AI readiness in insurance: How leaders close the gap and unlock value

Findings from Kyndryl research on AI adoption in the insurance industry

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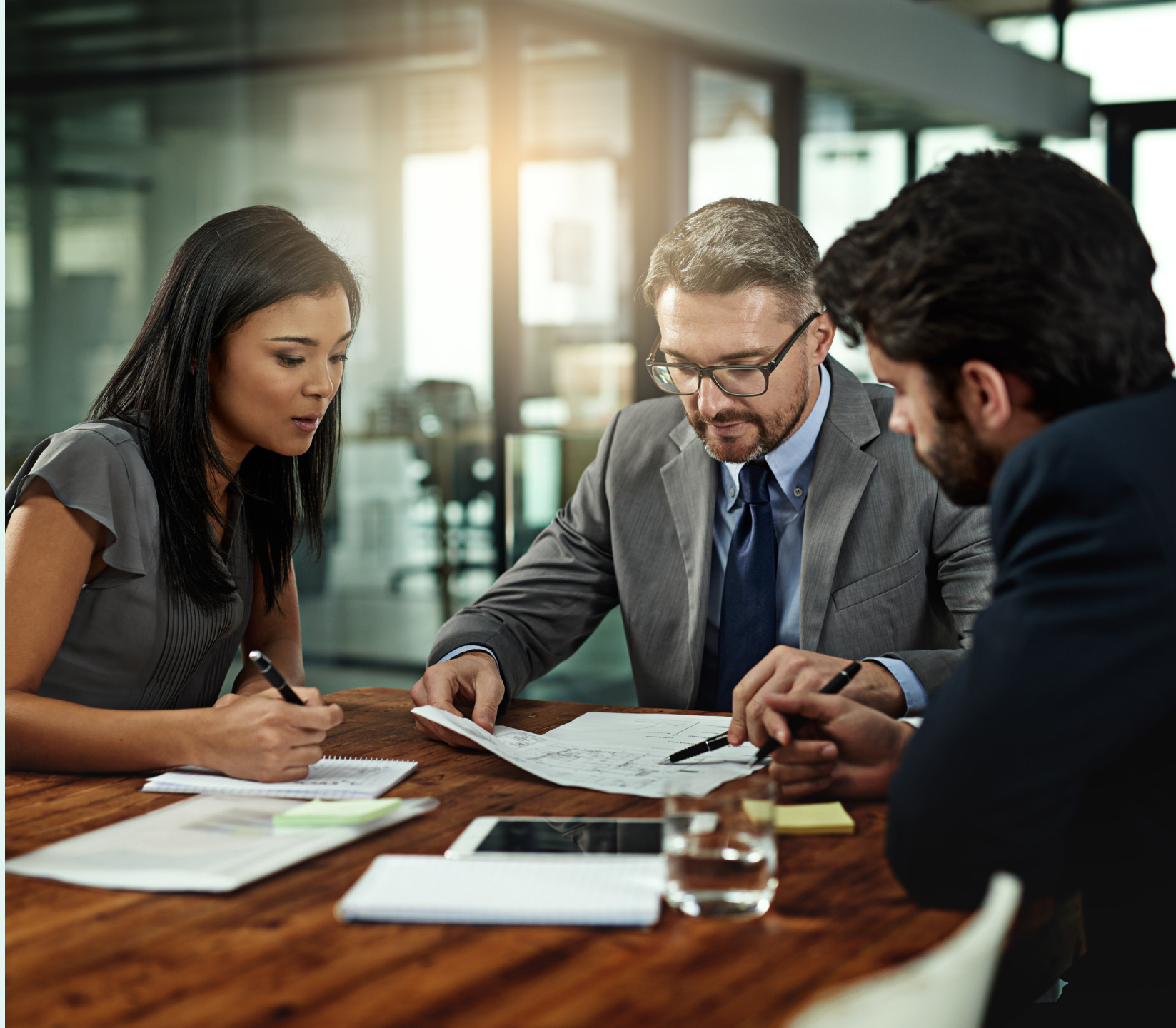

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Foreword

U.S. insurers may be eager to scale AI, but relatively few appear to be doing so with urgency.

The Kyndryl Readiness Report finds that 57% of respondents believe that AI and machine learning will yield positive ROI.[1] Yet industry research also shows that only 7% have scaled AI to deliver enterprise-wide value.[2]

Many insurers believe their organizations are much further along in implementing AI than they actually are, according to a survey of 200 industry executives by Kyndryl and research firm KS&R.

