

The Deloitte logo is positioned in the top left corner. It consists of the word "Deloitte" in a white, sans-serif font, followed by a small green dot. The background of the slide is a dark blue, abstract image featuring a large, glowing circular pattern with intricate, circuit-like or architectural details in shades of blue and white, creating a sense of depth and technology.

**Deloitte.**

# **The AI Imperative in Insurance**

Federal Advisory Committee on Insurance

**March 20, 2024**

## Meet Our Presenters



### **SANDEE SUHRADA**

Partner, Monitor Deloitte  
*US Insurance Strategy and AI  
Practice Leader*



### **CLIFFORD GOSS, PH.D.**

Partner, Risk and Financial Advisory  
*US AI Risk Management & Governance  
Leader*

# 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



## CURRENT STATE OF AI IN INSURANCE

# AI is rapidly transforming the Insurance industry

### Industry Adoption of AI

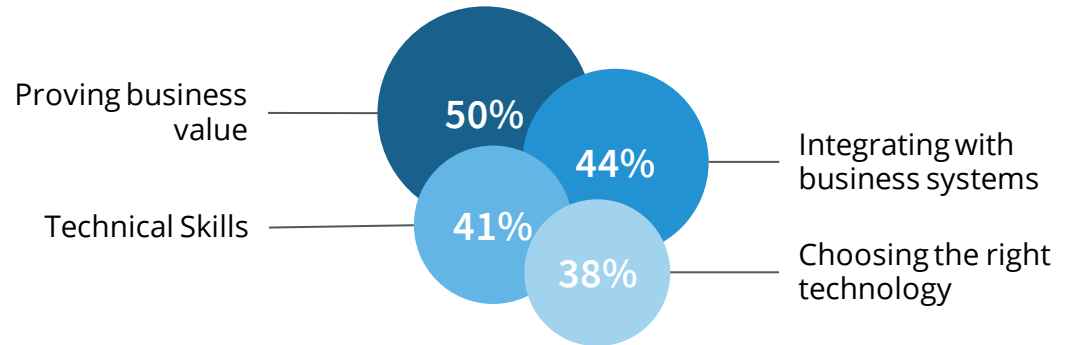
94%

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

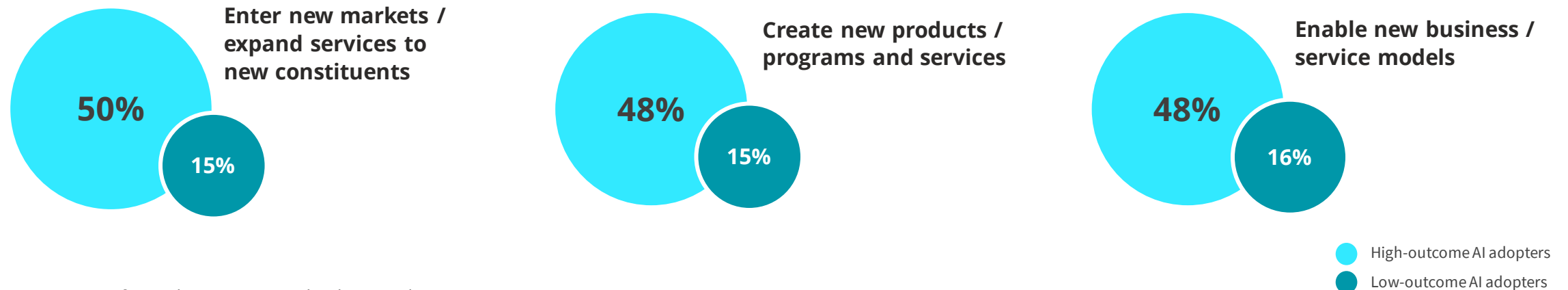
79%

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



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

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## CURRENT STATE OF AI IN INSURANCE

