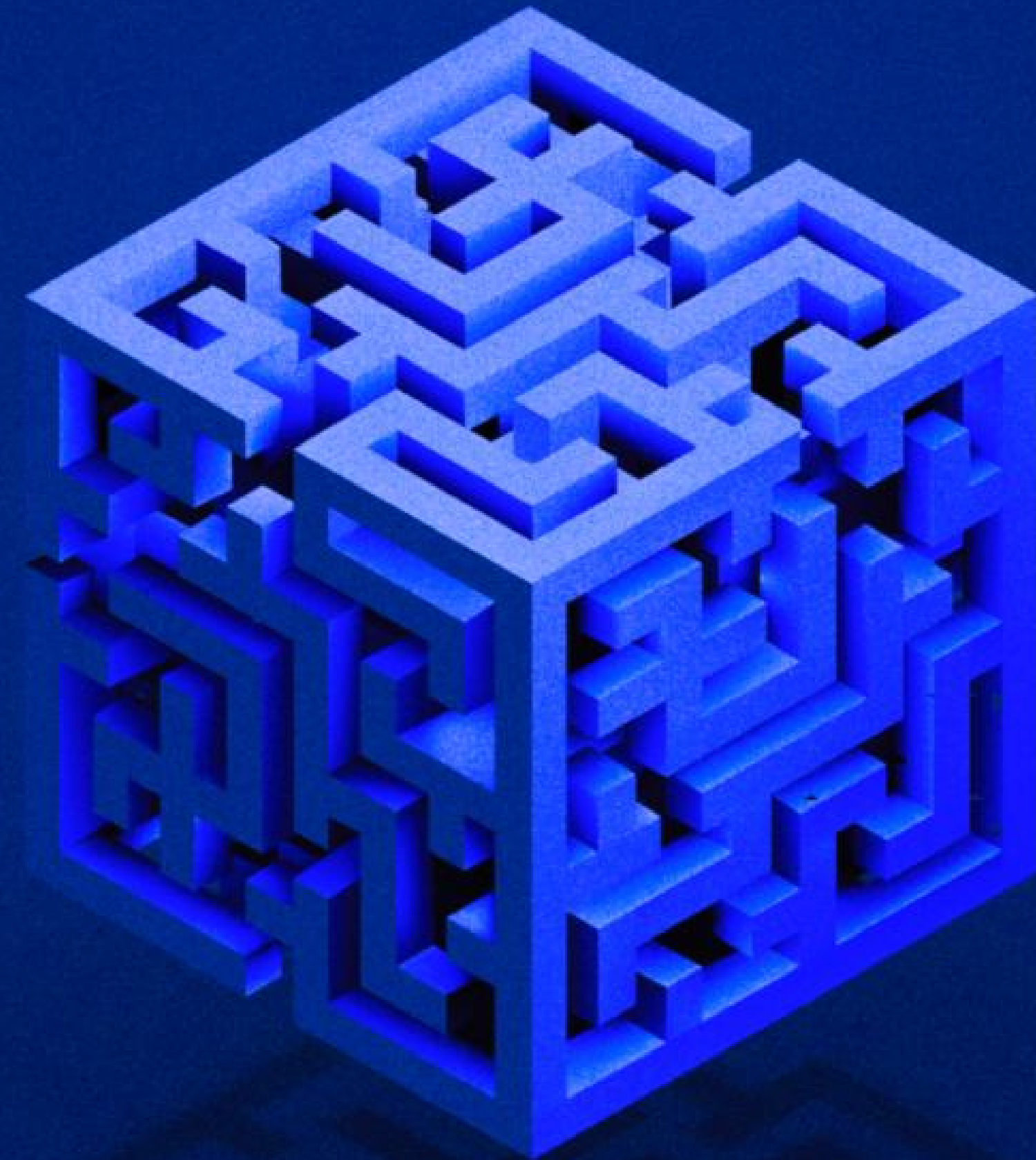# AI Insights Unveiled:

UK Insurance Leaders Navigate the 2024 Regulatory Maze

The insights, trends, and drivers of transformation in a changing regulatory landscape from the UK's insurance leaders at the Insurance Post's AI Summit 2024.

mind FOUNDRY   Insurance POST

Contents

Introduction

AI adoption is accelerating in Insurance, bringing with it the potential for numerous benefits and improvements, as well as significant obstacles and risks for insurers to navigate.

In 2019, the FCA reported that the [median Insurance firm had 7.5 live Machine Learning applications](#). Fast forward 5 years to 2024, and insurers are evolving quickly, with some claiming to have over 300 models in their pricing departments alone.

Insurers are doubling down on AI, but now, the challenge of scaling AI in a reliable, responsible, and compliant way has become more pressing than ever.

Mind Foundry recently held a series of workshops at the Insurance Post AI Summit to better understand how AI is being utilised by insurers, the challenges being faced, and how we can work through them together.

This report includes the insights from nearly 40 Insurance leaders representing some of the top UK insurers within claims, fraud, pricing, and data science, so that you, too, can take the necessary steps to navigate the AI landscape.

The workshops considered the following main areas of focus:
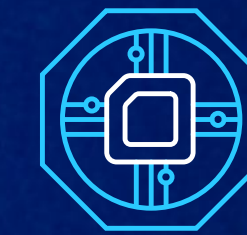
How insurers are incorporating AI into their business strategy - what is working, how it can be improved, and what factors are stifling innovation and progress.
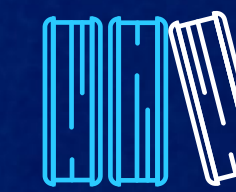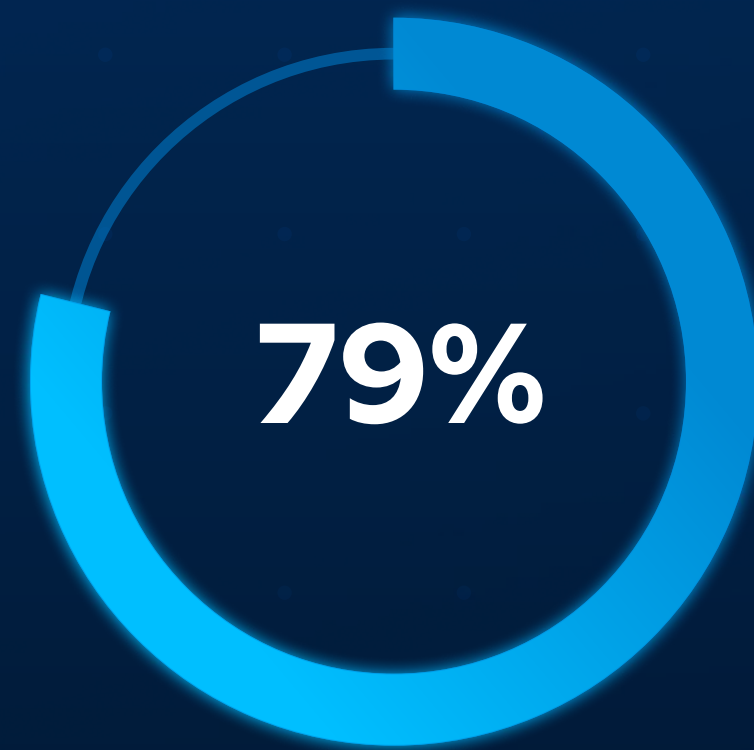
Which measures of AI governance, like model monitoring and explainability, are being implemented to adhere to current and upcoming UK regulations.

How deployment and governance, and the associated challenges, vary in organisations of differing size and AI maturity.

Key Statistics

79% of participants claim to be a **'6' or below on the AI Maturity Scale**, meaning they are between 'scratching the surface with AI' and 'having multiple systems in place' but are still focused on further developing their capabilities (see page 9 for maturity scale description). And yet, **0% of participants have a business-wide AI strategy**.

