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# **INNOVATION IN FOCUS: Reimagining Risk in an AI-Driven World**

**A Global Priorities Report Supplemental Feature**

The IIS Report on Innovation was developed by the International Insurance Society. The findings are based on responses from IIS and Insurance Information Institute (Triple-I) members, with subject matter expertise and guidance provided by HSBC Life, Nippon Life Insurance, Swiss Re, and Trust Re. The Report on Innovation was further validated by members of the IIS Innovation Working Group during a meeting at the Global Insurance Forum on Oct 26, 2025, in Ruschlikon, Switzerland. It offers additional insight into innovation impacts addressed in the 2025 Global Priorities Report published in April 2025.



## A Forward from the Facilitator

What if we have been looking at AI from the wrong angle, not as a magic fix for the insurance industry's legacy issues, but as an unlock for the next generation of growth through insurable risks? AI is emerging alongside forces already reshaping the global risk fabric: the rise of intangible assets and cyber exposure, mounting climate volatility, shifting global demographics, and an entirely new class of technologies. These are not distant scenarios, they are today's realities. The IIS Innovation Report reflects an industry in transition, a theme underscored during our executive working group session at the Swiss Re Centre for Global Dialogue in Rüschtikon. Leaders recognized that early AI efforts often focused too narrowly on efficiency and missed the broader strategic opportunity emerging across the global economy.

The discussions made it clear that the next decade will divide the sector between organizations making marginal improvements and those rebuilding their operating models around proprietary knowledge graphs, reengineered data flows, and augmented human judgment. These foundations enable stronger risk selection, superior service performance, and proactive loss prevention in a far more dynamic risk environment, while preserving what remains fundamentally human in our business: trust, advice, and long-term client relationships. AI agents can deliver transformative gains, but only for firms prepared to rethink governance, decision rights, talent, and data strategy. This is the strategic inflection point. If we mobilize for it, insurance will not simply adapt, it will become one of the defining stabilizers of an increasingly interconnected and AI-enabled world!



**George Kessleman**  
*IIS Innovation Working Group Facilitator*

IIS Innovation Working Group Facilitator  
President, InsurTech Asia Association

# Executive Summary

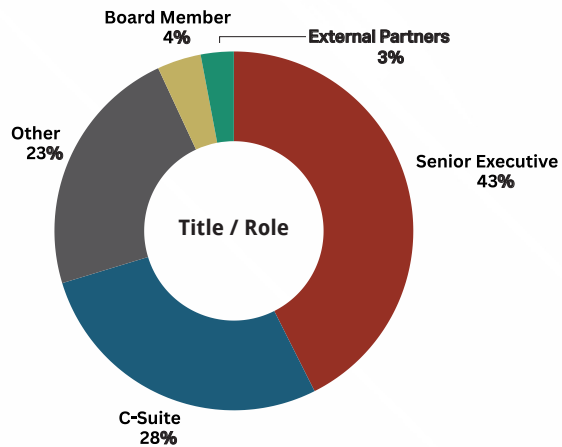
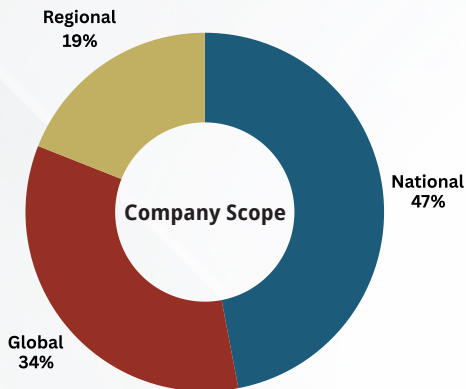
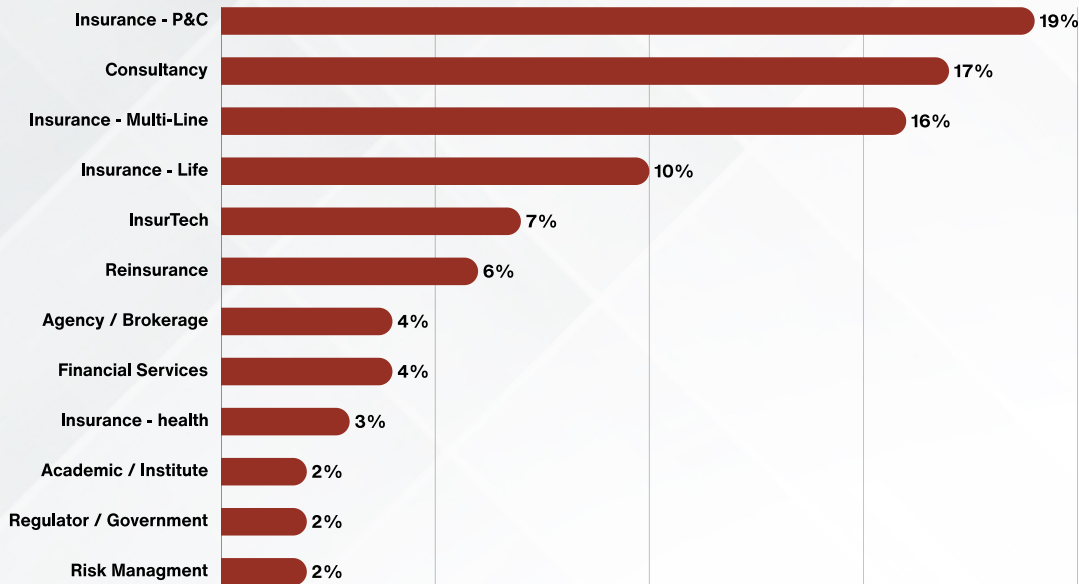
- ▶ **AI transformation sweeping the insurance industry.** The IIS Report on Innovation presents an in-depth examination of how organizations across the insurance sector are adopting and operationalizing artificial intelligence (AI) – particularly Generative AI (GenAI) – to drive efficiency, productivity, and strategic differentiation. Drawing from a diverse respondent pool across insurers, reinsurers, InsurTechs, and consultancies, the report underscores a sector in the midst of transformation. While enthusiasm for AI is high, maturity levels vary significantly by company size and type, with larger firms generally further along in production deployment and smaller firms focusing more on exploration and customer-facing innovation.
- ▶ **Efficiency remains the primary driver of AI adoption.** Operational efficiency and workflow optimization dominate current AI priorities, with 53% of respondents citing them as top focus areas, followed closely by underwriting, pricing, and claims management. These findings indicate that insurers are initially using AI to strengthen core processes rather than disrupt existing models. Smaller firms, however, show a stronger tendency toward leveraging AI for customer service and market expansion. Metrics of success largely center on productivity gains, data accuracy, and improved customer experience, though formal frameworks for ROI measurement are still evolving across the industry.
- ▶ **Widespread experimentation but limited deployment maturity.** Adoption data reveal that about 87% of companies are pursuing GenAI initiatives, though only around a quarter have reached production-level implementation. Budgets dedicated to AI average 3.9% of overall spending. Most firms rely on third-party general-purpose large language models like ChatGPT, while larger organizations increasingly explore first-party or industry-specific models. Leadership of AI innovation typically originates at the executive level – especially CEOs, boards, and CTOs/CIOs – indicating strong top-down strategic ownership of AI adoption.
- ▶ **Key challenges focus on governance, data, and talent.** This report also identifies major challenges that can temper progress. Chief among these are concerns over data privacy and integrity, security, and bias management, as well as the difficulty of measuring ROI. Talent shortages and the lack of formal governance frameworks also impede scalable AI integration, especially for small firms. Most companies rely on human oversight rather than structured governance systems, though larger insurers are beginning to formalize processes through ethics committees, audit trails, and explainability standards.
- ▶ **Balancing innovation with risk in the era of AI agents.** Looking forward, the report highlights both excitement and caution surrounding the rise of autonomous AI agents in insurance. Top concerns – such as hallucinations, validation difficulties, and regulatory compliance – reflect an industry still grappling with trust and accountability in automated decision-making. Overall, the findings portray a sector actively experimenting, learning, and building the foundations for responsible, scalable AI adoption that enhances both operational excellence and customer experience.