# 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 (trends for last year - 2023)

Point Solutions    roadmap    Governance

**Experimentation**

Use case prioritization    Strategy

Exploration    Proof of Concepts

### Where we are (2024 and beyond)

Operating Model    Purpose Build Solutions

**IMPLEMENT**

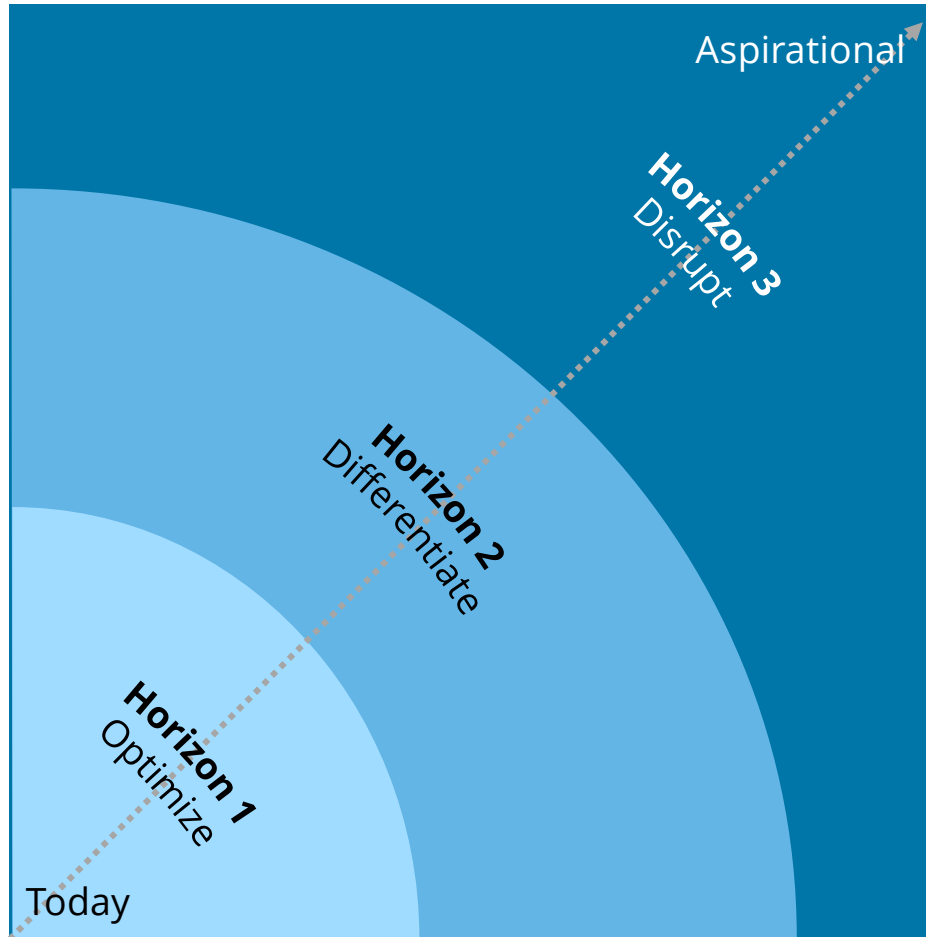
**Scaling Responsible AI**

Risk Mitigation    Talent    Value Measurement

Ecosystem Partnerships

CURRENT STATE OF AI IN INSURANCE

Insurers are following a systematic approach to create differentiation at scale



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 identify verification, Policy Coverage review, ...*

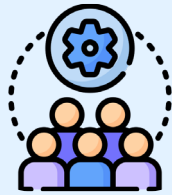
- ✓ **Reduce** Costs
- ✓ **Increase** Revenue
- ✓ **Improve** Experiences

HORIZON 1

**Optimize: Internal Experimentation and Optimization**  
*Ex: Intelligent Document Processing, Document Contextualization and Summarization, ...*

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

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



## Personalization of Sales and Service

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 Function

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

## AI OPPORTUNITIES & USE CASES

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

-- An Illustrative Set --



### Product Design & Actuarial

Using real-time customer data for **personalized products, services, and pricing** based on individual needs and expectations



### Distribution & Marketing

**Aiding agents** in detailing policy benefits, analyzing coverages, comparing quotes, and addressing customer queries.

Creating **personalized marketing** content tailored to customer needs



### New Business & Underwriting

Analyzing unstructured data like social media posts and news articles to identify risks and **guide underwriting decisions**

**Summarizing** customer and third-party data into easily understandable information



### Customer Service & Operations

**AI chatbots** for automated customer service, policy information, claims assistance, and account management

**Language translations** of policy document or marketing collaterals



### Claims & Fraud

**Real-time information** on claim triage and repair through initial claim notice routing

Quick **claims adjudication** through claims data analysis.