40% of respondents said they are **prioritising their AI investment within 'claims & fraud'** over the next 6-12 months, with participants specifically referring to claims decision support, automation, and assessment.
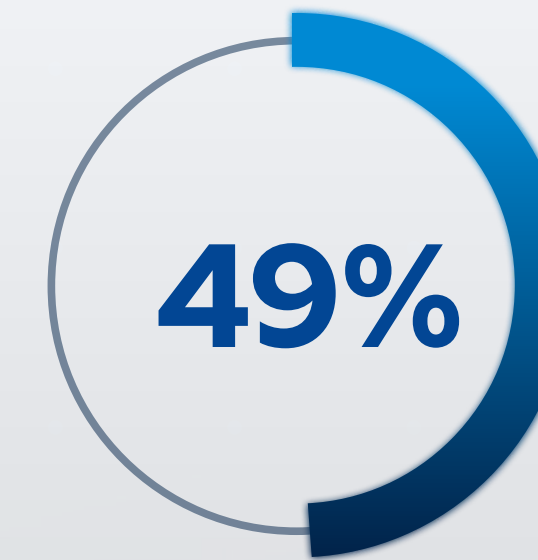
49% of respondents **believe AI governance to be important** in their organisation "to adhere to regulations and legal requirements."
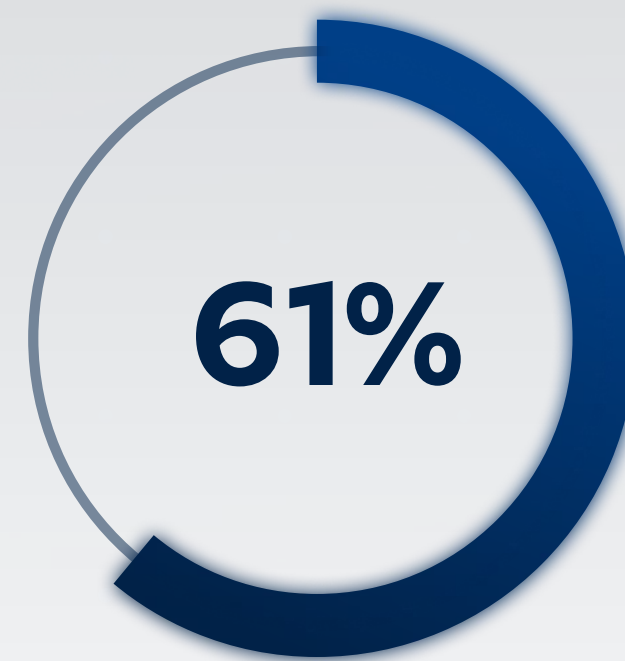
61% of respondents believe that **explainability is the most important feature of AI governance.**
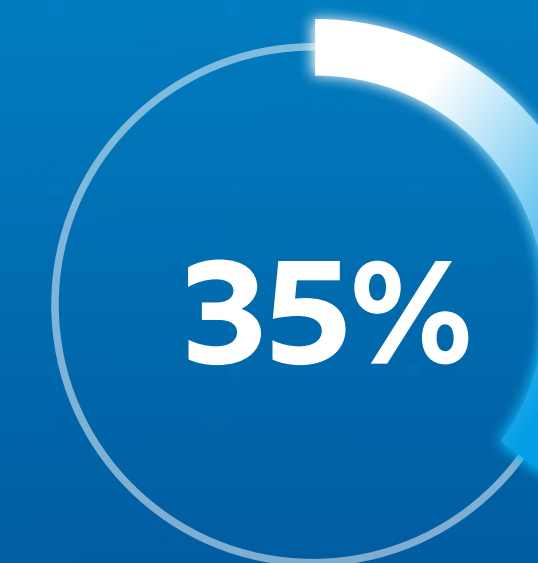
35% of participants indicated **pricing is the area of their business where AI is having the most impact**, closely followed by claims & fraud at 26%.

Key Findings

The Insurance sector is beginning to implement AI solutions and explore their potential. However, many organisations still have challenges around AI trust, knowledge, accountability, resources, skills, and model integration.

Even though 79% of respondents are either undergoing proof of concepts, have started developing AI systems, or have already deployed them, new challenges are now cropping up around AI governance, explainability, high operating costs, and the pace at which insurers can get models into production.

The survey findings and conversational feedback throughout the workshop highlighted five key findings:

1. **Cultural Acceptance... your team needs to understand and trust AI.**

2. **Legacy Systems... are a recurring obstacle.**

3. **Generative AI... requires effective guardrails.**

4. **AI Explainability... to manage risk, you need explainable AI models.**

5. **Automated AI Governance... can be a game-changer.**

Cultural Acceptance

Your team needs to understand and trust AI.

With the average data scientist remaining in their current job for only 1.7 years before leaving, retaining technical talent is proving difficult for insurers, particularly those that work closely with AI.

Respondents suggested that employee upskilling and knowledge transfer are critical to securing talent, driving operational change, and maintaining their constantly evolving cultural adoption of AI. Feedback indicated that trust was key to cultural acceptance, so transparency in how AI decisions are arrived at is needed, as well as reassurance that companies will not replace the 'human-in-the-loop'.

> **The people aspect is the biggest strategic challenge and making sure we keep the 'human-in-the-loop'.**

CHRIS VARLEY

Chief Data & Analytics Officer
Allianz

Allianz ⓘ

Legacy Systems

Legacy systems are a recurring obstacle.

Many insurers are experiencing challenges when moving AI models from proof-of-concept to wider production because of their reliance on IT and/or legacy systems.

An agnostic solution that can interface with models and data, regardless of where they are stored, was cited as a key requirement.

"

Legacy systems can indeed make it hard to move AI models from testing to full use. However, the key to solving this problem lies in a three-way partnership where the business team identifies the need, the AI team creates the solution, and the IT team is involved from the very start to understand the best way to integrate it into the existing system. This teamwork makes sure all parts of the transition are handled at once, making it easier to add AI to current systems. If any one of these three are late to the party, it's never going to work. By working together, they can use the strengths of each group to build strong, scalable AI solutions that provide real benefits.

NICOLA WALKER

Head of IT - UK
Aioi Nissay Dowa Europe

AND·e

Generative AI

Generative AI requires effective guardrails.

Generative AI (GenAI) was a popular theme among insurers, some of whom are deep in the experimentation phase. Nevertheless, only a few have been able to operationalise GenAI use cases, primarily in customer service and claims.

Given the greater likelihood of 'hallucination', establishing adequate guardrails was identified as a fundamental requirement to help correctly interpret and safeguard outputs for both employees and customers. Without this, scaling GenAI is slow, expensive, resource-intensive, and untrustworthy. But even with guardrails, insurers are wary of exposing themselves to reputational issues with their customers.

"

Given the way LLMs and GenAI solutions are built and work, you lose the ability to 'see the bottom', meaning your traceability and ability to explain a decision is lower. This will be a challenge with regulators when it comes to mitigating decisions or customer outcomes. We want to make sure we balance risk appropriately, so we are setting clear guardrails for the use of GenAI.

PAUL HOLLANDS

Chief Data & Analytics Officer
AXA UK

AI Explainability

To manage risk, you need explainable AI models.

As different models are deployed into production and function together, explainability was cited as the most important AI requirement.

Respondents highlighted the need to adequately explain multiple models simultaneously to better manage risk. This can also be an important feature for managing models as, on average, 91% of ML models degrade in performance within the first year, so monitoring and governing these models is a fundamental necessity. The more models an insurer uses, the more complex and onerous these challenges become.

> The term 'AI' is seen by many as an intimidating topic. The ability to clearly explain AI capabilities and function would help to bring a lot of reassurance to its use.

DAVID SHEPPARD

UK Head of Systems, Quality & Development
CRAWFORD & COMPANY

Crawford®

Automated AI Governance

Automated AI governance can be a game-changer.

Understanding and trusting the decision-making process of models as they become more complex and performant is essential.

Feedback throughout the day highlighted the need for automated AI governance surrounding model monitoring, performance, explainability, and bias detection. This would significantly reduce manual processes within data science teams whilst also balancing regulatory compliance and fairness with model performance.
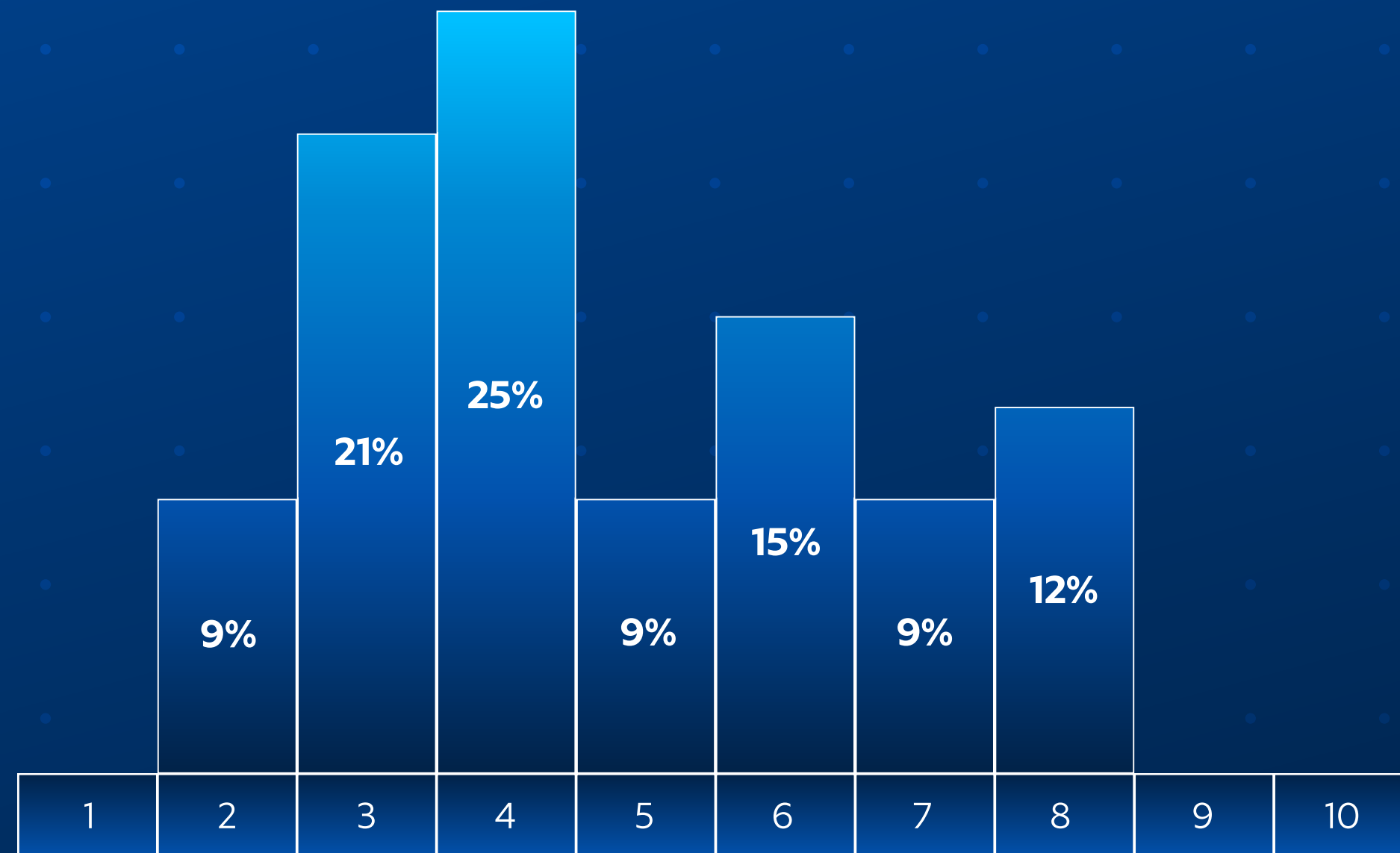
> "
> **We want to have the confidence in our models that they are performing as they should be.**
>
> **ANDREW SHAW**
>
> Development Director
> **CRAWFORD & COMPANY**

