

An aerial photograph of a vast, clear turquoise ocean. In the lower-left quadrant, a small white motorboat is moving towards the right, leaving a white wake. The water is exceptionally clear, revealing dark, irregular patches of coral or seabed beneath the surface. In the far distance, a small island with some buildings and vegetation is visible on the horizon. The sky is a pale blue with scattered, soft white clouds.

# Deloitte Insurance Week

Where Reinsurance Meets

Impact of GenAI to the (Re) Insurance Industry

May 2024



# Meet Our Presenters



UDIT NARULA

Senior Manager,  
Monitor Deloitte

US Insurance Strategy  
and AI Practice Leader



PIETA BROWN

Director,  
Risk Advisory

Caribbean & Bermuda  
Gen AI Leader



DAVID SHERWOOD

Managing Director,  
Risk and Financial Advisory

US AI Risk Management &  
Governance Leader

# Artificial Intelligence for Insurance

AI is poised to drive innovation and value across the Insurance value chain; however, insurers need to consider risks and challenges for successful implementation across the enterprise



## CURRENT STATE OF AI IN INSURANCE

- Most insurers are moving towards focused **exploration / experimentation of AI applications** and consider **AI to be a key factor for business success**
- As AI technologies keep progressing, most insurers are beginning to deploy GenAI solutions in production with an **emphasis on efficiency enhancements**



## AI OPPORTUNITIES & USE CASES

- Insurers are driving **AI led innovations across the insurance value chain**, with focus on the – Personalization of Sales & Service, Expansion of Underwriting & Claims Assistance, and Transformation of In-House Tech Function
- Expectations of **improved efficiency, enhanced user experience, and increased business growth** are driving accelerated adoption of AI across the enterprise



## POTENTIAL RISKS AND RISK MANAGEMENT FRAMEWORKS

- In addition to amplifying the existing risks from AI, GenAI brings in incremental risks, underscoring the need for robust **AI risk management and governance frameworks**
- **Deloitte's Trustworthy AI™ framework** provides the backdrop to a sustainable, safe, and responsible AI-use environment and risk management program

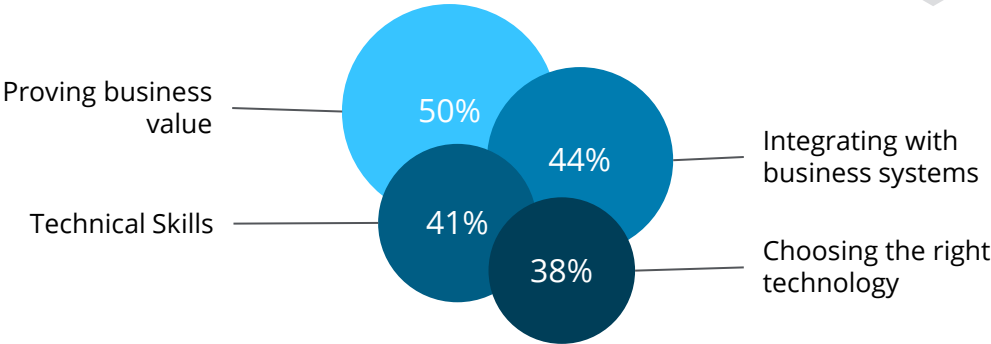
# AI is rapidly transforming the Insurance Industry

## Industry Adoption of AI

**94%** of business leaders surveyed by Deloitte agree that **AI is critical to success** over the next 5 years

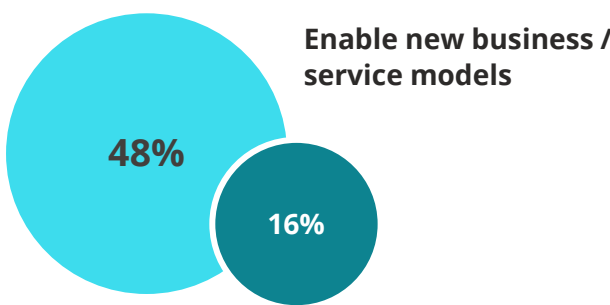
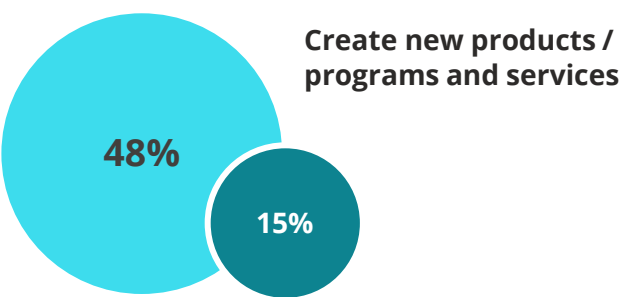
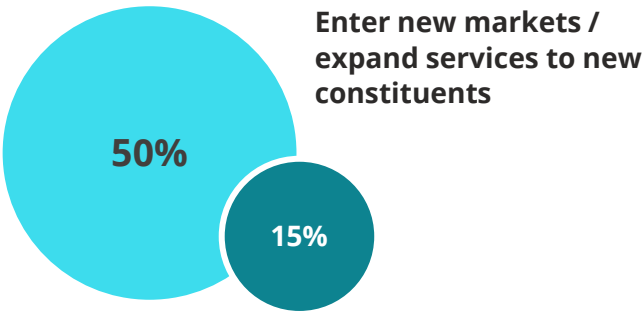
**79%** of leaders surveyed reported **full-scale deployment for three or more types of AI applications** – up from 62% least year