### Finance & Enterprise Risk

Predict and assess risks better by analyzing large volumes of data and **create simulations of potential risk scenarios**

Applications of AI

## Enabling Information Technology, Governance and Operations

**Automated code generation**, development lifecycle documentation, test scenario creation, and translation/business logic extraction from legacy code to increase speed to market and improve engineering efficiencies

Benefits

Faster iterations, more innovative and hyper personalized products

Improved targeting, personalized marketing, faster campaign optimization

Improve accuracy, enable more precise risk pricing, and better risk segmentation

24/7 availability, significantly reduced costs, multiple language support, better customer experience

Reduced costs, faster claims processing, and improved fraud detection

Improved risk assessment, identifying insights that could be missed by humans

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



## AI BENEFITS AND OUTCOMES

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



### EFFICIENCY

*Improve operational performance through improved productivity, by 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 / CAPABILITY

*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. Lift in Product Sales*

# 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

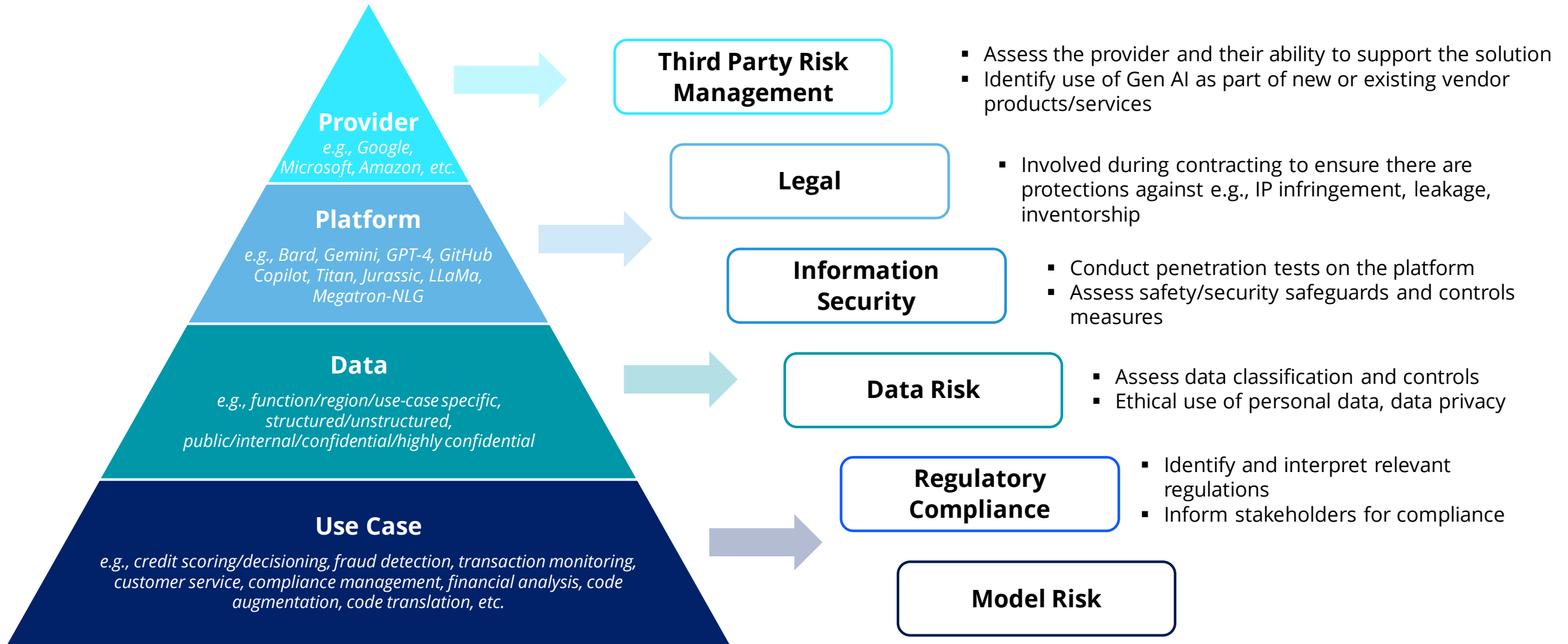
<b>Bias</b> 	<b>Explainability</b> 	<b>Output Reliance</b> 	<b>Confidentiality &amp; Privacy</b> 
<ul style="list-style-type: none"><li>✓ Biased training data can lead to biased output</li><li>✓ Bias can also emerge because of relationships formed within the model</li></ul>	<ul style="list-style-type: none"><li>✓ Opaque or overly complex training techniques make it difficult to understand how predictions are made</li></ul>	<ul style="list-style-type: none"><li>✓ Allowing erroneous output from AI to directly impact business decisions</li></ul>	<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> 	<b>IP Protection &amp; Infringement</b> 	<b>Malicious Behavior</b> 	<b>Token Size Limits and Costs</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>	<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>	<ul style="list-style-type: none"><li>✓ AI facilitated malicious behaviors or social engineering can jeopardize an organization's information integrity</li></ul>	<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>

