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THE MATURITY OF GENERATIVE AI IN THE SPECIALTY AND REINSURANCE MARKETS

The opportunity for speciality insurers and reinsurers

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Miqdaad leads strategy and operations projects for some of the world's largest (re)insurers. Graduating with a first class degree in Mathematics from the University of Oxford, Miqdaad has a strong technical skillset, allowing him to dig beneath the surface to uncover the real problems facing the executive teams with whom he is working. He balances strategic and market knowledge with pragmatism to drive towards solutions that deliver for his clients. He is a regular commentator on the topic for industry seminars, podcasts and summits, and often provides comments to the press on topical issues.

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CONTENTS

FOREWORD – LLOYD'S MARKET ASSOCIATION (LMA)

The Lloyd's Market Association (LMA) exists for the success of our members – Lloyd's managing agencies and members' agents – by delivering expertise, education and connecting and synthesising market opinion. This paper represents a critical contribution to the ongoing dialogue on generative AI, providing valuable insights from market experts to inform and enrich the knowledge of those navigating this complex and rapidly evolving landscape.

The insurance industry, long characterised by its reliance on data and risk assessment, is on the brink of a significant transformation driven by Generative AI. Or is it?

Generative AI, with its advanced capabilities to create, predict and optimise, stands as a game-changer for insurance companies seeking to enhance efficiency and improve customer experiences. This technological leap enables insurers to develop more personalised products, streamline operations and potentially predict risks with unprecedented accuracy.

However, as with any powerful technology, Generative AI brings forth its own challenges. This paper addresses critical issues such as governance, market preparedness, training and opportunity. It underscores the need for regulatory frameworks and the aspects firms should consider when assessing their AI strategy.

As you engage with this insightful paper, I encourage you to envision the transformative impact of generative AI on the insurance industry. The knowledge and perspectives offered here aim to equip this market with insights to better harness the potential of Generative AI responsibly and effectively.

I would like to personally thank Oxbow Partners for collaborating with us on this critical topic. The LMA continues to work with the market on AI as a topic and to add value to our members on this emerging risk and opportunity.

Elizabeth Jenkin
Underwriting Director
Lloyd's Market Association

FOREWORD – ASSOCIATION OF BERMUDA INSURERS & REINSURERS (ABIR)

Bermuda has earned a reputation as a hotbed of innovation in the insurance and reinsurance industry, an entrepreneurial market always working to build better solutions to the world's large and complex risks. From proprietary risk models to insurance-linked securities, Bermuda has been at the forefront of every major step forward the industry has seen in the past 30 years.

It is only natural that the global companies who make up the membership of the Association of Bermuda Insurers and Reinsurers (ABIR) are actively exploring the transformative potential of Generative AI. The broad spectrum of use cases, in areas including data analysis, risk assessment and process efficiency, offer enticing opportunities.

However, as a new, imperfect technology, it comes with risks, including the accuracy of AI output, embedded bias, data security and the global shortage of Generative AI expertise. Governments and regulators are paying close attention to how companies use AI. Take the European Union's AI Act, a first step towards a regulatory framework for Generative AI that emphasizes the importance of taking a responsible and measured approach to implementation.

This paper carries value for insurers designing their AI strategies. The research shines a light on critical issues, including governance, leadership, market preparedness, culture, and training. And it encapsulates a range of perspectives from specialty insurers and reinsurers on the possibilities and the pitfalls.

We are appreciative of the ABIR member companies and others who provided their input, and to Oxbow Partners who pulled together this insightful analysis, which will help to inform industry decision-makers taking their next steps into the brave, new, generative AI-powered world.

John Huff
President & CEO of the Association of Bermuda Insurers & Reinsurers (ABIR)

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EXECUTIVE SUMMARY

Generative AI (Gen AI) is the latest evolution in the development of artificial intelligence. With investor interest in the impact of AI increasing quarterly, it is no surprise that the topic has become an area of focus in boardrooms across the world in every industry.

Unlike previous iterations of AI, Gen AI has the ability to apply synthetic judgement to a range of inputs to generate new content such as datasets, scripts (including prose and computer code) and images.

Insurers of all shapes and sizes are considering how to generate value from AI and Gen AI. The answer will vary across different segments. In the retail insurance markets, executives are excited about the impact of creating personalised marketing content for social media platforms (think thousands of artificially produced TikTok videos targeting specific micro-segments) or enhancing contact centre interactions.

We believe that humans will remain at the core of the specialty and reinsurance business for the foreseeable future and so specialty insurers and reinsurers will exploit use cases that enhance the machine-to-human interface. Use cases will be anything from bordereaux ingestion to claims file summarisation. Benefits will be found in both the loss ratio and expense ratio.

Is this just another blockchain? We believe not. Oxbow Partners was unstirred by previous technology and InsurTech trends like blockchain and peer-to-peer models. But on AI and Gen AI in particular we are bullish.

What is really going on behind the headlines? How advanced are carriers with their AI initiatives in reality? Where are the greatest opportunities? What are the challenges that peers are struggling with? Should carriers lead or follow the market?

To answer some of these questions and provide guidance to executives, we conducted a study of 22 specialty and reinsurance carriers.

Referencing the specialty insurance and reinsurance markets, all participants agreed that Gen AI is going to be transformational in the longer term (5+ years). We heard that companies were struggling to advance Gen AI due to 'other strategic objectives', which likely, at least in part, explains why our interviewees did not see a transformational impact in the short term. Perhaps this opens the door to simpler, smaller players to gain an edge, and certainly to vendors to pitch 'outsourcing' engagement models.

What is clear is that for any incumbent, AI is not a silver bullet. A bit like a star human performer, AI needs to be well educated. Carriers need to build the right environment to foster a strong AI capability: this spans everything from their leadership and culture to data and the legacy technology stack. Our research found that both speciality insurers and reinsurers do not feel prepared to execute on the transformational opportunity that Gen AI presents.

As such, most of our participants are in the early stages of their Gen AI journey. 68% are in the 'tight experimentation' stage of our framework – the second stage of five. A few are ahead and building 'strategic foundations' whilst some are still on step 1, 'awareness'.

Nonetheless, 62% of participants had developed some Gen AI tooling internally, for example a secure version of Copilot or other GPT (broadly a Gen AI-powered chatbot). For the most part, these tools are being used either for internal use cases (e.g. accessing internal policies and procedures) or to generate process efficiency in underwriting, operations or claims.

