

2025 INTERNAL AUDIT WEBCAST SERIES

Course 1

March 25, 2025

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BDO and Our Internal Audit Webcast Series



Corey Bean

ANALYTICS & INNOVATION DIRECTOR, RISK ADVISORY SERVICES

Corey Bean is currently serving as BDO's national Risk Advisory Services Analytics & Innovation leader. He brings more than 14 years of experience in guiding clients through complex risk and compliance challenges using data-driven strategies and advanced analytics.

With a focus on internal audit and SOX, Corey specializes in deploying intelligent automation and innovative data solutions to optimize business processes, strengthen internal controls, and drive value across critical business functions.

He has particular experience in various industries including financial services, healthcare, technology & software, energy & utilities, aerospace & defense, manufacturing and government.



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EDUCATION

► B.B.A., Merrimack College

Kathleen Garenani

MANAGER, BDO DIGITAL ANALYTICS

Kathleen Garenani is currently a Director for the Data Analytics & Auditing practice for BDO Digital. Her client service experience involves data governance, information technology program management, information security programs, and various process improvement initiatives for complex and highly visible customers within the federal, public and private sectors.

She is a technical data management professional with more than 10 years of experience leading information security programs, enterprise-wide risk mitigation, data management, and process improvement initiatives helping to ensure streamlined solutions to complex problems while adhering to best standard practice, legal, and regulatory compliance.

Prior to joining BDO, Kathleen served as Information Governance Operations Lead for the White House Information Governance office, where she conducted multiple process improvement programs, defining and implementing data privacy initiatives for Presidential and Federal records and data. Many of these programs revolutionized the way data is maintained, stored and processed for the Obama and Trump administrations. Additionally, she worked as a Security Program Manager for White House Information Technology where her portfolio included Computer Network Defense, Information Governance, and Security Systems Engineering. During this time Kathleen worked to implement highly-integrated security programs and process improvements for computer network security, information security, data protection, vulnerability management, authentication, and incident response.

EDUCATION

- ▶ Certificate in Cybersecurity Strategy, Georgetown University
- ▶ M.A., International Relations, Maxwell School of Citizenship and Public Affairs, Syracuse University
- ▶ M.S., Public Relations, S.I. Newhouse School of Public Communication, Syracuse University
- ▶ B.A., Public Relations, Advertising, Graphic Design, State University of New York - Plattsburgh
- ▶ B.A., Sociology, State University of New York - Plattsburgh



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Mark Melnychenko, CIPT

MANAGING DIRECTOR, PRIVACY & DATA PROTECTION

Mark Melnychenko is a Managing Director in the firm's Privacy & Data Protection practice and leads the privacy technology practice area. With more than 25 years of experience in privacy, technology and engineering he helps his clients to evaluate and implement global programs, providing deep experience in building robust data inventories and implementing privacy rights automation, consent/preferences and vendor risk management solutions based on US state and international privacy laws.

Mark works closely with organizations in the retail, travel and hospitality, food manufacturing, quick service restaurant, entertainment and sports, and technology industries. He has formerly served in executive leadership roles as Chief Technology Officer, Vice President, and Director of Engineering and is comfortable working with all levels of an organization.

Mark is a business leader who works closely with his teams to deliver quality and actionable deliverables to clients. His practice focuses on providing privacy technology transformation, which allows his clients to optimize environments from manual to automated processes, comply with various laws, and develop sound risk management practices. He is experienced across multiple platforms where he and his team provide architectural guidance and implementation services.

EDUCATION

- ▶ B.S., Chemical Engineering, University of Delaware

PROFESSIONAL AFFILIATIONS

- ▶ International Association of Privacy Professionals



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Learning Objectives



Describe how data analytics can transform internal audit processes and outcomes



Identify the latest technologies impacting internal audit, including AI, RPA, and machine learning



Discuss methods to improve internal audit accuracy and efficiency using advanced analytics and technology



Define best practices for integrating new technologies into internal audit processes while ensuring ethical use and compliance with regulatory standards



Describe the potential risks and challenges associated with adopting new technologies and how to mitigate them effectively

AI in IA : Digital Tools

The Internal Audit Function of the Future

The internal audit and compliance **function of the future** has the following characteristics:

PROCESS

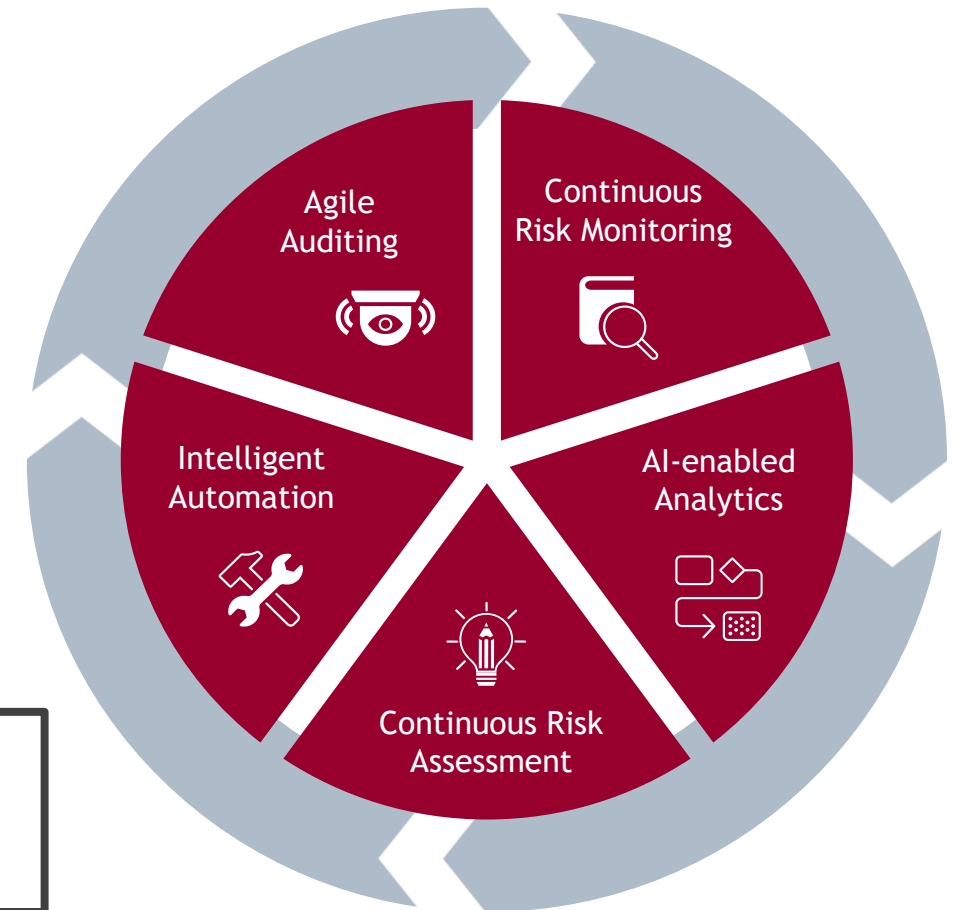
- ▶ Focuses on risks that are strategically important
- ▶ Is built on common risk taxonomy and indicators
- ▶ Is positioned as a value creator for the enterprise

TECHNOLOGY

- ▶ Is dynamic and agile
- ▶ Is powered by data leveraging automation and analytics
- ▶ Utilizes continuous risk monitoring solutions (proactive vs. reactive)

PEOPLE

- ▶ Established a common sense of purpose for all risk stakeholders
- ▶ Puts risk managers and auditors on the forefront of the transformation



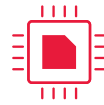
TECHNOLOGY ENABLERS



Advanced Analytics



Process Intelligence



Robotics




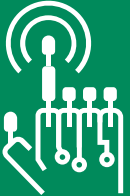
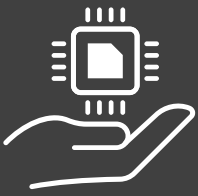

Artificial Intelligence (AI)

The Digital Ecosystem for Internal Audit and Compliance Functions

Digital transformation is achieved through a variety of tools and techniques. Leading Internal Audit teams are combining multiple tools from the ecosystem to reach their specific vision and goals.

