



# **Generative AI:** Value creation for UK insurers

June 2024

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# Executive summary

Generative AI (Gen AI) has arrived, promising to deliver tangible benefits for the UK insurance industry.

The industry itself is aware of the need to evolve its business models but is limited by having to adapt to regulations, the scale of its operations and legacy technology. Such limitations create an environment that does not naturally lend itself to fast-paced change and innovation. Nonetheless, the industry has embraced technologies such as cloud computing, machine learning and robotic process automation to challenge traditional business models and set itself for sustainable growth.

Now the industry finds itself in the midst of another wave of technological change, and time will tell if the market is able to realise the full value-creating potential promised by generative AI. To capitalise on this opportunity, how then should insurers evaluate Gen AI and ensure they seize the opportunity to truly transform the way they work and operate? We believe a key component of a winning strategy will be insurers' recognition of the need to place customers at the heart of their Gen AI strategies.

These questions are not only on the minds of insurers. They are front of mind for many firms, with a recent Deloitte study revealing that 79 per cent of business and technology leaders involved in piloting or implementing Gen AI expect the technology to drive transformation within their organisations and industries over the next three years.<sup>1</sup> Against this backdrop, in the UK alone the artificial intelligence (AI) market is predicted to grow to over £803 billion by 2035.<sup>2</sup>

UK insurers already experimenting with Gen AI are coming to grips with a range of practical considerations including use case prioritisation, risk assessment and regulatory compliance as they await further regulatory guidance and clarity. Nevertheless, we anticipate that many UK insurers will feel the organisation-wide impact of Gen AI in the near future.

In this report, we set out the size and nature of the value creation opportunities presented by Gen AI for life, pensions and wealth, general insurance and London market participants. Our analysis is based on market observations as well as our own experience of Gen AI's potential to address numerous business challenges facing UK insurers today. While we recognise that customers should always be at the heart of everything insurers do, the pressures of juggling cost, productivity and growth can lead to trade-offs being made and value being lost. Against a challenging backdrop of highly pressurised margins, novel technologies like Gen AI offer important new approaches for insurers to consider.

We also recognise that the implementation of Gen AI is not a risk-free enterprise and, as part of this report, we examine the multi-faceted dimensions of Gen AI regulations as well as considerations facing UK insurers when deciding to scale the technology. Two key themes we consider are:

- 1) Any pre-trained models, such as those used in Gen AI, require resources and effort to configure and adjust in order to extract the best outputs. Success will depend on factors such as the scope and quality of training data available as well as the complexity of the use case at hand
- 2) Certain Gen AI use cases will only yield benefits if they are fully integrated as part of a digitised or automated workflow. Implementations of Gen AI are unlikely to yield the same level of benefits if produced in isolation.

While many insurers are still working through how to fully capitalise on Gen AI, it is certainly encouraging to see the speed and volume of experimentation and early adoption taking place in the UK market. Gen AI presents insurers with an important opportunity to enhance their competitiveness and more rapidly scale new products, services and markets. However, they will need to be targeted and focused in where they deploy and scale. Insurers must also assess the balance of risk and reward in choosing Gen AI use cases to pilot or scale, as well as fully grasp the potential impact of such a capability at the enterprise level. Through correct and consistent assessments of such factors, insurers can protect their market share, improve decision-making, and make their businesses more efficient as they push forward.

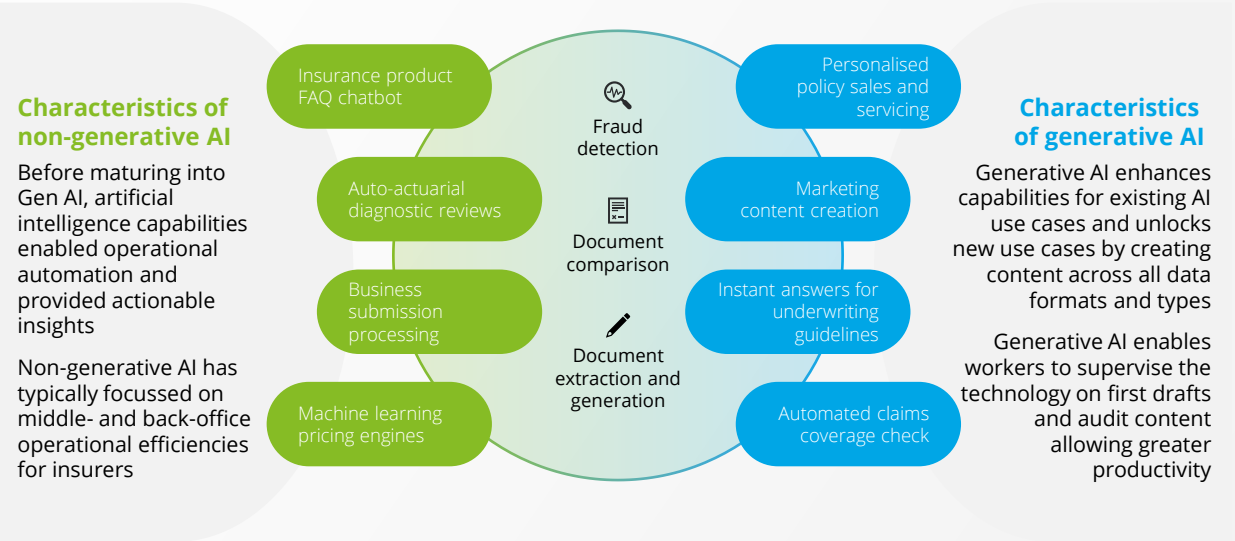
Now is the time to capitalise on generative AI.

# Capabilities of generative AI

Generative AI has enormous potential in insurance and the vast majority of firms are, by now, familiar with the concept of Gen AI and how it differs from previous iterations of AI.

A key difference is that Gen AI can create novel output that appears to be generated by humans (see Figure 1). The technology has the ability to create original content in one of several different modalities, such as text, audio, still images, video and code similar to the information it was trained on (see Figure 2). This elevates AI from enabler to potential collaborator. The coherent writing and hyper-realistic images that have captured public and business interest are examples of Gen AI models outputting data in ways once only possible through human thought, creativity and effort.

Figure 1. Non-generative AI versus generative AI



Generative AI has unlocked new use cases previously thought as too complex and augmented the capabilities of known use cases. While utilising out-of-the-box generative AI models will not lead to competitive differentiation, finding and experimenting with the right use cases will.