We expect 2024 to be a year of divergence where a small number of carriers believe they can generate an advantage from being a leader in this field and power on ahead. However, several of our interviewees said that they are taking a deliberate 'wait and see' position for now, making some investments in foundational capabilities, but scanning actively to see where others were making progress.

So what should executives do? We see three priorities.

First, the executive team should create a deliberate strategy for AI/Gen AI. Unlike strategies in more familiar territory, this is partly an educational process because our experience suggests that many executives are still hazy about the finer details and opportunities of these technologies. Then, many subjective questions need to be considered, such as whether to be a leader or follower in this space and where to invest amongst the myriad of opportunities before formalising the plan.

Second, the executive team must consider how to set AI/Gen AI up in the business. Part of the calculus here will be whether Gen AI in particular becomes a specialist skill like software development, or a technical skill like advanced Excel usage. In specialty insurance and reinsurance we believe that base Gen AI capability needs to become the latter in order that use cases can be deployed economically. Companies need to consider their operating models at both the conceptual level and practically, for example to identify who to train in the relevant skills.

Third, recognising the competing pressures on carriers' transformation agendas, companies should consider the AI/Gen AI angle on their short-term strategic project portfolio. For example, if a company is pursuing a claims transformation, it would be helpful (and educational) to consider how these technologies could accelerate the programme or indeed if the benefits of the current programme will still be relevant as AI/Gen AI mature. We believe a good first step is identifying an internal 'AI czar' who has responsibility for coordinating initial AI efforts.

Gen AI creates transformational opportunities for carriers over the long term. However, unlocking the opportunity is not (just) a technology project.
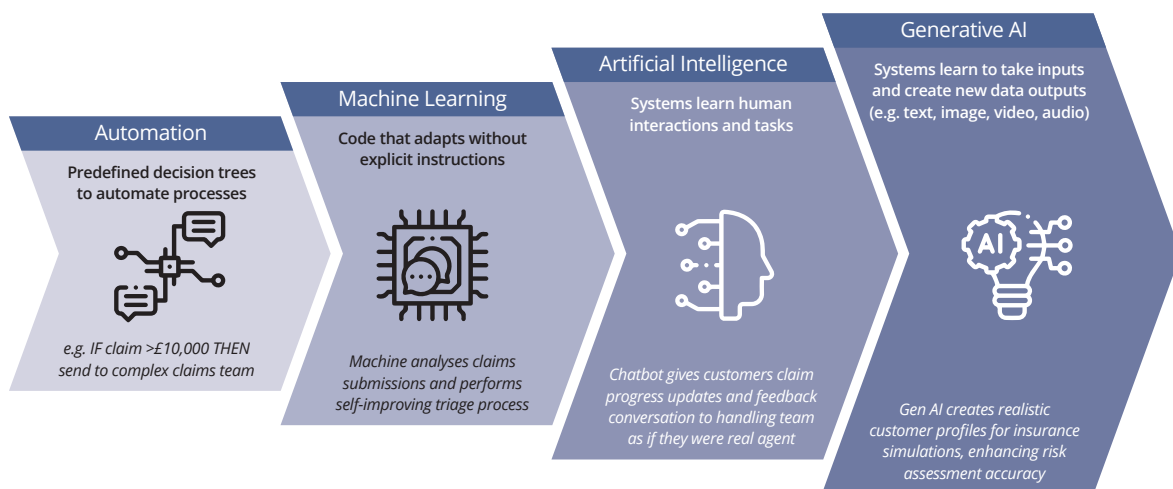
SECTION 01

Introduction

The origins of artificial intelligence date back to the 1950s when mathematician Alan Turing proposed a test of machine intelligence called The Turing Test. Six years later, a Stanford University professor named John McCarthy co-authored the document that coined the term 'Artificial Intelligence'. However, it is only since the 2010s that commercial use cases for AI have begun to proliferate meaningfully across industries.

Figure 1

Gen AI is the latest development in the long history of artificial intelligence

Automation

Predefined decision trees to automate processes

e.g. IF claim >£10,000 THEN send to complex claims team

Machine Learning

Code that adapts without explicit instructions

Machine analyses claims submissions and performs self-improving triage process

Artificial Intelligence

Systems learn human interactions and tasks

Chatbot gives customers claim progress updates and feedback conversation to handling team as if they were real agent

Generative AI

Systems learn to take inputs and create new data outputs (e.g. text, image, video, audio)

Gen AI creates realistic customer profiles for insurance simulations, enhancing risk assessment accuracy

Source: Oxbow Partners analysis

Since 2010, two parallel forces have driven the development of AI. First, a series of breakthroughs in machine learning research have improved algorithms. Second, the amount of computational power used to train AI models has increased by a factor of 10 billion, doubling every 6 months.[1] Together, these forces have improved the speed, accuracy and affordability of AI models.

Gen AI came to prominence when OpenAI launched ChatGPT-3.5 in late 2022. Unlike previous evolutions of AI, Gen AI can apply synthetic judgement to a range of inputs to generate new content such as datasets, scripts (including prose and computer code) or images. This gives Gen AI the ability to undertake a wide array of complex and dynamic tasks. Perhaps the most prominent recent example of the technology's sophistication was when an employee at a Hong Kong company transferred $25m to a fraudster after being requested to do so by a deepfaked colleague on a video call.[2]

Machine intelligence has captured the imaginations of executive teams, and the insurance industry is sprinting to identify potential use case and develop proofs of concept (PoCs).

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[1] *"Compute Trends Across the Three Eras of Machine Learning"* by Sevilla et al, 2022
[2] *"Company worker in Hong Kong pays out £20m in deepfake video call scam"* in Guardian, February 2024

SECTION 02

Carriers believe Gen AI will transform the market in the long-term

Key insights
- We expect that humans will remain at the core of the specialty and reinsurance business for the foreseeable future
- Specialty insurers and reinsurers will exploit use cases that enhance the machine-to-human interface
- In the long-term (5+ years) almost all interviewees believe Gen AI will be 'very transformational'
- Interesting use cases span the entire (re)insurance capability model

Specialty insurance and reinsurance markets have three characteristics that make them suitable for Gen AI use cases:
- The need to ingest and interpret disparate data that (re)insurers do not control
- A product landscape that is heterogenous and fragmented
- A relatively low volume of transactions

Furthermore, we expect that humans will remain at the core of the specialty and reinsurance business for the foreseeable future (unlike in other market segments). For example, underwriters will still lead negotiations and need to be equipped with a broad range of dynamic qualitative and quantitative insight.