The disconnect is striking, given that insurance companies are investing as much as $100 million annually to redesign end-to-end business processes for the AI era. Organizations that move toward an AI-native posture will unlock the full range of benefits AI can enable.

An AI-native enterprise is one in which AI permeates the full fabric of the business and is an integral part of business strategy.

The Kyndryl research found three related themes:

- The misconception of industry leaders about AI progress,
- The importance of overhauling the operating model, and
- The most important near-term areas of priority for insurers in AI.

This paper explores the themes and provides recommendations for insurers looking to accelerate their AI journeys.

Only 7% of insurers have scaled AI to deliver enterprise-wide value.

Theme 1

The AI maturity gap: High awareness, shallow adoption

Enthusiasm for artificial intelligence is palpable across the insurance industry, with nearly every U.S. carrier experimenting with this emerging technology in some way. Yet this activity is so far limited and shallow, with most carriers dabbling with proofs-of-concept and narrow use cases, while overestimating the depth and breadth of their AI implementation. While their awareness and optimism about AI are high, actual enterprise-level adoption remains limited.

Overconfidence vs. reality

Insurance executives often believe their organizations are further along in AI maturity than the data supports because they may see isolated AI experiments as indications of maturity.

However, survey data shows that only about 7% of insurers have embedded AI across all major enterprise functions, and only 13% are actively working to scale AI across multiple processes.

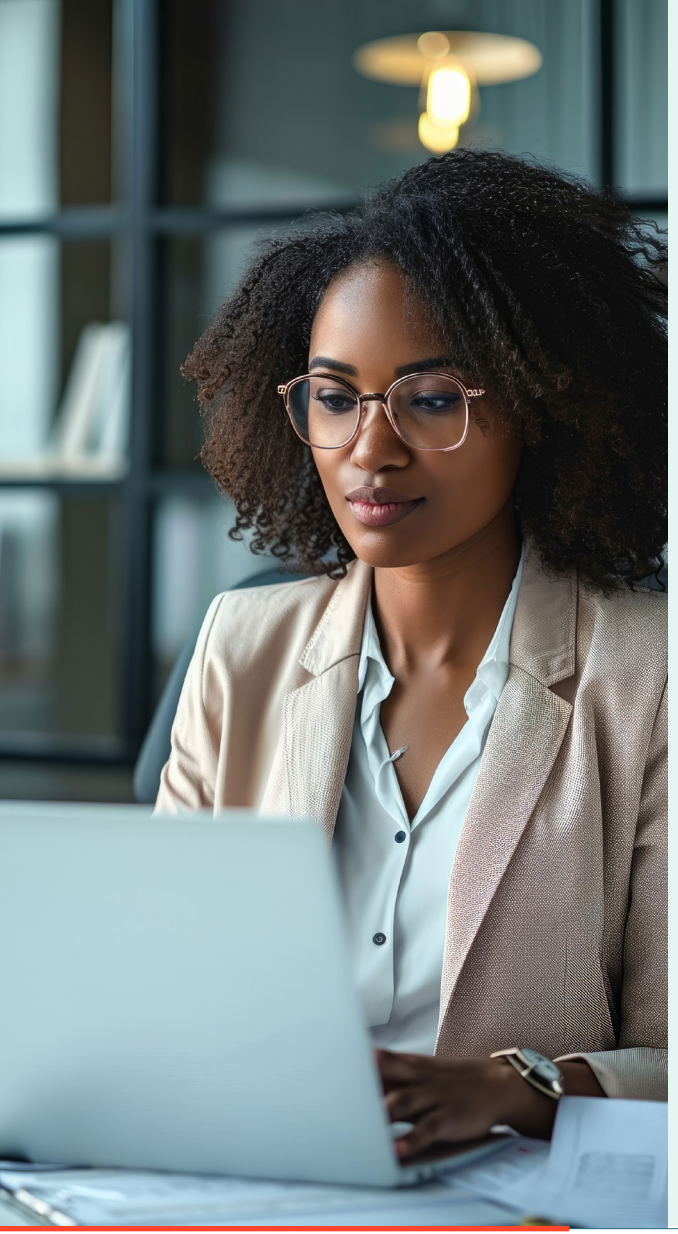
Meanwhile, 80% of insurers are on a spectrum between simply learning about AI to selectively embedding AI into finite business processes. The largest share of insurers, at 33%, remain in the middle of that spectrum, focusing on proof-of-concept experimentation. Industry insiders lament being too often stuck in "pilot purgatory"—a cycle in which enthusiastically conceived AI initiatives fail to graduate to full production.