## AI PITFALLS & EMERGING RISKS

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



## AI RISK MANAGEMENT FRAMEWORK

Comprehensive AI risk management principles serve as the cornerstone of a 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

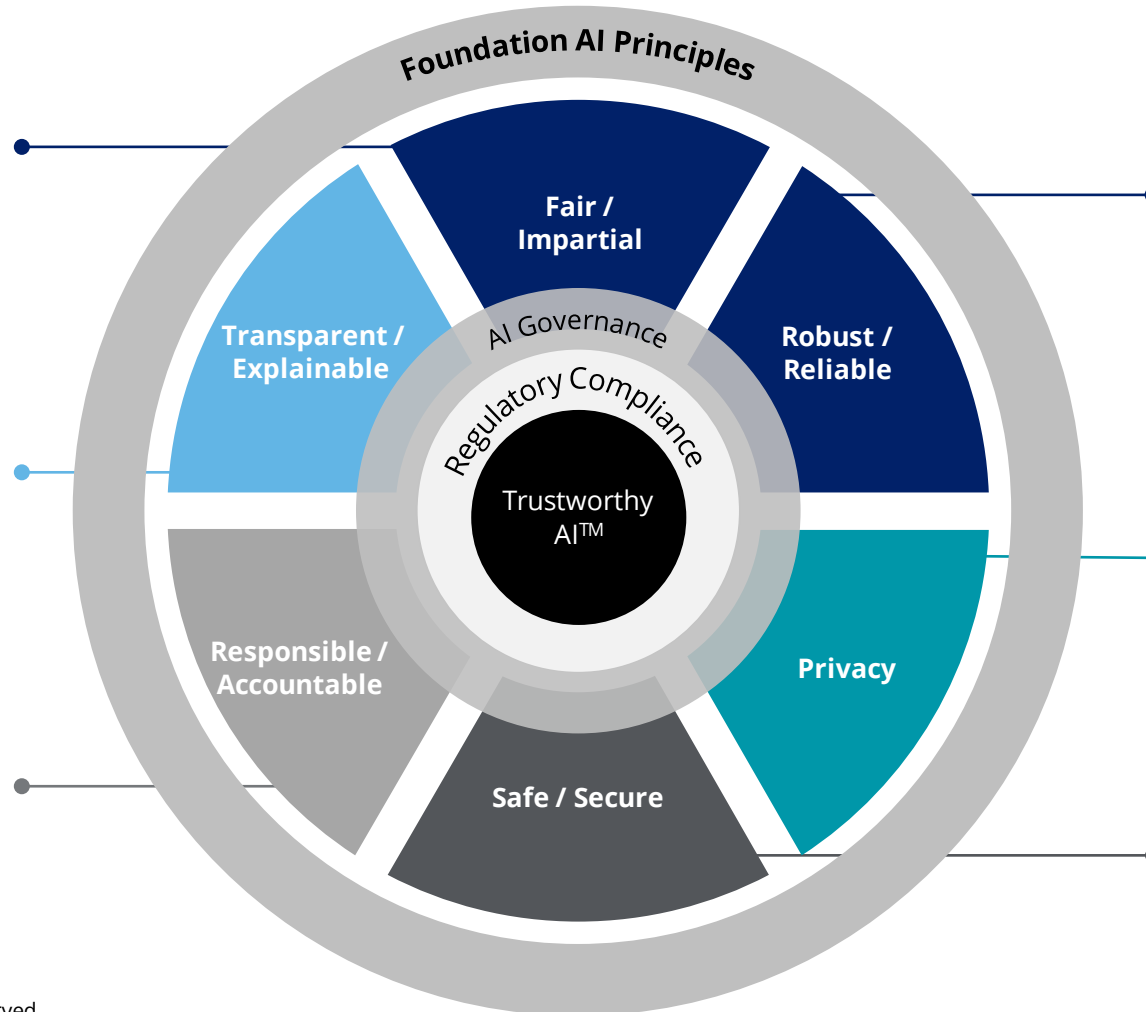
AI must be designed and trained to make decisions free of biases. AI applications include internal and external checks to help enable equitable application across all participants.