## Challenges from Early Adopters



## Revenue Outcomes Achieved by AI adopters

High-outcome AI adopters have embraced leading Data and AI practices required for strongest outcomes



High-outcome AI adopters  
Low-outcome AI adopters

Source: State of AI in the Enterprise, 5th Edition, Deloitte

# Most insurers are looking to move from strategy and experimentation towards scaling GenAI Solutions across the Enterprise

AI expected to **substantially transform** enterprises in **less than 3 years**<sup>1</sup>

**74%**

of respondents are testing GenAI solutions across their enterprise<sup>1</sup>

**31%**

of leaders believe GenAI will drive substantial transformation in their organization in less than 1 year<sup>2</sup>

**44%**

of respondents surveyed believe they have high levels of expertise in GenAI. These enterprise cite accelerated adoption of AI solutions across their enterprise<sup>2</sup>

Source:

<sup>1</sup>[State of Ethics and Trust in Technology](#)

<sup>2</sup>Deloitte, State of Generative AI in the Enterprise

## WHERE WE WERE

*2023 Trends*

Point  
Solutions

Roadmap

Governance

**Experimentation**

**Proof of Concepts**

**Exploration**

Use case prioritization

## WHERE WE ARE GOING

*2024 and Beyond*

Operating Model

Purpose Build Solutions

**Implement**

**Scaling Responsible AI**

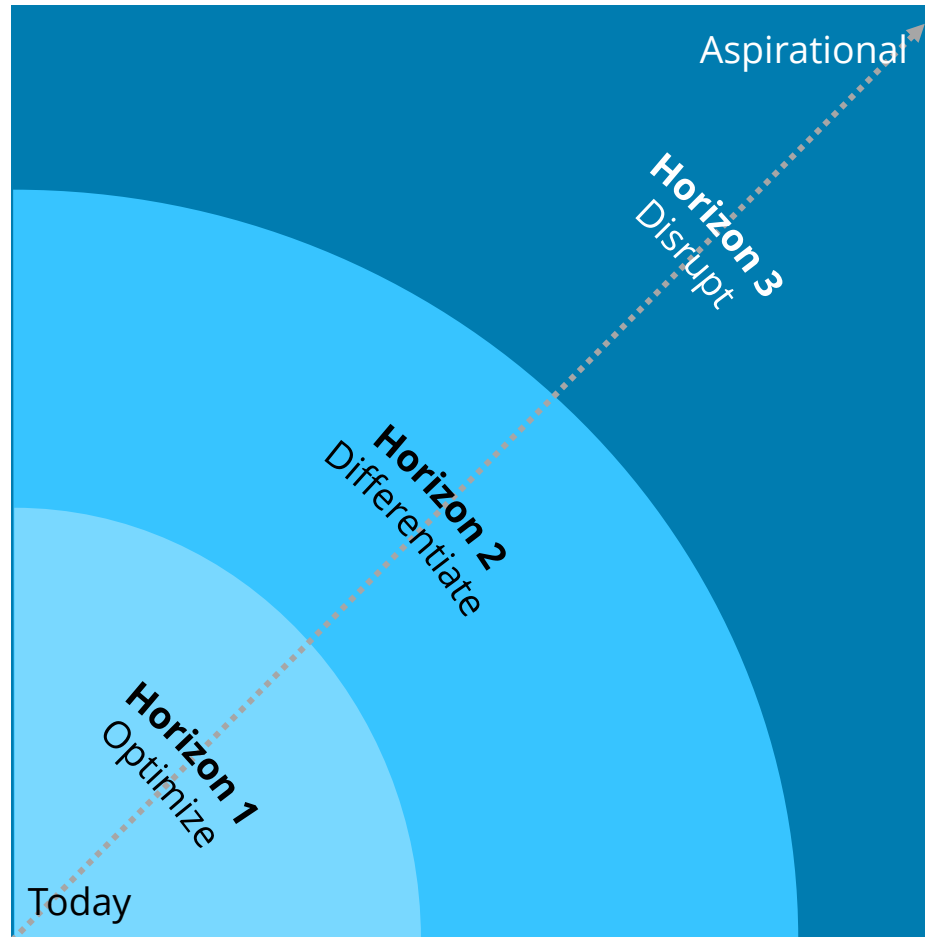
Risk  
Mitigation

Talent

Value Measurement

Ecosystem Partnerships

Key categories of use cases (enabled by GenAI solutions) are gaining more traction ...



