hyperexponential

US State of Pricing 2024

Cracks in the foundations

E&S pricing is far from future ready,
let alone future-proof

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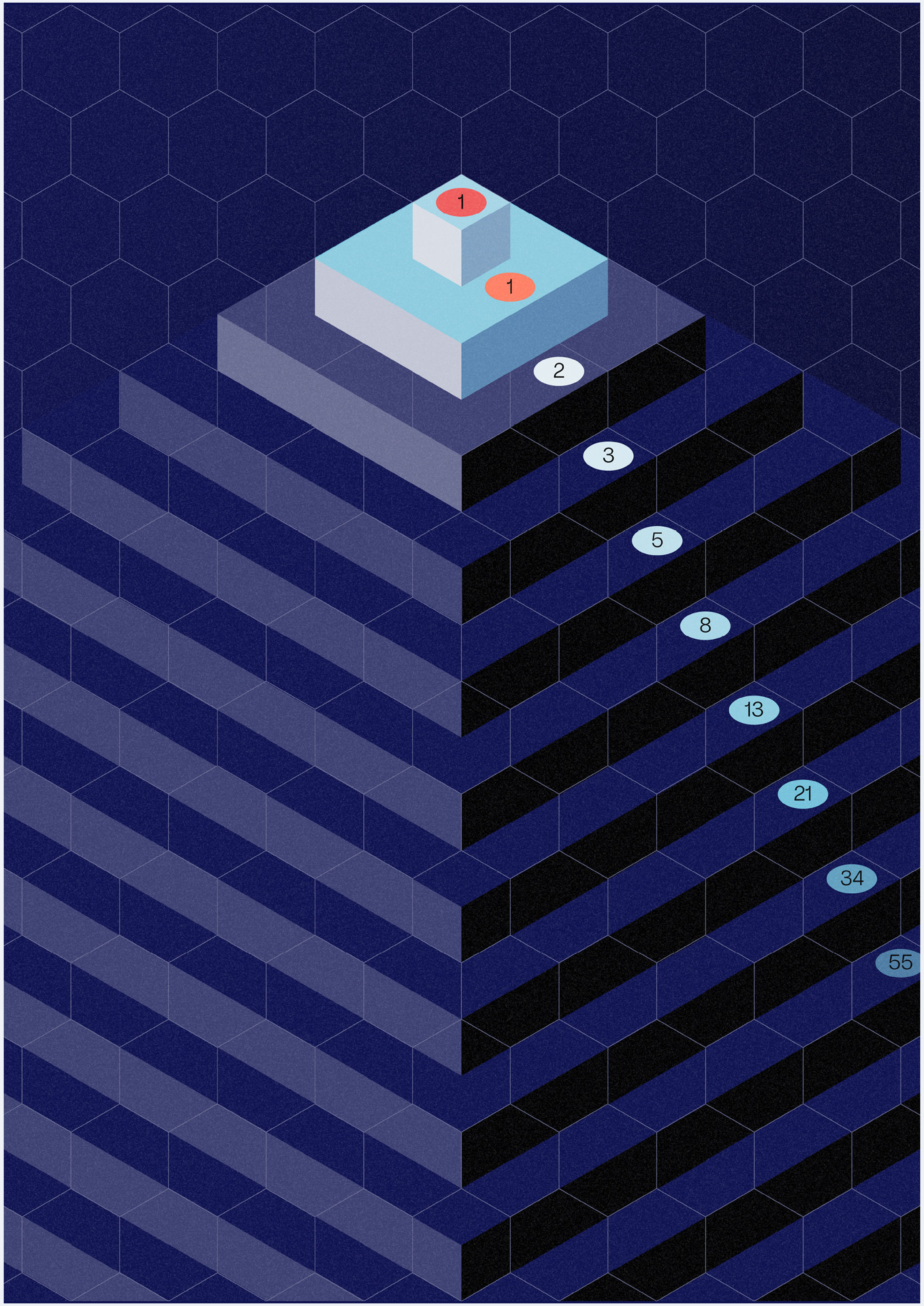
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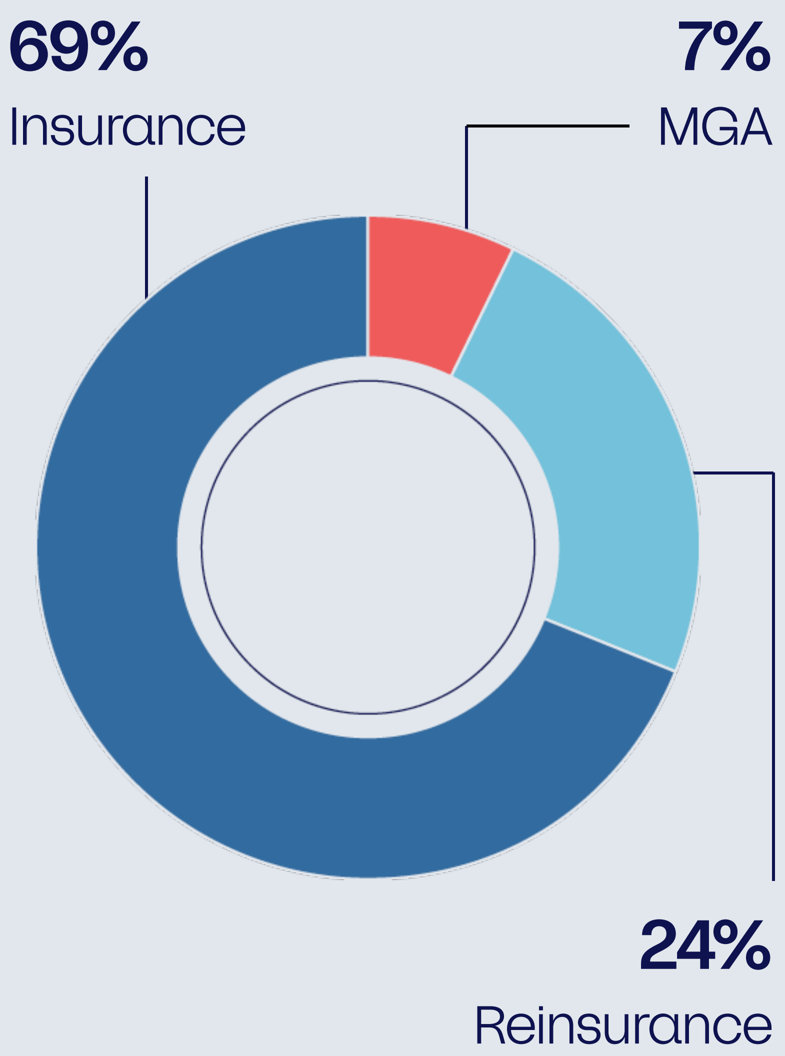
Research methodology

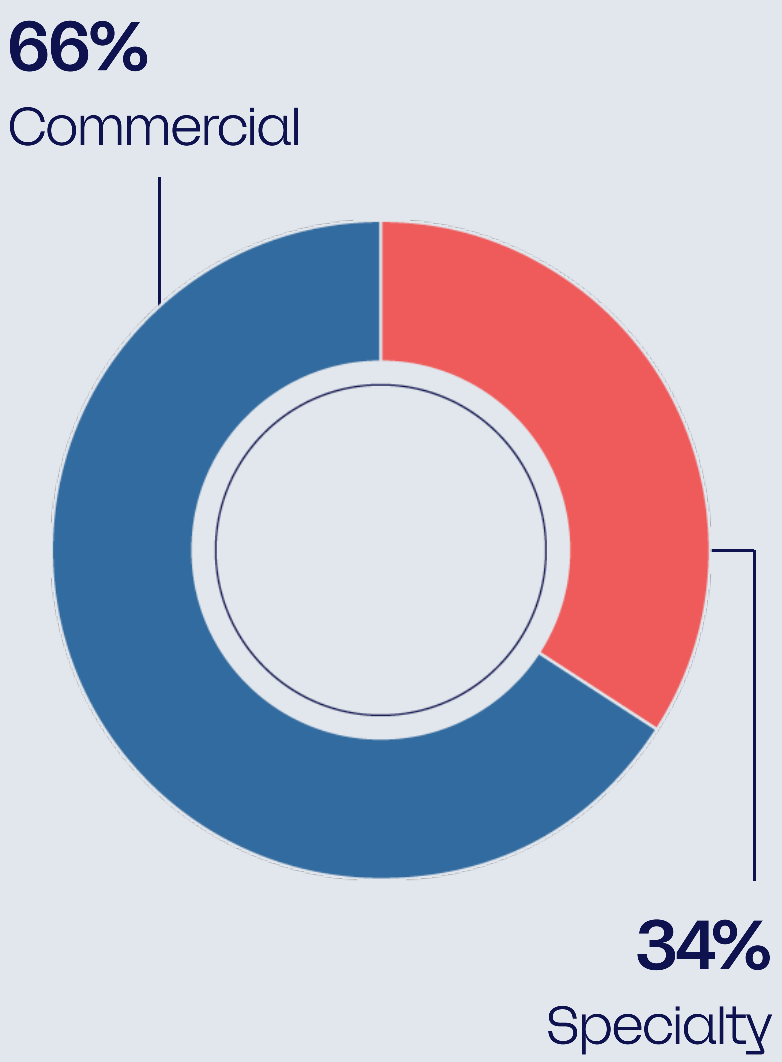
Independent research firm Coleman Parkes surveyed 245 underwriters and 105 pricing actuaries in the UK and US working in Specialty and Commercial insurance on behalf of hyperexponential.

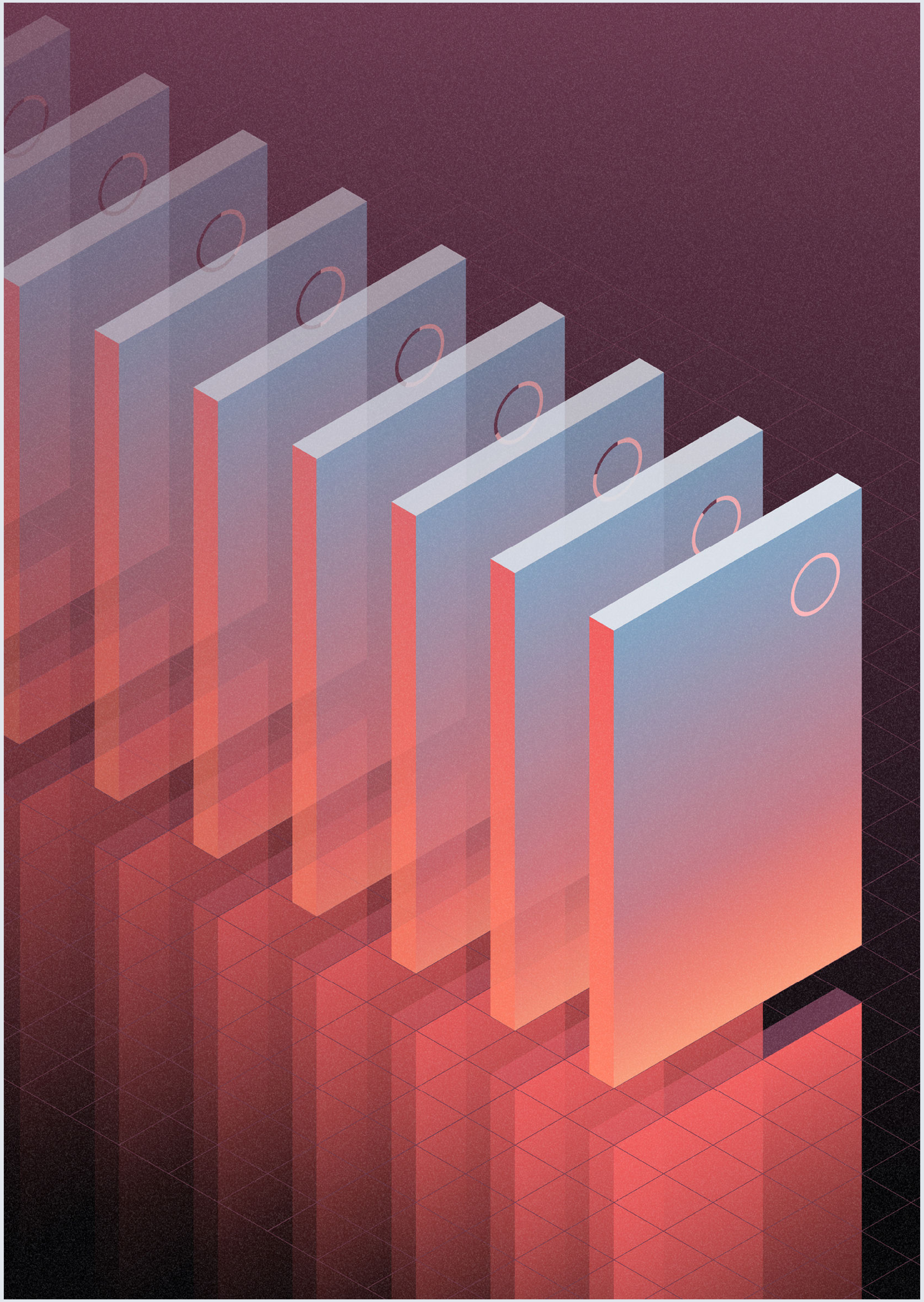
Half of respondents (125 underwriters and 50 pricing actuaries) were based in North America, and it's those responses and insights we examine in this special US edition of the 2024 State of Pricing report.