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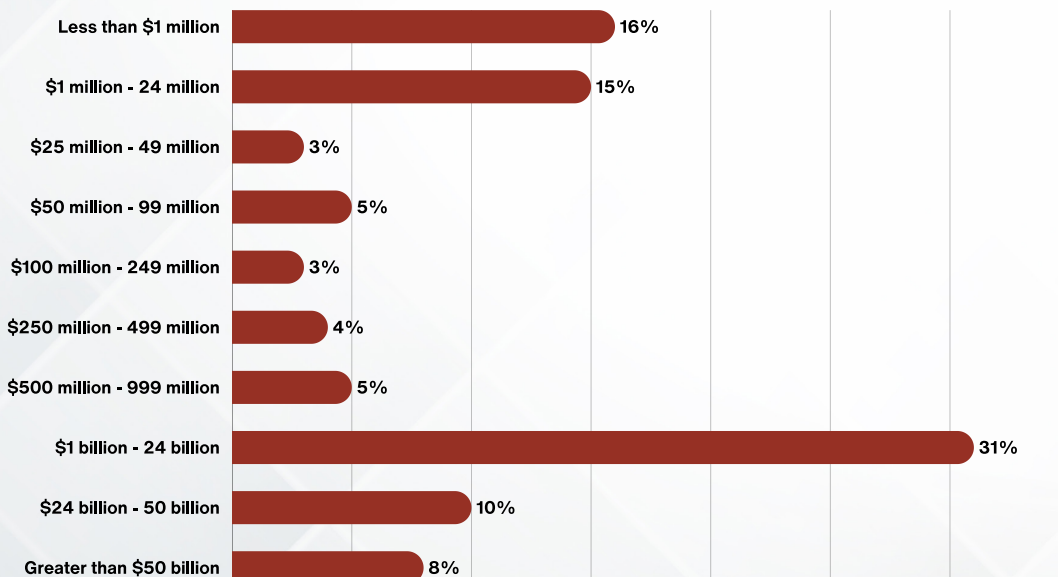
# Innovation Survey

## Respondent Demographics

### Company Type



### Company's Annual Revenue



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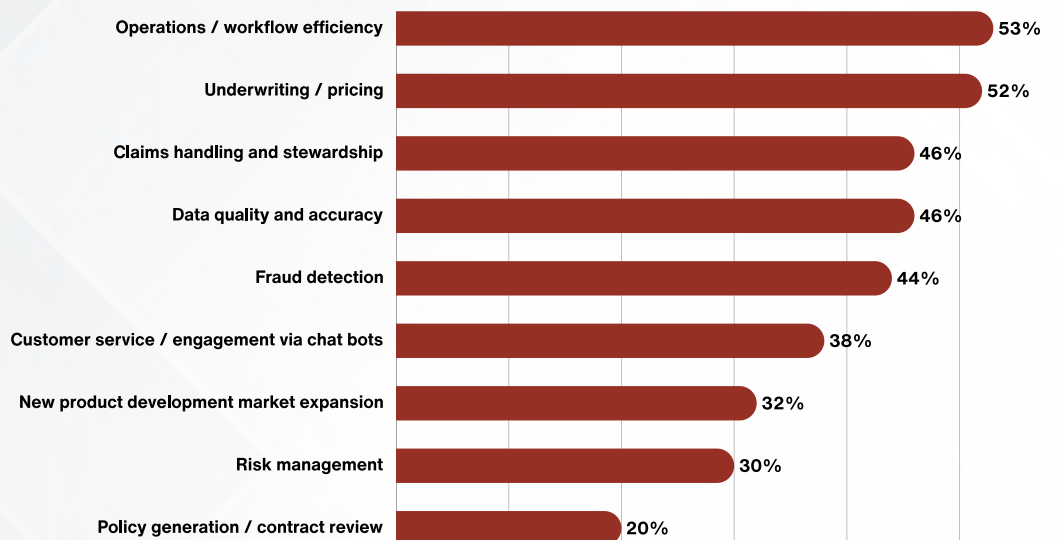
# Strategic Objectives