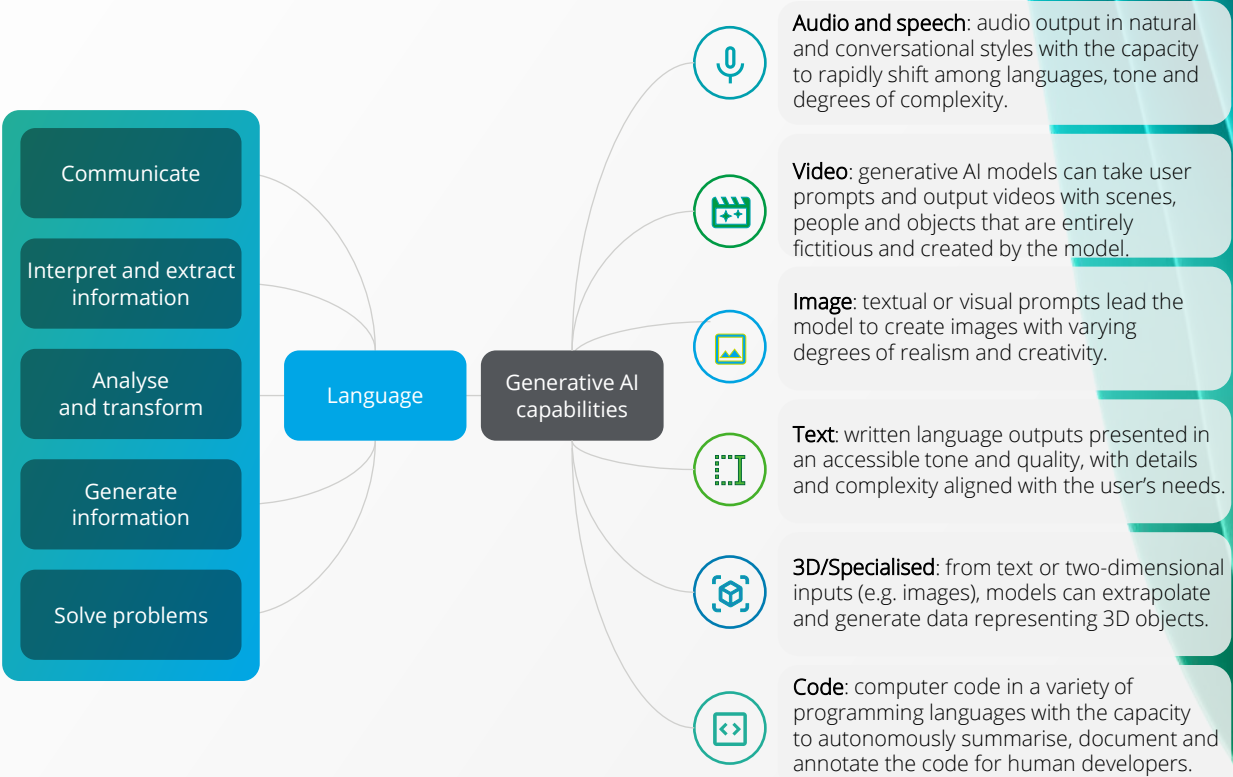
Source: Deloitte analysis



Gen AI's new and novel content is achieved using pre-trained machine-learning algorithms called foundation models. Mature machine-learning models pre-trained on large text-based datasets are Large Language Models (LLMs). Models have also emerged that interpret diverse types of data beyond the text specialism of LLMs to include other modalities such as images, audio and code. These are called Multimodal Language Models (MLMs). When a fully trained MLM is prompted with a correctly formatted query, it responds, using a process of prediction, with a coherent and contextually-relevant response either in natural language or as new content in one of several different modalities as shown in Figure 2.

The next section delves into the benefits generative AI delivers to insurers who are positioned well to capitalise on this technological capability.

Figure 2. Generative AI capabilities



Source: Deloitte analysis



# Value creation in insurance

In this section, we focus on the measurable outcomes that insurance companies can expect from their investment in Gen AI. If organisations can scale and integrate it effectively, we believe this new frontier in value creation could elevate customer outcomes while delivering *at least* a five-percentage-point improvement in profit margin for insurers.

Gen AI can help firms achieve greater efficiency and scale for growth. It is also potentially the most powerful tool available to UK insurers to help transform their customer experiences and outcomes. Insurers should look at their Gen AI strategies to prioritise customer connection through maximising resource efficiency and achieving a better understanding of customers' needs to offer tailored solutions. Insurers should also utilise a combination of human and Gen AI resources to best meet the evolving needs of their customers.

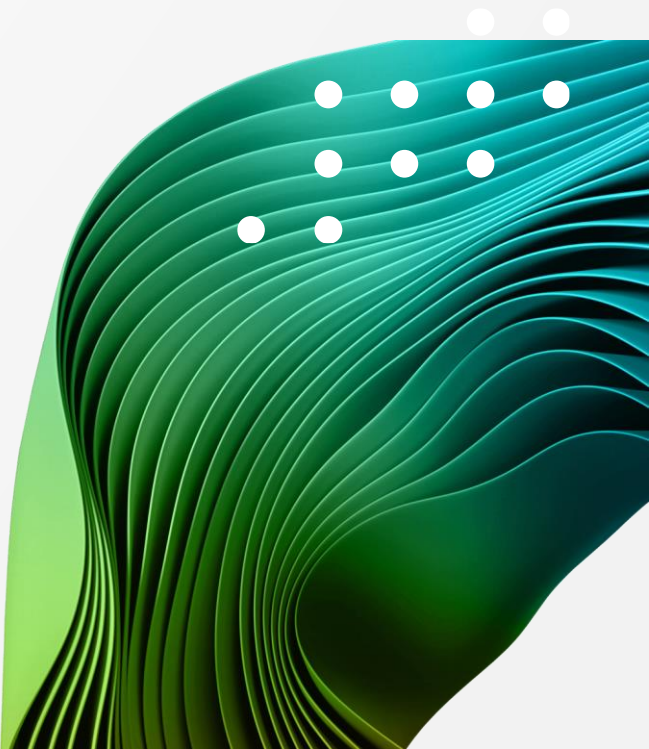
Gen AI's effectiveness in tasks that require creativity, problem-solving and empathy also means that it could be used to augment an organisation's workforce to tackle more complex challenges and free up time to focus on more value-adding tasks, including building more lasting connections with customers. Another key objective for insurers when implementing Gen AI should be to foster more creative and meaningful work for their employees.