What type of company do you work for?



What type of insurance do you work in?





> The insurance industry is more important than ever before - enabling the world to navigate and absorb ever-evolving risks.
>
> **Richard Gunn**
> CRO,
> hyperexponential

Foreword

You can look at the world through multiple lenses right now and conclude that the volume and complexity of risk is at an inflection point. With AI, more is possible, faster — although in many instances, more opaquely.

History shows that as soon as someone builds the world's first 1,000-ft building, someone else is ready to construct the first 1,100-ft building. With AI now solving complex genome sequences, it's surely only a matter of time before someone aims to build a structure that dwarfs the 2,717 ft Burj Khalifa.

We are seeing another inflection point in the climate. The U.S. has been hit hard, experiencing record-breaking storms, but the rest of the globe has not been spared. From a 48% rise in extreme weather events in Europe to devastating heatwaves in Southeast Asia, the acceleration of climate-related risk is undeniable. Beyond the environment, we face escalating geopolitical tensions and economic uncertainty.

These issues make the insurance industry more important than ever before—enabling the world to navigate and absorb ever-evolving risks. But to do so effectively, insurers need the right tools.

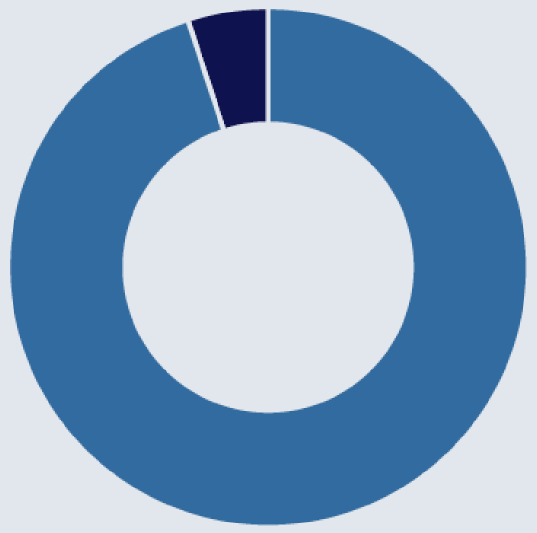
This report paints an unsurprising picture of an industry that feels under-resourced to price and underwrite effectively in such a rapidly changing environment. And whilst it's easy to pin some of this lethargy to over-regulation, there are clearly pockets of frustrated optimists in our ranks! 82% are already investing in data and analytics, with a further 8% planning to within the next 12 months. Actuaries and underwriters both report a strong desire to build the technical skills they'll need for the future.

Indeed, the same tools that are expanding the surface area of risk also provide an opportunity to manage it more effectively. Many companies, including hyperexponential, are enabling insurers to leverage AI to accelerate workflows while enhancing the sophistication of their pricing and underwriting.

I choose to hold onto my optimism, at least until the 2025 report disproves the progress it feels we are making on the coalface!.

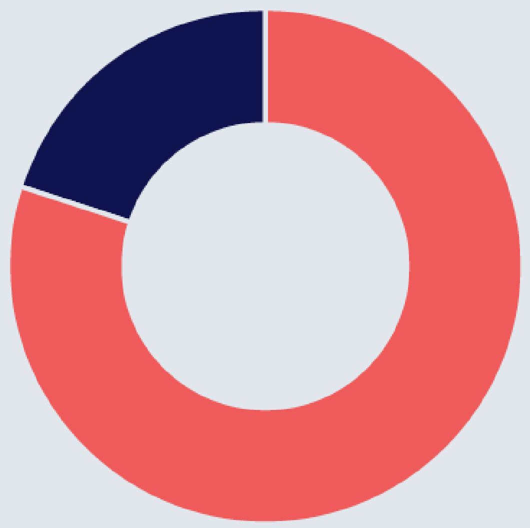
Richard Gunn
Chief Revenue Officer
hyperexponential

Key takeaways



95%

of respondents believe their pricing technology requires improvement

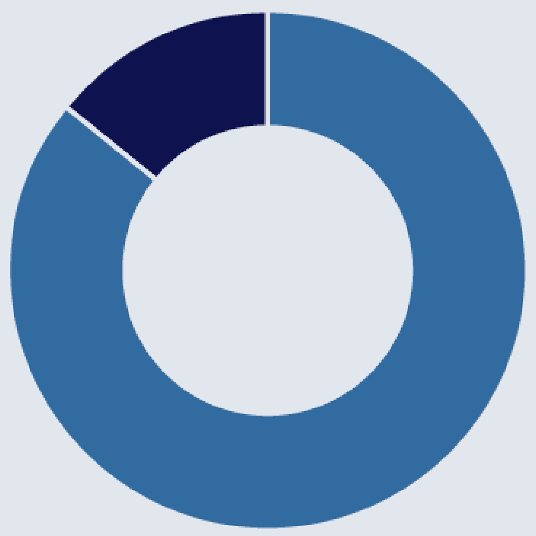


80%

of actuaries are worried about not having the right tech skills for the future

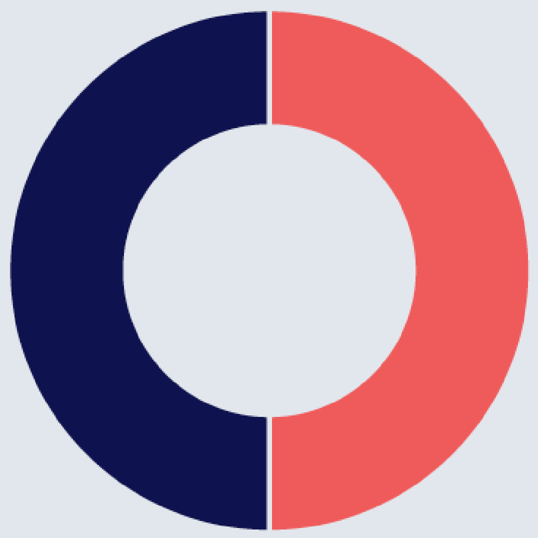
48%

say they are failing to meet the demands of a rapidly changing landscape



86%

of underwriters spend more than two hours a day on data entry



50%

have bought pricing platforms that haven't delivered what they promised

46%

report pricing platform is difficult to maintain

Part 1

Pricing challenges

Pricing is the key lever for profitability—yet sluggish model development and iteration, clunky processes and a lack of insight are resulting in sub-optimal decision making and risk rating.

In 2023, 78% of US specialty and commercial insurers believed their pricing technology needed improvement. Fast forward to 2024, and that number has jumped to 95%. What's driving this significant 17% increase in just one year?

It seems unlikely it's due to a decline in the actual performance of pricing technology—although this can happen as legacy systems age. A more plausible explanation is a shift in expectations.

95%

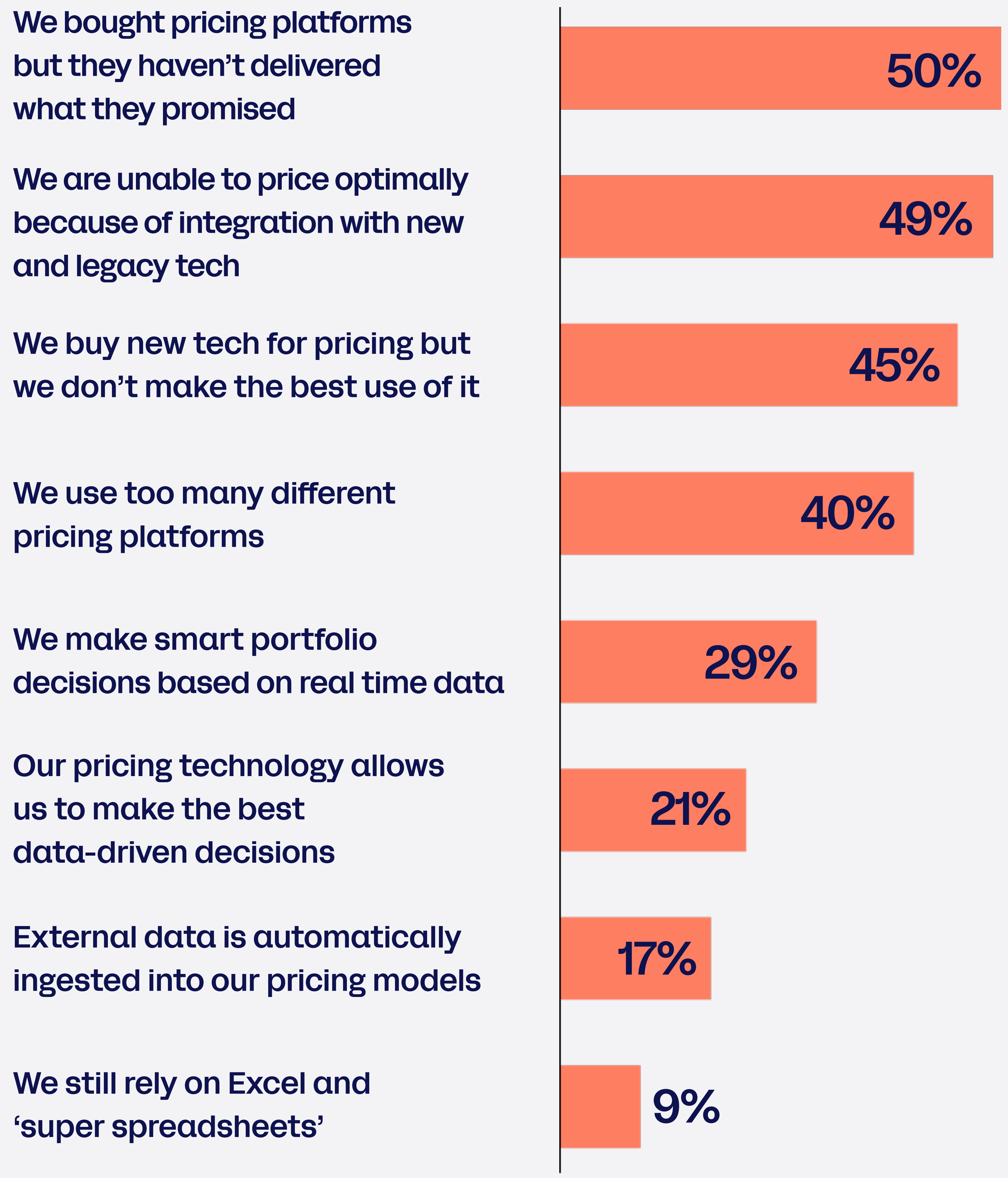
of respondents believe their pricing technology requires improvement

As other sectors adopt sleeker workflows and the buzz around machine learning and AI grows louder, the gap between cutting-edge advancements and outdated processes becomes increasingly glaring. When the rest of the world is accelerating, encountering clunky systems and limited insights feels more frustrating.