Crawford®

Findings and Statistics

What is your current level of AI Maturity?

AI MATURITY SCALE

Low Maturity

1	We do not deploy AI in our organisation, and it is not something we will consider in the future.
2	We are just scratching the surface, exploring how AI can help our organisation, but we have yet to build or deploy any AI models.
3	We have deployed some initial pilot projects with ongoing experimentation, but these have yet to deliver results.
4	We are past the pilot stage, with a few systems using AI.
5	We have deployed multiple AI models, but we are still learning and developing our AI capabilities.
6	We have multiple systems in place, but we are focused on further developing our capabilities, particularly integration.
7	We have multiple systems and applications using AI and some integration.
8	We have a full set of integrated AI capabilities that deliver value to most areas of the organisation.
9	We have introduced a business-wide strategy centred around our AI experience that delivers value to all areas of the organisation.
10	Our business-wide AI strategy is fully integrated, providing demonstrable results and giving us a solid competitive advantage within the market.

High Maturity

Where are you prioritising your AI investment in the next 6 to 12 months?

People Capability
Data and document ingestion Ethics
AI governance **Customer Service**
Internal processes Call Centre **Fraud** Monitoring Telematics
Report summarisation
Fine tuning **Claims** Faster lifts
Decision support
Knowledge Contract analytics
Submission triage Automation **Content Creation**
Indemnity management **Pricing** **Augmentation**
Sales & Distribution GenAI Efficiency **Integration (MLOps)**
Underwriting **AI Infrastructure**
Retention
UW decision support and knowledge management
Data Products and marketplace Analysis in exposure management
Natural Language Processing Understand legal landacape Information gathering and consolidation

Where is AI having the greatest impact on your business?

SELECT ONE OPTION

35%	29%	23%	10%	3%
Pricing	Other	Claims	Customer Service	Fraud
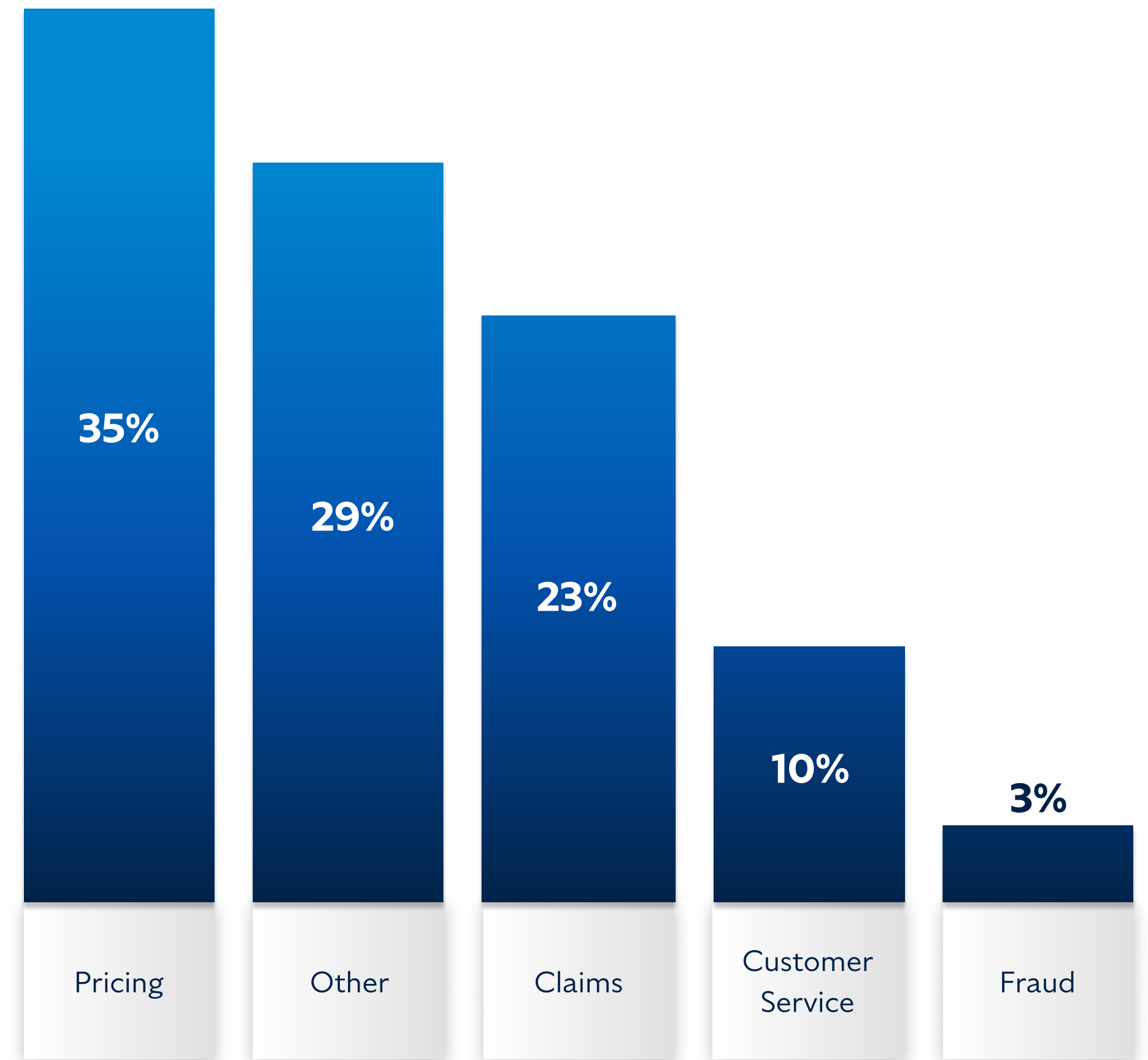
7 STEPS FOR SCALING AI GOVERNANCE