While the upside potential of Gen AI is huge, we also want to stress the importance of scaling and integrating this technology effectively. Proof-of-concept (POC) pilots or small-scale innovation may generate some limited value but ultimately, they can deliver a relatively small financial return on investment. A key consideration for firms then will be the identification and prioritisation of areas of the business where Gen AI can have the most impact.

Using Deloitte's value generation modelling and market observations for each sector – life, pensions and wealth, general insurance, and London market – our analysis helps insurers better understand where to focus and which business cases will truly increase enterprise value.



**If organisations scale and integrate generative AI, this new frontier in value creation could represent at least a five-percentage-point improvement in profit margin for insurers.**



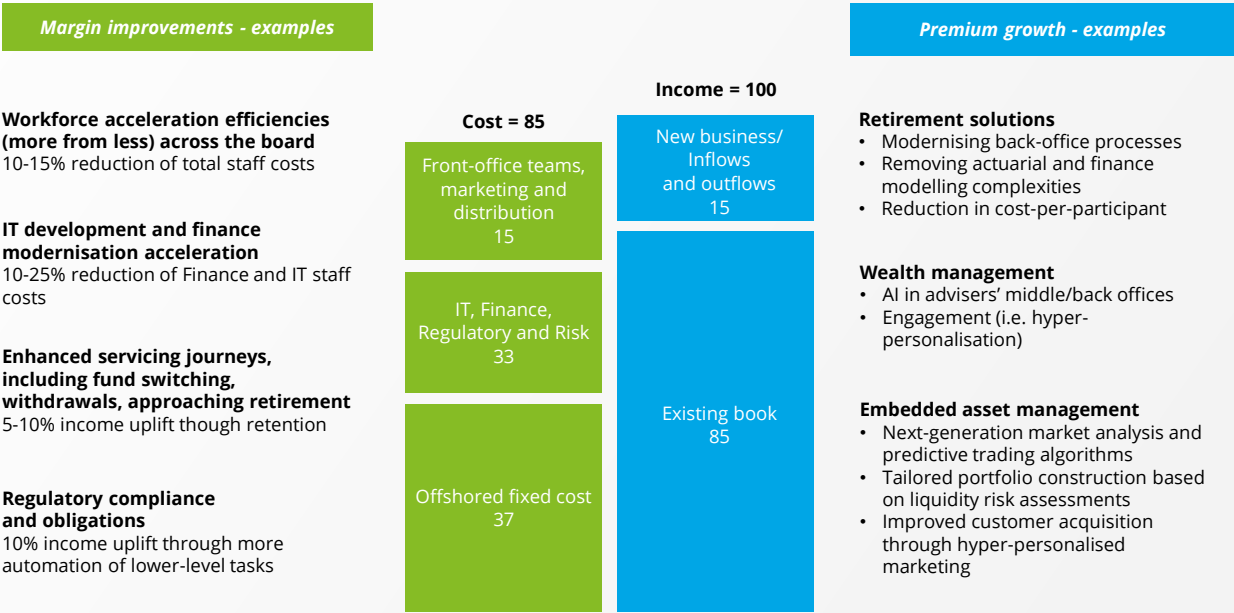
Improving longer-term profitability in life, pensions and wealth

The life, pensions and wealth sector has become much more highly regulated over the past 20 years. This, in tandem with the impact of volatile macroeconomic and technological forces, has triggered multiple market changes. The sector has also seen much of its transformation to be more agile funded from the sales of its scaled books. Nonetheless, in an era defined by interest rate volatility, continued regulatory scrutiny and ongoing transformation, the sector remains enmeshed in an ongoing debate about how it can provide appropriate retirement income and service to future customers in their old age while demand for better service and value for money increases.

The need for change is profound.

With corporate functions and offshore operations forming the majority of a typical UK life, pensions and wealth provider's cost base (see Figure 3), Gen AI can add significant value in a vertically integrated business model where the provider offers retirement solutions along with wealth and asset management services.

Figure 3. Value creation for UK life, pensions and wealth from generative AI



We anticipate a potential value shift of up to 25% in impacted areas through efficiencies alone across a three-year horizon.

Source: Deloitte analysis

Note: Cost figures are indexed relative to Income which is set to 100. Income is mainly focused on insurance-related activities instead of other ancillary activities and adjusted for reinsurance.

## In this scenario, the potential benefits from Gen AI across key areas are:

- **Increasing pensions and retirement solutions provision efficiency by 15-20 per cent.** Pension and retirement solutions are typically accompanied by manual processes that are compounded by legacy systems, product complexity and strict regulatory guidelines. Gen AI could drive efficiencies and cost reduction through automation and removal of some of the product and operational complexities.

For example, Gen AI could help as an assistant to various product, legal and compliance teams, helping them to answer queries dynamically on regulatory, legal and product specification documents. Gen AI can support these tasks that are typically time-consuming and require in-depth expert knowledge that takes time to acquire. To mitigate the creation of new technical debt, for example when a new product launches or closed or when the government announces a pensions rule change, Gen AI should also be embedded into ongoing product design and review processes.

In addition, Gen AI capabilities can be extended to accelerate and simplify the development of back-office processes such as finance, scenario modelling, forecasting and actuarial modelling. For instance, an initial area of focus for many insurers is the adoption of generative AI acting as a developer 'co-pilot' across general-purpose programming language software such as Python to help improve productivity, reduce errors and enable faster development in actuarial modelling and analysis.

