volume activities, Generative AI is mainly used to absorb increased activity without fundamentally reshaping organizational structures. However, outside of growth contexts, capturing real value requires revising job descriptions. It becomes essential to synchronize automation with natural attrition to transform this increased productivity into sustainable profitability.

When the insurance sector is asked about its strategy to capture these gains, the trend is clear: nearly 90% of insurers report having defined an approach, mainly focused on redeploying resources to higher value-added activities or improving service quality by dedicating more time to customer interactions. However, this ambition remains

largely siloed: only 17% (**‹20%**) of insurers include HR and Finance functions in this reflection. There is still no real logic of 'strategic workforce planning' applied to Generative AI, capable of turning minutes saved into tangible budgetary gains. This lack of coordination limits the scope of benefits and delays their conversion into measurable economic levers.

88% ✓ **Have an identified strategy** to materialize productivity
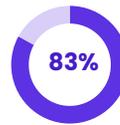
83% ✗ **Have not yet integrated HR & Finance** into their strategy to capture gains

> **We are fully aware that Generative AI represents a transformative element for our business and our processes. We are therefore conducting an in-depth review together with our Human Resources department and our social partners.**

Operations Director, mutual insurance company

Impacts on company employees

Acculturation and training

While productivity is a primary indicator of value, it cannot be fully realized without a human transformation. Team acculturation to Generative AI thus becomes a key success factor.

The level of acculturation appears high: 64% of employees report being familiar with the technology, and nearly one in two has already been trained in prompting. This foundation is an asset for supporting the deployment of Generative AI. However, these figures should be nuanced: business involvement, though real, remains sometimes partial and lacks operational anchoring, which limits the materialization of use cases in daily practice.

The challenge is no longer just to raise awareness and provide an industrialized technological foundation in a "push" mode, but to create a "pull" dynamic driven by the business teams themselves to generalize use cases. This requires positioning business teams as true 'owners' of identifying concrete use cases, leveraging their end-to-end vision of processes to optimize daily activities.

> **We have developed training programs for all levels of the organization, offering both generalist and specialized courses**

Chief Operating Officer and Head of Customer Management at a bancassurer

The objective is to move beyond occasional participation in exploratory phases and embed Generative AI into everyday practices, integrating the tool as a natural

lever for performance and service quality.

Thus, while acculturation remains a prerequisite, the real challenge now lies in business transformation: engaging teams in a mindset of ownership and accountability to systematize the approach and make Generative AI a tangible driver of value creation.

Regulatory and ethical

All this work on acculturation and business transformation is part of a collective approach, involving employees and representative bodies, particularly around compliance and ethical issues. The AI Act, which governs the use of artificial intelligence systems in Europe, requires companies to ensure compliance to guarantee transparency, security, and accountability in usage.

The chart below (Exhibit 10) illustrates the maturity level of companies in France and Germany regarding the AI Act. A similar trend is observed in both countries: a large majority of players (around 70%) are engaged in compliance initiatives, but only about 20% are currently fully compliant. Conversely, a minority – around 10% – have not yet taken any measures. This shows that, while awareness is real, compliance remains a work in progress, requiring sustained efforts to move from regulatory alignment to operational and sustainable integration of "compliance by design."
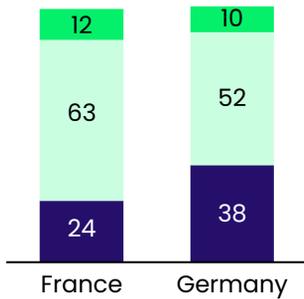
This step is crucial: it determines not only the legitimacy of Generative AI projects but also the trust of employees and customers.

However, compliance with the AI Act should not be seen as a constraint, but as a lever to structure responsible practices and strengthen the social acceptability of the technology.

Exhibit 10

Distribution of maturity levels regarding the AI Act in France and Germany

■ Fully compliant ■ Compliance underway
■ No measures taken

an ethical and sustainable way.

This approach involves designing models where technology acts as a lever, not as a substitute. People within organizations must remain the guarantors of quality, relevance, and compliance in decision-making, integrating principles of transparency, fairness, and respect for values. Ethics cannot be decreed: it is built through daily practices, co-construction of rules, and shared vigilance. Only under these conditions can Generative AI become a driver of progress, reconciling performance and responsibility.

This dynamic establishes a new operational paradigm: the role of employees is no longer limited to execution but evolves towards orchestrating Generative AI capabilities. Added value thus shifts from raw production to expert supervision and critical judgement. This human-AI pairing becomes the true engine of transformation, where technology proposes and humans decide, ensuring a level of business relevance unattainable by automation alone.