68%

of insurers have more AI and automation pilot projects than they can scale.

Sixty-eight percent of insurance industry leaders say their organization has more technology pilot projects (including AI and automation) than they can realistically scale. And more than a quarter (28%) identify difficulty scaling from pilots and proof-of-concept to full production as a particular challenge to implementing AI.

One driver of the gap between perception and reality is misalignment between business leaders and IT teams related to progress on AI. Business leaders are almost four times as likely as IT leaders to report that their organization has widely adopted generative AI, and almost 2.5 times as likely to say the same for agentic AI. Those in business units may see a few AI tools in their workflows and assume the enterprise has fully integrated AI, not realizing how much foundational work related to data quality, infrastructure modernization and governance frameworks remains to be completed.



Consequences of the perception gap

This disconnect between perception and reality around AI has real consequences for insurers. Business leaders may become complacent when they carry misconceptions about their organizations' AI progress. They may underinvest in the foundations needed for AI transformation while savvy competitors move from experimentation to at-scale adoption.

- **False confidence and underinvestment:** Overestimating their AI maturity can lead insurers to misjudge their strategic needs and underinvest in critical capabilities like data architecture, model operations and expert talent. False confidence can leave insurers unprepared for meaningful AI integration.
- **Regulatory and risk exposure:** AI adoption without robust governance and risk management practices increases the chance of AI failures, biased decision-making and compliance breaches. These problems can undermine the trust of regulators and customers, leading to reputational harm and financial consequences.
- **Missed opportunities:** Insurers stuck in pilot mode will lag competitors that are moving into implementation, especially more agile, digital-first businesses. They may lose customers to competitors who excel in efficiency, customer satisfaction and the ability to underwrite risk profitably in an AI-driven market.
- **Internal frustration and talent loss:** Employees who see AI projects launch with fanfare but never reach scale may experience fatigue and loss of confidence. Top data science talent may leave for competitors that can put their talents to better use in projects that reach production.
- **High costs and poor outcomes:** Fully implemented AI can help insurers move away from manual processes, accelerate turnaround times, lower operating costs and generate robust risk insights. The ROI of AI remains unrealized in perpetual pilot mode, and insurers incur a steep opportunity cost.

4x

Business leaders are almost as likely as IT leaders to say their organization has widely adopted generative AI.

Theme 2

The operating model is the barrier — and the opportunity

Lack of AI-ready operating models is the central barrier to AI adoption in the insurance industry. Many organizations have no formal enterprise AI strategy documents, struggle with unclear governance and ownership of AI projects, and put insufficient emphasis on workforce skills and change management. Insurers are investing in AI tools, but not in the internal processes, structures and talent they need to implement AI at scale. Insurers who modernize their operating model to ensure robust implementation of this technology will be able to scale AI adoption faster and more sustainably.

The operational challenge of getting AI ready

Solving technology issues alone is not enough to ensure widespread AI adoption within an organization. Creating an AI-ready company is at its core an operational challenge: AI efforts will remain piecemeal without clarity on strategy, governance and data management. Furthermore, safely delivering value from agentic and generative AI at scale requires adjustments in processes, metrics, infrastructure and people skills.

Many insurers are currently pursuing AI in an ad-hoc way. Around 85% of insurers have no documented strategy for enterprise-wide AI. Only 25% say they have a documented agreement on which business functions will use AI, and 34% say they have not yet decided on the matter.

Similarly, only 12% of executive leaders in the industry say policies on responsible use of AI is documented and communicated across their organizations, and only 10% say the same for AI governance. Only 14% of insurers have budgeted for enterprise-wide AI adoption, while 49% have budgeted for specific AI use cases, highlighting a lack of intention behind AI integration.

Industry insiders often cite the pressing need for clear decision rights and ownership around AI. Data governance, model approval and cross-department coordination are often ignored or mishandled when responsibilities aren't delineated. Many insurers lack cross-functional governance bodies or AI councils where leaders from various departments can jointly set AI priorities and policies. The result is fragmented efforts that often remain stuck in silos or suffer from inconsistent oversight.

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Only 15%

of insurers have a documented strategy for enterprise-wide AI.