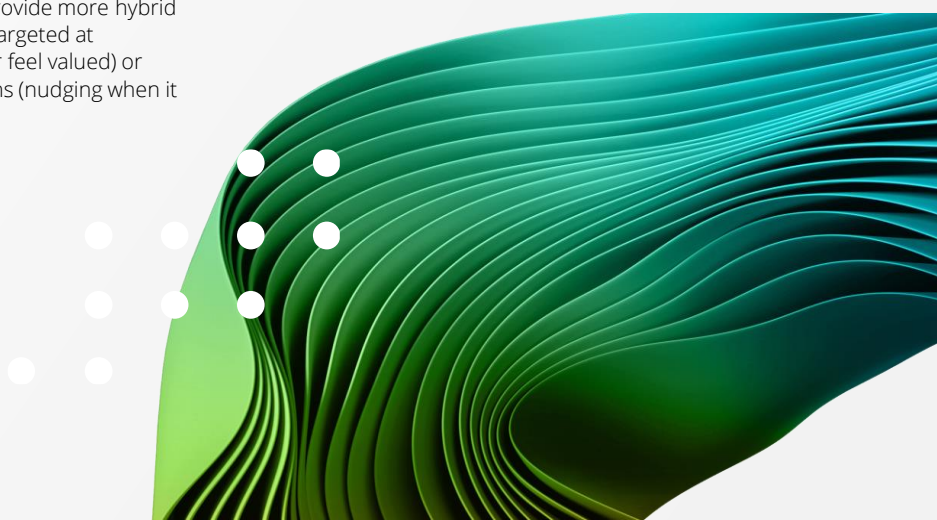
Finally, Gen AI can also offer deeper insights on customers to enhance experiences, nudge investors and personalise financial education that will lead to better sales and retention for insurers. While the correlation between better experience and sales and retention through Gen AI is still to be proven, many insurers are seeing this as an opportunity to enhance the customer experience such as customers reaching retirement or considering transferring money out. Insurers can apply this capability to provide more hybrid human and Gen AI communications targeted at customers' needs (making a customer feel valued) or provide pre-emptive digital interactions (nudging when it matters).

- **Wealth management efficiency gains by 10-15 per cent with added support for new business acquisitions.** One of the biggest opportunities to drive value through Gen AI is in wealth management, through the embedding of new Gen AI capabilities into existing distribution channels. Distributors such as financial advisers and sales teams can use Gen AI to enhance their paraplanning and middle-office activities.

This would come through improving lead generation activities and providing customised follow-up materials. Gen AI could also produce reports that document the appropriateness of products so financial advisers can more quickly and easily assess certain products' suitability for their client. These capabilities would allow wealth managers to focus on what clients often value most in their financial advisory relationships – direct knowledge of clients' circumstances and the more qualitative and nuanced human interactions associated with financial planning and wealth management.

In addition, Gen AI can support the shift towards hyper-personalisation to help new business acquisition and retention. Hyper-personalisation is the most advanced way insurers can tailor services to best meet customers' needs. Insurers have struggled in the past to make hyper-personalisation work but the multi-model capabilities of Gen AI can help identify and process customers' needs and generate targeted solutions and services more quickly and accurately.

Our observations across the industry show the application of Gen AI tools by life, pensions and wealth providers to help streamline repetitive, manual tasks in middle- and back-offices, particularly across functions such as IT, investments and product office, legal, regulatory and compliance functions.



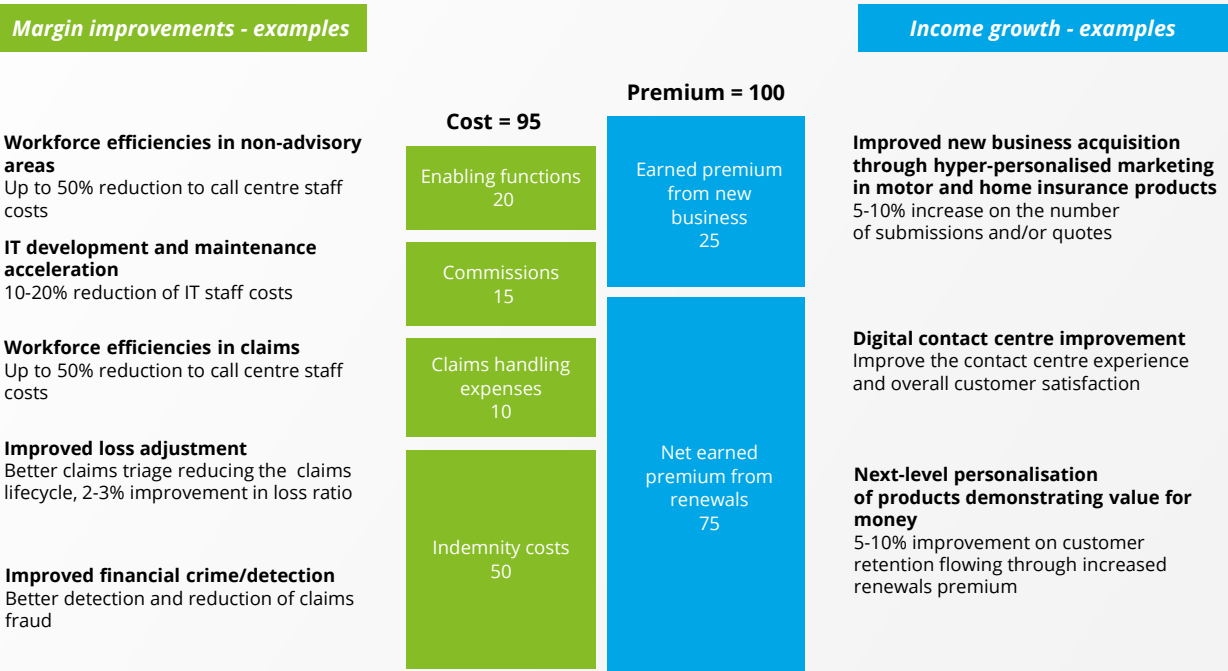


Transforming the entire value chain of general insurance

UK general insurers face similar challenges to those in life, pensions and wealth, as customer demand for better service and value for money continues to grow, as do the difficulties of securing talent, supporting customers with cost-of-living pressures, adjusting to higher inflation and interest rates. In addition, general insurance firms must manage the potential impact of climate change on property claims.

Customers persistently expect more ‘Amazon-like’ experiences from their insurers, with efficient and seamless service across channels. Meanwhile, aggregators and comparison sites continue to ensure a high degree of pricing transparency and market competition in UK general insurance. Along with the focus of regulators on value for money and consumer protection, for example through the Financial Conduct Authority’s (FCA) recent Consumer Duty regulation, the industry is facing further downward pressure on profits.

Figure 4. Value creation for UK general insurance from generative AI



We see potential for 30-40% reduction to operating expenses and at least a 2-3% improvement to the loss ratio.

Source: Deloitte analysis

Note: Cost figures are indexed relative to Income which is set to 100. Income is mainly focused on insurance-related activities instead of other ancillary activities and adjusted for reinsurance.