Specialty insurers and reinsurers will therefore exploit use cases that enhance the machine-to-human interface. Use cases will be anything from bordereaux ingestion to claims file summarisation. Benefits will be found in both the loss ratio and expense ratio.

We therefore believe it will unlock digital opportunities that previous technology evolutions were not able to access. In other words, Gen AI is not another 'hype bubble' like blockchain and other recent trends. Instead, it has the potential to materially and sustainably transform the market in the long-term.

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This view is consistent with the 22 carriers we interviewed as part of this report. 19 respondents rated the transformational potential of Gen AI over a 5+ year time horizon at least 7 out of 10.

Figure 2

In the long-term (5+ years) carriers believe Gen AI will be very transformational

Carrier self-assessment responses to the question 'How transformational do you think Gen AI will be to the specialty and reinsurance markets in the long-term (5+ years) on a scale of 1 – 10 ('*Not at all transformational*' – '*Entirely transformational*')?'

5 - 6	7 - 8	9 - 10
14%	50%	36%

0% 20% 40% 60% 80% 100%

1 - 2
Not at all transformational

9 - 10
Entirely transformational
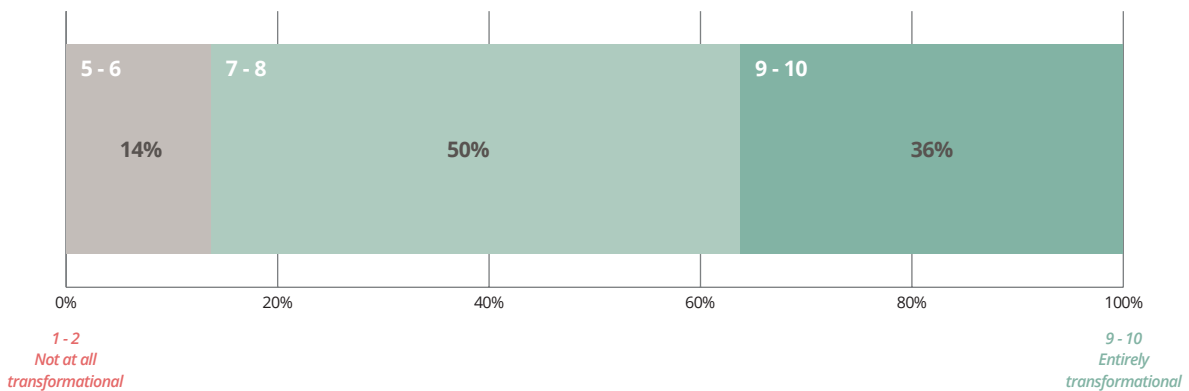
Source: Oxbow Partners analysis

Only three interviewees were lukewarm about the potential of Gen AI mostly citing complexities as the key challenge. For example, the broad variation in contracts in specialist segments of the market.

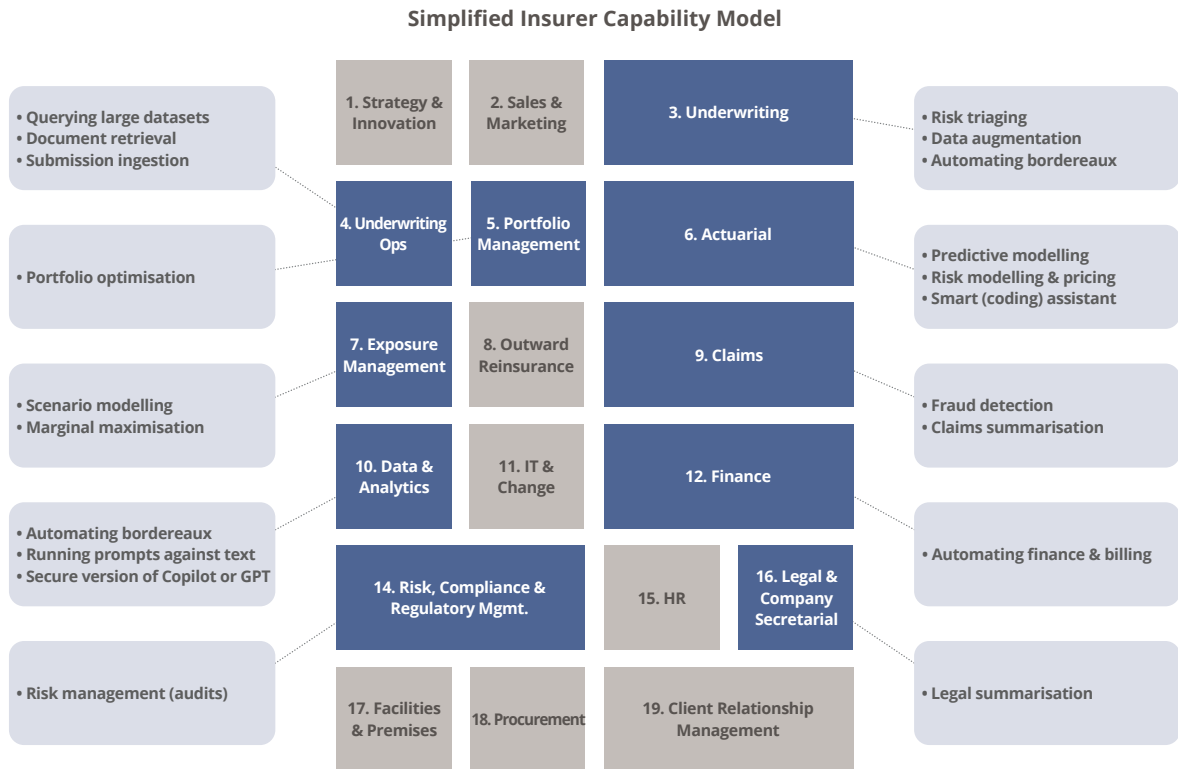## Selection of views from market participants

"The potential is not about substituting what we currently do, but reimagining what it could be"

"As transformative as the invention of the internet"

"Our market is all about insight and judgement, and Gen AI has the potential to truly enhance good decision making"

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Participants highlighted use cases spanning the entire (re)insurance capability model from underwriting to legal services. Use cases are discussed in more detail in section 4 below.