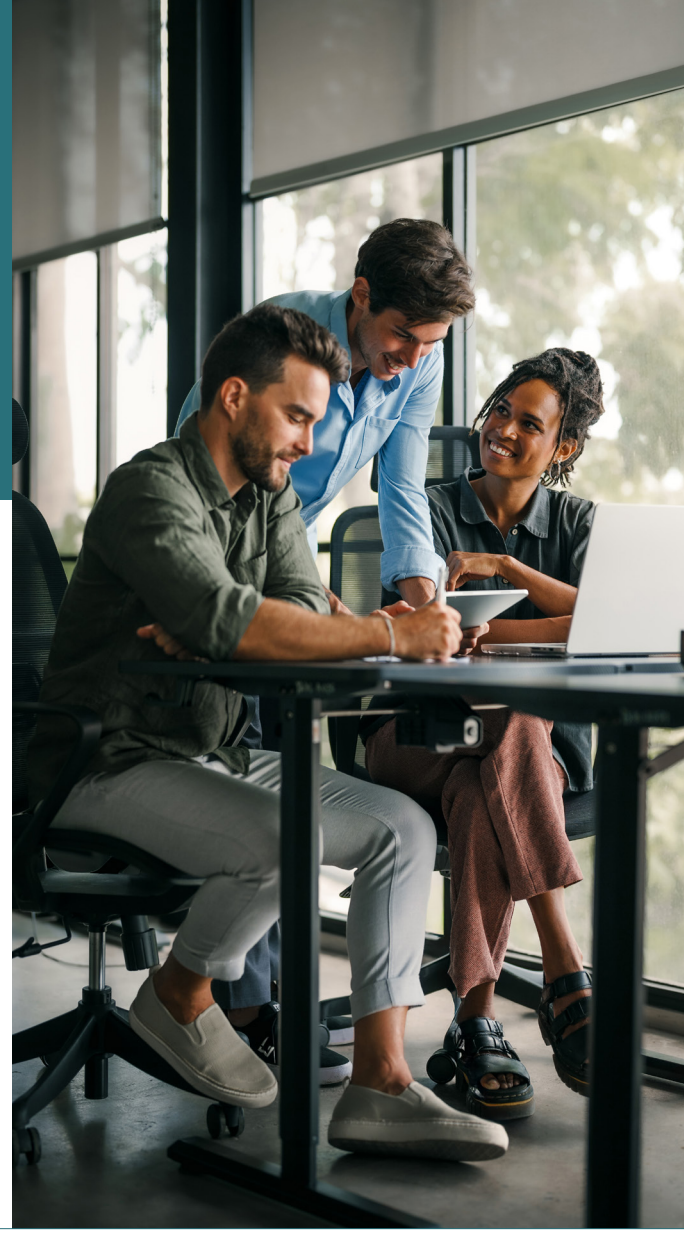
Another operating model challenge is a lack of focus on training and hiring competent AI talent. Many insurance companies have insufficient internal expertise and capabilities to scale AI. Lack of internal expertise or capabilities in AI is one of the top three challenges to implementing AI that industry decision-makers identify, with 35% saying they are concerned with having the right human and cognitive skills to make the most of AI opportunities,[4] and 31% citing lack of the right talent as a problem.