### 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.



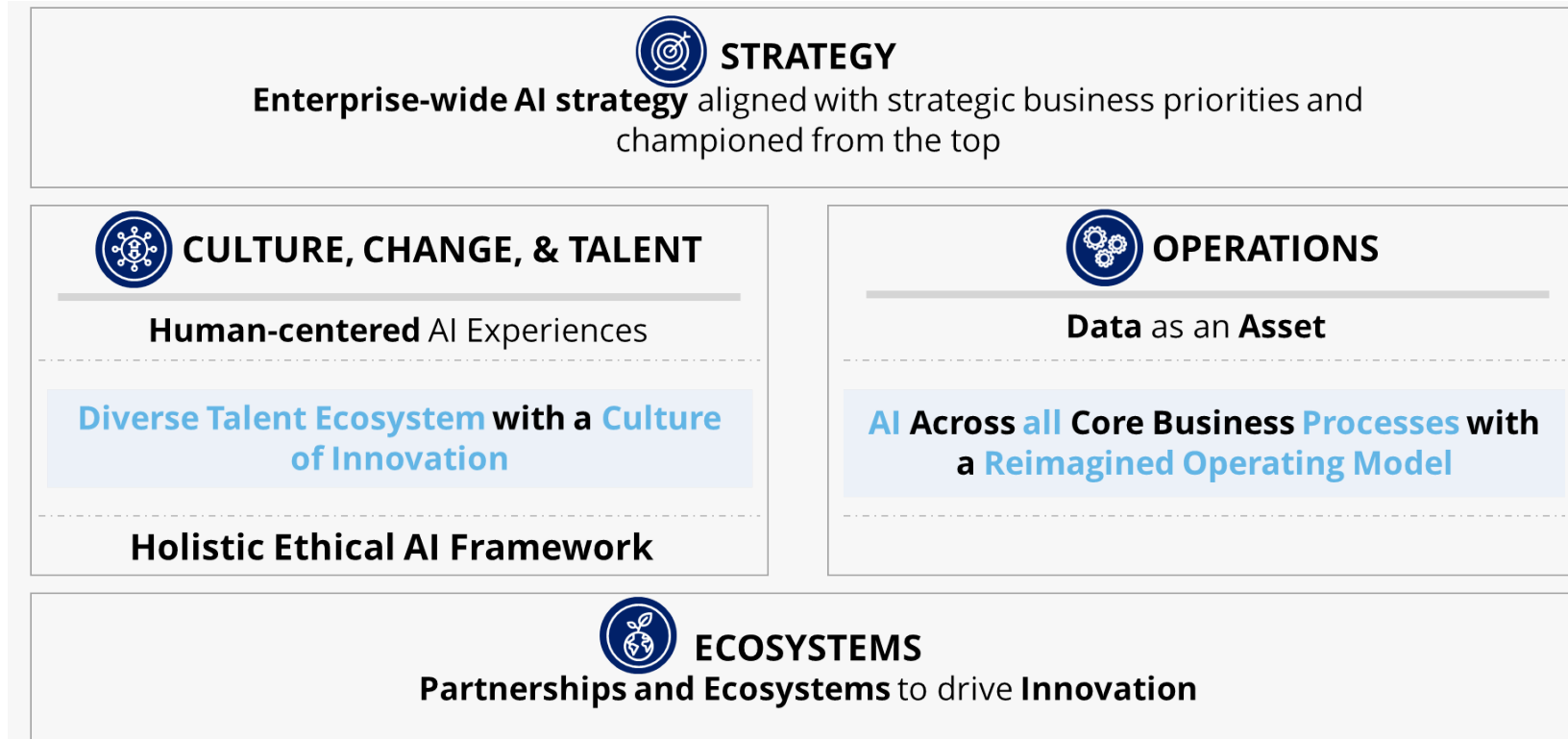
# Standing up an AI Risk Management Framework: Lessons Learned