Figure 3

Library of Gen AI use cases in the specialty and reinsurance market cited by participants

Simplified Insurer Capability Model

Use case library (left-to-right, top-to-bottom):

- Querying large datasets
- Document retrieval
- Submission ingestion

1. Strategy & Innovation | **2. Sales & Marketing** | **3. Underwriting**
- Risk triaging
- Data augmentation
- Automating bordereaux

- Portfolio optimisation

4. Underwriting Ops | **5. Portfolio Management** | **6. Actuarial**
- Predictive modelling
- Risk modelling & pricing
- Smart (coding) assistant

- Scenario modelling
- Marginal maximisation

7. Exposure Management | **8. Outward Reinsurance** | **9. Claims**
- Fraud detection
- Claims summarisation

- Automating bordereaux
- Running prompts against text
- Secure version of Copilot or GPT

10. Data & Analytics | **11. IT & Change** | **12. Finance**
- Automating finance & billing

14. Risk, Compliance & Regulatory Mgmt. | **15. HR** | **16. Legal & Company Secretarial**
- Legal summarisation

- Risk management (audits)

17. Facilities & Premises | **18. Procurement** | **19. Client Relationship Management**

Source: Oxbow Partners analysis

Carriers are not advanced in their Gen AI journey and it is struggling for attention

Key insights

- All carriers are at the early stages of their Gen AI journey; even the most advanced are still only building 'strategic foundations'
- Strangely given their view on its long-term transformational impact, Gen AI is struggling for attention in the strategic project pipeline
- The lack of prioritisation perhaps at least partly explains why Gen AI will not have a transformational impact in the next 1-2 years

Carriers are falling into three positions:

- **Groundbreaking innovator:** A groundbreaking innovator believes that Gen AI will transform traditional processes and functions and will invest heavily to be at the forefront of innovation
- **Fast follower:** A fast follower recognises the opportunities that Gen AI presents and is continuously on the lookout for successful use cases. In the meantime, fast followers may experiment in a limited way and are preparing their business to be 'adoption ready'
- **Reluctant reactor:** A reluctant reactor believes Gen AI poses more risks than opportunities and will only adopt emerging technologies if they must

As is common for unproven technology trends, we expect smaller players (and therefore most London Market specialty players by number) to be 'fast followers'. However, some niche specialists may take a pioneering approach more common of large players. In these cases, smaller carriers will target areas where they want to be pioneers. For instance, a couple of the specialty insurers we spoke to highlighted partnerships with vendors specialising in Gen AI to accelerate adoption for specific use cases, such as claims and document ingestion.

We have developed a Gen AI Maturity Framework to inform our work with management teams in this area. The spectrum goes from awareness through to optimisation.

**Figure 4**

Oxbow Partners' Gen AI Maturity Framework

1. Awareness	2. Tight Experimentation	3. Strategic Foundations	4. Scaled Execution	5. Optimisation
Broad awareness of Gen AI, perhaps from industry news or panel discussions, but limited discussion and a lack of action within the company to explore the technology.	Siloed experimentation by individuals or within innovation teams, with limited central coordination and no clear top-down vision. Efforts are focused on limited PoCs and risk mitigation.	Overarching strategy is articulated and buy-in is secured. Target use cases are clearly defined, PoCs are underway and efforts to build out foundational infrastructure are ongoing.	Use cases are evolving into scaled delivery with well-established foundations. Defined objective is to achieve value delivery at scale.	Continuous re-evaluation and subsequent refinement of Gen AI capability against industry advancements.

Source: Oxbow Partners analysis

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To understand the level of Gen AI maturity in our peer group, we asked our participants to self-assess their current position, and where they expect to be in twelve months. We discovered that most players (15) are in the 'tight experimentation' phase. Several (4) were still at step 1 ('awareness') and only a few (3) were already transitioning into 'strategic foundations'.

Figure 5

Most carriers sit in 'Tight Experimentation' and expect to transition towards 'Strategic Foundations' in 12 months
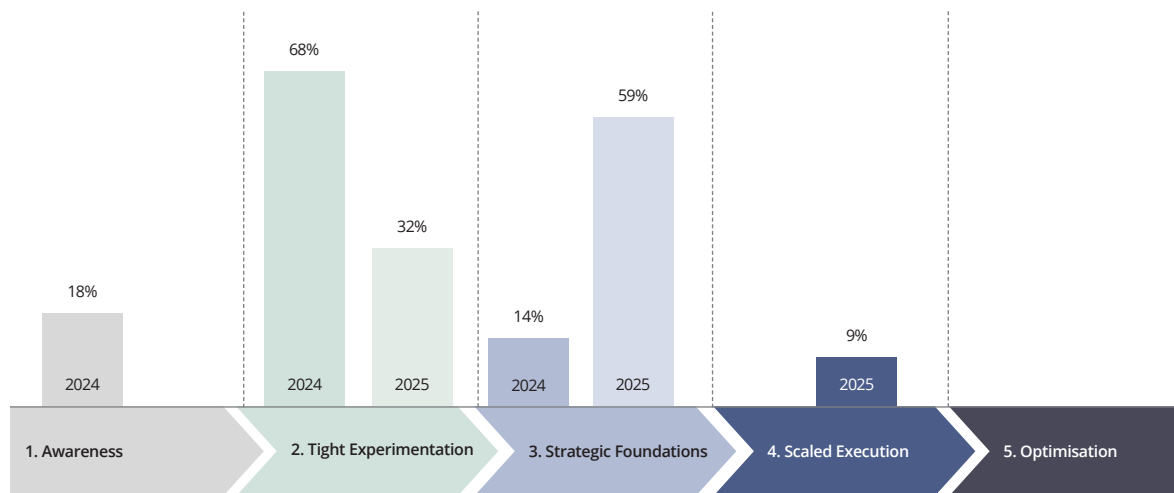
Source: Oxbow Partners analysis

A carrier in the 'awareness' phase is typically a smaller player who may be learning and exploring Gen AI options, either deliberately or more passively. Near-term progress is restricted by one or more of the capabilities we outline in section 5 of this report.