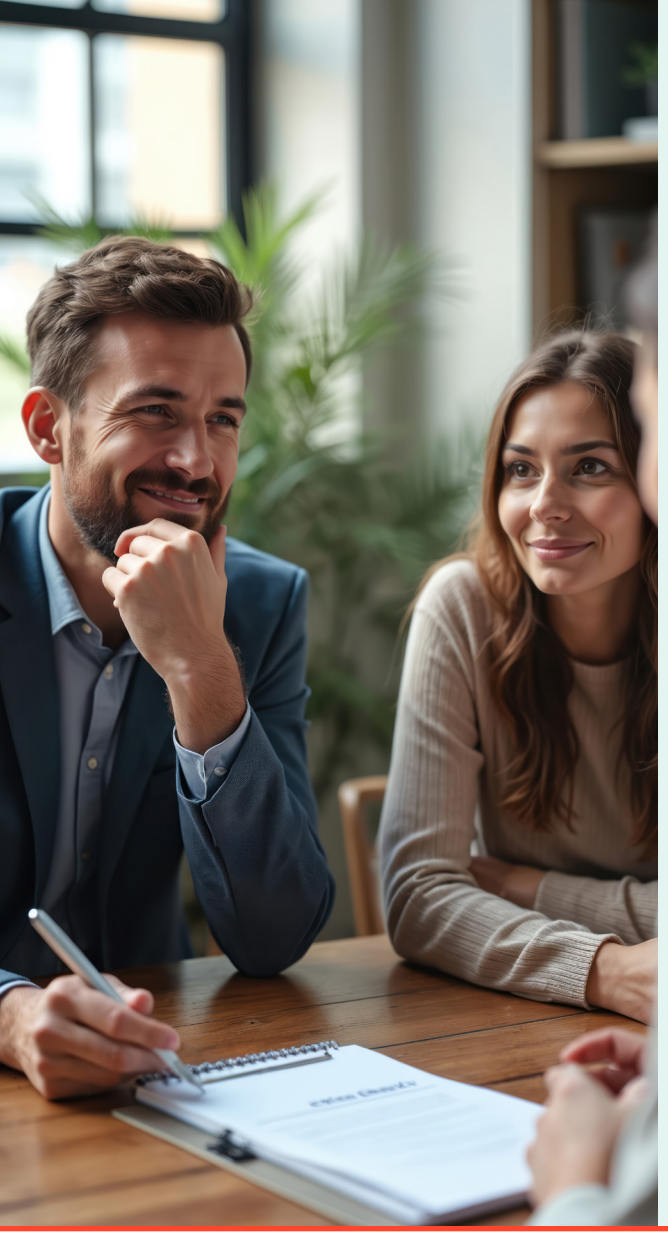
Despite 85% of insurance industry leaders saying they believe that AI is going to completely transform roles and responsibilities at their organization,[5] they often lack a formal plan for developing or recruiting AI-savvy talent. It's often necessary to create and implement a structured approach to building AI-relevant skills, such as training programs, creating new roles like data scientists and machine learning engineers, and engaging in change management activities with front-line staff.

31%

of insurers say that lack of the right talent is a problem for implementing AI.

Adapting the operating model goes beyond strategy, governance and people skills. Agentic AI can help reimagine end-to-end processes such as claims, policy servicing or broker support. Other processes need to shift as well, and additional changes can be driven by human-agent interaction, human-in-the-loop decisioning and the need for net-new processes for the AI-native insurer. Operational metrics must expand to provide information about these augmented processes, and outcome metrics must be realigned to the changing expectations in AI-enabled functions. Infrastructure and tooling need to be enhanced to deliver the required computing power and advanced networking capability in a human-agent enterprise. Security tools operating across hybrid workflows must utilize policy-as-code to implement the rules and standards required for controlled AI in a regulated context.





Why fixing the operating model matters

Without a formalized and coherent operational approach to AI, organizations lack clarity on who will use AI for what, which hampers coordinated action and robs potential AI initiatives of momentum.

They risk performing "random acts of AI" in various departments without a unified vision, which has various real-world consequences:

- **Stalled and siloed AI initiatives:** Without an enterprise-wide AI strategy and good governance in place, isolated AI projects pop up and then fizzle before they can achieve scale or help other departments. Projects are siloed in departments, and promising prototypes fail to make a company-wide impact.
- **Inconsistent risk controls and regulatory exposure:** Lack of central governance can allow for widely varying standards in AI projects, a fragmented approach that makes risk management a challenge. AI models may use biased data, run afoul of privacy rules or have other issues that create regulatory and reputational risks.
- **Limited reach for AI initiatives:** Without operational coherence, organizations lack a coordinated way to spread AI best practices as teams learn them. For instance, a claims department might automate part of its workflow with AI but fail to inform the underwriters about its new, efficient method.
- **Talent and culture mismatches:** Insurers who fail to address skills gaps and manage change may experience low adoption or misuse of AI projects. Employees may resist AI implementation due to fear or lack of understanding, undermining the ROI of technology investments.
- **Lost competitive advantage and innovation potential:** Insurers can look to move toward an AI-native operating model to keep up with more agile competitors who are actively leveraging AI. Insurers who are slow to evolve may end up with a winning vision but the wrong vehicle to actualize it, and lose ground in the market.

Theme 3

Fraud, claims and actuary: the near-term AI battleground

Three insurance functions stand out as prime targets for AI investment and competitive advantage in the near term: fraud detection, claims processing and actuarial analysis. Fraud and claims, which directly affect the bottom line through loss costs and customer satisfaction, both involve large volumes of data and repetitive decisions—ideal for AI to handle. Meanwhile, talent shortages and heavy workloads make actuarial departments ripe for AI-driven efficiency and insight. By focusing on these use cases, insurers believe they can achieve solid wins and tangible ROI from AI.