HORIZON 3

## ***Disrupt: Next Wave: Reimagining the Business***

*Ex: Autonomous agents to help manage products/policies, automated fraud detection and investigation, causal AI ...*

- ✓ **Transform** Business Models
- ✓ **Transform** Ways of Working

HORIZON 2

## ***Differentiate: Holistic Enterprise Transformation***

*Ex: Call center virtual agents, automated end-to-end claim support, Anomaly-based cybersecurity and identity verification, Policy Coverage review, ...*

- ✓ **Reduce** Costs
- ✓ **Increase** Revenue
- ✓ **Improve** Experiences

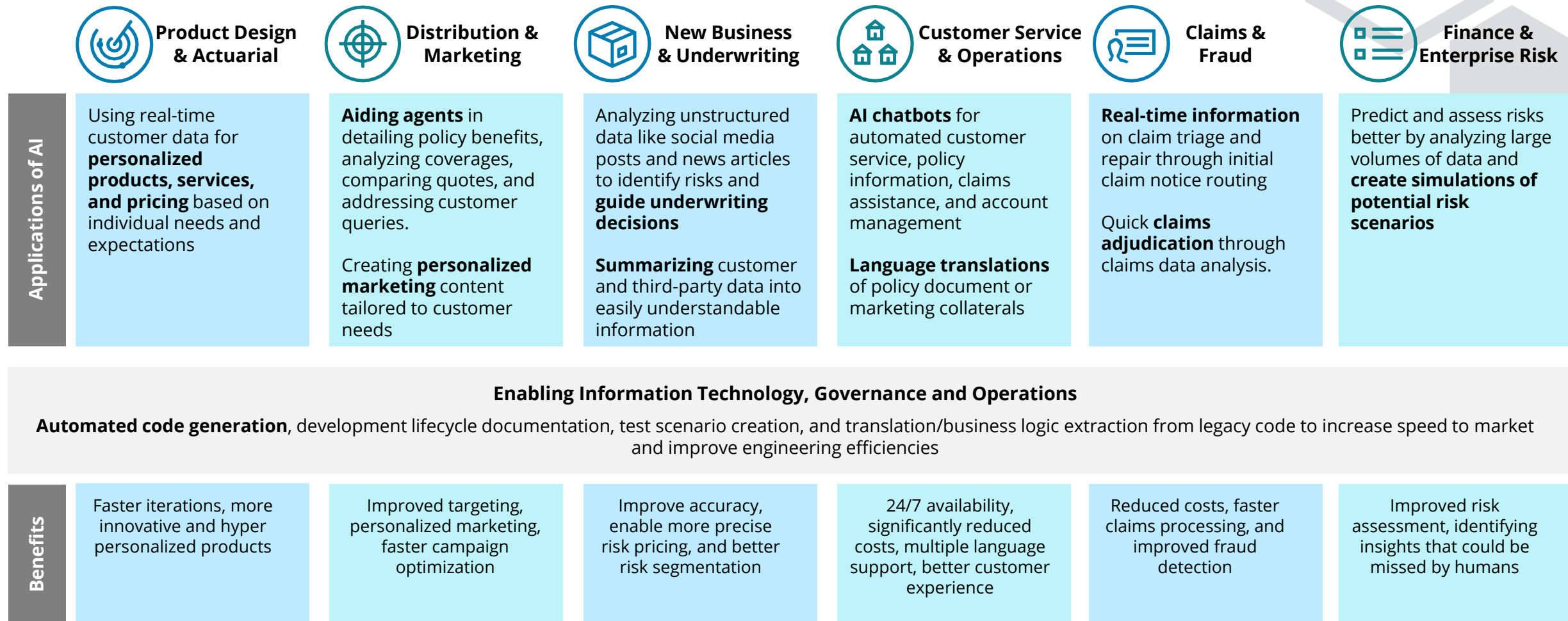
HORIZON 1

## ***Optimize: Internal Experimentation and Optimization***

*Ex: Intelligent Document Processing, Document Contextualization and Summarization, ...*

- ✓ **Improve** Productivity
- ✓ **Lower risk** profile

# Insurers are broadly leveraging AI to innovate across the industry value chain



-- An Illustrative Set --

Visit [The Generative AI Dossier](#) – A selection of high-impact use cases across six major industries by Deloitte AI Inst

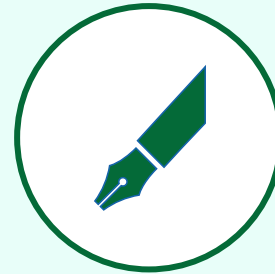
...but focusing on specific applications to create differentiation at scale