The 'tight experimentation' phase consists of a mixture of large players who want to leapfrog legacy data problems and smaller, nimble (re)insurers who want to lead the market. These carriers will have identified specific pilot use cases and have proofs of concept at various levels of development. An example might be a data aggregation use case for more targeted underwriting. We found that 62% of carriers across all stages of maturity have gone live with an internal chatbot or have one at a late stage of development.

Some of the more advanced carriers are prioritising their data and analytics function, including Gen AI initiatives, and are expected to transition into 'strategic foundations' within twelve months. Their progression is facilitated by a Gen AI strategy and a wider roadmap of activities across underwriting, operations and finance. Over the coming year they are prioritising 1-2 specific areas of business where they see greatest value, for example focusing on PoCs across underwriting operations to gain from an expense ratio improvement.

It is important to note that our sample likely skews somewhat towards more developed carriers as a lack of maturity was cited as a reason not to participate in our study by some players. As a result, we expect our number of those in the 'awareness phase' is likely to be an underestimate. We asked carriers what was holding them back in their Gen AI development. We were – perhaps naively – surprised to discover that 'other strategic objectives' was the primary barrier. On the one hand, Gen AI is seen as a transformational opportunity, on the other carriers cannot find space for it at the top of the strategic agenda. Most carriers are implementing several digital transformation projects already and business and change teams are at full capacity.

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Figure 6

'Other strategic objectives' are seen as the biggest barrier to Gen AI adoption

The proportion of respondents who cited specific barriers to Gen AI adoption
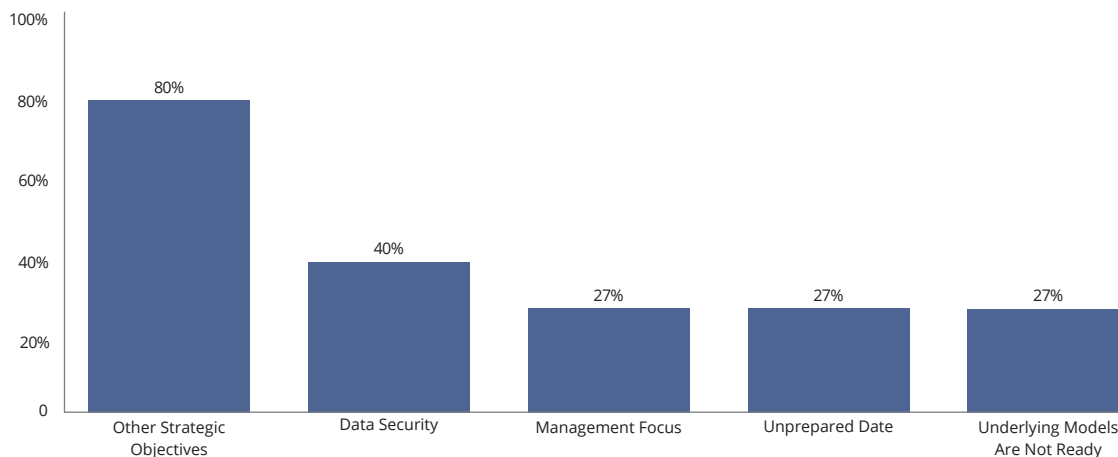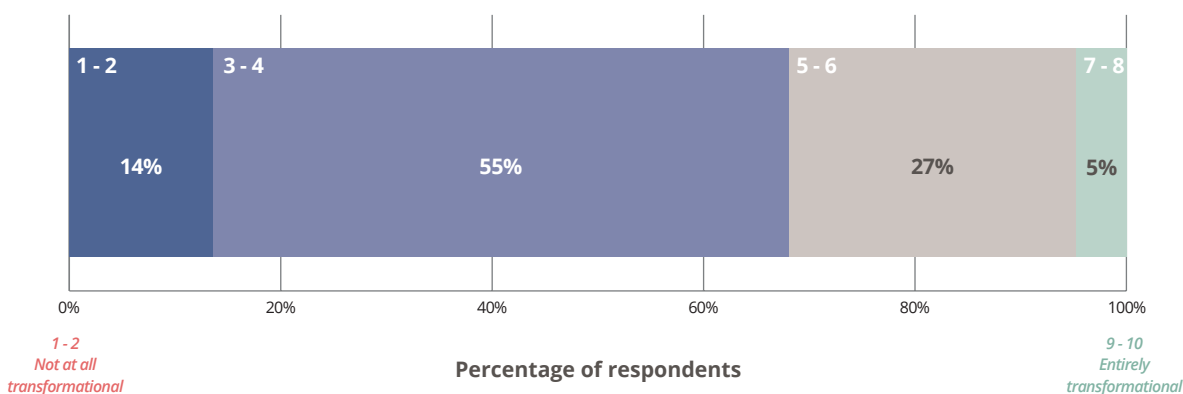

Source: Oxbow Partners analysis

It is likely that this is a factor in why most survey participants did not think that Gen AI would have a transformational impact in the next 1-2 years.

Figure 7

In the short-term (1-2 years) carriers believe Gen AI will not be significantly transformational

Carrier self-assessment responses to the question 'How transformational do you think Gen AI will be to the specialty and reinsurance markets in the short-term (1-2 years) on a scale of 1 – 10 ('*Not at all transformational*' – '*Entirely transformational*')?'

Source: Oxbow Partners analysis

Other reasons included technical issues like data readiness and model maturity.