Industry priorities for AI use

The business case for AI is clearest in claims, fraud and actuarial departments, as they have a combination of abundant data, high manual effort and measurable business impact. Many insurers report facing significant challenges, including poorly optimized processes that require experts to spend a lot of time on repetitive tasks (63%). Additionally, insurers report that processes often involve high levels of rework (69%), actuary skills are both costly and scarce (71%), and risk management tends to be reactive rather than integrated into processes (72%). AI can automate routine claims, assist adjusters with analysis and otherwise enable efficiency and speed in claims processing. It can help stem growing fraud losses, which now total $308.6 billion annually for U.S. insurers,[6] and rapidly analyze larger datasets to refine actuarial risk models.

72%

of insurers say that risk management tends to be reactive rather than integrated into processes.

Insurance companies are moving forward with plans to bring AI into these areas of the business. Sixty-nine percent of insurance leaders say they are currently investing in cybersecurity, such as fraud detection and risk management.[7] Almost half (44%) of insurance decision-makers say it is a priority to implement AI in fraud detection in 2026, and 50% say the same for claims processing. If these plans come to fruition, 77% of insurers will already be using or are on their way to using AI in fraud detection, and 79% will be doing so in claims processing. It is notable that claims processing and fraud detection are by far the highest priorities for AI among insurance companies that are leaders in AI implementation, with 61% identifying claims processing and 66% identifying fraud detection as a priority.

Among insurers that are leaders in AI implementation:

- → **66%** say fraud detection is a priority
- → **61%** say claims processing is a priority

Actuarial enhancements like AI-driven risk modeling and pricing are close behind fraud and claims as a priority. Actuarial modeling is a fast-emerging area in AI for insurers, as insiders emphasize that leaders are focusing on and eager to develop AI in this area, even though survey data show only 36% are currently doing so.

The emphasis on using AI in these specific areas of the industry represents a shift in momentum: Using AI in fraud and claims was recently considered experimental but is now increasingly mainstream, while AI in actuarial practices is a new frontier for the industry. Insurance insiders are optimistic that these use cases will yield AI success stories. They envision AI in fraud helping drastically reduce false claims payouts and improve detection rates, AI in claims enabling instant adjudication or better triage, and AI in actuarial work enhancing risk modeling accuracy and speed.

The consequences of ignoring this trend

With the bulk of the industry racing to implement AI solutions in fraud, claims and actuarial functions, companies that do not explore these areas and put AI to work as soon as possible are likely to fall behind their competitors. They may see several consequences for ignoring this trend.

- → **Higher fraud losses and leakage:** Fraudsters are using sophisticated methods—some of them AI-based—that enable outlier claims human auditors can't catch but AI-enabled pattern recognition can identify. Insurers with lagging AI implementation may become desirable targets for bad actors, leading to rising loss ratios.
- → **Customer attrition due to slow claims processing:** Claims departments that don't capture efficiency and speed will seem slow and unresponsive to customers in comparison to competitors, which can erode customer satisfaction and drive customers to switch to more efficient insurers.
- → **Disadvantages in pricing and underwriting:** Actuarial departments that delay AI adoption may fall behind in risk analysis and pricing sophistication, leading to a disadvantage compared to competitors that use AI to identify profitable niches and underwrite them more accurately.
- → **Talent attraction and retention issues:** Top talent will shy away from organizations they see as lagging the market or less innovative, making it harder for those insurers to attract the best workers or keep those they have. Losing employees capable of implementing AI projects will put a company even further behind in AI.
- → **Lower efficiency and financial gains:** Failing to automate claims means higher handling expenses and potentially more claim leakage. Not improving fraud detection means more fraud costs. Not enhancing actuarial models means missed chances to optimize capital and pricing.

Recommendations for insurers

The following recommendations will help insurers accelerate AI adoption in line with business strategy and work toward AI-native footing.

01 Craft a cohesive enterprise AI strategy and approach

Start by agreeing on the business outcome your teams need to reach and make sure it's in line with your organization's North Star vision. Alignment with your North Star vision is critical to obtaining the cross-functional buy-in necessary to scale proofs-of-concept, allowing insurers to shift from dabbling in AI to approaching AI strategically. The opportunities of automation, AI and agents may require technology that your organization is yet to establish.