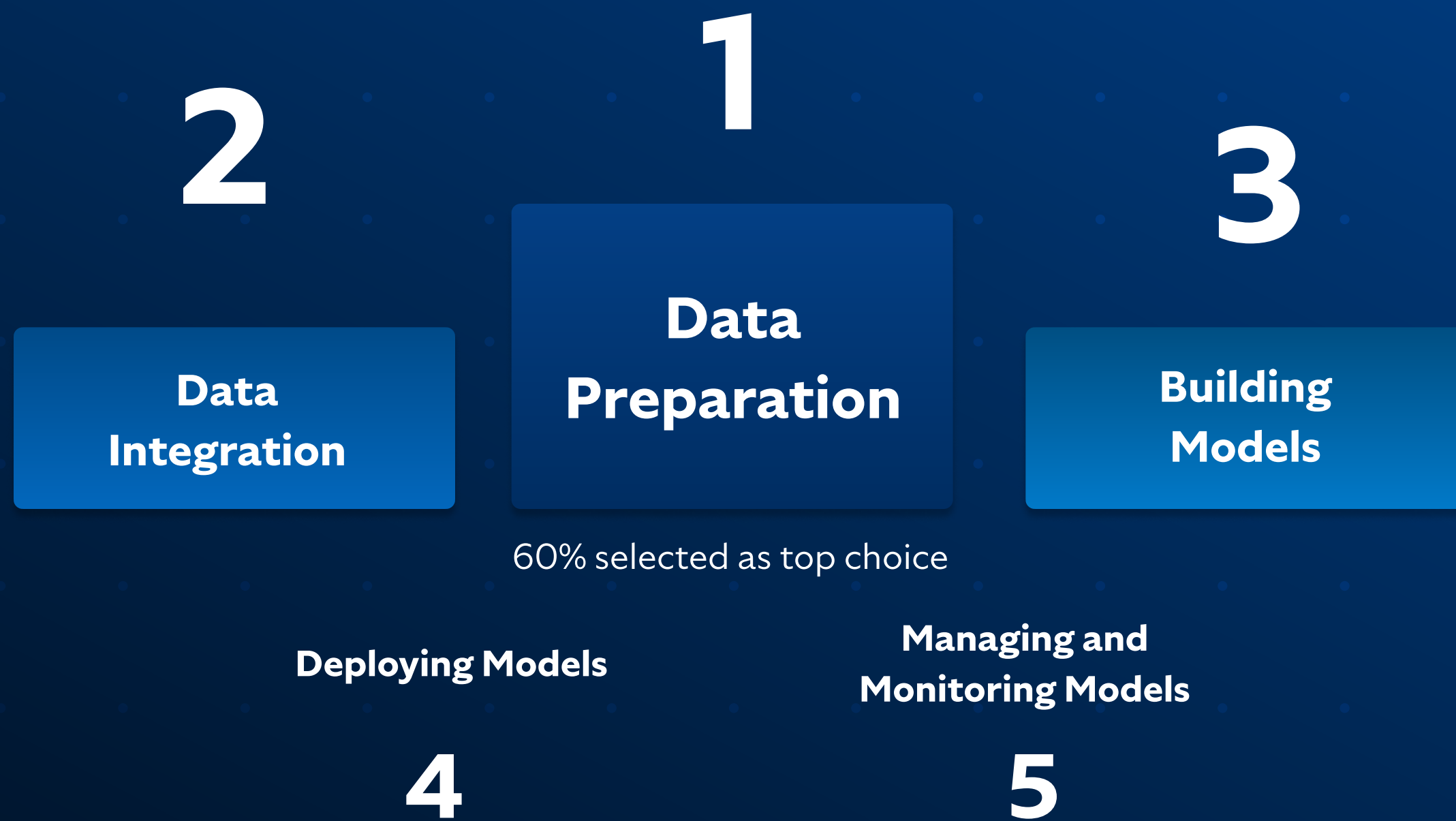|	
1	**KPIs:** Establish Clear KPIs & Limits for Model Monitoring
2	**Risk:** Conduct Thorough Risk Assessments
3	**Explainability:** Implement Explainability Reporting
4	**Performance:** Quantify Model Performance
5	**Flexibility:** Anticipate & Prepare for Shifting Market Dynamics
6	**Accountability:** Define Clear Lines of Accountability for Risk Ownership
7	**Partnerships:** Don't Try to Do Everything Yourself

What challenges are you experiencing as you scale AI?

Lack of cross discipline teams
Time and priorities
Explainability
Monitoring
Knowledge
Flexibility   Exec buy-in   Performance Monitoring
Accountability
Baseline and expectations around performance   Data integrity   KPIs
Integration
Legacy systems   Regulation   Demonstrate value
Understanding risk
Data Accuracy/Integrity/Quality
Internal compliance   Identifying optimum solution
Different Functions = Different Systems   Lack of budget to implement best solutions

How are these challenges impacting your business?

Risk Adverse
KPIs/ Objectives   High operating costs
Siloed strategies
Guiderails setting   Confusion   Transparency for adoption
Slow Progress
Complexity   Ability to retain talent   Resisting change
Lack of Understanding   Not using products
Missing opportunity
Bottom Line Performance   Limiting amount of work that can be achieved
Lack of Confidence   Abstracting away from practicalities
Use case selection and approval   Key person(s) risk

Which of the following AI activities does your business spend the most time on?

SELECT ONE OPTION

2
Data Integration

1
Data Preparation

60% selected as top choice

3
Building Models

4
Deploying Models

5
Managing and Monitoring Models

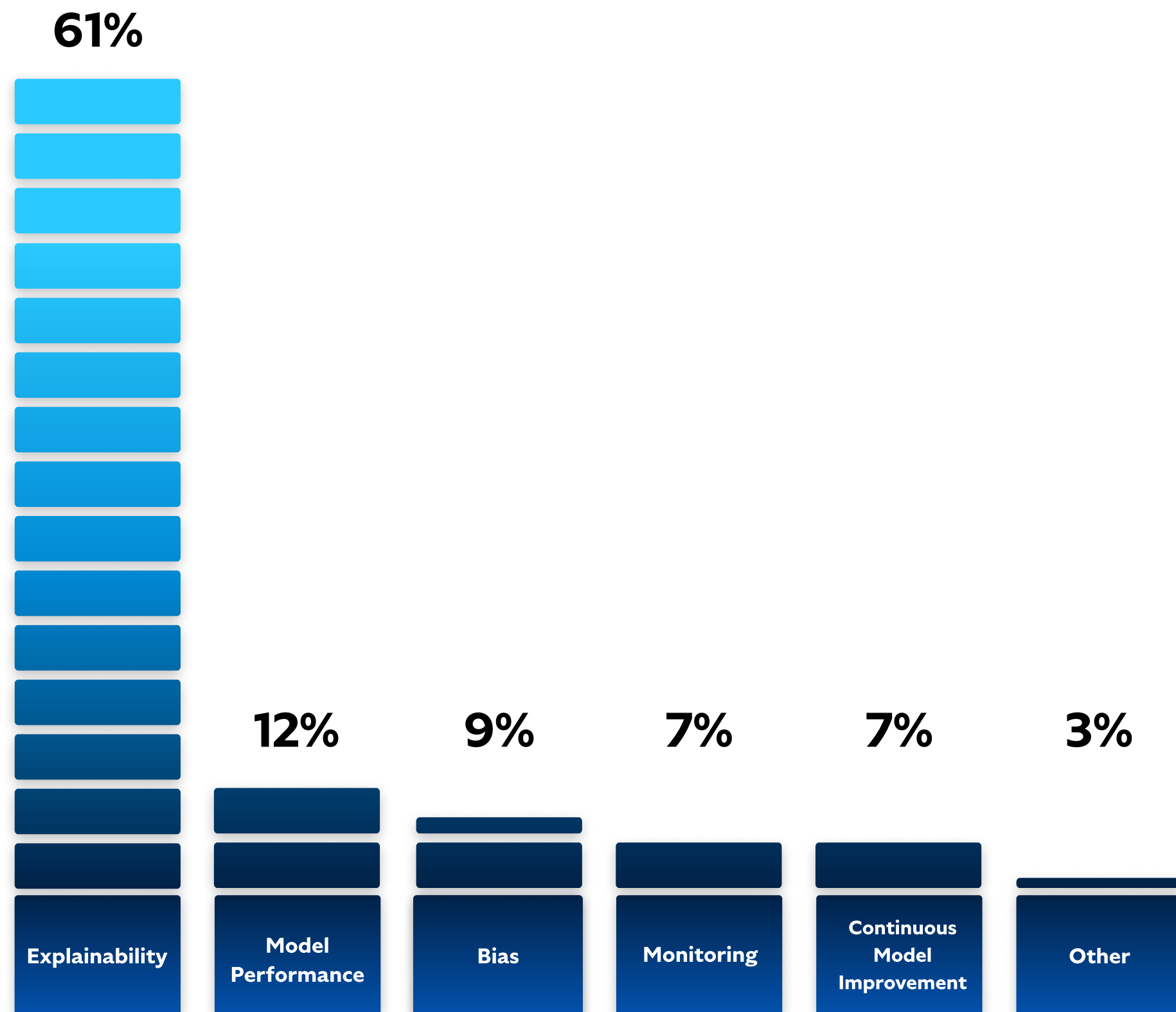# What % of your data science team's time is spent on manually managing, monitoring and governing models?