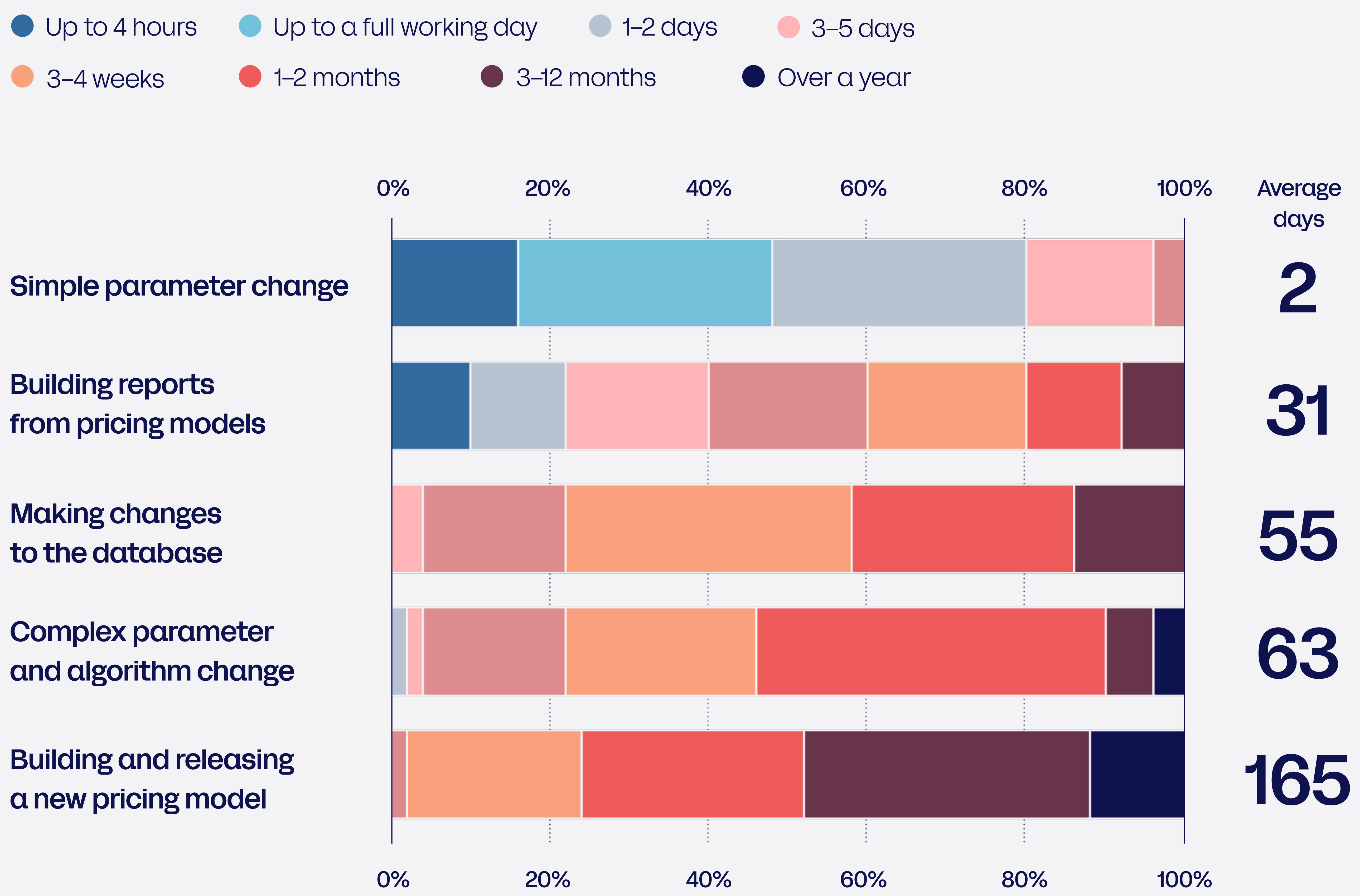
On the other hand, only 6% of respondents feel that a complete tech overhaul is required. The majority of insurers have already moved away from solely relying on Excel and super-spreadsheets (with just 9% still remaining). It's clear that most insurers have bought into the value that modern pricing platforms will bring to their business and future success. But there is still a long journey ahead to unlock the full potential of pricing technology. The findings ahead reveal that many longstanding issues are still impacting the efficacy and efficiency of pricing decisions.

Which of these statements best describe your pricing processes?

Inadequacies within pricing platforms do not always indicate a lack of investment or a failure to pursue pricing transformation. Often, these shortcomings result from poor implementation or the underutilization of existing technology.



Typical pricing model process times in 2024



Pricing moving slowly

Nearly half of respondents say current tech is failing to meet the demands of a rapidly changing risk landscape; a challenge that will only intensify as new risk elements come into play over the next few years. More importantly, these issues are having significant impact on insurers' business and bottom line - 43% feel they are unable to maximize profitability, and 38% believe their pricing tools aren't fit for purpose at all. More than a third of insurers report that it's resulting in a loss of business to competitors.

Nearly 9/10 of actuaries report feeling "worried" about not having the right pricing platform, with 32% considering the issue "urgent today". A further 20% of respondents expect the issue to become urgent within the next 2 years.

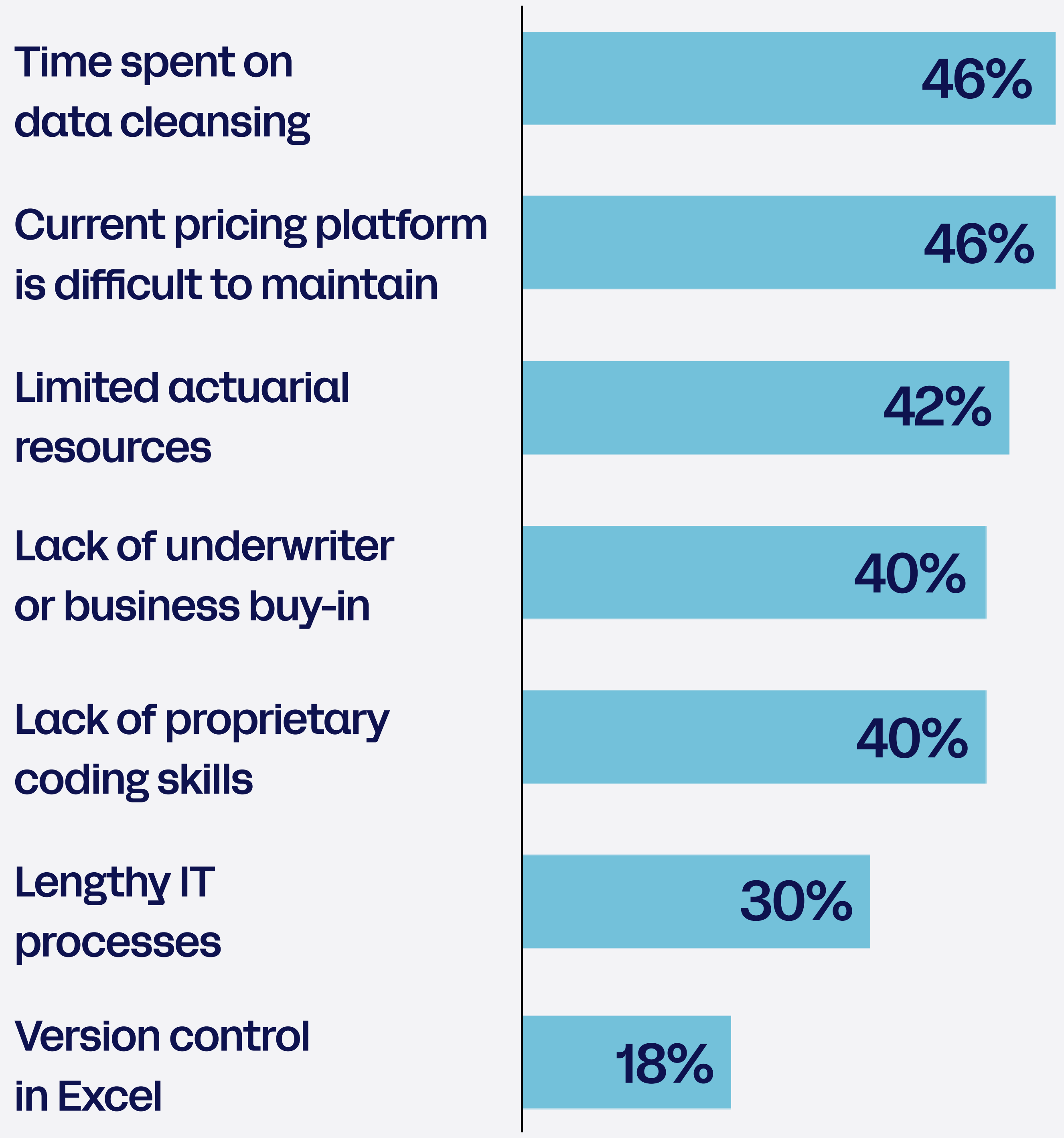
That's no wonder when, for most actuaries, it takes over a month to build or release a new pricing model. In fact, nearly half of actuaries report that making a complex parameter and algorithm change takes more than a month on average.

This may reflect good due diligence, but it's also indicative of slow-moving workflows and outdated platforms. Sluggish development and iteration may mean that insurers are stuck working with models they know are outdated or less accurate, leading to sub-optimal pricing decisions.

What are the biggest barriers stopping you deploying and maintaining pricing tools?

Actuaries face platform-related issues when deploying pricing tools, including data issues and platform maintenance.

Issues around lack of buy-in and lengthy IT processes show how collaboration is key to effective pricing model development.



Building a rich data ecosystem
Despite the exponential growth of global data—an estimated 90% of which has been generated in just the past two years—Specialty and Commercial pricing often remains hampered by a lack of data-driven insight. When critical information is unstructured, hidden within PDFs, or locked away in images, only advanced pricing platforms can unlock its full value.

New technology holds the key to solving the data challenge, yet ust 21% of respondents believe their technology enables the best data-driven decisions. Fewer than 2 in 10 have automated external data integration. More than a quarter of actuaries cite siloed data as one of the biggest data issues affecting their organization.

Additionally, over 40% of underwriters report that the lack of access to third-party data is affecting their ability to price effectively. The US has an enormous wealth of third-party data sources, but there are barriers to actually leveraging them for pricing. API connections need to be available, implemented smoothly, and easy to maintain. On top of these practical hurdles, access to valuable third party data sources can be prohibitively expensive.

What are the top 3 data issues affecting your organisation?

1. Hours wasted rekeying data
2. Onerous processes and a long time to satisfy internal compliance
3. Lack of regular reporting on pricing and underwriting data

In an ideal scenario, underwriters would have seamless access to a consistent stream of rich insights from a diverse array of sources, all integrated directly into their pricing workflows. Insurers would also capture and harness their internal and proprietary data, feeding it into a continuous, iterative feedback loop to drive increasingly robust decision-making over time.

Part 2

Manual processes

Flexible, modern infrastructure is the ideal foundation for future development, but many insurers still have workflows dominated by slow, manual tasks.

Pricing the long way round

Underwriters spend an average of three hours a day manually entering data into systems, with more than half reporting that ingesting 3rd party data takes more than two hours. Regular reporting takes around an hour a day, and peer review can be even more time-consuming at around two hours per day.

7 in 10

underwriters concerned about not seeing significant improvements across underwriting processes

Underwriters aren't data entry clerks, and a heavy administrative burden takes them away from the most value-added work—negotiation, relationship building, risk assessment, and strategic decision-making.

No wonder 7/10 underwriters are worried about not seeing significant improvements across underwriting processes, with nearly 20% considering this an urgent issue today.

Insurance is an industry that rewards timely responses. With an average of 8 days between submission to quote, and a further 11 from quote to bind, insurers that can move faster will unlock a crucial competitive advantage.