Against this backdrop, Gen AI can act as a powerful enabler for improving firms' Combined Operating Ratios (COR), translating into stronger profitable growth.<sup>3</sup> However, to achieve these outcomes, general insurers must transform their entire value chain across the underwriting, claims and enabling functions. This includes:

- **Next-level personalisation of products and services, which can improve premium growth by 5-10 per cent.** Customers expect insurers to understand and respond to their specific needs with insurance products that give them complete 'peace of mind'. It is also a core outcome of the FCA's Consumer Duty to have consumers receive products and services that meet their needs. Virtual assistants – powered by Gen AI – could help to handle a significant portion of routine enquiries, connecting customers with the best products and offers while freeing up human agents for more complex, value-added tasks.
- **Non-advisory and call centre workforce efficiencies to cut staff costs by up to 50 per cent.** From our observations of the UK motor and home insurance markets, many providers currently rely on a substantial number of operators handling calls in areas such as final notice of loss, claims' statuses, quote inquiries, policy changes and general inquiries. These are areas that Gen AI can help to become self-service and/or make more efficient through providing real-time customer guidance, improving call handling times and enhancing chatbot facilities.
- **Streamlining the claims process to reduce loss ratios by 2-3 per cent and reduce claims handling staff costs by 40-50 per cent.** Firms' loss ratios are highly correlated with the claims lifecycle in general insurance, starting with first notice of loss. If deployed strategically and responsibly as a tool to augment and support human decisions, Gen AI can aid in accurate damage assessment, enhance triage accuracy, reduce the time and effort required to prepare communications for external parties related to the claim and enrich input to fraud detection models. Ultimately Gen AI can improve the customer experience throughout the claims management process.

Gen AI could also lead to some disintermediation of claims handlers' roles, particularly in the context of low-complexity general insurance claims. Claims handling and adjudication could see savings of upwards of 40 per cent of staff costs as Gen AI supports in areas such as initial triaging activity, setting initial reserves or determining initial severity of loss related to a claim.

- **Improved fraud detection and reduction of claims fraud.** Generative AI poses new fraud risks for insurers, with its abilities to generate realistic images or documentation that may enable bad actors to commit fraud more easily than before. However, at the same time, Gen AI can be used to combat fraud with its enhanced abilities to process large volumes of unstructured data, detect anomalies and identify 'fakes'. For example, in personal lines insurance, Gen AI using LLMs can analyse the natural language in customer conversations or documentation to detect inconsistencies or fabrication.

While the AI technology for fraud detection is not new, Gen AI plays a crucial role in faster and more accurate fraud detection with its adaptive learning abilities and capability to handle large data sets of often unstructured historical data. Gen AI models can now be trained to address complex and emerging fraud patterns, improve fraud detection accuracy, lower false positives, improve the detection of anomalies and boost productivity of fraud investigation teams. Additionally, insurers must keep pace with those seeking to use Gen AI for fraudulent activity to safeguard customers and their own organisations from potential data security weaknesses

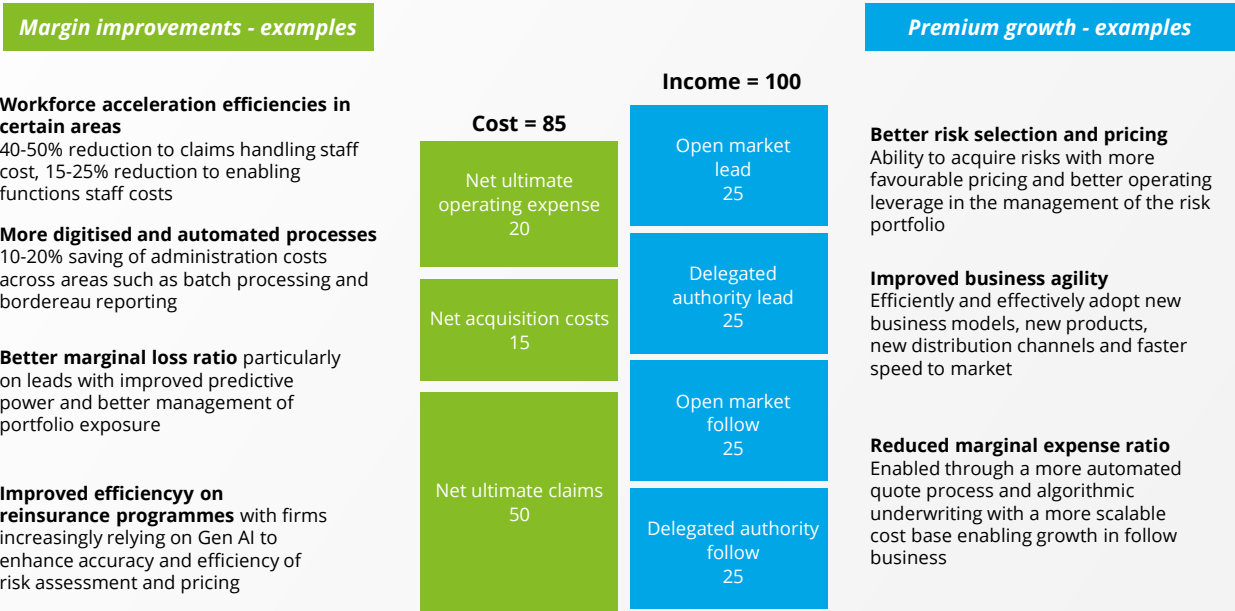
- **Workforce acceleration and efficiencies in enabling functions to cut staff costs by 15-25 per cent.** Gen AI offers the chance to create more capacity for growth, particularly in finance and risk functions that require extensive data manipulation and reporting. There also exist opportunities to reduce IT staff costs by 10-20 per cent, with the potential for further longer-term uplift. For example, the rise of Gen AI agents (AI tools capable of autonomously performing specific, complex tasks without human intervention) signals a profound shift in how the existing workforce will collaborate with the technology. As the underlying technologies behind these agents improve, and greater trust is built between the human workforce and AI, this will not only liberate workers from mundane tasks but enable strategic thinking and better decision-making by providing actionable insights and next best action.

Enabling significant cost savings for London market participants

The London insurance market, with Lloyd's of London at its heart, has been a global leader in underwriting complex and specialty risks for centuries. Lloyd's has undertaken significant work to modernise and digitise the marketplace through its Blueprint programmes to make the market "better, faster and cheaper for all participants, and help customers face these new risks with confidence".<sup>4</sup> The programme aims to deliver new systems, processes and data standards, and is part of a marketplace transformation programme initiated in 2019.