SELECT ONE OPTION

68%	18%	11%	3%	0%
0 to 20%	21 to 40%	41 to 60%	61 to 80%	81 to 80%
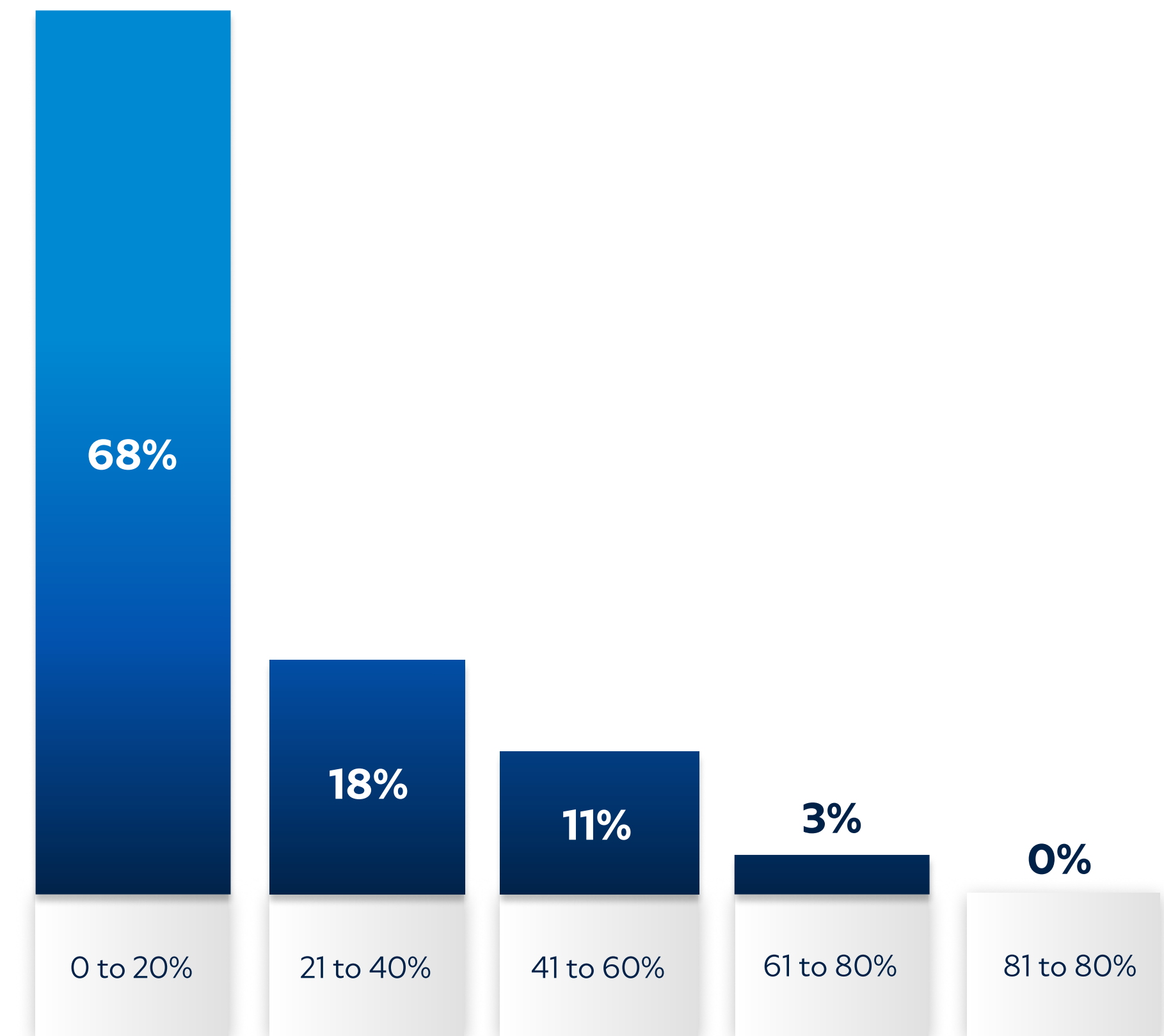
When talking about AI governance, which of these features is the most important to your organisation?

SELECT ONE OPTION

61%

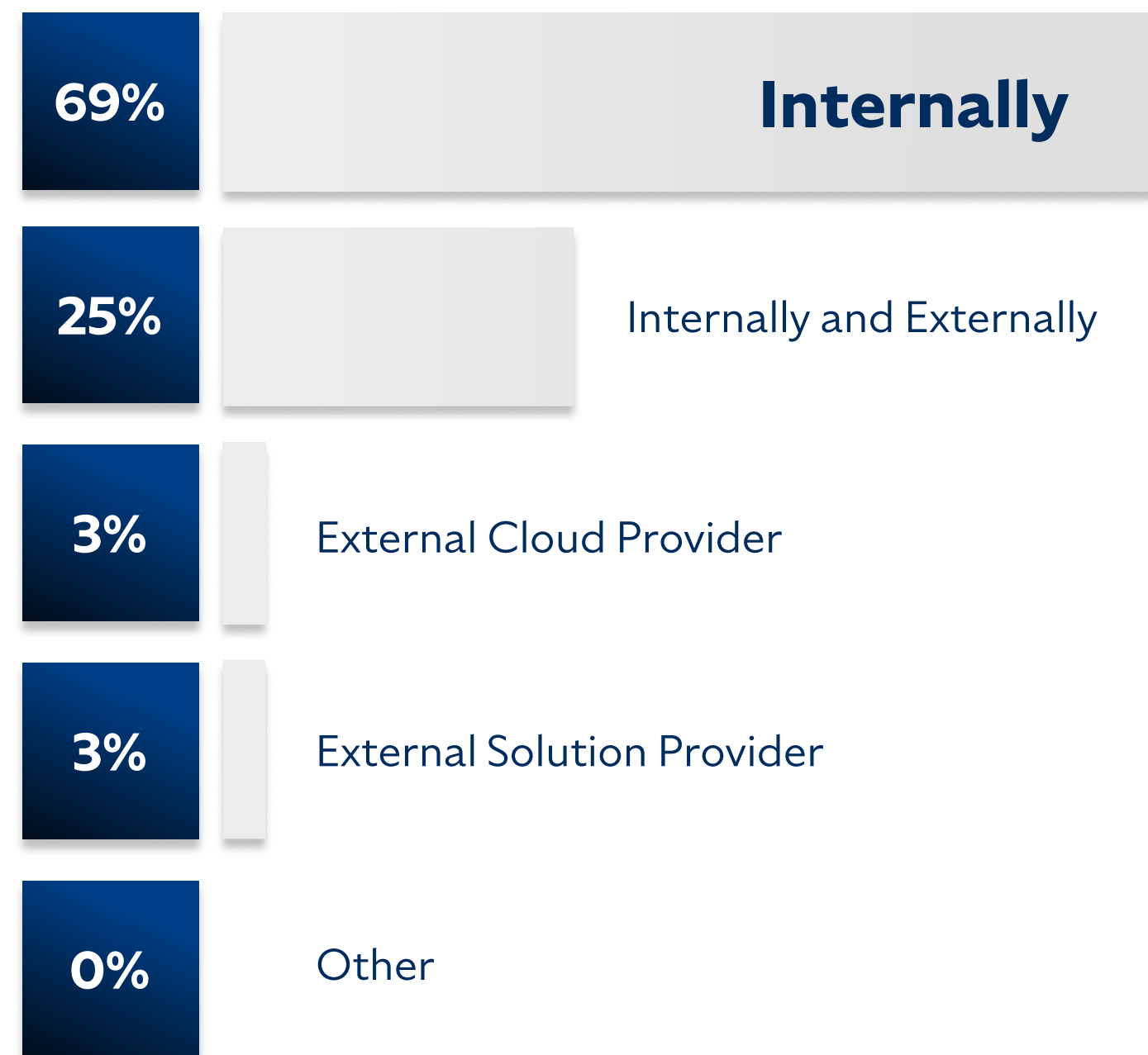**12%** **9%** **7%** **7%** **3%**

Explainability | Model Performance | Bias | Monitoring | Continuous Model Improvement | Other

Why is AI governance important to your business?

SELECT ONE OPTION

49% — To adhere to regulations & legal requirements

21% — It aligns with our company values

15% — It is part of our strategy and ensures we meet our organisational objectives

12% — To ensure our AI is responsible

3% — It is our main competitive advantage

How does your business currently govern AI?

SELECT ONE OPTION

69%	**Internally**
25%	Internally and Externally
3%	External Cloud Provider
3%	External Solution Provider
0%	Other

How much do you think your business will spend on AI governance in the next 12 months, excluding internal headcount?