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Selection of views from market participants

"Changing internal processes – which this will do – is really hard"

"There's only so much change that we can oversee and manage"

"It takes a long time to do something new, to grow something new"

"There are other priorities from a strategic and operational perspective"

"ChatGPT thinks COVID-19 is a psychiatric condition"

"Accuracy, even in our document extraction tool, can drop to the low 80s"

"At the moment we're getting other things fixed, like our internal data"

"We are worried about data confidentiality"

"Traditionally insurance isn't an industry that embraces these kind of things, whether it's InsurTechs or blockchain"

"In our D&O lines, if you classify conditions using generative AI, it struggles with wording and sometimes gets things very wrong"

SECTION 04

Carriers need to set the direction for Gen AI

Key insights
- We observe that development efforts are initially owned by pioneering colleagues before senior management push for greater coordination to manage both efficiency and risk
- Once frameworks and policies have been developed, we expect accountability for Gen AI to be moved out into divisions and functions again
- Given the versatility of the technology, Gen AI's use cases touch most parts of a specialty insurer's or reinsurer's operating model
- There are three types of use case: increasing the efficiency of existing activities, extending or enriching existing activities, or substituting current ways of working
- Querying large datasets was the most mentioned use case by our participants
- Incumbent carriers tend to be focused on expense ratio opportunities whilst newer players are more focused on loss ratio opportunities

How to organise

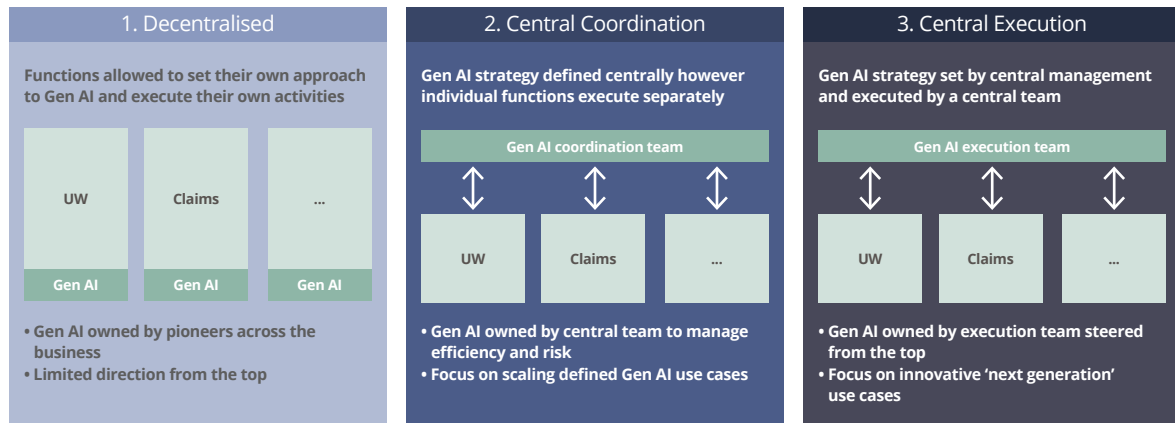The first direction-setting challenge for executives is how to organise.

Broadly speaking, we expect to see an evolution in Gen AI ownership. Initially, development efforts are owned by pioneering managers or colleagues around the business trying to forge a path with an emerging solution. These carriers are sitting between the 'awareness' and the 'tight experimentation' phase. As these micro-initiatives proliferate, senior management feels that it has to get its arms around the topic to manage both efficiency and risk across the experimentations. They assign accountability for AI and move the company closer towards 'strategic foundations'.

Companies take varied approaches to experimentation. Some are centralising the model and experiments are led or tightly coordinated by a small central group, perhaps the innovation team. Others are putting in place basic infrastructure (e.g. secure GPTs) and allowing local teams and functions to determine priorities and effort.

Each model has pros and cons. Centralisation allows the group not only to prove value but also to understand and advise on the barriers the organisation needs to clear in order to embed valuable use cases. As we discuss in section 3, these barriers are substantial for many companies. Localisation allows the use cases to be embedded where the business expertise lies.

Participants are also taking different views to who owns the execution. Some believe it should be owned by the business given, theoretically, limited IT knowledge is needed to get started, whilst others believe this should sit in the technology teams. Our belief is that in future most participants will divide the effort across more traditional lines as with other technology related projects.

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Figure 8

Typical approaches to Gen AI operating models

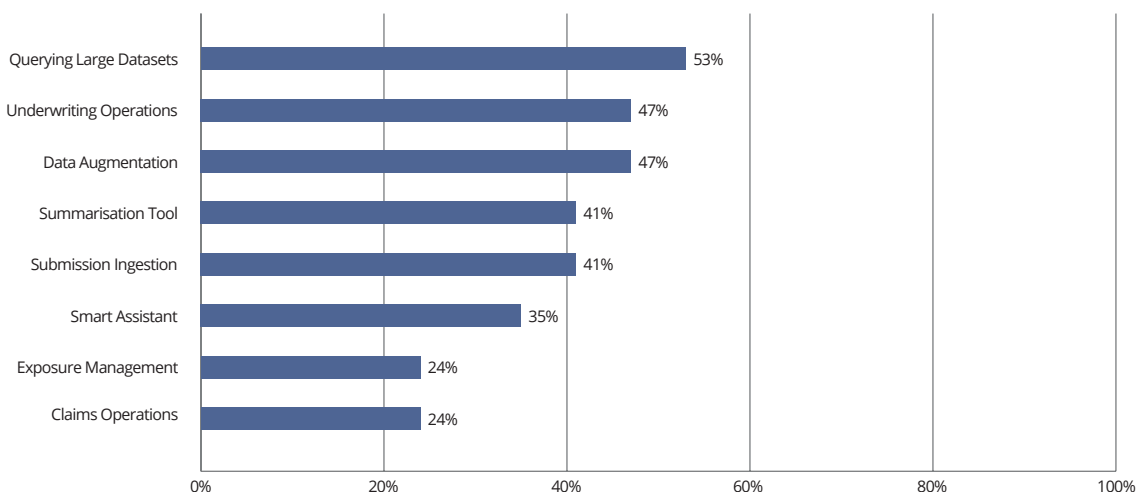| 1. Decentralised	2. Central Coordination	3. Central Execution
Functions allowed to set their own approach to Gen AI and execute their own activities	Gen AI strategy defined centrally however individual functions execute separately	Gen AI strategy set by central management and executed by a central team
	Gen AI coordination team	Gen AI execution team
UW Claims ...	UW Claims ...	UW Claims ...
Gen AI Gen AI Gen AI		
• Gen AI owned by pioneers across the business • Limited direction from the top	• Gen AI owned by central team to manage efficiency and risk • Focus on scaling defined Gen AI use cases	• Gen AI owned by execution team steered from the top • Focus on innovative 'next generation' use cases

Source: Oxbow Partners analysis

As with all emerging technologies, executives need to find the right balance between control and individual accountability and entrepreneurship. At this point in the cycle, we expect senior leadership at most companies to be deliberate about setting an approach for Gen AI.