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.

<b>Stakeholder Alignment</b>	<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>
<b>Building off of Existing Processes</b>	<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>
<b>Managing Risk in a Creative Environment</b>	<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>
<b>Managing Regulatory Jurisdictions</b>	<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>



# 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

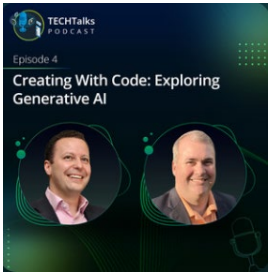
# Learn more and continue your Generative AI journey

## 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](#)

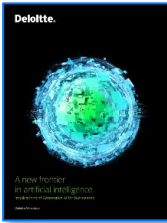
## Read



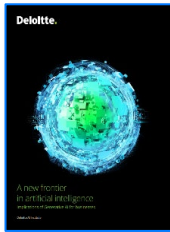
[Implications of Gen AI for Insurance](#)



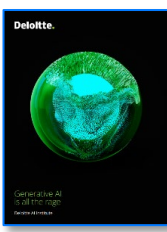
[Generative AI is all the Rage](#)



[Generative Artificial Intelligence](#)



[Generative Artificial Risk Management](#)



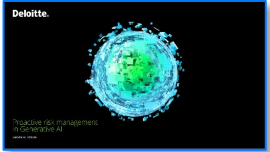
[Generative AI for Enterprises](#)



[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



## **SANDEE SUHRADA**

Partner, Monitor Deloitte | US Insurance Strategy and AI Practice Leader  
Email: [ssuhrada@deloitte.com](mailto:ssuhrada@deloitte.com)

Sandee leads Deloitte's Insurance Data Strategy and AI practice and has over 18 years of experience delivering innovative business solutions and complex transformation efforts for global financial services institutions.

She is an industry-recognized strategist, creator, and architect of end-to-end enterprise solutions that encompass data analytics, AI, and digital innovations. Sandee advises insurance executives on opportunities to leverage next-gen technology to operationalize their business strategies and realize growth, profitability, cost-efficiencies, operational excellence, and an elevated customer experience.



## **CLIFFORD GOSS, PH.D.**

Partner, Risk and Financial Advisory | US AI Risk Management & Governance Leader  
Email: [cgross@deloitte.com](mailto:cgross@deloitte.com)

With nearly 20 years' experience assisting FSI clients with modeling and AI efforts, Clifford leads Risk and Financial Advisory's AI Risk Management practice for FSI clients.

In this capacity, he is helping his clients navigate the evolving AI regulatory environment and stand up, or enhance their AI risk management programs. By enhancing risk mgmt. programs (model, data, cyber risk, etc.) he is helping his clients develop holistic AI risk mgmt. programs which span the end-to-end AI lifecycle.

In addition to this role, Clifford helps lead the Model Risk Management practice and has extensive experience with the broader range of AI models



## **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



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