## Top priorities for AI applications

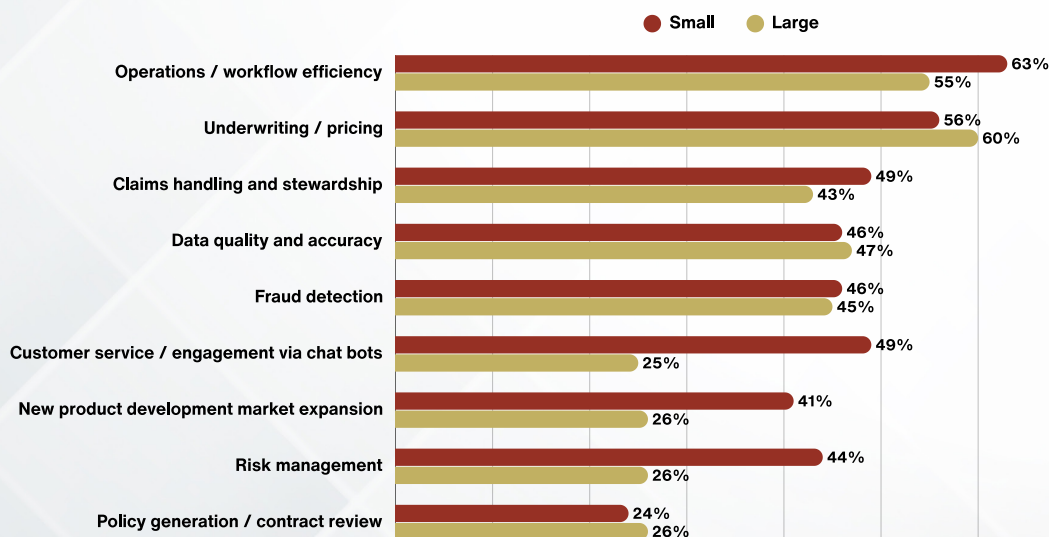
**Question:** In the next 12-24 months, which areas of the insurance value chain are your top priorities for exploring or implementing AI applications (including Generative AI, Agentic AI, etc..)? *Select all that apply.*

- ▶ The top three focus areas are operations/workflow efficiency (53%), underwriting/pricing (52%), and claims handling (46%).
- ▶ Data quality and fraud detection follow closely, reflecting emphasis on core performance and control.
- ▶ Overall, innovation-oriented areas like new product development, customer chatbots, and market expansion trail behind, showing AI's current use as an efficiency driver rather than a disruptor.
- ▶ Smaller firms (under \$25m in annual revenue) were also about twice as likely as larger firms (over \$1b in annual revenue) to be prioritizing customer service applications, using AI for market expansion, or for risk management.

### Overall



### By Company Size



# 5

# Success Metrics

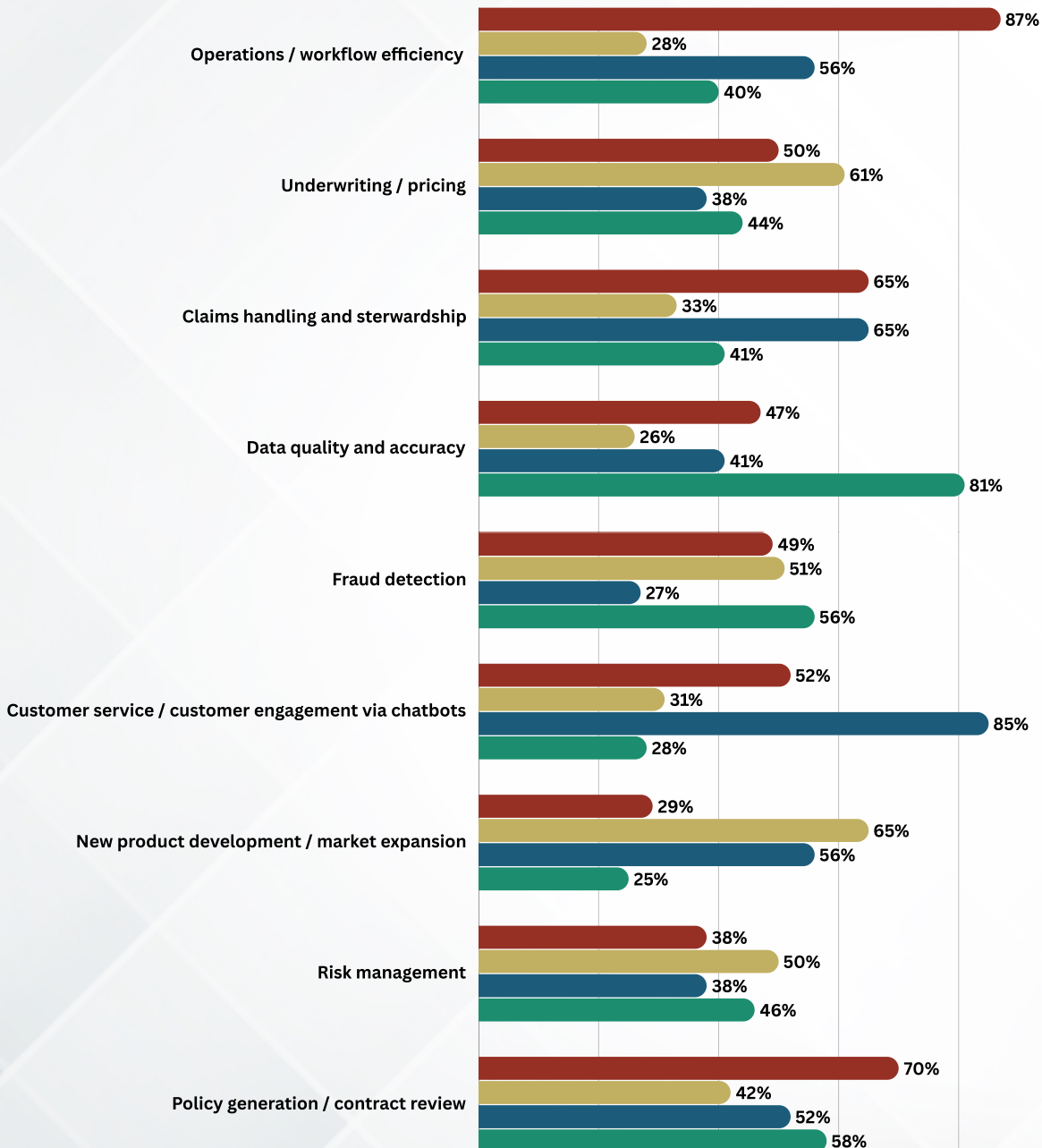
## Valuable AI success outcomes / metrics

**Question:** What outcomes or metrics would be most valuable to you when assessing the success of an AI initiative? *Select all that apply.*

- ▶ 87% of those prioritizing AI applications for operations and workflow efficiency are looking for metrics that indicate increased productivity from AI usage.
- ▶ 85% of those prioritizing customer engagement via chatbots are looking for metrics that indicate an improved customer experience.