SELECT ONE OPTION

75%	**Up to £500k**
13%	Up to £1 million
3%	Up to £2 million
3%	More than £2 million
6%	Other
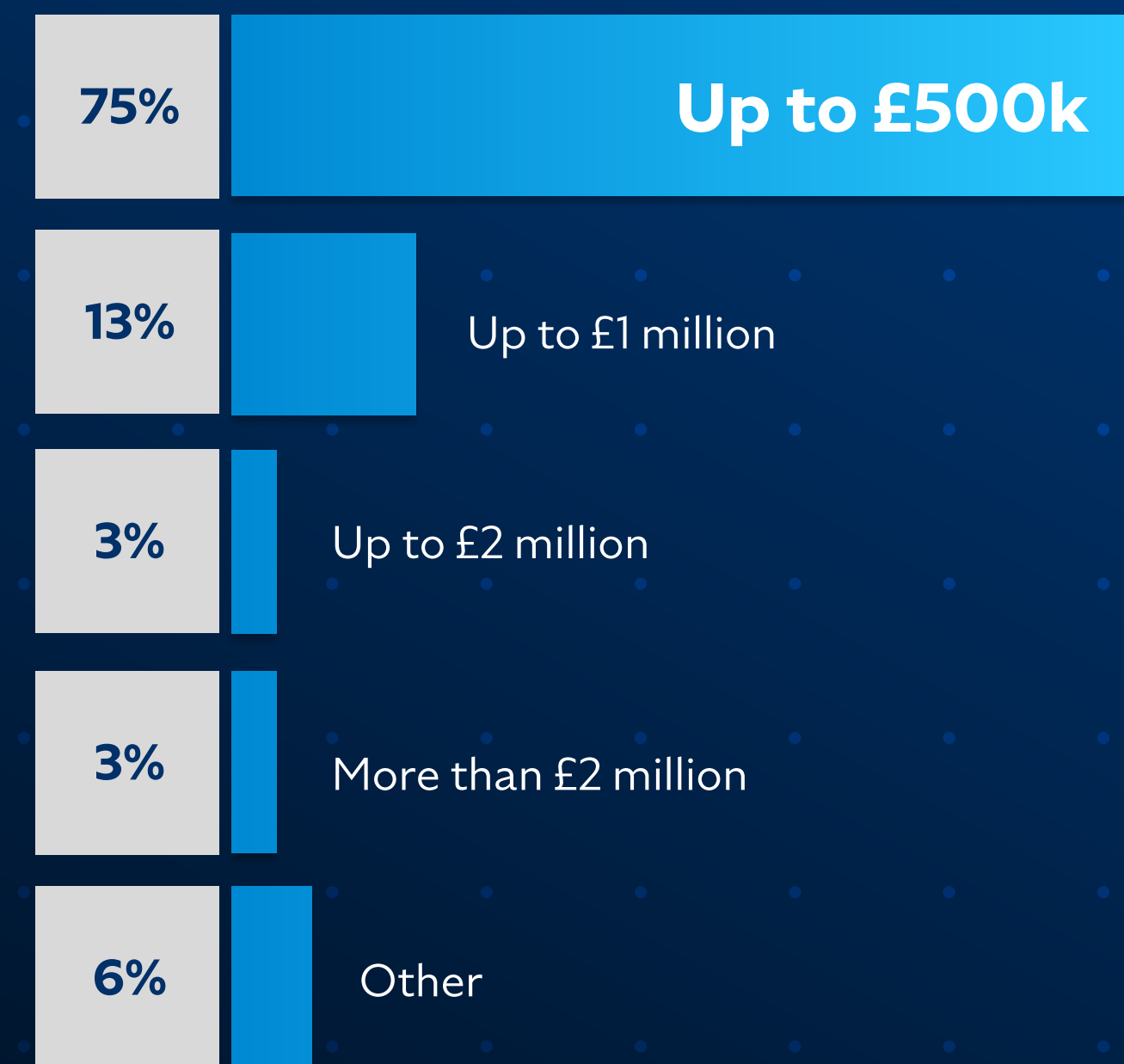
Workshop Analysis

It is clear that emergent technologies have, and will continue to play, an ever-increasing role throughout the Insurance sector. AI is no exception, however, there are risks...

The FCA Consumer Duty and other UK and EU bodies have laid down frameworks to regulate AI, focused particularly on transparency and explainability. As these regulations develop, they will impact how insurers procure, manage, and maintain AI across their business units. In this section, we will take a deep dive into the data to determine the significant obstacles and risks that insurers face in adopting and scaling their AI systems. Navigating the landscape of AI in Insurance can be daunting, but with the right strategies, risks can be mitigated and benefits maximised.

AI Maturity in Insurance

Starting with insurers' AI maturity, more than 50% of respondents rated their organisations as 'level 4' or below.

This indicates they are past the pilot stage but are still learning and developing their AI capabilities. This is unsurprising considering other questions highlighting slow progress, employee skills, and lack of understanding/confidence as recurring challenges. It also reflects the industry being perceived as a slow adopter of emerging technologies. One reason for this, highlighted throughout, is the fear that exists surrounding AI. Some respondents are concerned about how humans and AI will collaborate and that their organisation doesn't fully understand AI's capabilities, reflected in their lower maturity level.

All respondents rated their organisations above a 'level 2' in terms of AI maturity. This shows that organisations are at least exploring how AI can bring value, with some taking further steps into deployment and integration.

+50% of respondents rated their organisation as a 'level 4' or below.

1	We do not deploy AI in our organisation, and it is not something we will consider in the future.
2	We are just scratching the surface, exploring how AI can help our organisation, but we have yet to build or deploy any AI models.
3	We have deployed some initial pilot projects with ongoing experimentation, but these have yet to deliver results.
4	We are past the pilot stage, with a few systems using AI.
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9	We have introduced a business-wide strategy centred around our AI experience that delivers value to all areas of the organisation.
10	Our business-wide AI strategy is fully integrated, providing demonstrable results and giving us a solid competitive advantage within the market.

WORKSHOP ANALYSIS

All respondents rated their organisations above a 'level 2' in terms of AI maturity. This shows that organisations are at least exploring how AI can bring value, with some taking further steps into deployment and integration. However, **Only 12% of respondents rated their organisation a 'level 8' or above**, suggesting that scaling AI isn't straightforward, as more models create bigger challenges and shift priorities. Amongst these challenges is the time it takes build, deploy, scale, and monitor models. **On average, those that are 'level 8' or above spend double the amount of time monitoring and governing AI**. 69% of respondents currently do so internally, which implies time constraints are a major obstacle. This suggests that partnering with external AI experts could be significantly advantageous in overcoming this challenge.

12% of respondents rated their organisation a 'level 8' or above

1	We do not deploy AI in our organisation, and it is not something we will consider in the future.
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AI Investment and Challenges

**Most of AI's investment and impact in Insurance is found in Pricing.**

To further understand how insurers are currently investing in AI within their organisations and their expected challenges for the future, we asked where they are prioritising their AI in the next 6-12 months. Even though just 13% of respondents have roles predominantly in pricing and 9% in claims, 'pricing' and 'claims' are the most common answers.

This is no surprise, and suggests organisations within the industry are aligned with their priorities when identifying where AI can currently bring the most value. This may bring about potential collaborations or, possibly, an increased threat of competition and a race to be the first.

This level of investment pairs with where AI is already having the most impact within Insurance. **35% of participants indicated 'pricing' is the area of their business where AI is having the most impact,** closely followed by 'claims & fraud' at 26%. As a key decision factor, pricing is the most important value creator for many insurers, so this response is to be expected. Both of these use cases are also good examples of where AI is the right solution to solve the problem.

They offer abundant opportunities for data collection, have a clearly defined data source, and, most importantly, allow Machine Learning to uncover insights that may not be readily apparent to humans.

As with any new and constantly growing technology, there are certain challenges. Respondents experienced a high level of

35%
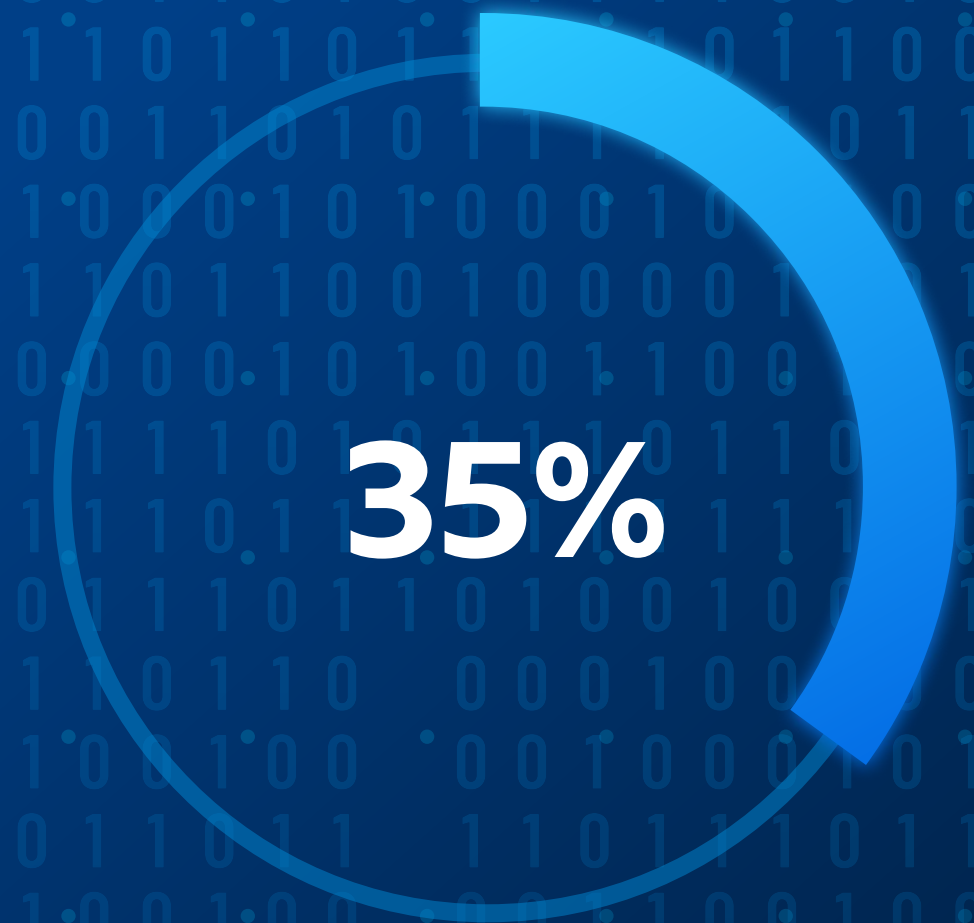
of participants indicated 'pricing' is the area of their business where AI is having the biggest impact.