We expect the London market to experience strong growth with increasing demand from clients in areas such as cyber and ESG-related insurance products. A recent Lloyd's report highlights the dual nature of Gen AI as both a tool for enhancing cyber resilience and a potential source of new cyber threats.<sup>5</sup> Lloyd's insurers are uniquely positioned to lead in underwriting cyber risks, informed by cutting-edge generative AI insights.

Figure 5. Value creation for London market participants from generative AI



We see potential for 30-40% reduction operating expenses and at least a 2-3% improvement to the loss ratio.

Source: Deloitte analysis

Note: Cost figures are indexed relative to Income which is set to 100. Income is focused mainly on insurance-related activities instead of other ancillary activities and adjusted for reinsurance.

Firms that better harness the power of Gen AI will have a significant cost and capital efficiency advantage.

- **Improved marginal loss ratio, particularly on lead underwriting.**<sup>6,7</sup> Gen AI offers the chance to improve predictive power in risk selection, pricing and management of portfolio exposures. Harnessing the technology could also improve business agility, which will put a first-mover insurer at a substantial competitive advantage when adapting to changing business models and general speed to market.
- **Reduced marginal expense ratio, particularly on follow underwriting.**<sup>8,9</sup> With Gen AI, value can be delivered through a more automated process for algorithmic underwriting.
- **As in general insurance, potential workforce efficiencies will reduce claims handling staff costs by 40-50 per cent.** Gen AI capabilities would enable greater efficiencies and potentially accelerate progress in areas such as initial triaging, setting initial reserves or determining the initial severity of loss related to a claim.
- **More digitised and automated processes could save 10-20 per cent of administrative costs, while workforce efficiencies in enabling functions could further cut staff costs by 15-25 per cent.** For example, the adoption of Gen AI and automation in bordereau reporting can translate into substantial cost efficiencies for insurers, reducing the time and resources traditionally needed to compile and analyse these reports.<sup>10</sup> Gen AI can also reduce the risk of human error, which can be costly in terms of both financial restitution and reputational damage. As in general insurance, Gen AI also offers further workforce efficiencies in areas such as finance and risk enabling functions that feature reporting and data manipulation resulting in a potential staff cost reduction of 15-25 per cent.



## Where are insurers now?

Insurers in the UK and elsewhere are only really starting out on their Gen AI journeys (see Figure 6). However, based on our knowledge and interactions in the UK insurance market, we know that Gen AI is materialising in discrete areas within insurers' organisations and value chains. These initial implementations are the first steps towards generating broader outcomes, such as end-to-end transformation of complex claims management and new business propositions that combine the power of efficiency, augmentation and hyper-personalisation.

From our observations, it is encouraging to see some insurers starting to move from POCs to scaled solutions in specific areas with the path to production more seamless. Insurers' previous experience in adopting technologies such as machine learning have paved the way for testing and implementing Gen AI especially around working with regulators to use these capabilities in regulated areas of an insurance business.

Gen AI solutions in insurers are still in targeted areas where manual and domain expertise are applied. This is a natural place to start owing to its potential to deliver enhanced returns on investment.

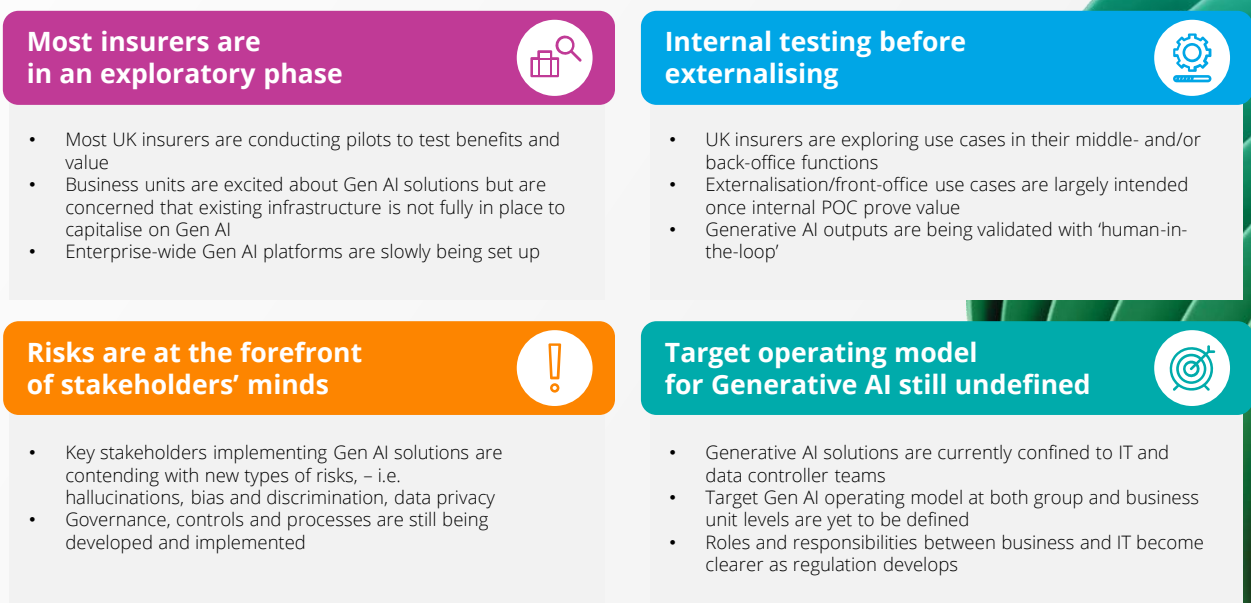
However, over time, we believe more insurers will embrace the potential of scaling this capability across every workforce within their organisations.

Nevertheless, there are some hurdles that insurers will need to clear along the way. For example, Gen AI focus areas need to meet certain materiality, feasibility and organisational readiness tests. Insurers will also have to consider the costs of implementing Gen AI versus its potential benefits as part of these feasibility assessments.

Insurers' Gen AI strategies will also be developing as regulation around the technology continues to evolve. The next section of our report highlights the multi-faceted dimensions of Gen AI regulation as both the European Union (EU) and the UK set policies and frameworks that both foster and challenge innovation.