Enabling AI-native ways of working requires providing secure guardrails and giving agents and people the freedom to work and innovate within those boundaries. Establishing a flexible, AI-first culture is a key to success. Organizations for which adaptability is a core cultural value are 15 percentage points more likely to have achieved positive ROI on their AI investments.[8] To do so, leaders need to gain a deep understanding of how work gets done and become fluent in and comfortable with AI, so they can guide their employees through the transition and anticipate how the change may affect their business.

Best practices are:

- → Pairing AI deployment with training and change management;
- → Addressing employee skepticism and skills gaps; and
- → Clarifying how employees should interpret and act on AI-driven insights.

Leaders can also look to deploy sophisticated AI tools that are emerging for value realization, such as Agentic Program Management (PMO) and Agentic Value Realization Office (VRO) to accelerate the shift to AI-native.

02 Pick your AI-based competitive advantage

Considering the need for speed, you may not be able to bring AI to scale in every part of the organization right away. The key will be to choose where AI will create a competitive advantage for your organization and put all your resources toward that implementation to start.

You may prioritize competing head-on in a high-potential area such as claims, fraud or actuarial, or you might identify other strategic priorities for AI that can help differentiate you in the marketplace, such as customer acquisition or customer engagement.

Select use cases that allow you to demonstrate value quickly, building credibility, ROI and permission to move forward. A good early use case simplifies a complex process—the more steps in a process, the better the opportunity for agentic AI to create efficiencies.

03 Lay a strong technology and security foundation

Regardless of the investment choices, it's important to understand the collective scale of autonomous agents working across insurance workflows, the computing power required, and the optimal technology stack to enable and orchestrate delivery.

One factor to address is a legacy technology stack that stifles quickness, innovation and flexibility in an increasingly AI-enabled business. More than half of enterprise leaders say their existing technology holds them back from scaling innovation.[9]

In an industry with $200 billion in technical and process debt,[10] insurance companies are beginning to deploy AI solutions to modernize their legacy estates and eliminate this debt.

Even those companies that choose to keep existing technology can use AI as an orchestration layer to harmonize the current IT environment. Rather than replacing or replatforming applications that are still performing, start by using agentic AI to read code written in older languages. Using AI to conduct modernization programs can cut the timeline for completing them by about half.[11]

Insurers must keep in mind that security must be front-and-center in any agentic innovation, and that digital trust is paramount for businesses fully adopting and embracing autonomous agent workloads. This is especially true as quantum computing moves closer to reality, and therefore is one reason why 75% of organizations across industries are investing in AI for security.[12]

04 Adapt your operating model to enable AI at scale

To fully and quickly take advantage of AI, insurers must make AI transformation into business as usual. Doing so means overhauling your operating model to build transformational resilience and create a foundation of strong regulatory, compliance and security capabilities.

Each element of the operating model requires examination and adjustment to manage and magnify the impact of AI. This includes adapting people skills to understand, engage and oversee autonomous agents in the environment. It means rethinking processes to account for agents' speed and accuracy, as well as the need for agent-human interaction. It means assessing the capabilities of technology infrastructure to support a multitude of autonomous agents working within and across insurance workflows and enabling generative AI that supports each role in the organization.

It's time to move fast

Time is of the essence for U.S. insurers as the industry moves quickly to implement AI. To move from AI experimentation to deployment at scale, insurers will benefit from ensuring that their technology and operating model evolve in tandem.

Leaders can push their organizations toward fast, secure and successful transformation by becoming dialed into their AI progress and providing proactive, future-looking guidance to employees and implementation teams.

How Kyndryl can help

Working with outside experts can accelerate progress and give organizations a leg up in this fast-paced, competitive environment.

Schedule a consult with Kyndryl to help understand how you can get a realistic view of your AI maturity, decide where AI will drive competitive differentiation and ensure your operating model can support AI at scale.

AI-native operating model design

Kyndryl helps insurers redesign their operating models to embed AI as a core capability, enabling AI-native ways of working that are resilient, scalable and secure.

AI-ready workforce transformation

Kyndryl supports workforce evolution through AI fluency, role redesign and skills enablement so employees can effectively collaborate with intelligent agents.

Governance, risk, and compliance (GRC) frameworks

Kyndryl establishes governance and risk frameworks tailored for agentic and generative AI, enabling control, accountability and safe scale.

AI readiness assessment and strategy formulation

Kyndryl assesses organizational, data and technology readiness and co-creates a pragmatic AI strategy aligned to business priorities and regulatory realities.