### Personalization of Sales and Services



Provide personalized sales support and plan member service, answering complex questions, improving overall customer experience, and orchestrate better administration

### Expansion of Underwriting and Claims Assistance



Gathering and analyzing relevant data to assist underwriters and claims adjusters in making better decisions for complex cases

### Transformation of In-House Technology



Analyze existing codebases, understand underlying logic, and generate code snippets or even entire modules, helping accelerate development of technical applications



# AI Adoption is accelerating given the promise of value-realization through enhanced efficiency, experience, and business growth

## EFFICIENCY

Improve operational performance through improved productivity (doing more with less)

- ✓ Automate Processes
- ✓ Optimize Costs
- ✓ Drive Consistency
- ✓ Reduce FTEs
- ✓ Manage Compliance
- ✓ Improve Speed

**Profitability and Margin Improvement**  
*SG&A, Personnel Cost as a % of Revenue*

**Stakeholder Value**  
*EPS, EBITDA*

## EXPERIENCE

Provide fit for purpose and customized experiences to customers and employees

- ✓ Personalize Content
- ✓ Democratize Knowledge
- ✓ Differentiate Services
- ✓ Amplify Creativity
- ✓ Enhance Quality and Outcomes

**Engagement Centricity**  
*Customer Journey Engagement*

**Work, Workforce & Workplace of the Future**  
*Virtual, Automated, Augmented Workforce*

## BUSINESS GROWTH

Develop and enhance enterprise product, channel, and data capabilities





- ✓ Generate New Insights
- ✓ Improve Adaptability
- ✓ Augment Skills
- ✓ Improve Decisioning
- ✓ Drive Product innovation

**Business Model Agility**  
*Time to Market*





**New Digital Products & Services**  
*Diversified Product & Advisor Portfolio*

# Advancement of AI technologies introduces new risks, underscoring the need for establishing robust AI governance frameworks

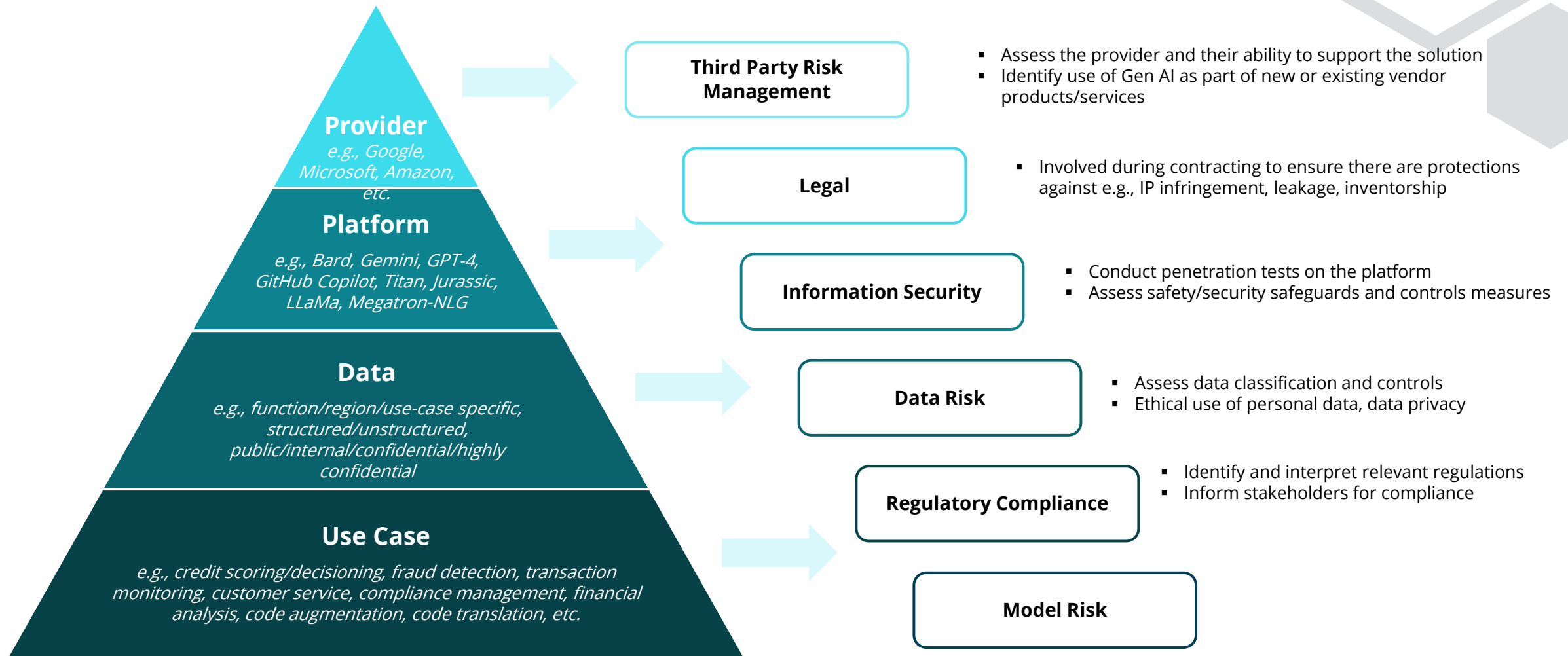
## Examples of existing risks from AI that are further amplified by GenAI