### Overall

● Increased productivity
 ● Increased revenue
 ● Improved CX
 ● Improved data quality



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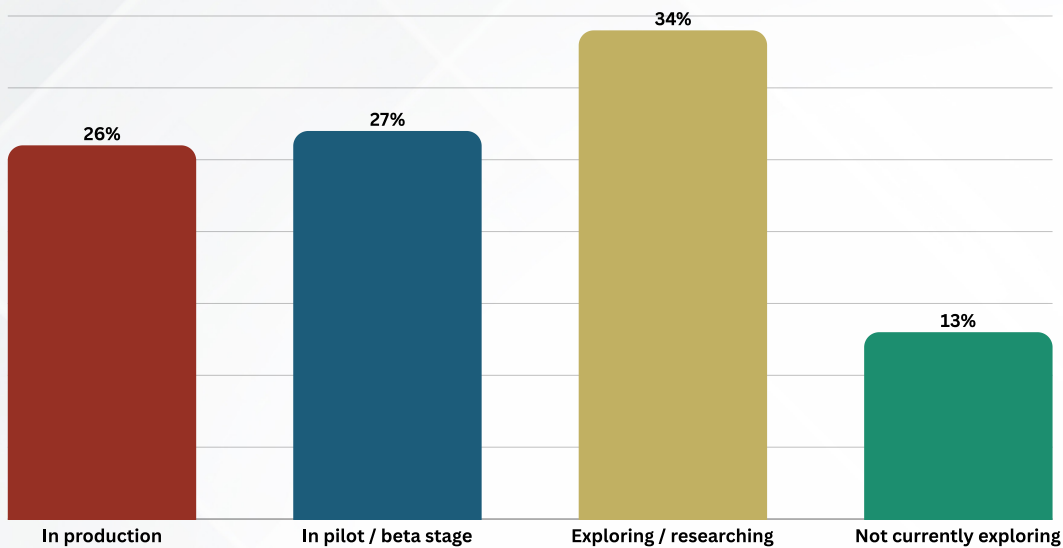
# AI Adoption

## State of Adoption

**Question:** Please indicate the current stage of adoption for Generative AI at your company.

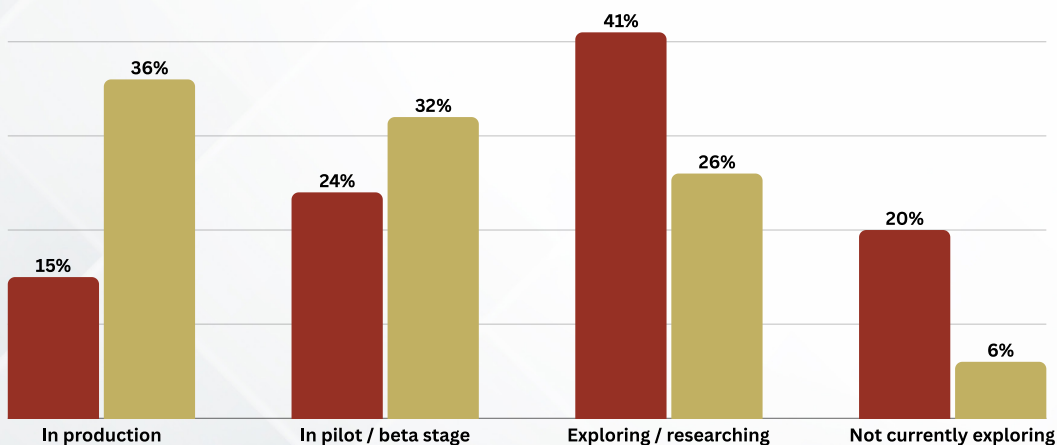
- ▶ Respondents vary widely in their company's current stage of GenAI adoption with only about a quarter in production and 13% not exploring any GenAI adoption at all.
- ▶ However, with 87% overall pursuing GenAI applications at their company, this pattern signals broad enthusiasm for GenAI, but a measured rollout.
- ▶ Larger firms are more likely to be in production already while smaller companies tend to be in exploratory stages, if pursuing GenAI at all.

### Overall



### By Company Size

● Small ● Large



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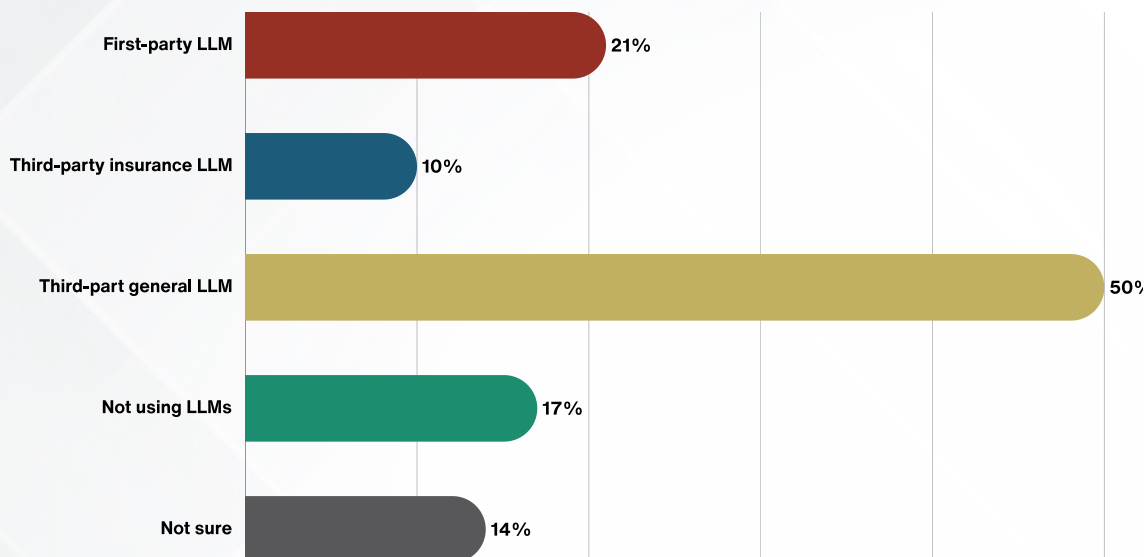
# Large Language Models