Where to play

The range of opportunities that Gen AI enables is huge and carriers need to define where to focus their efforts. Given the versatility of the technology, Gen AI's use cases touch most parts of a specialty insurer's or reinsurer's operating model. One participant said that they had identified over 100 use cases.

The most mentioned use case was querying large data sets, with 53% of respondents mentioning this opportunity.

Figure 9

The most cited Gen AI use cases in the specialty and reinsurance market
The proportion of respondents who cited specific use cases in the specialty and reinsurance markets

Use case	Percentage
Querying Large Datasets	53%
Underwriting Operations	47%
Data Augmentation	47%
Summarisation Tool	41%
Submission Ingestion	41%
Smart Assistant	35%
Exposure Management	24%
Claims Operations	24%

Source: Oxbow Partners analysis

Use cases broadly segment in to three groups.

Firstly, some use cases aim to increase efficiency of existing activities. For instance, Gen AI can understand and interpret the diverse range of bordereaux documents, allowing it to streamline bordereaux ingestion processes by automatically extracting, validating and cleansing key data.

> "We took a 75-page US general liability slip, dropped it into ChatGPT, asked it a question on a specific type of claim coverage, and it got it spot on!"

Secondly, there are use cases that seek to extend or enrich existing activities. Gen AI can scan a more extensive array of competitor publications, regulatory updates and market trends to enrich the market narrative, providing valuable insights for investor conversations. Equally, Gen AI gives claims adjusters the ability to 'read' many more claims reports and databases than they can currently digest and make better informed decisions about case strategies. The same logic applies to underwriters reviewing risks.

Finally, there are use cases that substitute current ways of working. For example, Gen AI can analyse historical claims data to detect patterns indicative of fraudulent behaviour. Upon identifying inconsistencies, new claims submissions can be automatically flagged for further investigation by fraud experts.

The impact of these use cases covers both the expense ratio and the loss ratio.

We observed that carriers focused on the expense ratio tend to be incumbents with back-end processes that have evolved organically over many years and become unstandardised and clunky. These carriers favour expense ratio opportunities because they are both substantial and require less stakeholder engagement and governance to implement.

Conversely, those focused on the loss ratio tended to be newer carriers without legacy tech and data constraints. These companies observe the relative value of a percentage point improvement on the loss ratio versus the expense ratio and are addressing what they see as the big prize.

Of course, most are at least looking at both areas.

Selection of views from market participants

> "Expense ratio plays are the quick wins. Loss ratio plays come across in the longer term"

> "The assistant will eventually become a Siri for underwriters"

> "Our approach includes a mix of use cases: some focussed on the expense ratio and others on the loss ratio"

> "We're very low volume, and we have no legacy – it is all about how can we do better underwriting?"

> "Our strategy is different to the market: we decided pretty early on that we're going to focus on the use cases that make a material impact on pricing and loss ratio"

Building the foundations for Gen AI

Key insights
- ⟳ Carriers currently feel unprepared to embrace Gen AI across their operating model
- ⟳ Leadership is rarely seen as a major barrier; most executive teams are excited about Gen AI's potential but want to see proven benefits before full buy-in
- ⟳ The biggest concern is the talent gap, with fears of falling behind without the necessary expertise; solutions cited include using third party vendors and pushing on recruitment and training
- ⟳ Governance is recognised as crucial, with clear executive ownership and senior leadership buy-in
- ⟳ To go beyond incremental thinking on Gen AI requires a culture that fosters innovation and enables (re)insurers to unlock its full transformational potential

As one participant said, "doing pilots is relatively easy, it's the change management to drive adoption that's difficult." In other words, generating value from Gen AI is not just about the tech.

We asked carriers about the maturity and preparedness of the capabilities they require to get value from Gen AI. Across the five dimensions we tested, the average came out at 5.3 on our 10-point scale with specialty insurers marginally ahead of reinsurers.

Figure 10

Carriers do not feel well prepared to embrace Gen AI

Responses to the question 'How prepared are you to embrace Gen AI across each of these five categories on a scale of 1 – 10 ('*Not prepared*' – '*Fully prepared*')?'

- ▬ **Average carrier**
- ▬ **Highest response**

Leadership — 10 / 6.3
Culture — 9 / 5.6
Talent & Expertise — 8 / 4.4
Governance — 9 / 4.8
Technology & Data — 9 / 5.3
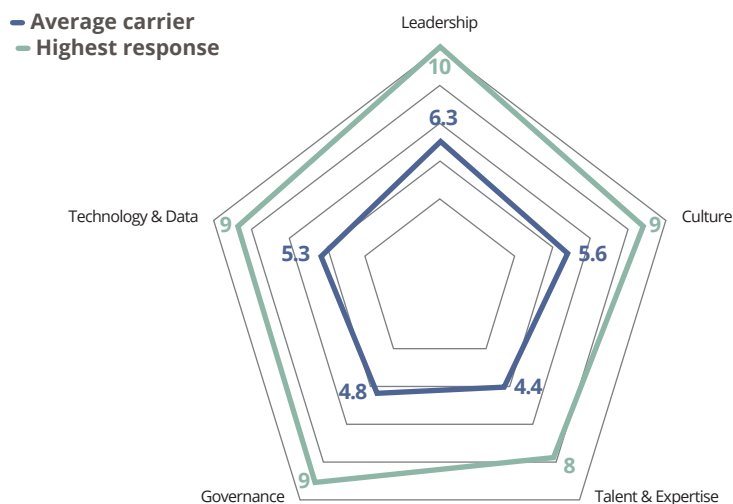
Source: Oxbow Partners analysis

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Leadership: The strongest capability for adopting Gen AI

We have commented on the need for executives to set the direction for Gen AI and it follows that senior leadership buy-in is crucial. As one participant said: "without an ultimatum coming from the top, and without it being centralised, cottage industries make it harder to create lasting, truly progressive change."

Our study suggested that leadership is relatively well engaged, delivering the highest 'preparedness score' in our analysis. Certainly our discussions with executives would suggest that the C-suite is interested in the opportunities and risks from AI generally, and organisational momentum is often driven at the CEO level.

That said, there are some laggards. Some are worried that leadership see Gen AI as a 'distraction', 'the latest hype' or that it is 'a solution looking for a problem'. For these sceptics, the benefits need to be proven and there need to be 'runs on the board', most likely for other pioneering companies, for the topic to be advanced in any meaningful way.