<b>Bias</b>  <ul style="list-style-type: none"> <li>✓ Biased training data can lead to biased output</li> <li>✓ Bias can also emerge because of relationships formed within the model</li> </ul>	<b>Explainability</b>  <ul style="list-style-type: none"> <li>✓ Opaque or overly complex training techniques make it difficult to understand how predictions are made</li> </ul>	<b>Output Reliance</b>  <ul style="list-style-type: none"> <li>✓ Allowing erroneous output from AI to directly impact business decisions</li> </ul>	<b>Confidentiality &amp; Privacy</b>  <ul style="list-style-type: none"> <li>✓ Consent for data used (confidential information, personally identifiable information) is necessary</li> </ul>
---	---	--	---

## Examples of incremental risks from GenAI

<b>Hallucination</b>  <ul style="list-style-type: none"> <li>✓ LLMs are based on probabilities, and can generate false outputs with a confident tone - sources and citations are unavailable for most models</li> </ul>	<b>IP Protection &amp; Infringement</b>  <ul style="list-style-type: none"> <li>✓ AI service companies may use confidential data to train future models, exposing the user to IP infringement claims</li> </ul>	<b>Malicious Behavior</b>  <ul style="list-style-type: none"> <li>✓ AI facilitated malicious behaviors or social engineering can jeopardize an organization's information integrity</li> </ul>	<b>Token Size Limits and Costs</b>  <ul style="list-style-type: none"> <li>✓ Most LLMs have a size limit on the number of tokens (units of text/code) that are processed, resulting in limitations in processing larger documents and high computing costs</li> </ul>
--	--	---	--

# Organizations are finding that AI is not a standalone risk, but a cross cutting expansion of existing risks across the layers of AI



Comprehensive AI risk management principles serve as the cornerstone of sound AI practices. Deloitte's Trustworthy AI™ framework provides the backdrop to a sustainable, safe, and responsible AI-use environment and risk management program

### Fair / Impartial

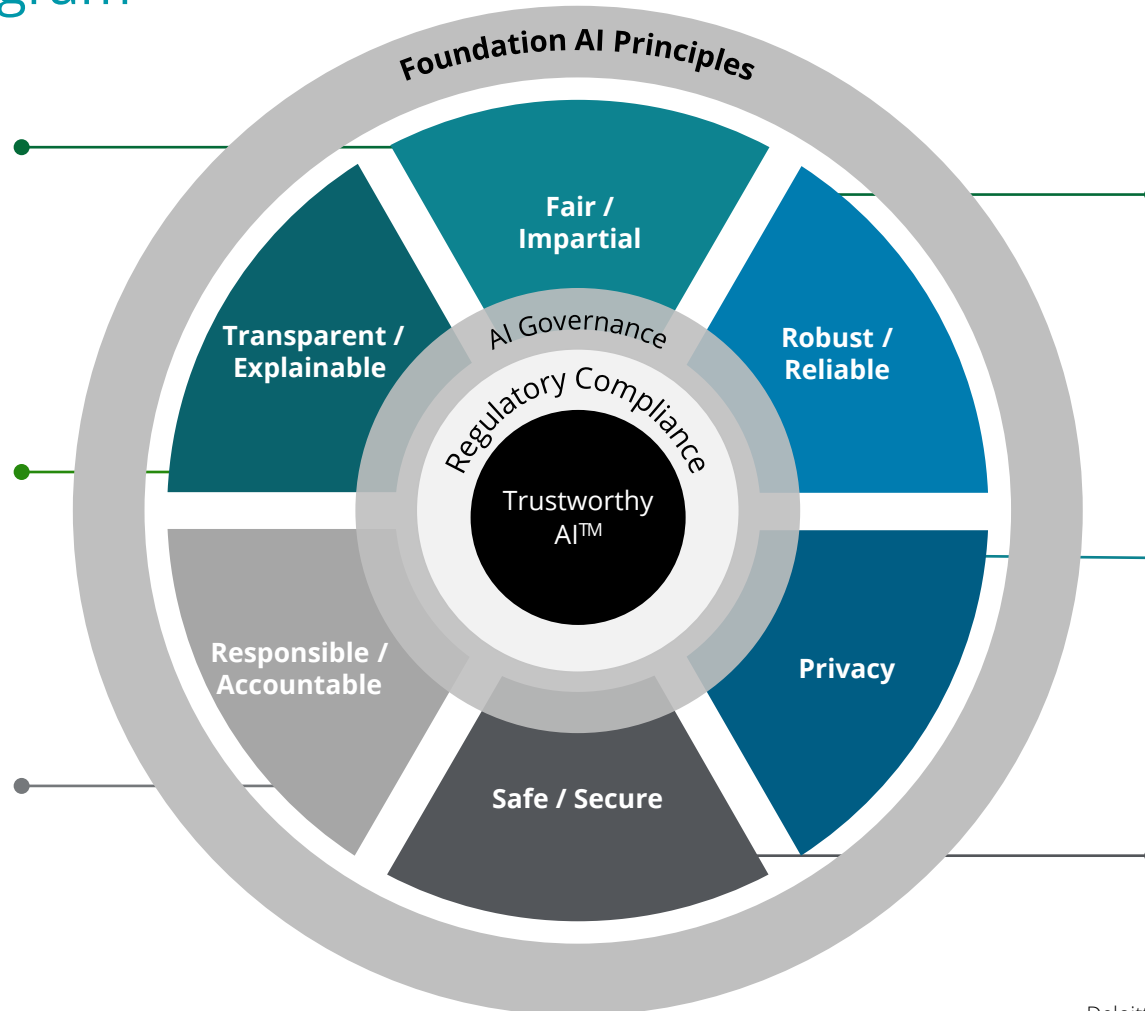
*AI must be designed and trained to make decisions free of biases. AI applications include internal and external checks to help enable equitable application across all participants.*