## Types of Large Language Models in use

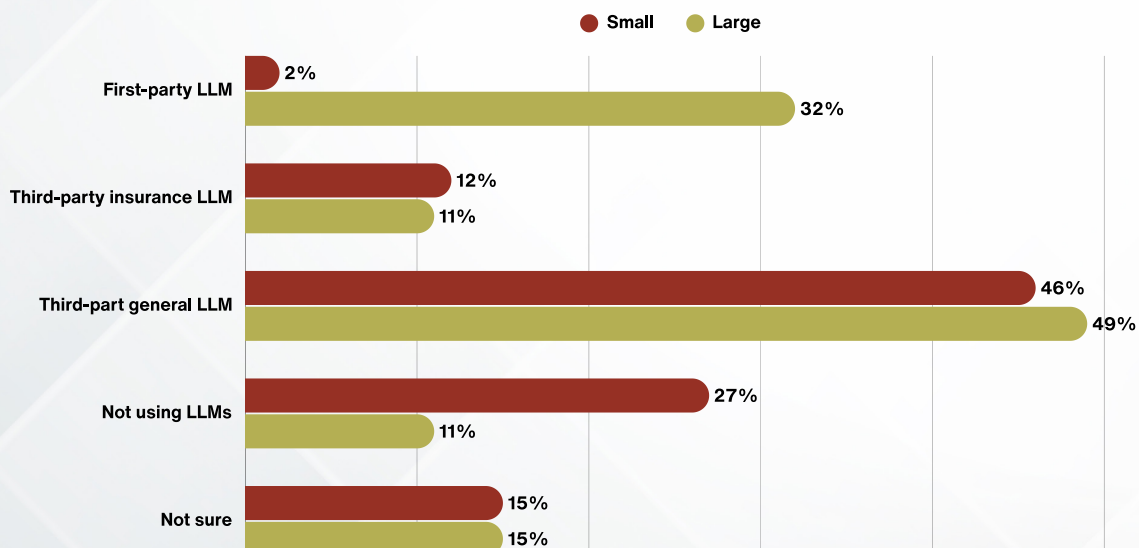
**Question:** If your company is using an LLM, what kind are you using? An LLM is a "Large Language Model" and could include tools like ChatGPT, Google Gemini, Anthropic/Claude, or even chatbots or agents used specifically at your company. *Select all that apply.*

- ▶ Around 50% of firms use general-purpose LLMs (e.g., ChatGPT), with smaller portions using insurance-specific or first-party models.
- ▶ 14% are unsure which models are in use — a sign of either limited AI transparency/coordination at the company or possibly a lack of understanding of LLMs.
- ▶ A third of large firms are using first-party LLMs (LLMs that they built internally).
- ▶ Large firms diversify with multiple LLM types, while small firms rely mainly on off-the-shelf tools.

### Overall

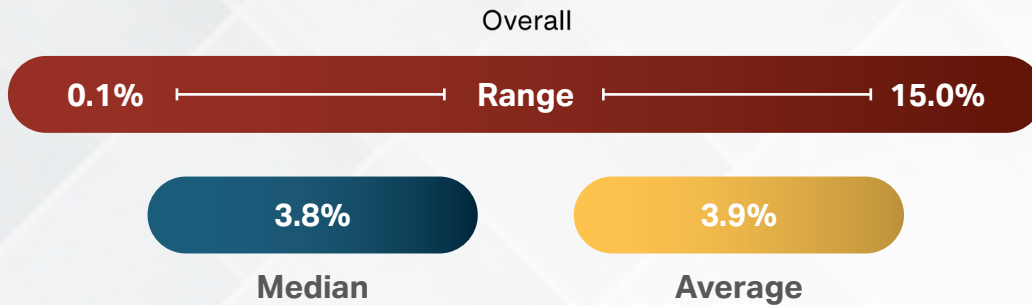


### By Company Size



# AI Investment

**Question:** What percentage of your company's overall budget is allocated to Generative AI investments?



**Question:** In a few sentences, how are you measuring the success of your Generative AI pilots and deployments?

Overall

**Operational Efficiency and Productivity.** A dominant theme across responses is the measurement of success through efficiency gains – both in operations and employee productivity.

- ▶ Many respondents mentioned reduced time spent on manual tasks, automation improvements, or process optimization as primary indicators.
- ▶ Some tied success directly to expense reduction or employee utilization rates.

“

*Operational cost savings, a reduction in labor hours, an acceleration of product development, and automation rate increases.*

”

**Business Outcomes and ROI.** A subset of respondents (mostly from larger firms) mentioned return on investment (ROI) or business impact as emerging measures.

- ▶ These include cost savings, customer experience improvement, and revenue enablement.
- ▶ However, qualitative responses indicate that many are still developing concrete measurement frameworks.

“

*Business impact metrics: measurable improvements in efficiency, cost reduction, or revenue generation (e.g., 30% faster report generation or 20% lower operational costs).*

”

**Adoption and Deployment Metrics.** Another common metric involves tracking adoption or deployment counts – particularly in the early phases of experimentation.

- ▶ Respondents measure success by the number of pilot projects, active users, or models deployed.