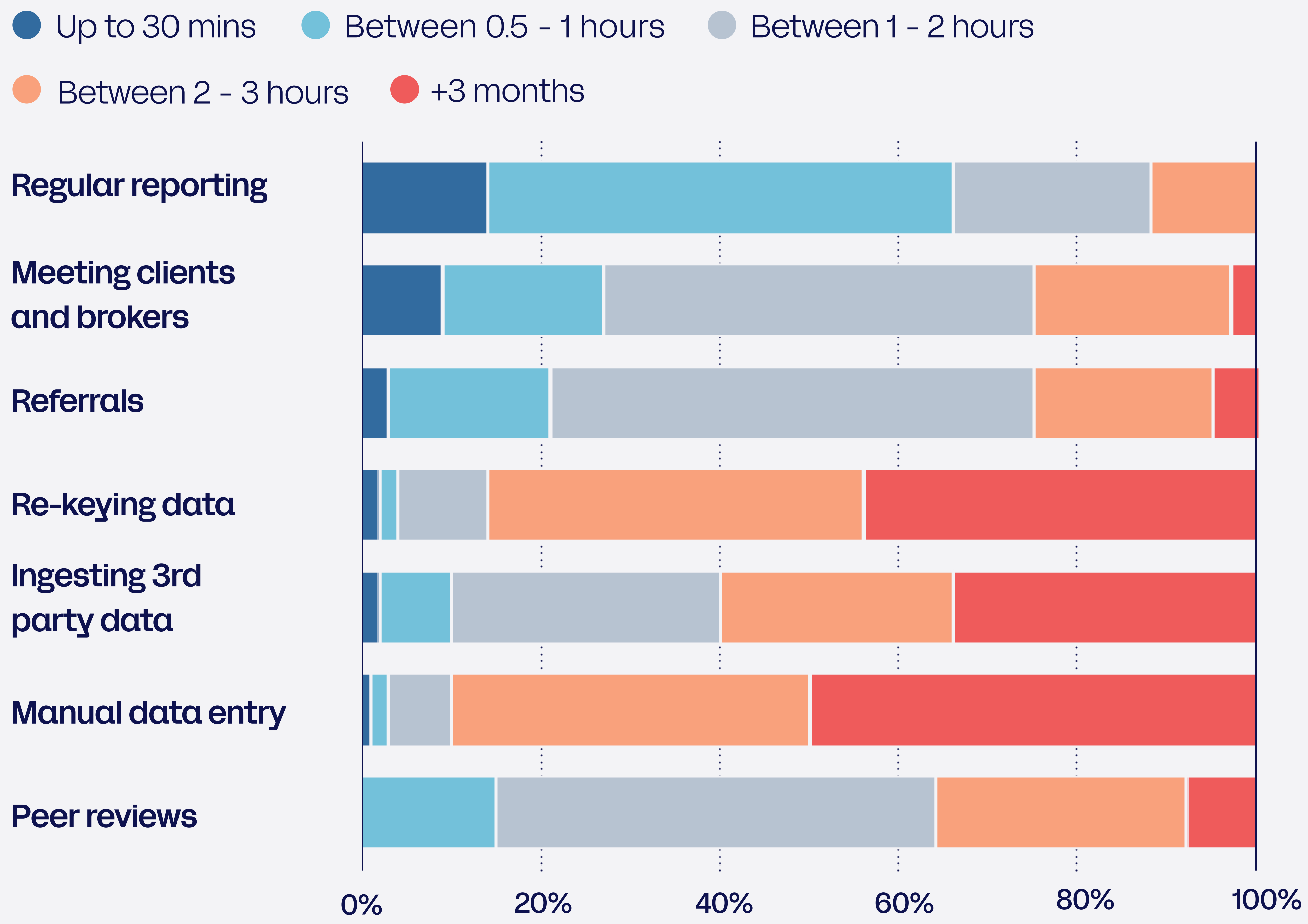
77% of underwriters believe that "adhering to compliance standards" is a concern, or will become so within five years. This is part-procedural, part infrastructural. Automated version control, built-in guidelines, integrated peer review processes and automated flagging are just some of the ways meeting compliance standards can be made easier and less time-consuming.

90%

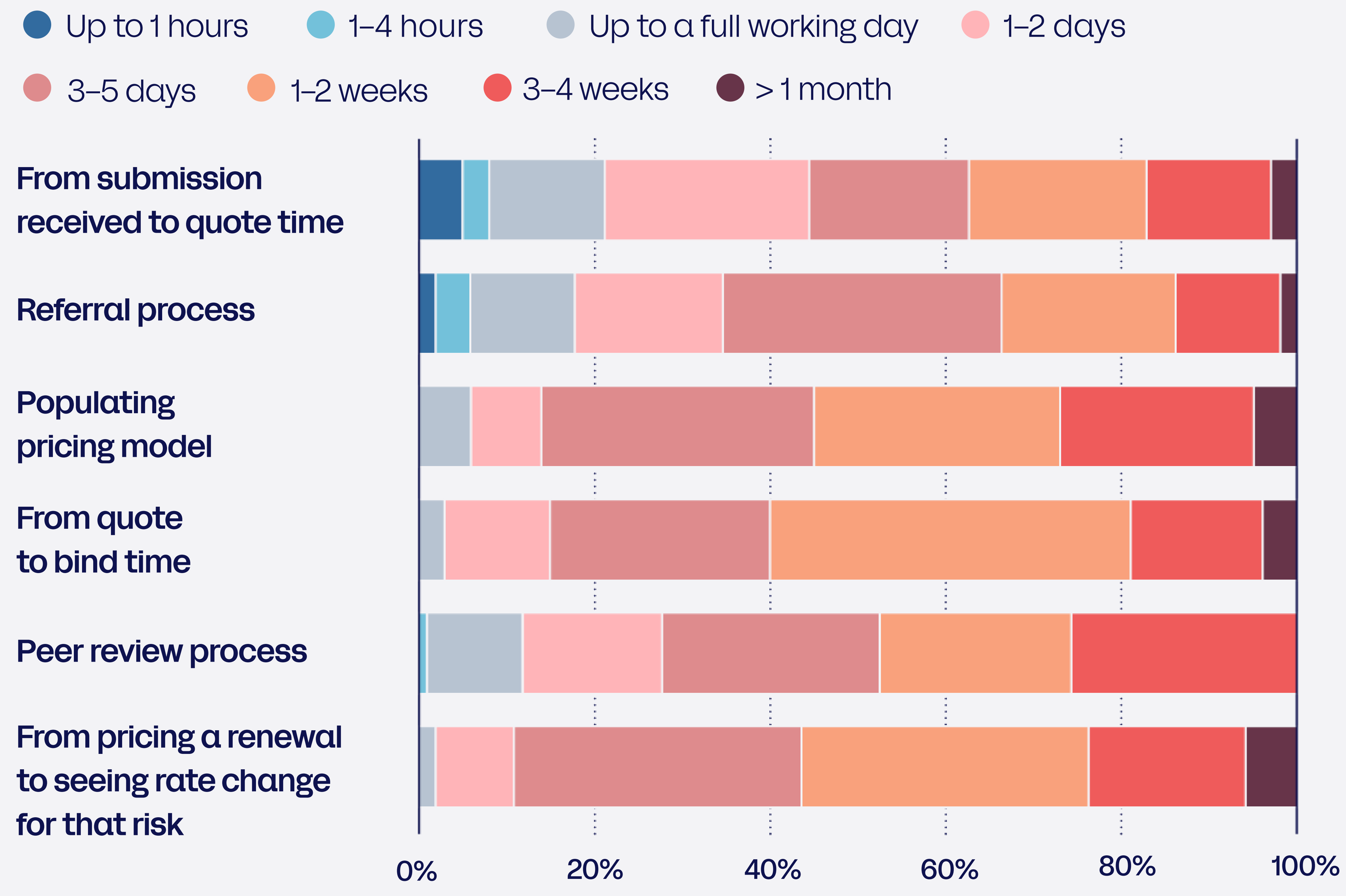
of underwriters spend more than 2 hours a day rekeying data

Manual entry of data:
How long do underwriters spend on different processes?

Average day task allocation



Underwriting process times



What are the main reasons technology you use in your role needs improving?

1

Current tech requires a lot of workarounds to make it usable

43%

2

Our technologies aren't integrated with one another

40%

3

Too much manual input / lack of automation

40%

4

Making changes to applications/processes takes far too long

37%

5

Current tech is difficult to audit / report from

36%

Manual processes for actuaries

Actuaries are also slowed down by the broader data ecosystem around their pricing technology. Nearly half report that the time spent cleansing data is their biggest barrier to deploying pricing tools.

4/10 of actuaries say “our technologies aren’t integrated with each other”, and 37% say “making changes to applications and processes takes far too long.” This is likely exacerbated by poorly integrated legacy technology, with nearly a third reporting that moving data from old systems is far too time consuming. These are highly qualified, highly skilled workers, and freeing them up to focus on more impactful work can unlock huge business value for insurers.

46%

of actuaries say their pricing platform is difficult to maintain

How could technology further enhance your role?

The message is clear; both actuaries and underwriters want to see significant operational improvements.

Manual tasks like data cleansing and rekeying could be alleviated with the right pricing technology.

For Underwriters

1 Reduce time spent on rekeying data

2 Reduce time spent on peer review and referrals

3 Decrease quote to bind time

For actuaries

1 Reduce time spent on data cleansing processes

2 Create more accurate pricing models faster

3 Integrate new technology with legacy pricing systems

Integrating ESG data

According to a report from PWC, 85% of global insurers believe ESG will impact all functions of their business.And this drive towards leveraging ESG in insurance was reflected in our own research, with only 5% of our survey respondents saying they have “no plans to use ESG data.”

There is still room for improvement in uptake however, with 13% of respondents reporting “extensively” incorporating ESG data across lines of business and 51% only use it for certain lines, while 29% do not currently use ESG data, but intend to start soon.

95%

of insurers already, or plan to, use ESG data for pricing

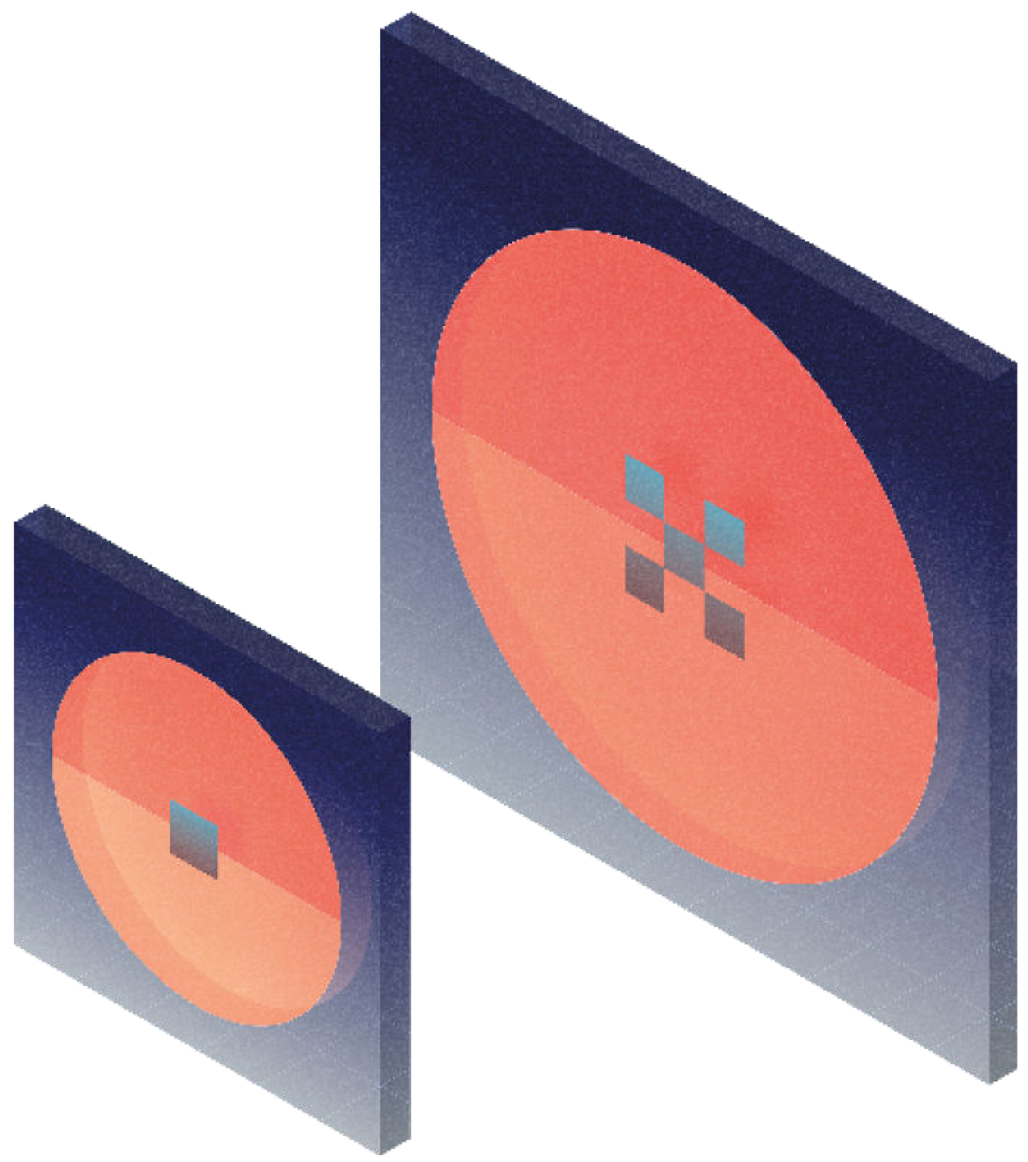
91%

are already investing in AI technology, or plan to in the next 5 years

Part 3

AI, ML and beyond

With insurers already investing in AI and machine learning technology, skill gaps and infrastructural requirements are more pressing than ever to ensure we see the promised benefits. Are insurers ready? And which other technologies will be crucial to future-proof pricing?