### Transparent / Explainable

*All participants are able to understand how their data is being used. How AI systems make decisions; algorithms, attributes, and correlations are open to inspection and are fully explainable.*

### Responsible / Accountable

*Policies are in place to determine who is held responsible and accountable for the output of AI system decisions.*



### Robust / Reliable

*AI systems have the ability to learn from humans and other systems and produce consistent and reliable outputs. The systems must be robust and function as intended even under unexpected environment and data.*

### Privacy

*Consumer privacy is respected, and customer data is not used beyond its intended and stated use. Data regulations are complied with, and consumers are able to opt in / out of sharing their data.*

### Safe / Secure

*AI systems can be protected from risks (including cyber risks) that may cause physical and/or digital harm such as adversarial manipulation of AI models and reverse engineering of data.*



# Standing up an AI Risk Management Framework: Lessons Learned

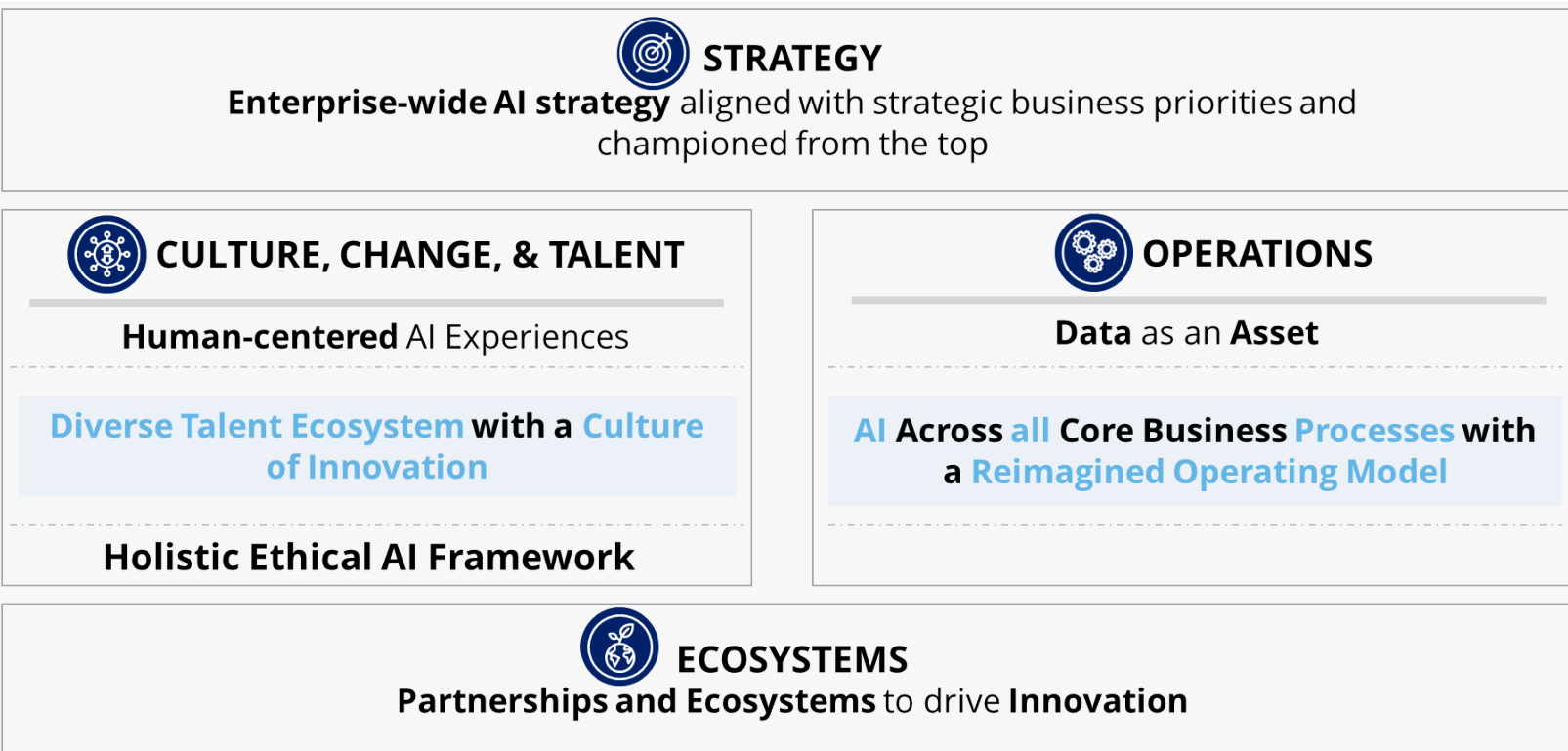
The AI use-environment is evolving quickly and leading practices in AI risk management have yet to fully converge. This poses a unique challenge when designing and implementing an AI risk management program