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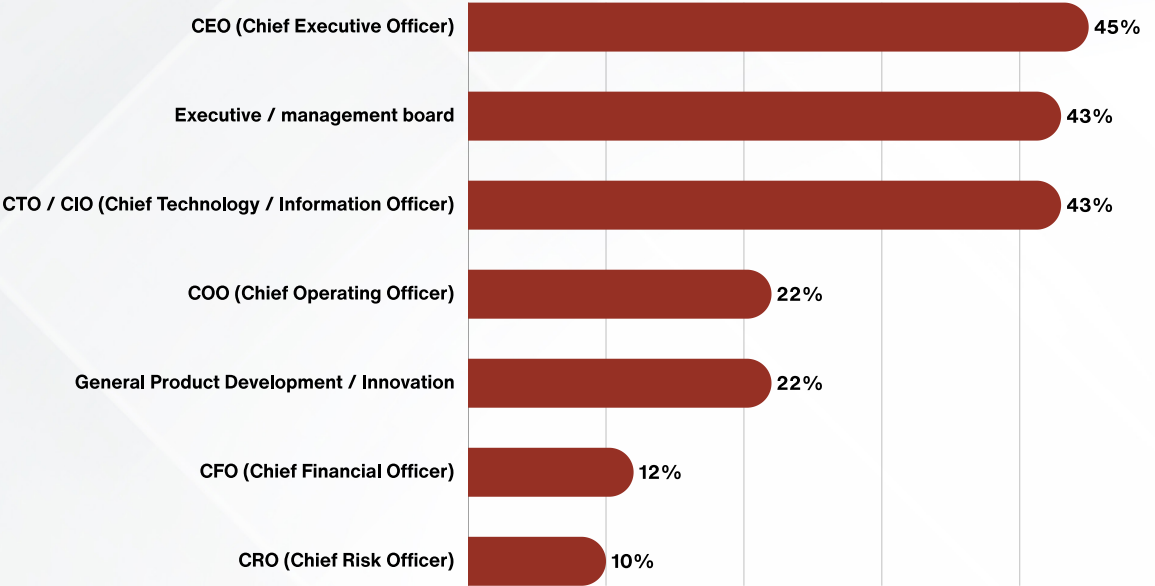
# AI Champions

## Primary champion of AI innovation efforts

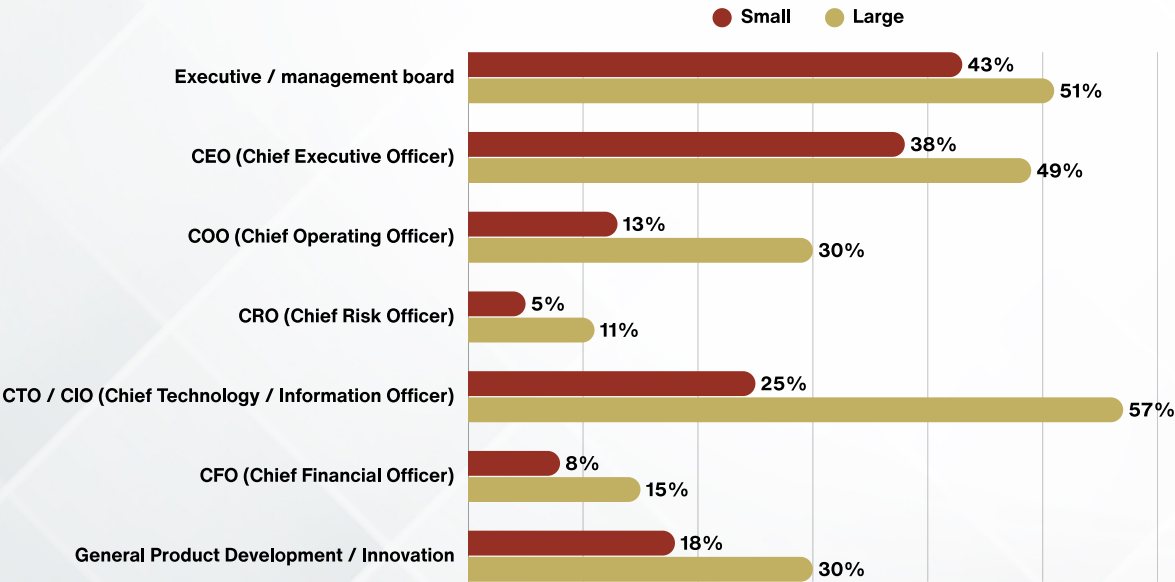
**Question:** Who at your company is primarily championing AI innovation efforts? *Select all that apply.*

- ▶ AI initiatives are most often led by CEOs (45%), executive boards (43%), and CTOs/CIOs (43%).
- ▶ This concentration indicates strong top-down ownership of AI agendas.
- ▶ Large organizations are more likely to rely on structured tech leadership, with 57% saying that the CTO or CIO is the primary champion of AI innovation efforts; smaller firms lean on CEO- or Executive Board-driven innovation.