Agentic AI–driven core system and application modernization

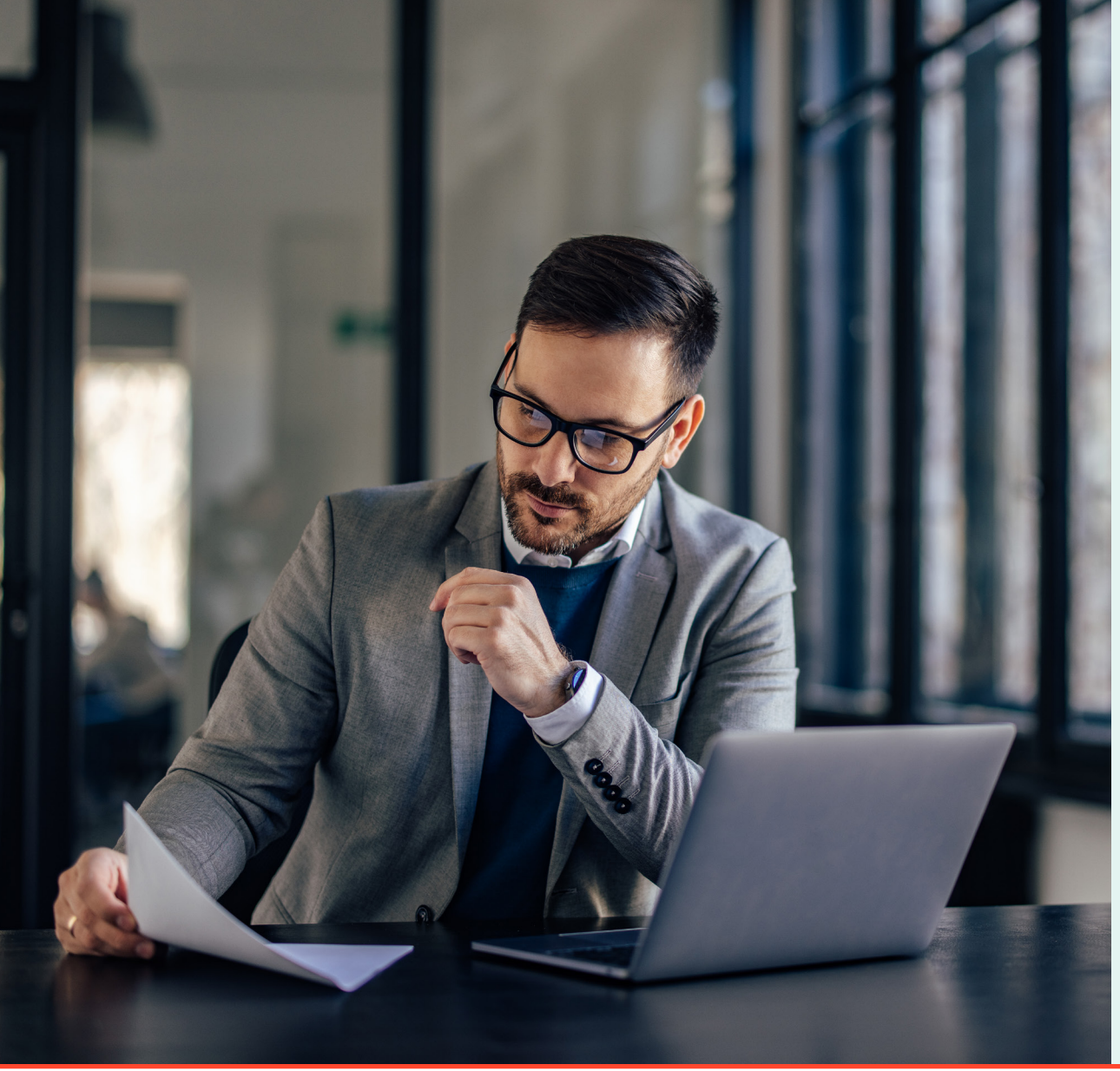
Kyndryl applies AI and autonomous agents to modernize legacy systems, reduce technical debt and remove barriers to speed and innovation.

Responsible AI and data protection

Kyndryl embeds responsible AI principles, privacy-by-design and data protection controls to ensure trust, transparency and regulatory alignment.

Managed AI services and AIOps for scale

Kyndryl provides managed AI services and AI-enabled operations to help insurers deploy, monitor, optimize and continuously improve AI solutions at enterprise scale.



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