Stakeholder Alignment	<ul style="list-style-type: none"><li>• Typically, the <b>most challenging</b> part of standing up an AI risk management program</li><li>• Requires <b>well-structured/planned consensus workshops</b> for each topic, from AI definition, to risk rating, to required lifecycle activities</li><li>• It's best to <b>bring options</b>, based on industry practice, with pros/cons, and a recommendation to consensus workshops</li></ul>
Building off of Existing Processes	<ul style="list-style-type: none"><li>• There is <b>considerable overlap</b> in AI risk management to other existing risk management programs (e.g., MRM, cyber, data risk, technology risk, etc.)</li><li>• Determining <b>where existing programs can be leveraged</b>/built off of incrementally, vs. holistic new processes (and/or technology) requires careful consideration and input from the broader stakeholder group</li><li>• These decisions will drive <b>stakeholder buy-in</b> and drive program efficiency</li></ul>
Managing Risk in a Creative Environment	<ul style="list-style-type: none"><li>• One of the biggest stakeholder complaints (and therefore sources of stakeholder push-back) is that AI risk management is burdensome and <b>stifles the innovation</b> environment needed to develop AI objects (e.g., requiring inventory registration during AI design)</li><li>• While these concerns can be assuaged through <b>educational sessions</b> demonstrating the value of AI risk management, it is also critical to make sure that AI risk management controls/requirements are risk and regulatory-based</li></ul>
Managing Regulatory Jurisdictions	<ul style="list-style-type: none"><li>• There are varied <b>requirements across regulatory jurisdictions</b>. To avoid burdening stakeholders in regulatory jurisdictions which have yet to evolve into strict environments, it is critical to understand the different landscapes and design flexible life-cycle activity requirements</li><li>• Moreover, a <b>centralized control function</b> that drives updated lifecycle activities as regulations evolve can help stakeholders comply with local regulations</li></ul>

# OPEN TO QUESTIONS & THOUGHTS

## SCALING AI

# Deploying Responsible AI to deliver successful outcomes at scale



AI success is built upon the foundation of business-value-centric strategy, responsible governance to create trusted solutions, an adaptive workforce, and a robust set of ecosystem partners.



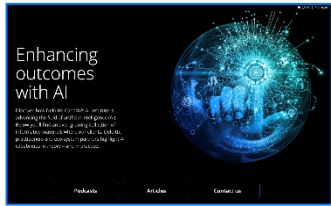
Thank you





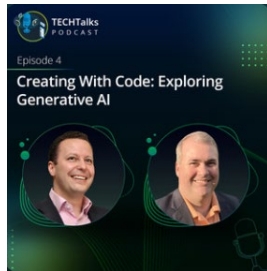
# Learn more and continue your Generative AI journey

## Listen



### [Generative AI Industry Webinars](#)

#### Podcasts

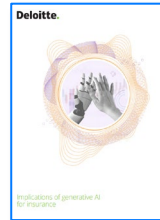


Listen to an exciting episode of the **TECHTalks podcast** exploring Generative AI with Ed Bowen, Deloitte Advisory AI Leader and Managing Director of the AI Center of Excellence, now available on [Spotify](#)