The journey to AI underwriting is well underway

McKinsey estimates that AI technologies could add up to $1.1 trillion in annual value for the global insurance industry. Given the potentially transformative impact on both processes and the bottom line, it's no wonder insurers are building AI into their technical roadmaps.

50% of respondents report that their organization is already investing in AI technology. 26% intend to invest within the next 12 months, and a further 15% within the next 2–5 years. Only 7% have no plans to invest within the next 5 years.

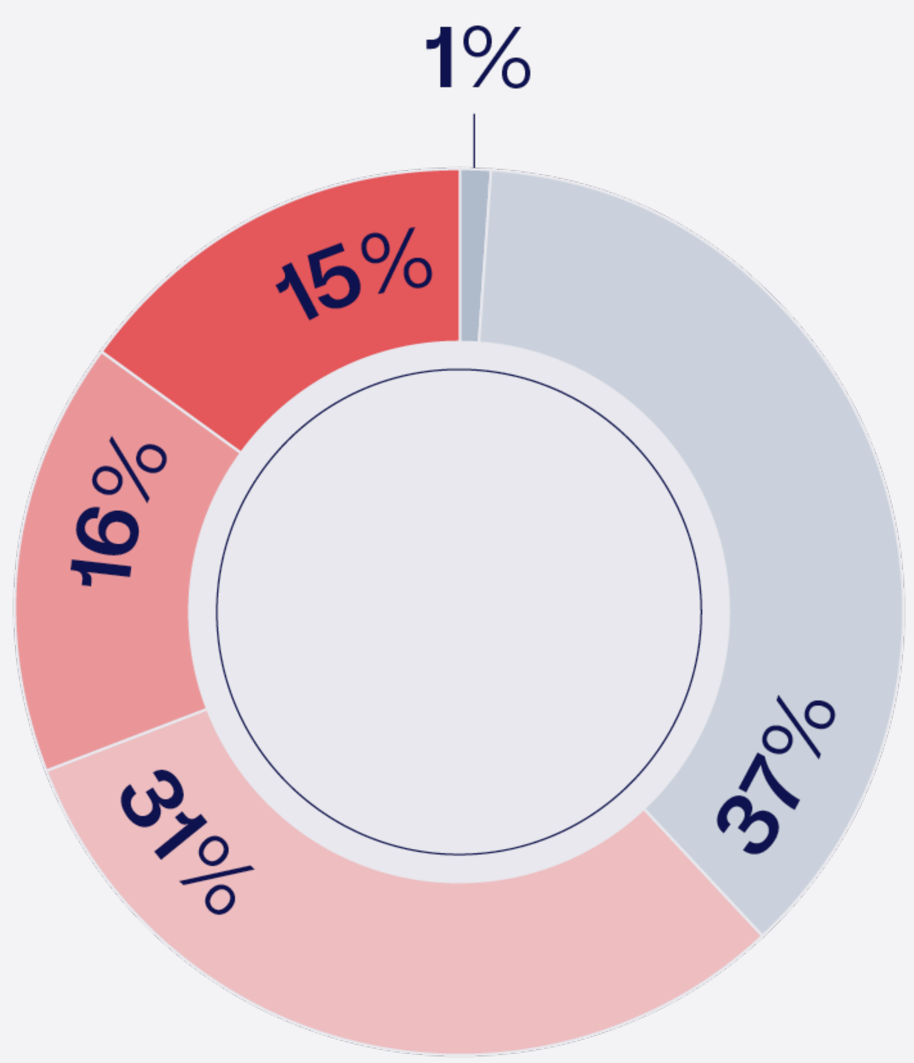
The more data available, and the higher its quality, the stronger the opportunity for AI-enabled decision-making. However, poorly integrated systems, inability to convert data into insights, and failure to capture past decisions hinder insurers from effectively using machine learning applications in the future.

How worried are you about being replaced by AI?

A similar proportion of underwriters and actuaries are worried about being replaced by AI, but underwriters are significantly more likely to think the issue is "urgent today"

Underwriters

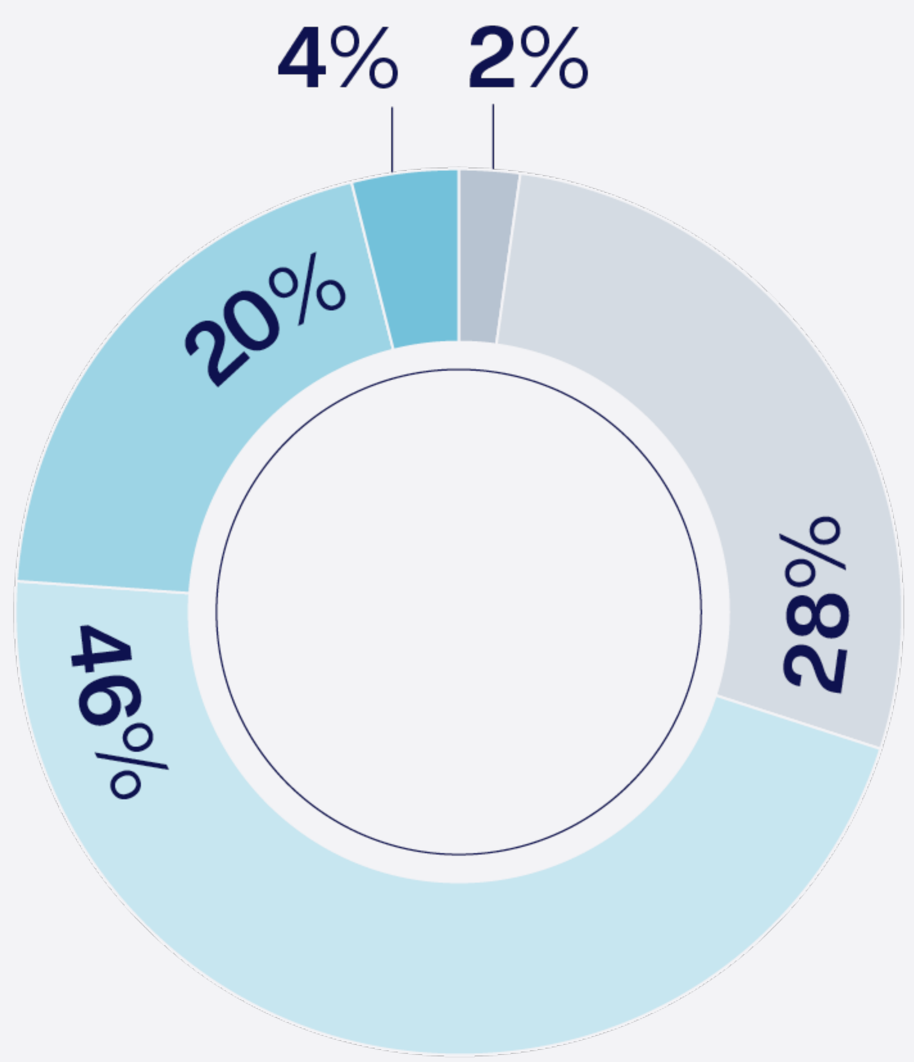
- Worried this is an urgent issue today
- Worried this will be an issue, but some time in the next 2 years
- Worried this will be an issue in 2 to 5 years
- Considered it, but not worried at all
- Haven't considered it



62%
are worried

Actuaries

- Worried this is an urgent issue today
- Worried this will be an issue, but some time in the next 2 years
- Worried this will be an issue in 2 to 5 years
- Considered it, but not worried at all
- Haven't considered it



70%
are worried

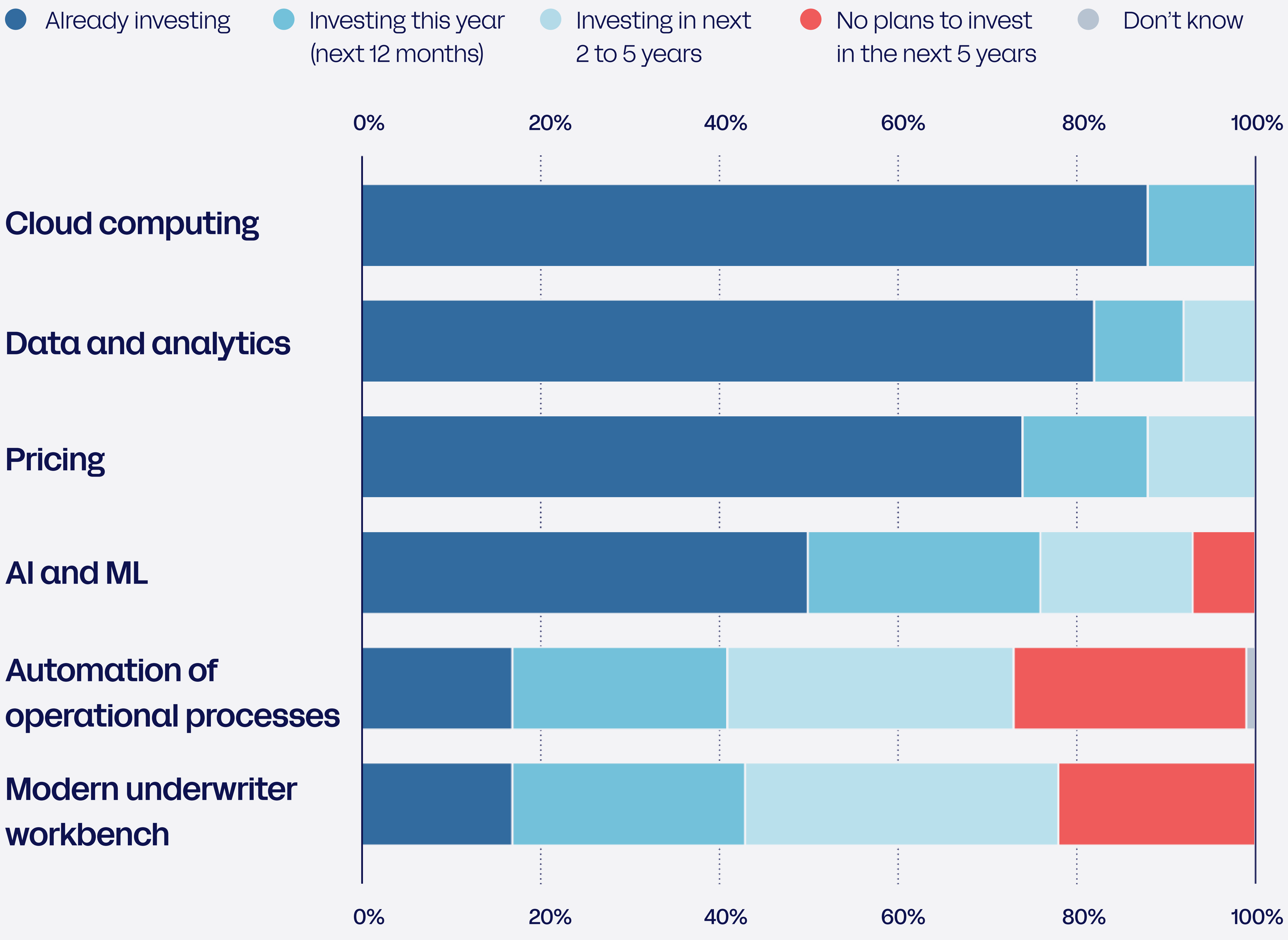
> **"Without focused upskilling and an emphasis on recruiting for technical talent, insurers may find themselves with the infrastructure for AI and machine learning, but without the current or incoming talent to get the most out of it."**

Underwriters and actuaries in the AI age
In order to successfully implement AI and machine learning, actuaries (and some underwriters) are likely to need modern coding skills.