Data Automation	Advanced Data Analytics	Robotic Process Automation	Artificial Intelligence
<p>Data wrangling and transformation tools to discover, merge, interpret and summarize large data sets.</p> <ul style="list-style-type: none"> ▶ Decreases process time ▶ Enables repeatable process ▶ Automates manually intensive mundane tasks ▶ Creates resource capacity for more strategic work improving employee satisfaction ▶ Test 100% of the population ▶ Increase coverage areas using automation ▶ Automatically create/ populate workpapers 	<p>Graphical representation of data to quickly analyze large data sets through interactive charts and graphics with drill down capabilities to drive insights</p> <ul style="list-style-type: none"> ▶ Decreases process time ▶ Instantly recognize patterns in the data and analyze millions of data points ▶ Creates more time for analyzing insights, trends and business value generation ▶ Share audit insights and findings via visual depictions ▶ Automate the audit reporting process 	<p>Computer software or a “robot” that emulate and integrate the actions of a human interacting within digital systems to execute a process.</p> <ul style="list-style-type: none"> ▶ Decreases process time ▶ Ability to run 24/7 performing manually intensive tasks ▶ Streamlines testing processes ▶ Reduces outsourcing, offshoring and operations ▶ Creates resource capacity for more strategic work & analysis 	<p>Generative AI, such as ChatGPT, is a type of AI technology that broadly describes machine learning systems capable of generating text, images, code, or other types of content, often in response to a prompt.</p> <ul style="list-style-type: none"> ▶ Automatically process a range of time-consuming language-based tasks normally fulfilled by humans ▶ Machine learning algorithms to “predict” or generate results ▶ Ability to gather, maintain, and analyze large amounts of data, using both human and AI tools, to arrive at the best decisions
<p>Difficulty: Low/Citizen-led Time to Value: 1- 2 months Cost: Low</p>	<p>Difficulty: Low/Citizen-led Time to Value: 1-2 months Cost: Low</p>	<p>Difficulty: High/IT dependent Time to Value: 3-6 months Cost: High</p>	<p>Difficulty: Medium/IT dependent Time to Value: 2-3 months Cost: Medium</p>

AI Introduction

Machine Learning	Neural Networks / Deep Learning	Generative AI	Predictive Analytics
			

- ▶ What is Artificial Intelligence (AI)?
- ▶ Core functionalities (Deep Learning, Machine Learning, Generative AI, Predictive Analytics, Natural Language Processing)
- ▶ The rise of AI in business processes and its growing adoption of AI across industries
- ▶ AI and its potential impact on auditing projects

AI in IA : Practical Use Cases

Opportunity to Leverage Next-Generation Digital Tools Can Be Found Throughout the Internal Audit Lifecycle

TECHNOLOGY ENABLERS

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1011010
1101001

Advanced Analytics



Process Intelligence



Robotics



Artificial Intelligence (AI)

- ▶ Training and Skill Development using ChatGPT
- ▶ Continuous Learning & Knowledge Sharing using ChatGPT
- ▶ Control Rationalization and Automation Assessment
- ▶ Digital Maturity Assessment

- ▶ Predictive Analytics
- ▶ Automated Data Testing
- ▶ 100% Coverage
- ▶ Control Validation
- ▶ Chat Bots for Auditors
- ▶ AI-Enabled Fraud Detection
- ▶ Risk-Based Sampling

Planning & Information Gathering

Risk Assessment & Audit Plan

Assess Plan & Perform Audits

Deliver Results and Reporting

- ▶ Risk Assessments using AI and ChatGPT
- ▶ Interactive Risk Register
- ▶ Audit Planning & Resource Allocation

- ▶ Automated Audit Reports
- ▶ Interactive Status Dashboards and Reporting
- ▶ Continuous Monitoring of Compliance Metrics

Embedded and Sustainable Solutions

Practical Use Cases to Empower Your People

AI in Internal Audit

- ▶ Analyze large volumes of data to identify patterns and trends.
- ▶ Interpret data as internal auditors gather evidence across organizational areas.
- ▶ Detect anomalies to aid in further investigation, including potential instances of fraud.
- ▶ Provide internal audit teams with a full comprehensive view of risk landscape.
- ▶ Help generate comprehensive, timely internal audit reports for stakeholders.
- ▶ Automate manual controls and procedures.



AI in IA : Risks

Risks of AI



Privacy and Cyber Security

- ▶ Privacy
- ▶ Identity
- ▶ Data Security
- ▶ Secure Cloud
- ▶ Incident Response



Responsibility and Accountability

- ▶ Acceptable use
- ▶ Societal / Market Impacts
- ▶ Regulatory Environment
- ▶ Accountability of Outcome



Misinformation and Inaccuracies

- ▶ Output Integrity
- ▶ Validation
- ▶ Intellectual Property Concerns



Bias and Discrimination

- ▶ Unintended Bias
- ▶ Unrecognized data patterns
- ▶ Market Fit



Regulations and Requirements

- ▶ Regulatory Alignment
- ▶ Governance of Program

The Principles of Responsible AI

The core principles of responsible AI define its use, support governance, and guide employee training. They can help you assess and mitigate risk, implement effective controls, and assist with regulatory compliance.