WORKSHOP ANALYSIS

internal resistance when introducing AI due to a lack of understanding, opposition to change, and knowledge and skills deficiencies. Whilst many individuals are happy to adopt AI in their personal lives, like ChatGPT for example, once introduced in the workplace, there is a new-found reluctance. AI training and upskilling are necessary steps to overcome an internal lack of confidence and understanding.

The lack of high-quality data is also a challenge, with **60% of respondents spending the majority of their time on data preparation.**

This can decelerate the speed of deployment, which in turn can lead to missed opportunities, high operating costs, and have a major effect on bottom-line performance. With an apparent lack of accountability, objectives, and KPIs, as well as no obvious business-wide AI strategy, it is no surprise that 'slow progress' is amongst the most-cited challenges.

Without urgency and prioritisation, scaling AI will continue to be overlooked until insurers become forced to implement company-wide AI strategies to remain competitive.

Another challenge widely discussed was 'integration'. This reflects the AI maturity scale, as the majority of respondents selected below 'level 7', which is typically where you would begin the integration work. **Only 21% of respondents selected a 'level 7' or above,** as scaling AI across the wider organisations is not an easy task, particularly with the added challenge of integrating with legacy systems and adhering to regulatory requirements.

Once more, slow progress results from these challenges, particularly with the introduction of the FCA Consumer Duty, which will most likely hinder the development of AI within the industry rather than accelerate it.

This will be especially apparent in the short term as insurers work to adhere to these regulations for their existing models, as opposed to introducing new systems or scaling their current capabilities. Perhaps, whilst slower progress is likely to be more prevalent in the short term, in the long term, this may become less of a challenge for insurers as the regulatory landscape becomes more established.

60%
of respondents spend the majority of their time on data preparation.
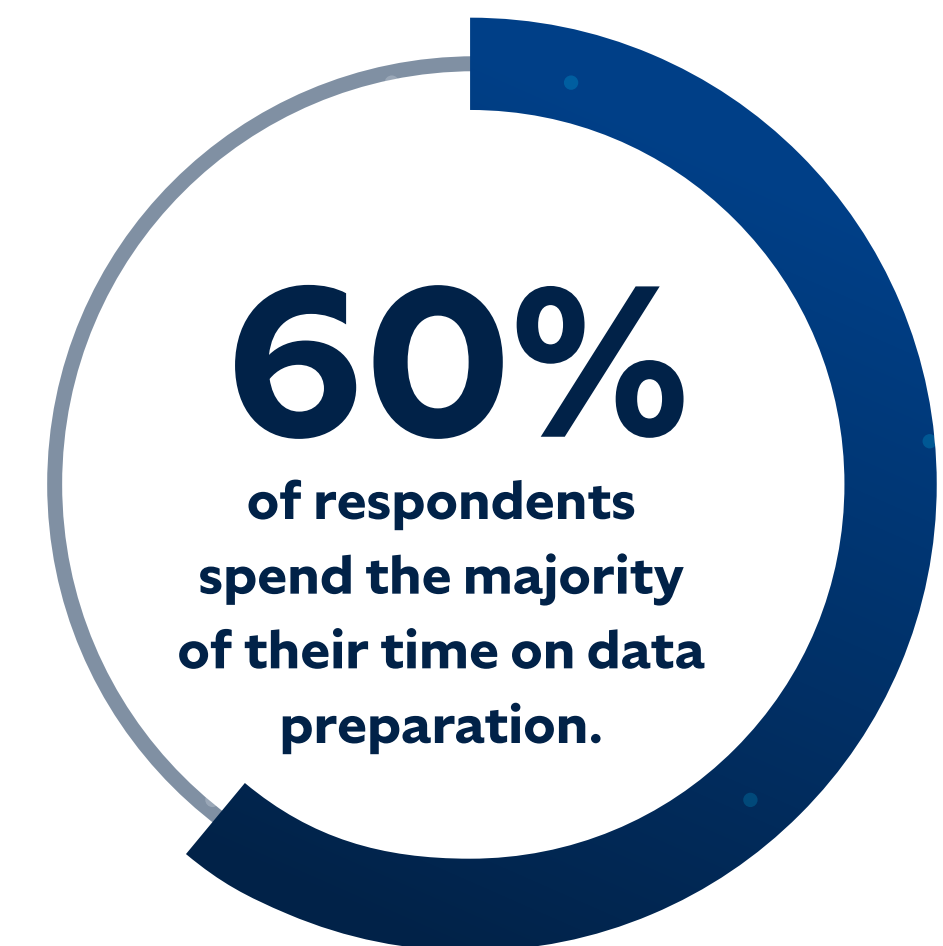
AI Governance, the Solution?

Explainability can help insurers maintain compliance with changing regulations.

Finally, we look at how AI governance is impacting organisations within the Insurance industry. **61% of respondents consider explainability to be the most important feature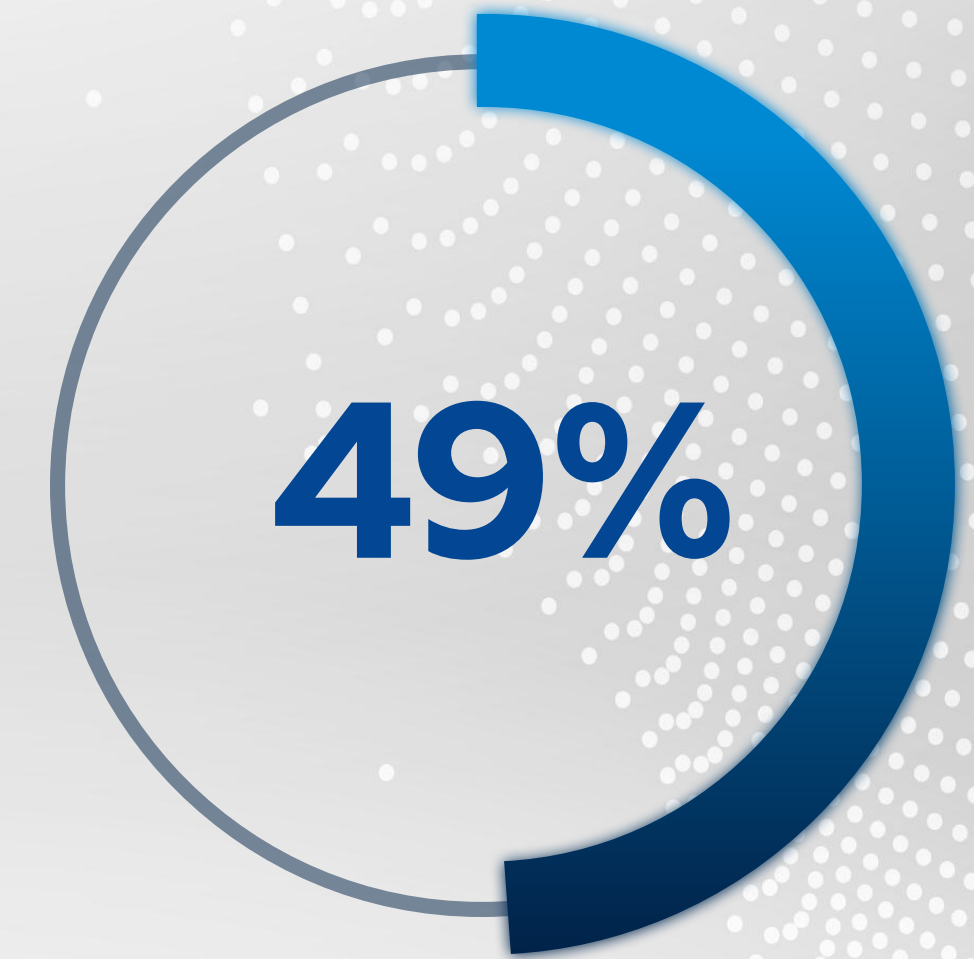**, and we couldn't agree more. Organisations of all sizes and maturity, as well as participants from different departments, agreed on this. With 79% of organisations a 'level 6' or below on the AI maturity scale, the need for trust and explainability is higher than ever.

Another reason to prioritise explainability is regulatory compliance. **49% of respondents believe AI governance is important to "adhere to regulations and legal requirements"**, and it's no surprise that this was the most common answer.

In a heavily regulated industry, ensuring the organisation does not get fined and protects its reputation is a top priority. 21% of participants also understand how AI governance aligns with company values, whilst 50% of respondents in pricing roles believe it is important because it is part of their strategy rather than just to conform with regulations.

This could indicate that there has already been a greater need for AI monitoring and governance within pricing pre-regulations, hence why it is already a fundamental aspect of their approach.

68% of respondents in technical roles say explainability is the most important feature when discussing AI governance. In comparison, respondents in managerial roles believe monitoring to be more

49%

of respondents believe AI governance to be important in their organisation "to adhere to regulations and legal requirements".

WORKSHOP ANALYSIS

important, highlighting differing priorities and internal misalignment, most likely because of differing levels of understanding or involvement with AI systems.