Listen to an exciting episode of **The AI in Business Podcast**, where AI leaders in Deloitte talk about AI opportunities in insurance and how value is being created. Available on [SoundCloud](#)

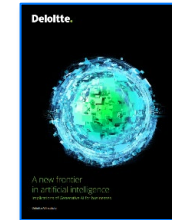
## Read



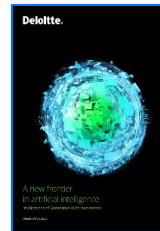
### [Implications of Gen AI for Insurance](#)



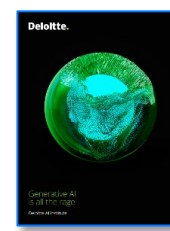
### [Generative AI is all the Rage](#)



### [Generative Artificial Intelligence](#)



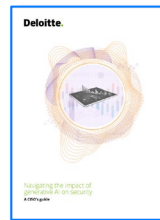
### [Generative Artificial Risk Management](#)



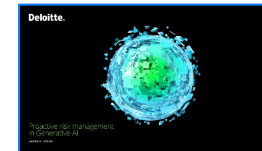
### [Generative AI for Enterprises](#)



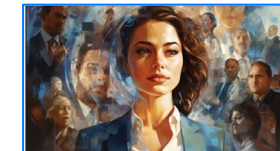
### [Legal Implications of Generative AI](#)



### [Navigating the impact of generative AI on security](#)



### [Proactive risk management in Generative AI](#)



### [Generative AI will reshape - not replace - the workforce](#)



# About the Presenters



## UDIT NARULA

Senior Manager, Monitor Deloitte  
US Insurance Strategy and AI  
Practice Leader

Email: [unarula@deloitte.com](mailto:unarula@deloitte.com)

Udit is a leader in our Financial Services Strategy practice with over 10 years of experience across India, Canada, and US. Udit has advised several Banks and Insurance players to shape customer and innovation driven growth strategies.

Udit is passionate about solving complex problems, designing actionable business strategies, and supporting clients undertake bold transformation programs. Udit leads the thinking on Strategy and Operating Model for Gen AI applications within Financial Services at Deloitte. He is experienced in supporting senior stakeholders understand Gen AI opportunities, drive consensus around opportunities and outcomes, develop business cases, and implement transformation programs.

Udit is trained as an engineer and studied MBA at Cornell University.



## PIETA BROWN

Director, Risk Advisory  
Caribbean & Bermuda AI & Data  
Practice Leader

Email: [pibrown@deloitte.com](mailto:pibrown@deloitte.com)

Pieta leads the Generative Artificial Intelligence (GenAI) practice at Deloitte in the Caribbean and Bermuda region (Deloitte CBC). Her skillset draws on more than 10 years of experience growing data science/machine learning capability and delivering large-scale projects for public and private sector organizations. Pieta's expertise spans the full AI lifecycle, from building AI literacy and identifying opportunities through strategy development, technology implementation and governance. Pieta's previous roles have included Chief Analytics Officer, Head of Data, and Product Director for machine learning, spanning various global organizations as well as technology- and data-driven industries

Pieta holds a Masters of Professional Studies in Data Science, a Bachelor of Laws, a Postgraduate Certification in Health Informatics and is an ICAgile Certified Professional



## DAVID SHERWOOD

Managing Director, Risk and  
Financial Advisory

Email: [dsherwood@deloitte.com](mailto:dsherwood@deloitte.com)

David Sherwood is a Deloitte Advisory Managing Director in the insurance (Life & Health, and Property & Casualty) sector specializing in AI, risk management, regulation and compliance.

David has taken a lead role in global and domestic regulatory developments, and helps clients navigate regulatory and organizational change both domestically and internationally. David's experience includes AI related developments, and he continues to support and advise clients in this area. He acts as the Deloitte lead at International Association of Insurance Supervisors (IAIS) and the US National Association of Insurance Commissioners (NAIC), and has presented at NAIC Summer National Meeting 2023 on Generative AI



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms, and their related entities (collectively, the “Deloitte organization”). DTTL (also referred to as “Deloitte Global”) and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other in respect of third parties. DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see [www.deloitte.com/about](http://www.deloitte.com/about) to learn more. Deloitte Ltd. is an affiliate of DCB Holding Ltd., a member firm of Deloitte Touche Tohmatsu Limited.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax and related services. Our global network of member firms and related entities in more than 150 countries and territories (collectively, the "Deloitte organization") serves four out of five Fortune Global 500 ® companies. Learn how Deloitte's approximately 330,000 people make an impact that matters at [www.deloitte.com](http://www.deloitte.com)

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms or their related entities (collectively, the “Deloitte organization”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and none of DTTL, its member firms, related entities, employees or agents shall be liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication. DTTL and each of its member firms, and their related entities, are legally separate and independent entities.

© 2024 DCB Holding Ltd. and its affiliates.