That's why it's such a concern that 8/10 actuaries report feeling worried that they don't have the right tech skills for the future. Nearly half believe the issue is "urgent" or will become so over the next two years.

74% of underwriters are also worried about not having the right tech skills for the future, with 16% considering the issue urgent today.

Where does your organisation plan to invest in technology this year and over the next five years?



Technology investment overview: Where insurers are placing tech bets

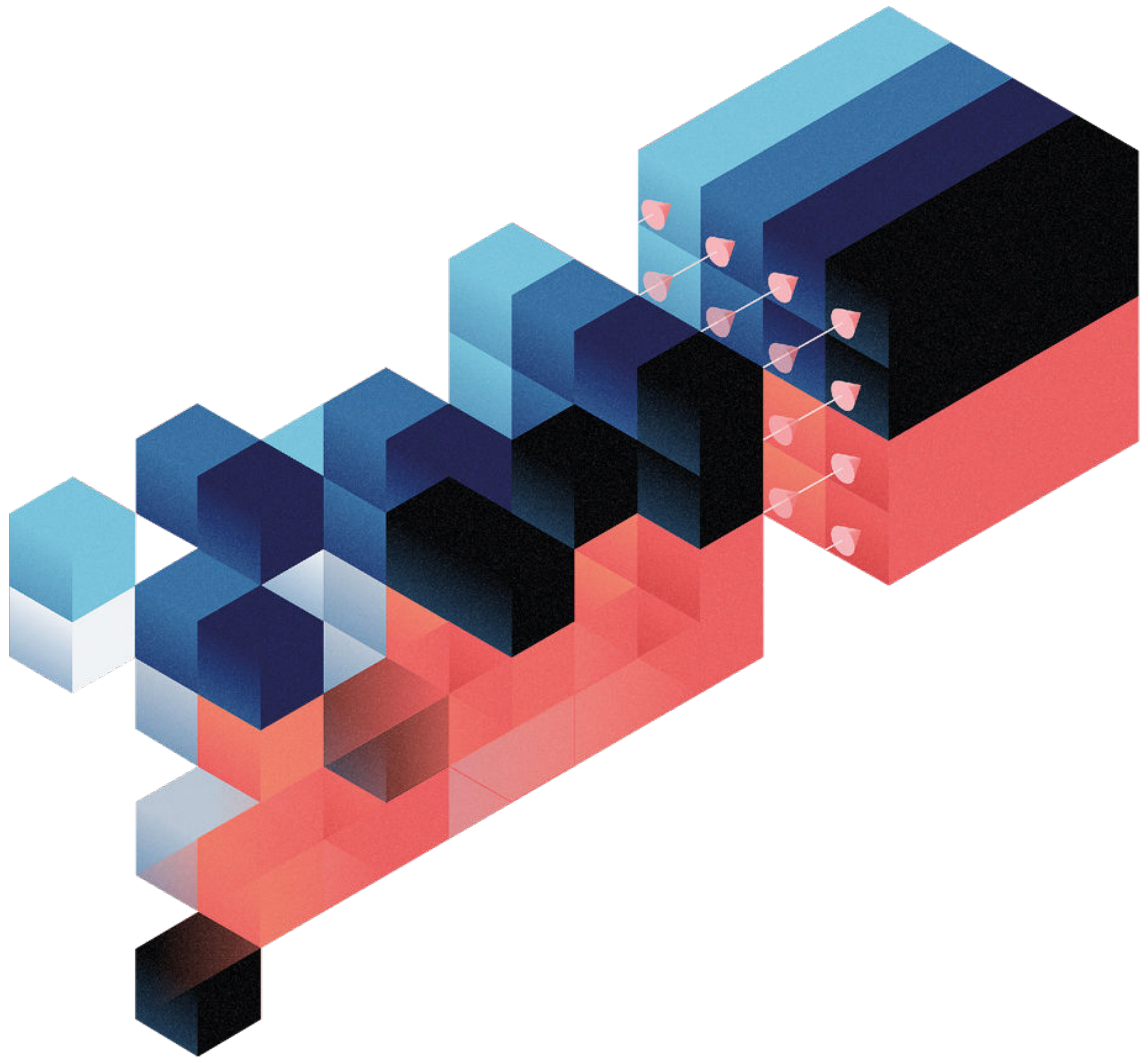
There are some strong themes in the technical investment roadmaps of insurers over the next five years. One key theme is the completion of the move to the Cloud, with the vast majority (88%) of insurers already investing, and the final 12% planning to invest over the next 12 months. Data and analytics (82% already investing) and pricing technology (74% already investing) are two further focus areas for insurers looking to the future.

Other technologies, such as automatization of processes, show much lower rates of uptake. Given the clear need to reduce admin and manual low-value tasks, it's worrying that this is so low on the agenda, and points to a potential oversight in the optimization roadmap for insurers' pricing workflows.

Part 4

The evolving role of underwriters and actuaries

The state of pricing is not only determined by the nuts and bolts of technology; the readiness of the workforce is key, both culturally and educationally. Our research reveals notable concerns and skill gaps.



The skills gap for actuaries

Surveyed about their concerns for the future, actuaries revealed serious worries about the technology they use, and the skills they feel they need to deliver the best results.

Actuaries in particular are deeply concerned about a lack of key modern technical skills. 86% report feeling worried about learning how to code in various languages over the next 5 years, with more than 3/10 reporting that the issue is "urgent today".

On top of this, nearly a quarter believe they do not have the in-house skills to make the most out of their data.

The skills gap for underwriters

The underwriter of the future might not need to be a coder, but understanding modern coding languages, pricing platforms and how they work will be vital. With 72% feeling worried about a lack of future-focused tech skills, this may be a ticking talent time bomb.

Underwriters are being pushed to shift from retrospective decision-making to a forward-looking approach that involves real-time portfolio monitoring. Yet 85% of underwriters are concerned about moving from risk to portfolio underwriting, with over half seeing this as an urgent issue. It requires new skills in data analytics, risk aggregation, and portfolio management. A lack of live portfolio insight—cited by more than a quarter of respondents as a major issue with their pricing technology—exacerbates the challenge.

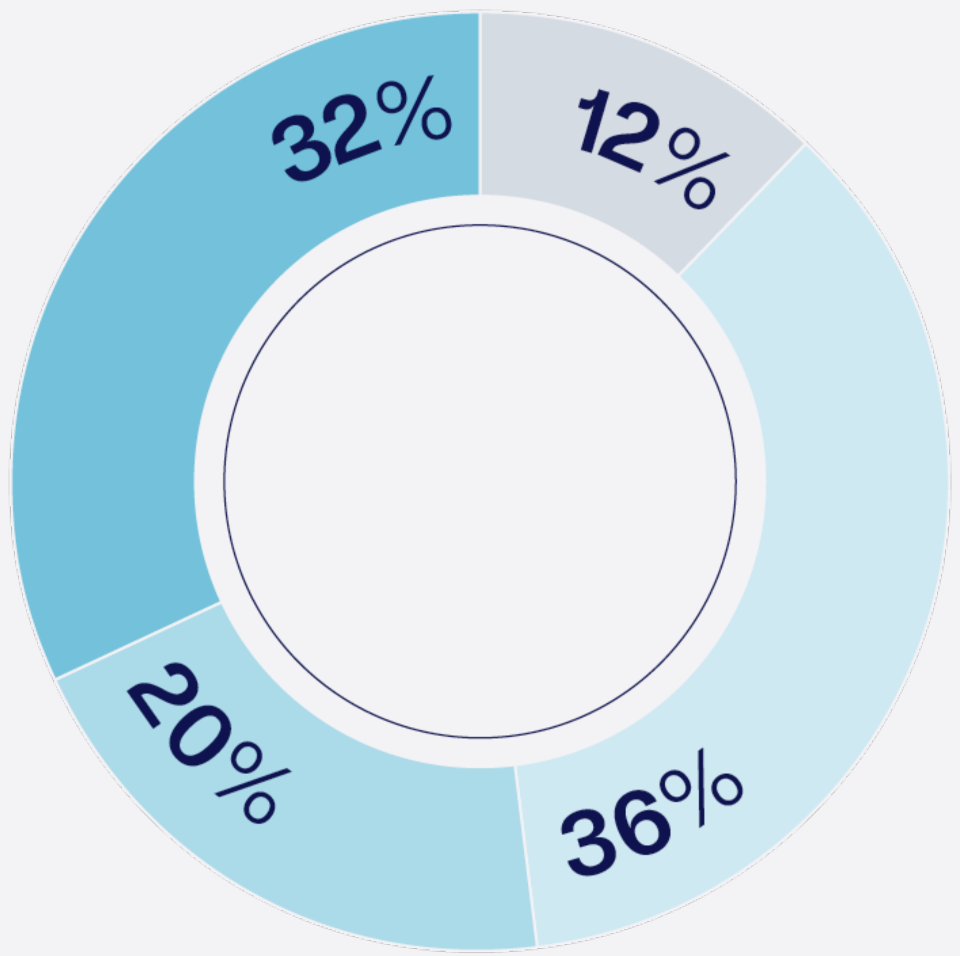
Another concern may be the perception that a move to portfolio underwriting will blur the lines with what some actuarial teams have done in the past, with 75% of underwriters reporting concerns about the actuary and underwriter roles becoming one and the same.

As emerging risk sectors like Cyber continue to grow, and the need for predictive analytics to address issues like climate change intensifies, the push towards a portfolio-based approach will only accelerate. Addressing the growing skillsgaps sooner rather than later will become even more critical.

Actuaries:
Thinking about the future of your role, how concerned are you about the following issues?

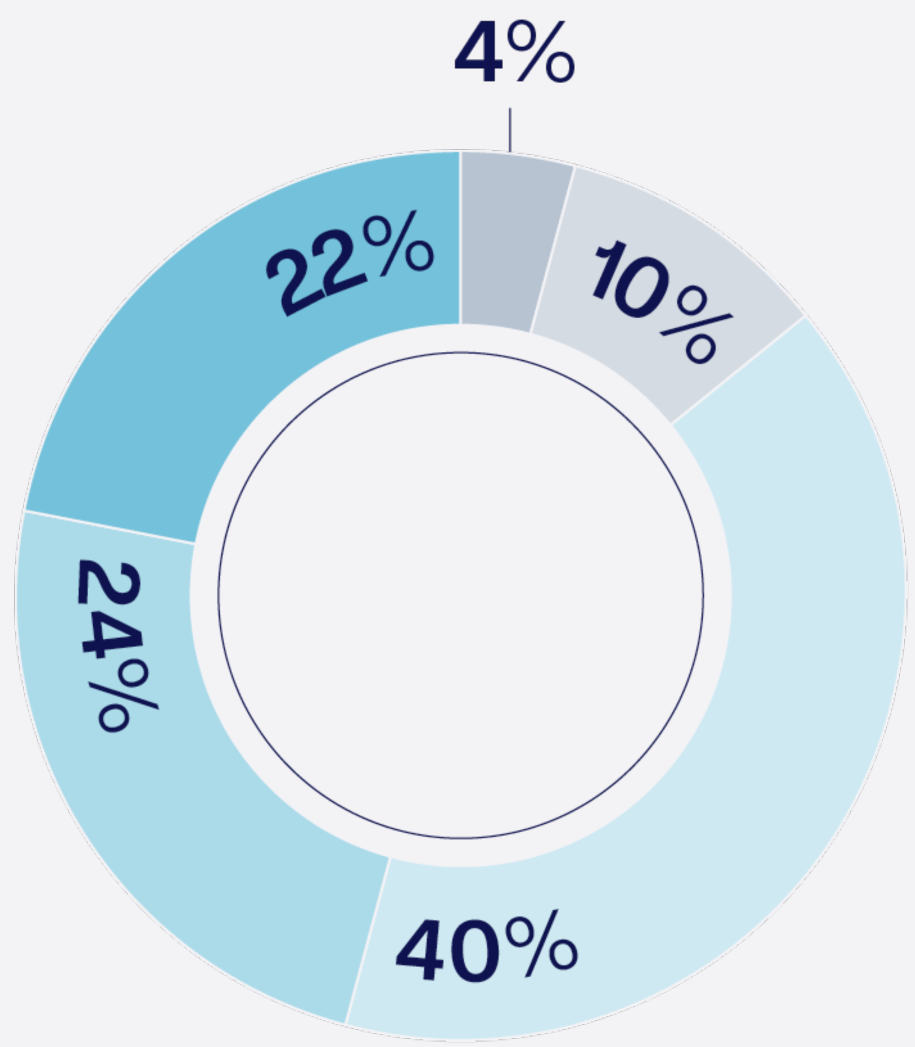
- Worried this is an urgent issue today
- Worried this will be an issue, but some time in the next 2 years
- Worried this will be an issue in 2 to 5 years
- Considered it, but not worried at all
- Haven't considered it