> **We are one of the first insurers to have published an AI charter placing humans at the center and aiming to provide clear guidelines to avoid irresponsible use cases**

Chief Data & AI Officer of an insurance group

Ethical transformation

Generative AI is not just a technological evolution – it requires a profound transformation of processes, guided by a strong conviction: putting humans back at the heart of the dynamic. While technology opens unprecedented opportunities for automation and efficiency, it must never dehumanize relationships or diminish the role of employees. On the contrary, process redesign must go hand in hand with greater accountability for business teams, giving them the means to steer and guide usage in

Transformation & agentic AI: Towards operational reinvention

An industry-wide dynamic driven by agentic experimentation

This movement towards business ownership takes on an even more strategic dimension with the emergence of agentic systems, marking a true paradigm shift in how business processes will be designed and operated. Agentic systems are not just an incremental evolution: they introduce intelligent systems capable of reasoning, planning, and memory, effectively joining the "workforce" and profoundly transforming enterprise productivity. This integration between agents and business functions redefines roles and responsibilities across the value chain, placing autonomy and proactivity of systems at the heart of operations.

Definitions may vary among stakeholders, but according to leading voices, agents:

- "are intelligent systems equipped with reasoning, planning, and memory"[1]

- "orchestrate tasks autonomously and proactively"[2]

- "join the 'workforce' and deeply transform enterprise productivity"[3]

Thus, agentic systems refer to solutions that do not merely execute tasks but anticipate, orchestrate, and interact with operating systems to optimize end-to-end processes. This capability paves the way for intelligent automation, where agents become operational partners for employees.

The dynamic is already well underway in the insurance sector: nearly **three-quarters of insurers report having launched initial pilots**, a clear sign that experimentation is in progress and the transition to agentic models is accelerating. This movement calls for strategic reflection on governance, security, and business integration to ensure that this transformation drives performance while preserving ethical and human principles.

> " **Agentic systems represent an opportunity in our business because it is a complex field, particularly in areas such as claims analysis or fraud detection** "

Deputy General Manager in charge of Transformation at a bancassurer

The implementation of agentic systems relies on targeted investments and a medium-term vision. Nearly **3/4 of insurers are already allocating dedicated budgets to support the development of these technologies, signaling a clear intention to industrialize ongoing experiments**. This dynamic builds on previous work on AI and Generative AI, which laid the technical and organizational foundations necessary for rapid scaling. The industrialization of the technological base of existing use cases by some players provides a platform for evolving towards agentic systems.
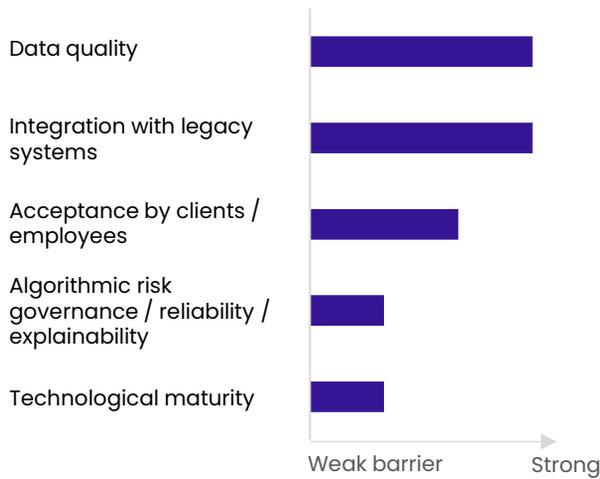
The challenges of agentic AI

Projections confirm this ambition: **67% of players anticipate a significant deployment of agentic systems within three years**, with major gains in productivity and operational efficiency.

However, this trajectory will depend on organizations' ability to overcome several key obstacles.

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1. Sundar Pichai,,Google I/O 2024 2. Satya Nadella, Microsoft build 24 : May 21, 2024 3. Sam Altman, blog : January 6, 2025.

Exhibit 11
Ranking of barriers to agentic deployment

	Weak barrier ———→ Strong
Data quality	████████████
Integration with legacy systems	████████████
Acceptance by clients / employees	███████
Algorithmic risk governance / reliability / explainability	████
Technological maturity	████

> " **We identify numerous underlying platform topics around agentic systems, which are necessary to orchestrate interactions and decision-making while maintaining human control** "
>
> Chief Operating Officer and Head of Customer Management at a bancassurer

The main obstacles to deploying agentic AI revolve around two major factors: data quality and integration with legacy systems. These particularly significant barriers reflect the technical and organizational complexity inherent in implementing advanced solutions within existing environments. Acceptance by clients and employees is also a key challenge, highlighting the need for change management and clear, educational communication.

These challenges, if addressed proactively, will transform Agentic into a strategic lever, capable of redefining business processes and paving the way for a new era of performance and innovation.

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About Wavestone

Wavestone was founded amid the rise of new technologies and digital innovation, growing with a strong entrepreneurial spirit. Expanding from France and Germany into Switzerland, the United Kingdom, and North America, Wavestone has become a leading consulting partner, supporting the world's largest companies in their most ambitious strategic transformations.

Drawing on expertise at the intersection of technology and business, Wavestone's 6,000 employees deliver a 360° portfolio of high-value, tailored consulting services, from redesigning business models to implementing cutting-edge technologies, while helping clients advance sustainable transitions.

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