Assessing the costs associated with Gen AI will also be less straightforward to calculate than, for example, increased costs of compliance since they will be multi-layered. Since the target operating model for Gen AI in insurers is still undefined, with current use cases confined to IT and data control teams, the costs involved will not merely be financial but may also extend to societal impacts and ethical considerations from not implementing Gen AI thoughtfully.

**Figure 6. Current observations of generative AI in insurance**



Source: Deloitte analysis



# A look at regulation

As firms look to scale their AI capabilities and operating models, one additional dimension that will play a bigger and more influential role is the regulation surrounding AI – both from EU as well as UK regulators. The EU is expected to set the tone for the global regulation of Gen AI in 2024, not only determining what goes on in the bloc, but also serving as a template for other regions.

EU institutions granted final approval to the AI Act (AIA) in March 2024 followed by a two-year phased implementation period for organisations.<sup>11</sup>

It proposes a prescriptive but risk-based differentiated approach to regulate Single-purpose AI systems (or simply “AI systems”) – designed for specific tasks and General-purpose AI (GPAI) models and systems, which are to service a wider range of tasks.<sup>12</sup>

The impact of the EU AI Act on Gen AI systems in insurance will depend on the specific use cases concerned. Using Gen AI for health insurance pricing, for example, is considered high risk and will require compliance with a set of wide-ranging prescriptive requirements (see Figure 7). In contrast, a Gen AI chatbot providing low-risk general information would be subject to transparency obligations only under the Act.

The risk-based classification of the regulation is already understood by many insurers. Our market observations demonstrate that insurers are focusing on Gen AI use cases in their middle- and back-office activities. Insurers are acknowledging that certain front-office activities are deemed high risk under the AI Act and will therefore require further planning.

Unlike the EU, the UK has instead adopted a principles-based and non-statutory framework to guide responsible AI design, development and deployment.<sup>13</sup> The framework is underpinned by five core principles: safety; security and robustness; transparency and explainability; fairness, accountability and governance; and contestability and redress.

For now, existing insurance and cross-sector regulators such as the UK’s FCA and independent public bodies such as the Information Commissioner’s Office (ICO) will be responsible for interpreting and applying the principles within their own remits. They will use existing laws and regulation and publish additional guidance where needed. Key considerations for insurers from the EU AI Act and the UK framework for AI regulation are:

- **Insurance firms using Gen AI (or AI) systems will face significant compliance demands under the AI Act.** Insurers undertaking risk assessments and pricing using Gen AI for consumers to access life or health insurance is deemed high risk under the AI Act. The decision to develop in-house or use off-the-shelf AI systems will also be important as Gen AI providers will have to comply with some of the AI Act’s strictest obligations. These include pre-market conformity assessments, with requirements such as data quality and governance, transparency, accuracy, robustness, cyber-security, human oversight, technical documentation and registration in a new EU AI database. In addition, insurers will need to manage grey areas, such as where material customisation of third-party Gen AI systems may cause them to be considered as developers.
- **Insurers must navigate international regulatory divergence strategically.** Multinational insurers operating in both the EU and the UK (and other jurisdictions) must choose between adopting AIA standards globally, using EU-specific Gen AI systems in the EU, or potentially consider scaling back Gen AI use in the EU. Compliance costs and potential limits to innovation are among the downside risks to regulatory divergence, while increased trust and reduced operational risk are potential upsides.

- **Technology-neutral regulatory frameworks will apply to Gen AI solutions used by insurers.** AI-specific legislation is a critical component of AI regulation within financial services, but it is just one piece of a much larger puzzle. Insurers will also need to ensure their AI governance and risk management frameworks are in full compliance with the existing and technology-neutral regulatory frameworks in both the EU and UK – such as data and consumer protection, model risk management and operational resilience – as they apply to their Gen AI use cases.

An example of the layered nature of AI regulation can be demonstrated in the use of chatbots by insurers. Consumer Duty requires insurers using generative AI via chatbots when interacting with customers to make sure the information is still tailored to their needs. However, under the AIA, the use of chatbots by insurers will only require transparency to the end-user that they are engaging with a Gen AI system. Insurers should, therefore, pay close attention to forthcoming additional guidance from UK regulators to help them interpret existing requirements in an AI context.

Figure 7. Risk-based classification of AI systems under the EU Artificial Intelligence Act

Generative AI and AI systems	Classification	Examples  (Non-exhaustive and narrow exemptions apply)	Key requirements (Non-exhaustive list)	
			AI providers	AI deployers
	Unacceptable risk	<ul style="list-style-type: none"><li>• Emotion recognition in workplace</li></ul>	Prohibited (with narrow exemptions)	
	High risk	<ul style="list-style-type: none"><li>• Risk assessments and pricing for access to health or life insurance</li><li>• Remote biometric identification</li><li>• Recruitment, staff monitoring and management</li></ul>	<ul style="list-style-type: none"><li>• Pre-market Conformity Assessment (PMCA) and registration in EU AI database</li><li>• Detailed requirements on:<ul style="list-style-type: none"><li>- data quality and governance</li><li>- transparency</li><li>- accuracy, robustness and cyber-security</li><li>- human oversight</li><li>- risk and quality management</li><li>- technical documentation and record-keeping</li></ul></li><li>• Post-market monitoring/incident reporting</li></ul>	<ul style="list-style-type: none"><li>• Fundamental Rights Impact Assessment (FRIA)</li><li>• Comply with provider instructions</li><li>• Assign human oversight to competent, trained personnel</li><li>• Ensure relevant and representative input data for AI system's purpose</li><li>• Monitoring, record-keeping and incident reporting to providers and competent authorities</li></ul>
	Transparency risk	<ul style="list-style-type: none"><li>• Virtual assistants, chatbots</li></ul>	<ul style="list-style-type: none"><li>• Transparency obligations for AI systems interacting with people or generating content to prevent manipulation or deception</li></ul>	
	Minimal risk	<ul style="list-style-type: none"><li>• Spam filters</li></ul>	<ul style="list-style-type: none"><li>• No specific obligations</li></ul>	

Source: Deloitte analysis

# Implementing generative AI successfully

This report has provided our perspective on why and where Gen AI can provide a competitive edge over the next three to five-years. In determining their Gen AI strategies, we believe UK insurers should explore the following considerations for successful implementation and scaling.