Overall



By Company Size



10

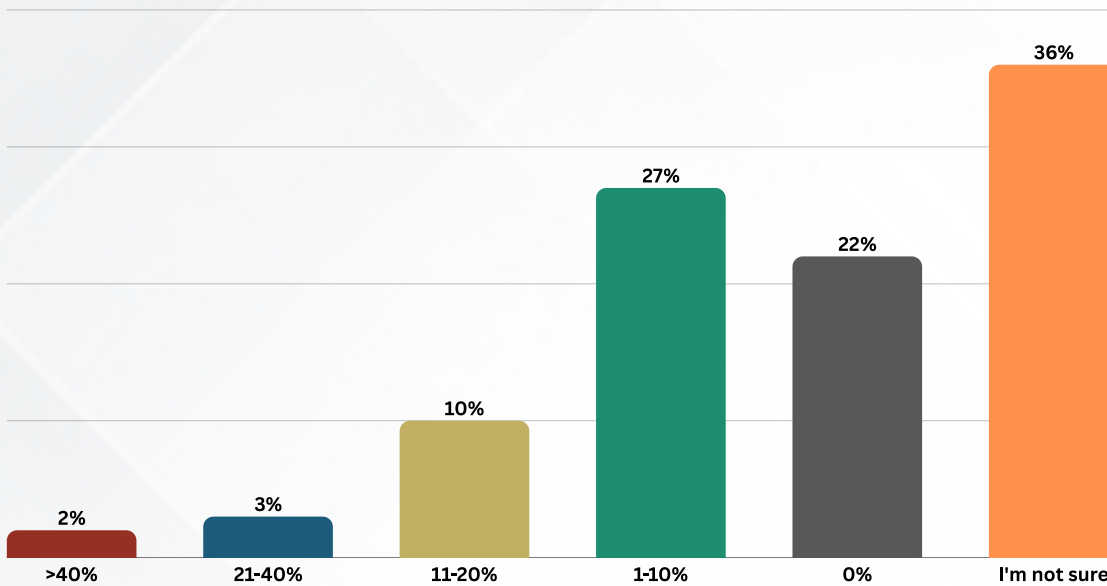
# ROI

## ROI from GenAI

**Question:** How significant has the Return on Investment been from using Generative AI at your company so far?

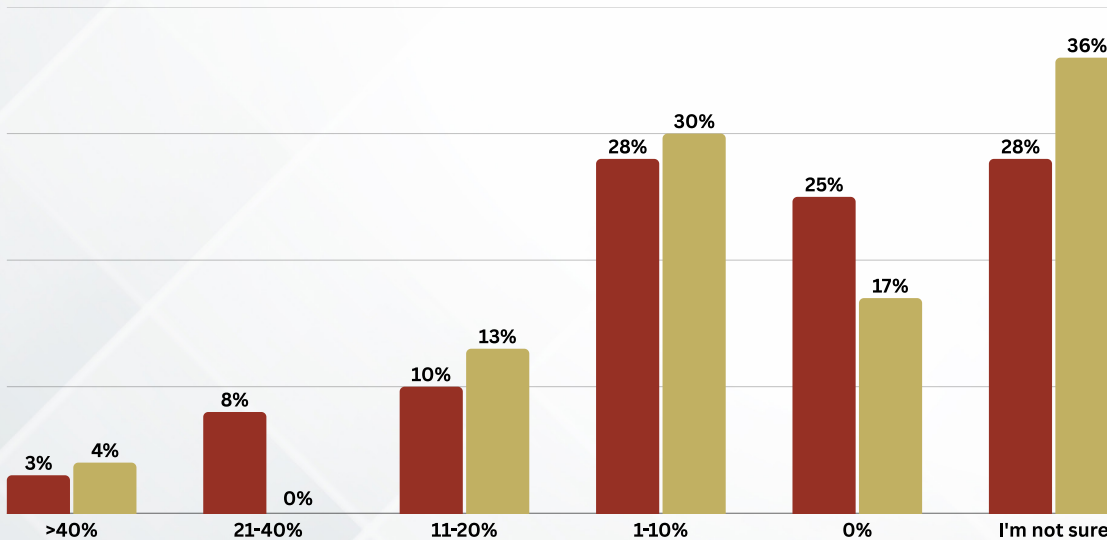
- ▶ ROI from GenAI usage has been minor or non-existent for about half of the respondents' companies.
- ▶ Around 36% are unsure of results, underscoring the experimental nature of current efforts.
- ▶ Large companies show slightly higher ROI realization than smaller firms.