Prioritising explainability is therefore essential, not just for regulatory compliance but also as a step towards building greater trust with consumers and stakeholders by staying ahead of cultural shifts and regulatory expectations. However, not many providers can meet these challenges currently, which presents opportunities for strategic partnerships with external technology providers to fill this gap in the market.

When asked how much of their data science team's time is spent manually managing, monitoring, and governing models, **68% of respondents said between 0-20%**.

As highlighted previously, this is perhaps due to their lower score on the AI maturity scale and their current situation of progressing from pilots to actual deployments.

Mind Foundry undertook similar research in Q4 of 2023, and compared to these findings the industry is moving faster than expected. We suspect that post-deployment tasks will become a growing challenge as insurers operationalise and scale AI as they progress on the maturity scale. We don't know what the tipping point will be, but insurers should be proactive and prepare now rather than wait for it to become a problem.

Looking at how organisations currently govern their AI, 69% of respondents do so internally, suggesting a reluctance to bring in external help.

68%

of respondents in technical roles say explainability is the most important feature when discussing AI governance.

Conclusions

AI's potential to drastically enhance the Insurance industry is undeniable.

The technology has already dramatically impacted the industry across various use cases, from models that assist with fraud detection to competitive pricing. Even within the last 12 months, the AI deployment landscape has shown remarkable growth and advancement, and this maturity represents a significant shift in how insurers are leveraging AI to enhance their operations. With several organisations having already taken advantage of AI's capabilities and embraced technological change, it has become imperative for insurers to adopt sophisticated AI strategies and solutions to maintain a competitive edge and drive business transformation.

AI's impact has been pronounced in Insurance pricing, fundamentally transforming premium calculation and personalisation methodologies. However, the data indicates a coming shift in the next 6-12 months, with many respondents predicting a significant focus on AI in claims processing. This evolution highlights the urgent need for insurers to strategically align their AI capabilities to optimise claims management, thereby improving efficiency and customer satisfaction.

As AI's capabilities develop and evolve, adoption will continue to accelerate, with insurers adding more models to their portfolios.

However, as AI adoption scales, so do the associated challenges and risks, including explainability, a lack of knowledge, slow progress, and cultural acceptance of AI. Organisations with higher levels of AI maturity face additional challenges surrounding model integration and the best way to implement a business-wide AI strategy. As shown, this can give rise to internal resistance and, again, slow progression. It is, therefore, crucial for insurers to develop robust strategies to overcome these hurdles, ensuring seamless integration and maximising the potential of their AI investments.

Conclusions (continued)

Even with differing levels of AI maturity, as regulations take shape and the importance of AI governance grows, explainability has emerged as critical for balancing regulatory compliance and fairness with model importance. However, as a wider topic, AI governance was discussed much in relation to model monitoring, performance, and bias detection, as all elements started to become areas of interest for insurers with the introduction of regulations. The FCA has recognised the value that AI can bring and drive progression in the insurance industry but balances this against responsibility, fairness, and consumer safety. This is a positive step forward to ensure that all AI is, and continues to be, responsible.

As such, ensuring the transparency and understanding of AI-driven decisions is vital for regulatory compliance and building stakeholder trust. With further regulations expected to be introduced, insurers must take a proactive approach to AI governance, and with data showing the majority doing so internally, questions will be raised as to whether this is the most efficient and cost-effective way. Or in fact, perhaps collaborating with external AI experts through partnerships could address these challenges by providing comprehensive solutions which ensure explainable and responsible AI models and robust governance frameworks.

By leveraging the expertise of external providers, insurers can navigate the complexities of AI deployment yet, ultimately remain in control and have the responsibility to position themselves for sustained success in the rapidly evolving insurance landscape.

Case Study: Scaling AI Responsibly

Mind Foundry's work alongside Aioi Nissay Dowa Europe showcases how a strategic partnership can enhance business operations.

Together, we identified which problems should be combatted first, assessing whether they were suitable to be solved by AI and Machine Learning. We built explainable AI solutions based on specific requirements that no off-the-shelf solutions could satisfy. These solutions spanned many departments to combat fraud, prioritise claims, enhance pricing models, and prevent large losses.

Building and deploying these solutions was just the start. To ensure they continued to perform as well as the day they were deployed, or even performed better, regular maintenance, including governance, bias and drift detection, and retraining, took place.
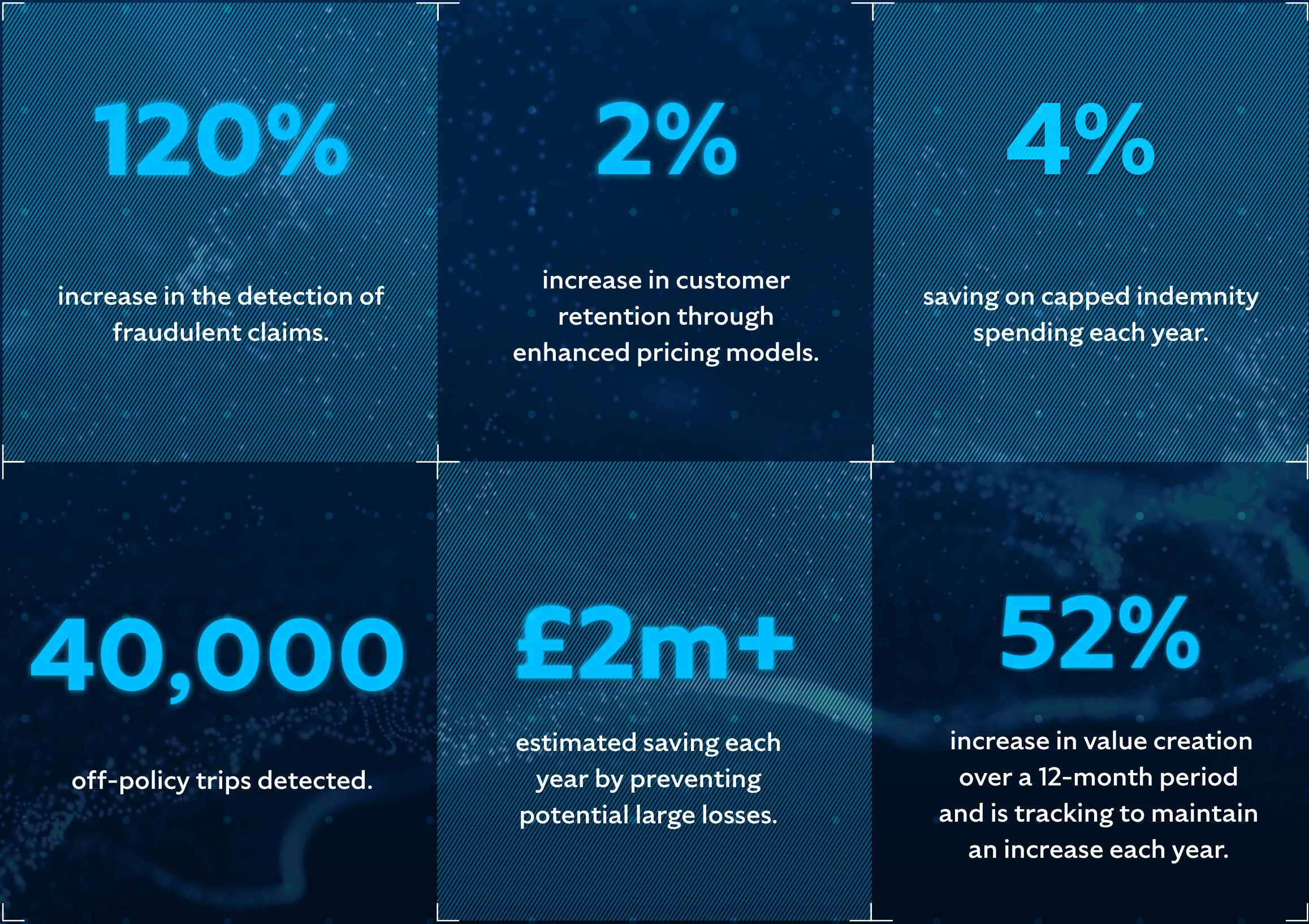
52%

The models' ability to continuously learn generated a **52% increase in value** creation over a 12-month period and is tracking to maintain an increase each year.

AND·e

Case Study (continued)

Together, we have enhanced the operations across the business, including:

120%

increase in the detection of fraudulent claims.

2%

increase in customer retention through enhanced pricing models.

4%

saving on capped indemnity spending each year.

40,000

off-policy trips detected.

£2m+

estimated saving each year by preventing potential large losses.

52%

increase in value creation over a 12-month period and is tracking to maintain an increase each year.

"

When you go past pilots and proofs-of-concept towards actual deployment of AI, in-house data scientists can spend half their time on AI governance, including retraining a model or trying to understand its health and performance. But Mind Foundry's solution has simplified all of that for us, meaning we can focus more of our time on building models rather than managing existing ones.

GREG COLE

Director of Claims
Aioi Nissay Dowa Europe

AND·e

Get in touch to learn how Mind Foundry can help you build, deploy and scale AI responsibly.

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FOUNDRY