Not having the right pricing platform



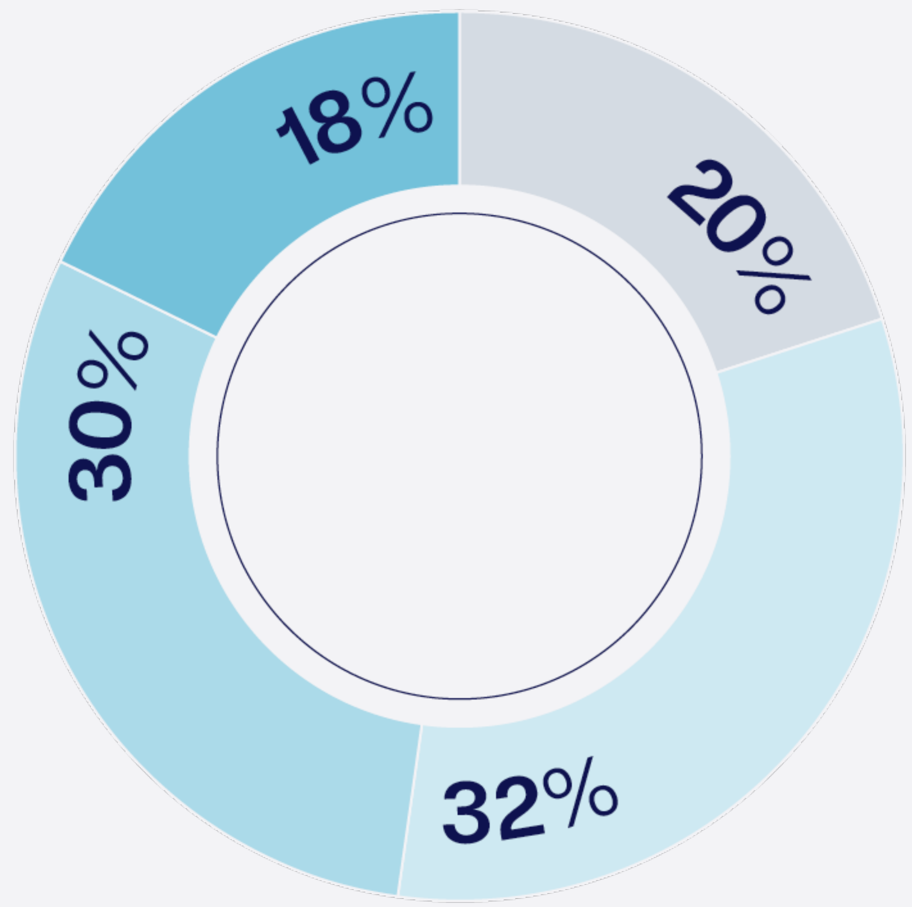
88%
are worried

Having to code in various languages



86%
are worried

Not having the right skills for the future

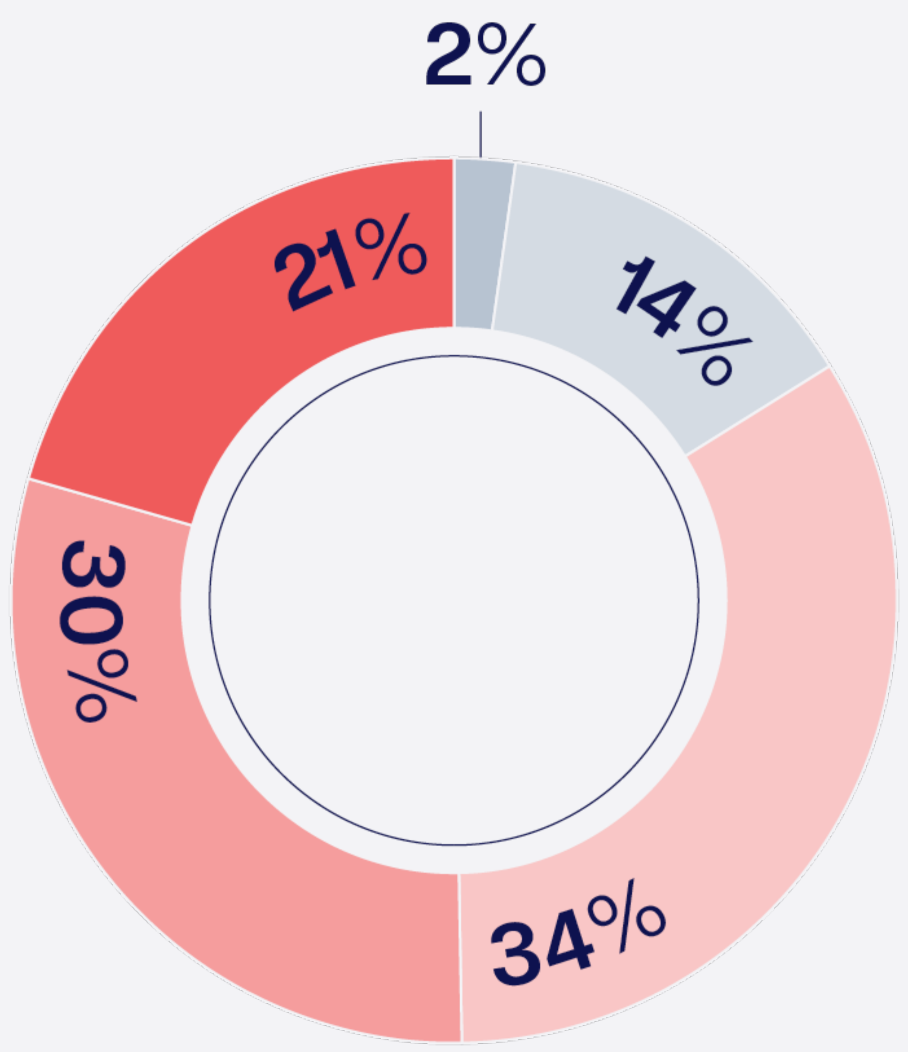


80%
are worried

Underwriters:
Thinking about the future of your role, how concerned are you about the following issues?

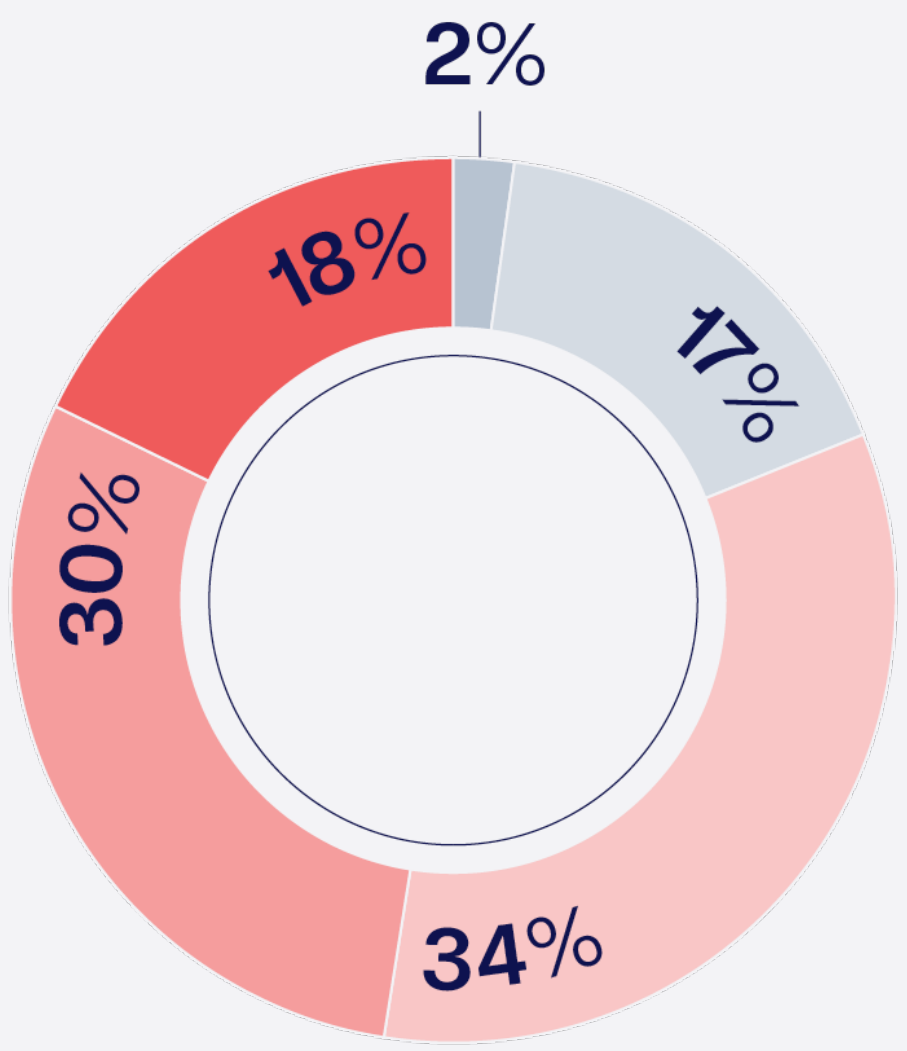
- Worried this is an urgent issue today
- Worried this will be an issue, but some time in the next 2 years
- Worried this will be an issue in 2 to 5 years
- Considered it, but not worried at all
- Haven't considered it

Shifting from risk to portfolio underwriting



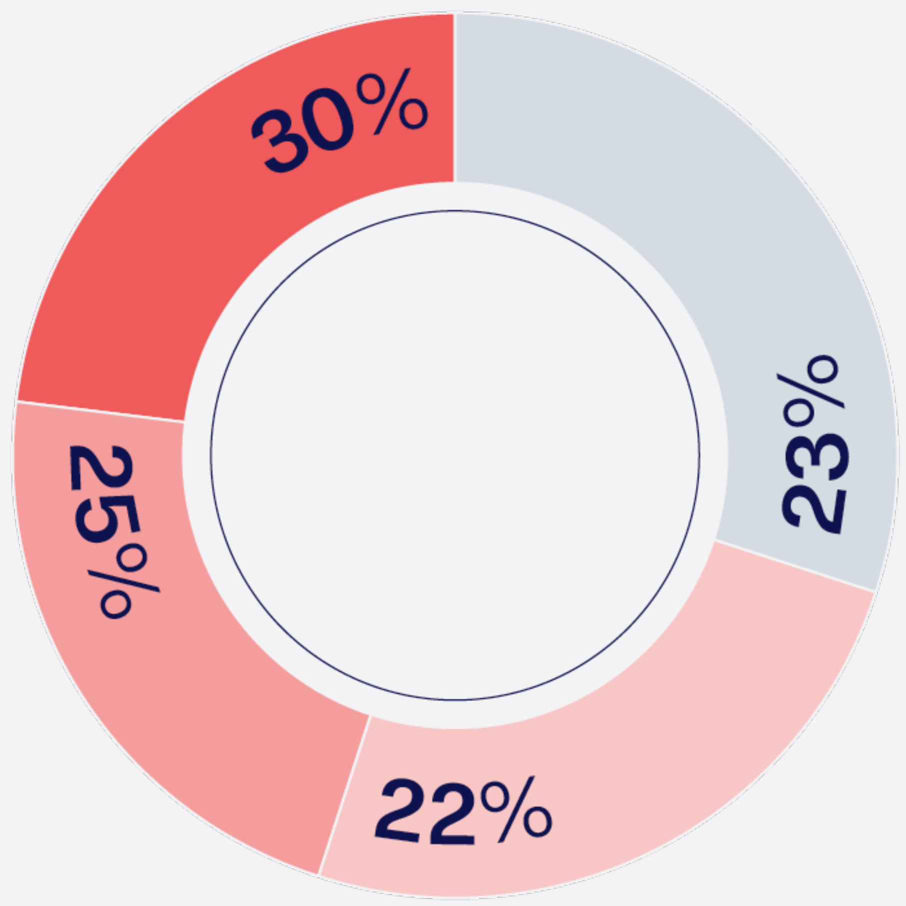
85%
are worried

Bored of the profession / burnout



81%
are worried

Adhering to compliance standards



77%
are worried

What skills will be most important for an Actuary of the future?