Talent & Expertise: The least ready capability

Talent achieved the lowest 'preparedness score'. Most are making deliberate efforts to bring in people with expertise in data, analytics and AI, but these roles are in high demand and insurers struggle to attract the right volume and calibre in the global marketplace. It is therefore common for carriers to work with third-party AI vendors to outsource some of this AI capability.

Training should therefore be a critical element of any carrier's talent strategy and we were surprised that only a few of our participants noted that they had prioritised formal training in this area. One of the organisational questions to resolve over the next five to ten years will be whether Gen AI becomes a skill that is embedded in skill sets of, say, operational or analytical resources, or remains a specialist topic. We suspect that actuaries and operations professionals, for example, will likely be expected to have Gen AI skills in the future.

Governance: Guiderails need to be established

As Gen AI develops, it will become increasingly important for (re)insurers to establish guiderails through frameworks and policies. The 'preparedness score' on this dimension was an average 4.8 out of 10.

All carriers we surveyed have considered their approach to Gen AI governance. Some have moved further and already established formal AI & Gen AI governance committees. However, there is a general sense that Gen AI-specific governance frameworks will have a short shelf-life given the pace at which the technology is moving. Some carriers also called out the need to find the right level of governance 'to prevent it becoming an inhibitor instead of an enabler.' As such, frameworks generally focus on some hard rules (for example about use cases that cannot be pursued for regulatory reasons) and high-level principles.

Furthermore, few carriers have assessed their risk management frameworks to ensure there are sufficient new controls or that current controls are adapted to be ready for Gen AI adoption.

Technology & data: Foundations need to be built

The ability of Gen AI to have an impact is limited by how easily it can integrate with current systems and access existing data. The average 'preparedness score' for technology and data was 5.3 out of 10.

Carriers with legacy technology are concerned about the speed at which they will be able to move forward. While Gen AI can, in theory, be used as an 'integration layer' for both systems and data sources, practical challenges like data consistency remain.

Culture: Buy-in needs to be across the business

Carriers recognised the challenges that a resistant culture brings when striving to achieve widespread Gen AI adoption, with the average 'preparedness score' for culture at 5.6 out of 10.

Buy-in from the business – across all levels – is therefore crucial and critically cannot happen overnight. It takes months, if not years, for employees to really understand the potential of Gen AI and experience its value in making their lives easier.

Carriers with higher culture 'preparedness' scores had already embarked on a series of training sessions to create awareness and excitement beyond a mere 'technology improvement'. Almost always, they had a secure version of Copilot or other GPT embedded and in use throughout the business.

Those who succeed in building the innovative culture, will not only benefit the most from Gen AI as it is today, but will be best placed to go beyond incremental improvements. Such teams will be able to reimagine the art of the possible and realise its transformative potential in the future.

SECTION 06

What to do now: next steps for specialty and reinsurance carriers

So where should you go from here? How should you move forward considering the opportunities and risks that Gen AI presents? Who should you hire and with whom should you partner to help you bolster capability? We recommend three immediate next steps to progress towards a more Gen AI enabled future within (re)insurance.

Determine your Gen AI strategy

The first step for any executive team is to set the parameters for the Gen AI ambition. Unlike strategies in more familiar territory, this is partly an educational process because our experience suggests that many executives are still hazy about the finer details and opportunities of these technologies.

Then, many subjective questions need to be considered, such as whether to be a leader or follower in this space and where to invest amongst the myriad of opportunities before formalising the plan.

Once these parameters have been determined, it is possible to set the strategy, build the foundational work required and determine which use cases to prioritise, working through questions such as whether to focus on the expense ratio or the loss ratio.

Overall, we believe executives should think big, even if they are not ready to make the leap. Our survey found widespread agreement that Gen AI's long-term transformational potential is huge, and it is important that the strategy is not limited to simply 'digitising' existing processes, but using the technology to reimagine the business model.

This does not all mean to say that Gen AI requires its own strategy; its application can be embedded in a data or technology strategy, for example, or be part of an underwriting or operations transformation strategy.

Establish the Gen AI operating model

Second, the executive team must consider how to set AI/Gen AI up in the business. Part of the calculus here will be whether Gen AI in particular becomes a specialist skill like software development, or a technical skill like advanced Excel usage. In specialty insurance and reinsurance we believe that base Gen AI capability needs to become the latter in order that use cases can be deployed economically.

Companies need to consider their operating models at both the conceptual level and practically. Our survey indicated that developing a talent strategy to enable the operating model is critical.

Another area for consideration is the level of centralisation of the model. Some organisations are choosing to set up a light-touch central structure that sets a high-level direction (e.g. priority themes) as well as putting in place the basic infrastructure (e.g. secure GPT) whilst leaving the precise use case choices and implementation to the local teams or functions. Others are fully centralising as a way of controlling the direction and learning.

A potential first step is identifying an internal 'AI czar' who has responsibility for coordinating initial AI efforts. A key aspect of this role is observing ongoing and planned change activities and identifying where there is an AI/Gen AI opportunity to do things differently.

Consider the AI/Gen AI angle

Our survey found that many carriers are struggling to prioritise Gen AI. Recognising this reality, companies should at least consider the AI/Gen AI angle on their short-term strategic project portfolio. For example, if a company is pursuing a claims transformation, it would be helpful (and educational) to consider how these technologies could accelerate the programme or indeed if the benefits of the current programme will still be relevant as AI/Gen AI mature.

ABOUT THIS REPORT

Benchmarking methodology

This report seeks to assess the current maturity of Gen AI adoption and usage in the specialty and reinsurance market. 22 carriers agreed to participate, representing a total GWP of more than $170bn.

Oxbow Partners conducted interviews with participants throughout April and May 2024 using a bespoke market maturity framework based on our previous experience setting Gen AI strategy for specialty insurers and reinsurers. Topics we discussed with participants included current adoption and use of Gen AI, the key challenges and opportunities they identified in the use of Gen AI, and their strategic vision and roadmap.

Participants' responses (both qualitative and quantitative) were aggregated and analysed by Oxbow Partners. Most responses have been anonymised and all references to specific points not in the public domain are made with the participant's permission.

Oxbow Partners

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