- **Evaluating business value and strategic alignment.** Thinking critically about Gen AI opportunities across the value chain – piloting and focusing on use cases that scale the benefits of Gen AI will be key. Insurers should identify initial use cases that provide measurable value quickly before further investment in scaling Gen AI. Selecting the right Gen AI platform is also critical to ensure flexibility for multiple use cases across the business and support scale. Business value and wider strategic alignment are critical here, owing to the more adaptive and evolving nature of Gen AI solutions. Additionally, insurers should define a target operating vision for scaling and roll out Gen AI in phases to ensure good customer outcomes and regulatory compliance.
- **Adopting strategic technology infrastructure.** Making strategic investments in Gen AI platform capabilities and staying current with emerging AI technologies and trends will equip insurers with the ability to adapt to a fast-changing Gen AI landscape. Insurers should focus on developing capabilities, guardrails and use cases with reusability across different functions and business units to benefit from incremental value without increasing costs exponentially. Options for insurers to access Gen AI capabilities will continue to emerge from across the value chain, from infrastructure providers to end-user applications. It will be crucial for insurers to assess use case requirements holistically against existing Gen AI capabilities to avoid duplication.

With complex technology behind Gen AI, insurers must also ensure a resilient supporting technology infrastructure that can accelerate innovation while securing data and intellectual property. Updating or overhauling legacy technologies is crucial to establish a suitable foundation for Gen AI. This will be particularly challenging and costly for many traditional life, pensions and wealth providers who are dealing with multiple legacy systems across their technology estate. However, insurers who invest in their technology and data estates will be better placed to scale Gen AI.

- **Assessing business readiness and adapting operations.** A solid foundation for Gen AI starts with good data quality and governance, and effective and scalable data management. Business process redesign is also an important step to take advantage of Gen AI-based solutions that offer the potential for workforce acceleration, cost base optimisation and transformative customer propositions.
- **Preparing people for change.** As the use cases for Gen AI become more powerful and intuitive, valuable human skills – such as applied judgement, creativity and critical thinking – will be in greater demand to ensure the technology is used effectively. Insurers should plan and implement training programmes for employees to understand Gen AI and its tools. To realise the potential of Gen AI, workforces will need to be upskilled and empowered to help them embrace the ways in which Gen AI can accelerate and support the work they do. Skills development should be an ongoing process, reflecting the dynamic and evolving nature of Gen AI while building a resilient culture for employees.
- **Understanding the future talent strategy.** Gen AI offers to disrupt the incremental pace of change often seen in insurers when developing and retaining the appropriate people. Predictions for Gen AI's impact on the future workforce vary, but insurers will see work impacted. New skills will be required not only to better support the processes augmented by Gen AI, but also to fill new roles not yet known to insurers. For example, prompt engineering is an emerging role where employees and companies team with Gen AI to utilise the strengths of both humans and technology.<sup>14</sup> Prompt engineering involves crafting inputs (i.e. 'prompts') that guide the Gen AI system to produce the desired outputs, and is crucial for effectively utilising Gen AI models.<sup>15</sup> The concept of prompt engineering is not new, but its importance has grown exponentially with the advent of Gen AI models capable of understanding and generating human-like text.



# Conclusion

Gen AI will transform insurers' business models, processes and how their workforces interact and operate, delivering significant benefits for those organisations fully able to seize the opportunities presented by this technology. While this report focuses on the benefits of using its capabilities, it is imperative that good customer outcomes remain at the heart of insurers' generative AI strategies. In this way, firms can maintain their competitive advantage, gain the trust of customers and regulators, and mitigate the risk of any implementation challenges they may encounter.

As with other technologies and capabilities, adoption and commercialisation are likely to deliver slowly at first, becoming exponentially faster as they are bedded in. Early signals, however, indicate the trajectory for generative AI is moving more quickly than previously anticipated. Insurers must balance waiting for the market to mature against the potential first-mover advantages available to them, particularly when the opportunities for creating efficiencies and improving customer experience are so exciting and plentiful.

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**Generative AI will change the future of work for insurers, but the race is not just for data, efficiency and new business models.**

**It is also for trust.**

# Endnotes

1. [The State of Generative AI in the Enterprise: Now decides next](#), Deloitte AI Institute, January 2024.
2. [United Kingdom Artificial Intelligence Market](#), United States International Trade Administration, 16 September 2022.
3. The Combined Operating Ratio measures insurance profitability by comparing claims and other costs/expenses to premiums. Unprofitable underwriting occurs when costs are higher than premiums, (i.e. the ratio is more than 100 per cent).
4. Lloyd's Blueprint Two website. See also: <https://www.lloyds.com/about-lloyds/blueprint-two>
5. Generative AI: Transforming the cyber landscape, Lloyd's, March 2024. See also: [https://assets.lloyds.com/media/439566f8-e042-4f98-83e5-b430d358f297/Lloyds\\_Futureset\\_GenAI\\_Transforming\\_the\\_cyber\\_landscape.pdf](https://assets.lloyds.com/media/439566f8-e042-4f98-83e5-b430d358f297/Lloyds_Futureset_GenAI_Transforming_the_cyber_landscape.pdf)
6. Lead underwriting occurs when a primary underwriting company or group of underwriters help bring the risk offering to the insurance market and commit to a first share of the risk capacity.
7. Loss ratio represents the losses an insurer incurs to claims paid and other expenses as a percentage of premiums earned. A high loss ratio can be an indicator of financial distress for an insurer.
8. Expense ratio is a measure of profitability in insurance. It is the percentage of premium used to pay the costs of acquiring, underwriting, and servicing insurance and reinsurance.
9. Follow underwriting occurs when there is a decision to follow business from a lead underwriter based on information provided by the lead underwriter on the type of risk and pricing of the risk. Follow underwriting helps insure the risk in full.
10. A bordereau is a report provided by insurance brokers, policy holders or managing general agents to insurers or reinsurers containing data regarding written premiums, claims and risk exposures for a specific time period.
11. [The EU AI Act: the finish line is in sight](#), Deloitte UK, March 2024.
12. Final draft agreement on the AI Act: EU Council, Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts, February 2024, available at: <https://data.consilium.europa.eu/doc/document/ST-5662-2024-INIT/en/pdf>
13. [The UK's framework for AI regulation](#), Deloitte UK, February 2024.
14. [So you want to be a prompt engineer: Critical careers of the future](#), Tori Orr, VentureBeat, 17 September 2022.
15. [Generative AI and prompt engineering: the future of legal work](#), Deloitte Legal Briefs, 17 August 2023.

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