Top 3

1. Knowledge of modern pricing platforms
2. Management of large teams
3. Expertise in data analysis and/or machine learning

What skills will be most important for an Underwriter of the future?

Top 3

1. Ability to generate insights from current affairs
2. Knowledge of modern pricing platforms
3. Proficient coding skills

The talent gap

It's notable that 68% of actuaries and 81% of underwriters are worried about becoming bored or burning out of their profession over the next five years. On top of this, 50% of actuaries report feeling concerned about a lack of exciting career opportunities.

The US Chamber of Commerce reports that 50% of the current insurance workforce will retire over the next 15 years, creating an urgent need for a strong talent pipeline to replace them.

Embracing slick 21st century technology does more than streamline pricing workflows; it can create a more interesting and varied working life for insurance professionals, while making the insurance industry a more appealing prospect for potential new entrants.

> **"50% of current US insurance workforce will retire in the next 15 years, creating urgent need for strong pipeline of technically-minded talent to replace them."**

The gender gap

According to GQ Littler, despite making up about 60% of the insurance workforce, women make up less than 7% of chief executives and 11% of board directors.

Little surprise, then, that 94% of our respondents think there is room for improvement in the insurance industry in overcoming inequality and sexism, with nearly 4/10 considering the issues "significant."

But there's good news, too; 62% of respondents report that their organization has comprehensive policies in place to support equality for women. 29% feel there is room for improvement, but no one reported a complete lack of policies or programs.

> **"While we've seen a significant rise in women holding leadership positions, I'm optimistic that the next generation of female leaders will gain even more ground."**
>
> **Risa Ryan,** Strategic Advisor at hx

Part 5

Enhancing collaboration

The relationship between actuaries and underwriters is fundamental to the pricing workflow, but the path does not always run smooth...

While every respondent reported valuing the input of the other party, 76% of actuaries and 77% of underwriters believe there is “room for improvement” in how they work together.

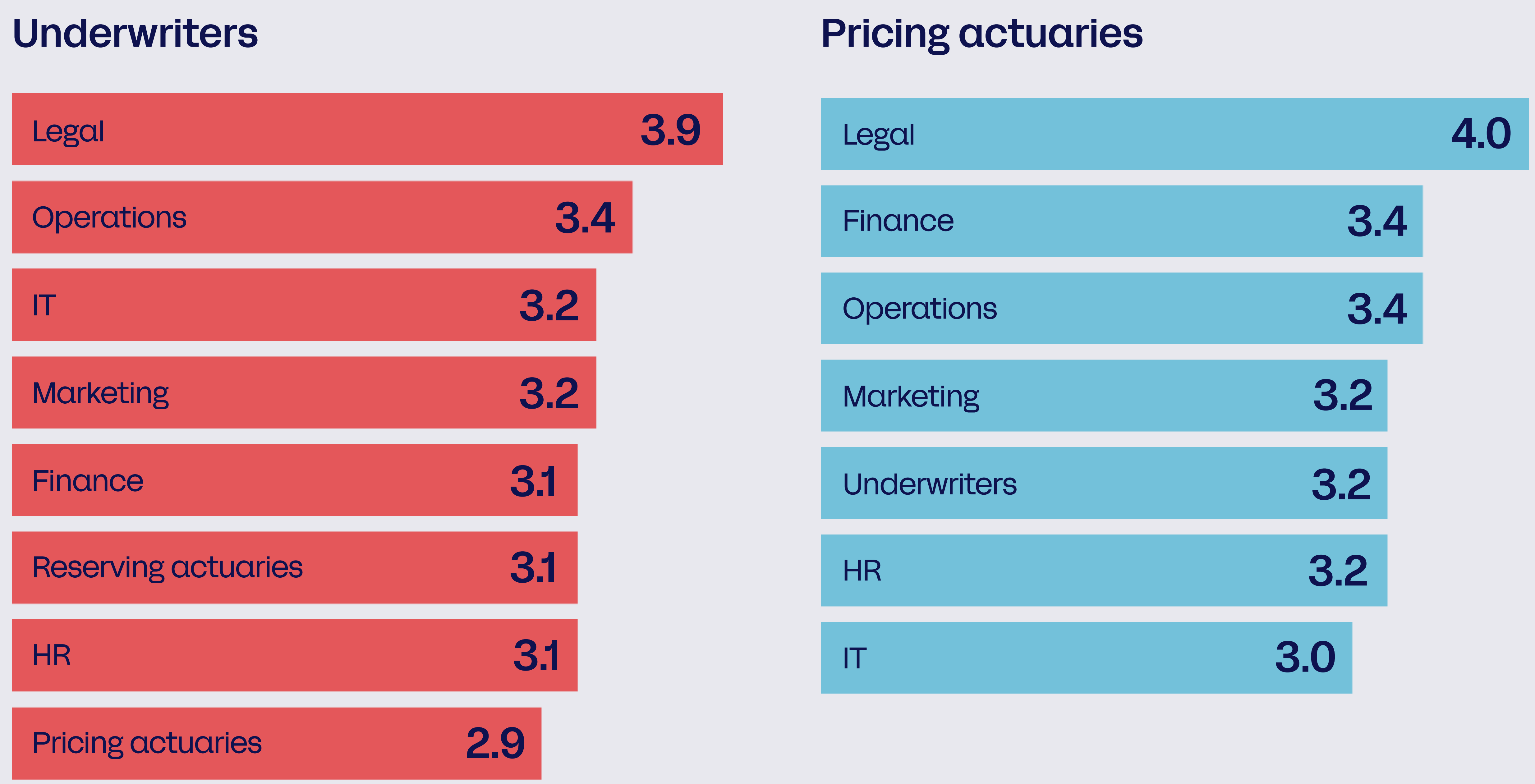
In fact, underwriters ranked their collaboration with pricing actuaries lower than every other department, including reserving actuaries, IT, Operations, Marketing, HR and Legal. Actuaries ranked IT lower and marketing the same, but underwriters still came towards the bottom of the pack.

1 in 10

Underwriters rated collaboration with actuaries “very ineffective” (the lowest score)

How effectively does your team collaborate with the following departments?

In the insurance industry at least, it seems everybody loves lawyers!



Who is using those powerful new pricing models?

A poor or limited actuary/underwriter relationship can impact the adoption of pricing tools. Just a third of underwriters consider pricing tools to be "essential", used every time they write a risk. 39% use them only for risks where they trust the output, 19% describe them as a "necessary inconvenience", and 9% say they "don't trust them, as they are often outdated".

This can reflect interpersonal blockers, a lack of understanding of the functionality of models, or a lack of alignment. Poor collaboration may also reflect infrastructural defects.

If actuaries can update and iterate on pricing tools quickly in response to feedback, a positive loop is formed where the requirements of the underwriters are rapidly met. If the model build process itself is highly flexible, the input of underwriters can be considered from the very beginning.

Actuaries and IT

There's another key relationship that received suboptimal responses. Actuaries rate their collaboration with IT the lowest out of all the inter-team partnerships, with an average score of just 3.0/5. Worryingly, 10% gave the collaboration the lowest score, "very ineffective". This is a particular concern as the IT department is integral to pricing transformation efforts.

30% cite lengthy IT process times as one of the major barriers preventing them building and deploying pricing tools.

> **Only one third of underwriters consider pricing tools to be "essential" and used every time they write a risk**

> The IT and actuary stat doesn't surprise me, but it does disappoint. The most successful pricing transformations we've seen are those where actuarial, IT, and underwriting are fully engaged and collaborating from the start. This helps IT teams evolve from a 'cost centre' to a 'value centre', ensuring your whole business (not just 'the business') thrives.
>
> **Tom Clark**
> Field CTO, hyperexponential

Part 6

Next generation pricing platforms

The research makes it clear; pricing workflows and decisions are all-too-often being undercut by the very technology that underlies them. While many approaches may prove effective in the future, we can already identify what isn't working today. Sprawling spreadsheet-based systems were outdated five years ago. Siloed systems add a significant manual burden. Platforms that don't facilitate rapid model building and updates ensure out-of-date decision-making.

Today's choices determine tomorrow's market leaders. Insurers need to be certain that their platform is setting them up for success.

Future-proofed pricing

hx Renew is the market-leading platform trusted by best-in-class insurers including Aviva, Markel and Conduit Re.

With hx Renew:

Underwriters are given the tools (and the time!) to make the best pricing decisions.
Seamless integrations with internal systems and underwriter workbenches eliminate data rekeying. Insights are surfaced throughout the workflow. And portfolio underwriting has never been easier, with the ability to view their live portfolio and assess the marginal impact of the policy they are pricing in real time.

Actuaries can easily build and iterate on best-in-class pricing tools.
Models are developed and deployed by actuaries themselves, in Python, within a flexible modular environment that reduces replicated effort. Structured and unstructured data is effortlessly ingested.

Insurers can build the solution that works best for them.
The platform was built to accommodate a wide array of operational strategies, technical infrastructures, and business objectives. hx Renew doesn't dictate your pricing strategy; it enables it.

Pricing Decision Intelligence

"Decision Intelligence" is an engineering concept. It aims to create a tight, iterative feedback loop between data, insights and the decisions they drive, resulting in progressively stronger decisions. In insurance, Pricing Decision Intelligence (PDI) paints a north star for insurers to build toward; a seamlessly interconnected ecosystem, models that are regularly iterated upon using first- and third-party data, and decisions that leverage the full weight of historical data and insight.

hx Renew is the platform that will enable insurers to truly unlock PDI, creating a pricing environment that only gets richer over time.

For more information, visit hyperexponential.com

> "Decision intelligence is the creation of a tight, iterative feedback loop between data, insights, and the decisions they drive."

Five Actionable Steps to Future-Proof Your Organization

The difference between tomorrow's industry leaders and those who fall behind lies in the actions taken today. Here are five things forward-looking organizations are doing now to prepare.

1

Choose the right platform

Selecting a robust, scalable, and versatile pricing platform is crucial. The right system will meet your current needs and scale and evolve as you do.

2

Prioritize data capture and quality

High-quality data is the backbone of digital transformation. Implement rigorous data capture processes and ensure data integrity. This solid foundation will support future developments.

3

Update and integrate legacy systems

Ensure your systems can integrate with any dataset or platform. Address technical debt and identify transformation projects with the most significant impact.

4

Create a culture that embraces innovation

Advanced technology requires skills and willingness to leverage it. Organizational culture plays a critical role in adopting new technologies. Foster a culture that supports continuous learning.

5

Build a feasible roadmap (while remaining flexible)

Develop a clear, strategic roadmap. With technology and the industry changing rapidly, agility is essential. Embrace the fundamentals while staying responsive to new opportunities and challenges.

hyperexponential

Complex Risk – Intelligent Pricing Decisions

hyperexponential is the leading insurtech provider for re/insurers looking to effectively and confidently price complex risk and streamline their underwriting workflow. hx Renew allows actuaries and underwriters to leverage diverse data sets, collaborate effectively and establish a Pricing Decision Intelligence feedback loop to continuously improve output over time. hyperexponential work with global market leaders including Aviva, Beazley, Conduit RE and AEGIS, with over $45bn of gross written premium contracted through the hx Renew platform.

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