### Overall



### By Company Size

● Small ● Large



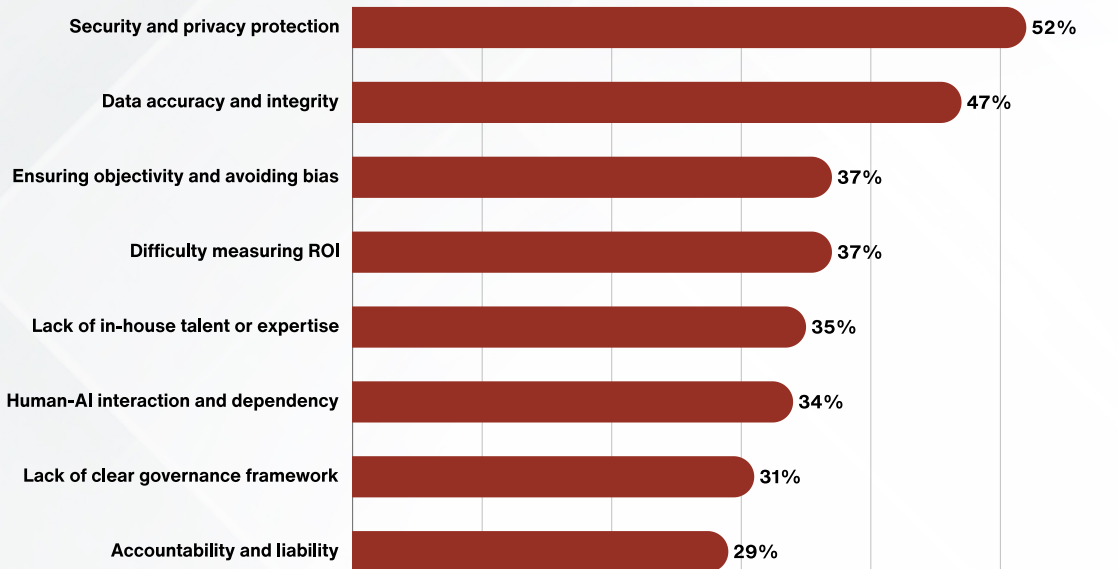
# Challenges

## Risks or Challenges with Gen AI adoption

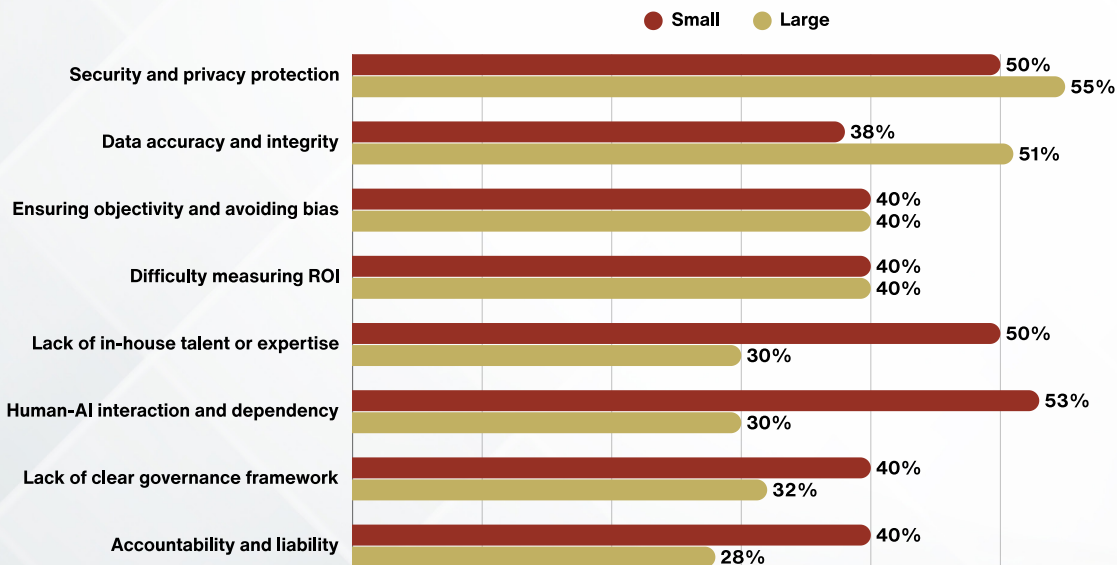
**Question:** What are the most pressing risks or challenges you face with the adoption of Generative AI?  
*Select all that apply.*

- ▶ Leading challenges include security/privacy (52%), data integrity (47%), and bias/objectivity (37%).
- ▶ Difficulty measuring ROI (37%) and talent shortages (35%) are significant operational barriers.
- ▶ Large firms are more likely to highlight data accuracy and integrity challenges than smaller firms, while half of small firms noted having a lack of in-house talent or expertise to achieve high GenAI adoption.

### Overall



### By Company Size



# Governance and Risk Frameworks

**Question:** What governance or risk frameworks are you using to ensure that your AI solutions are accurate, ethical, and transparent?

- ▶ Most firms depend on human oversight instead of formal AI governance systems.
- ▶ Larger organizations report using audit trails, explainability protocols, and ethics committees.
- ▶ Smaller firms tend to use ad hoc reviews or lack formal structures entirely.
- ▶ The industry as a whole is still in a low- to mid-maturity phase for AI governance.

## Overall

**Human Oversight and Review.** Many respondents mention manual review processes or human-in-the-loop governance as their main safeguard.

- ▶ This approach often substitutes for formal frameworks, ensuring that AI outcomes are validated or approved by humans before use.
- ▶ Indicates a low to moderate governance maturity phase for many firms.

“  
*[My company is using] human oversight and four-eyes principle in effect on all key matters.*

**Explainability, Auditability, and Ethics Committees.** A subset of respondents – typically larger firms – mention audit trails, explainability protocols, and ethics committees as key pillars of their governance approach.

- ▶ These frameworks focus on traceability and ethical accountability, aligning with recognized responsible AI practices.
- ▶ Suggests that these firms are progressing toward formalized governance systems.

“  
*[My company uses] ethical AI principles aligned with corporate governance—covering fairness, accountability, transparency, and human-in-the-loop review processes.*

**Early Exploration and Uncertainty.** A significant portion of respondents admit limited structure or uncertainty regarding formal AI governance.

- ▶ Phrases like “not sure” or “standards are vague” indicate early-stage awareness without consistent frameworks in place.
- ▶ Many may rely on general IT or data governance structures rather than specific AI frameworks.

“  
*Standards are vague at best.*

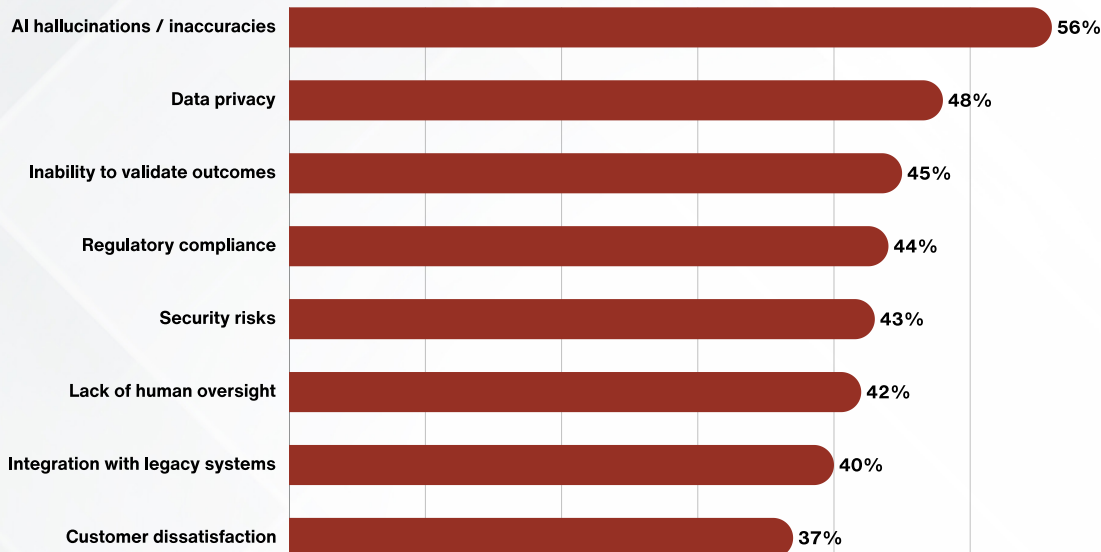
# Concerns with AI Agents

## Concerns with the use of AI agents

**Question:** What are your company's greatest concerns regarding the future use of AI agents in insurance? (e.g., an AI agent handling claims or customer inquiries from start to finish). *Select all that apply.*

- ▶ Top concerns include AI hallucinations/inaccuracies (56%), data privacy (48%), and validation challenges (45%), reflecting a general concern over the reliability of using AI agents in the insurance industry.
- ▶ Less concerning, but still worrisome for over a third of respondents is customer dissatisfaction with AI agents, which may be more indicative of these tools only being at limited deployment / piloting stages.
- ▶ However, smaller firms were about twice as likely to be concerned about customer dissatisfaction with AI tools.

### Overall



### By Company Size