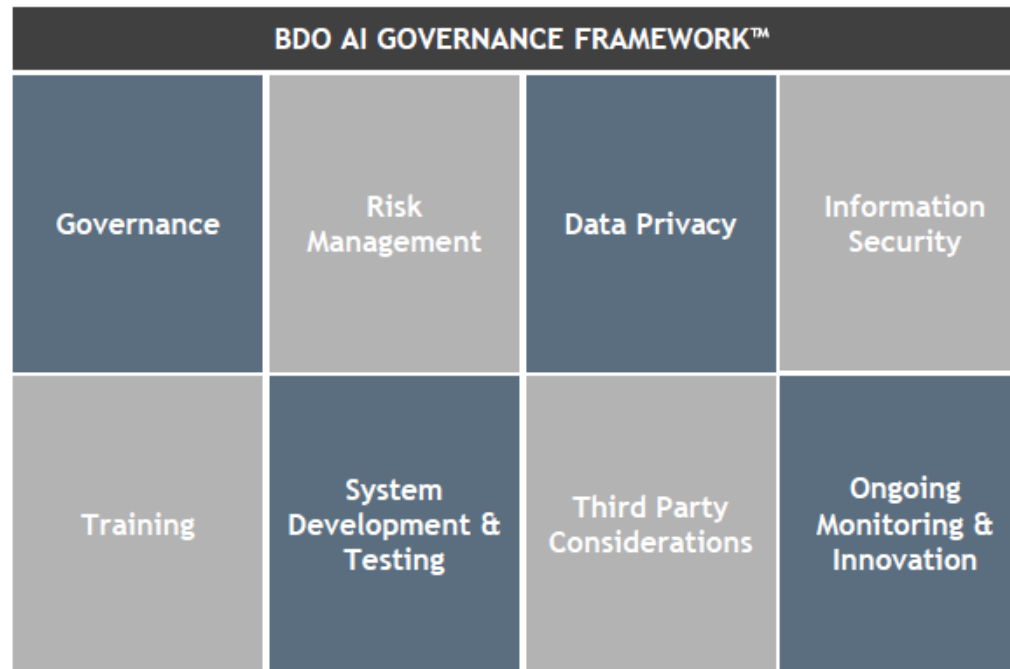
AI Governance Framework

POTENTIAL LAWS

- ▶ EU AI Act
- ▶ Other emerging AI laws
- ▶ EU/UK GDPR
- ▶ US State Privacy Laws
- ▶ Other privacy laws

PRIVACY & DATA PROTECTION PRINCIPLES

- ▶ Consent and individual rights
- ▶ Data minimization
- ▶ Accountability
- ▶ Security measures
- ▶ Automated decision making



FRAMEWORKS

- ▶ NIST AI RMF
- ▶ ISACA AI Audit Toolkit
- ▶ OECD AI Principles
- ▶ EU Ethics Guidelines for Trustworthy AI
- ▶ BDO Privacy Framework

AI PRINCIPLES

- ▶ Bias and fairness
- ▶ Ethics
- ▶ Explainability
- ▶ Hallucinations
- ▶ Transparency

AI Trusted Testing Program

OUTCOMES:

- ▶ Reduce bias
- ▶ Reduce inaccuracies
- ▶ Identify customer experience issues
- ▶ Identify critical bugs
- ▶ Improve NPS
- ▶ Improve accessibility for disabled users

It's important to test your AI against a diverse set of real-world users



LLM APPLICATION
Text or Voice interaction



**PERSONAL DATA
CONSENTS & NDAS**



DIVERSIFIED TEAM

Example: Age, gender, ethnicity, disability, sexual orientation, socio economic, education
Experts: Medical, Financial
Location: Cultural context



TESTING STRATEGIES

Prompt Input/Responses

- ▶ Natural usage
- ▶ Directed usage
- ▶ Adversarial
- ▶ Testing for: Biased and/or inaccurate responses

User Feedback

- ▶ Surveys to gauge user satisfaction, trustworthiness, pain points
- ▶ Measure attributes, such as latency for voice interaction

Quality Assurance

- ▶ Exploratory, scripted
- ▶ Localization
- ▶ Accessibility

Final Thoughts & Takeaways



Numerous Use Cases

AI has numerous use cases throughout the organization



Additional Risks

With the use of AI, as with any technology, comes additional risks



Internal Audit Can Help

As Internal Audit professionals we can help the organization adopt AI in a risk responsible manner

Questions?



Thank you



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Join Us!

**Strengthening
Corporate
Governance and
the Key Role of
Internal Audit**

TUESDAY, APRIL 22, 2025
3:00 – 4:00 PM ET / 2:00 – 3:00 PM CST



Join Us!

Navigating Third Party Risk: Internal Audit's Strategic Role

TUESDAY, JUNE 24, 2025

3:00 – 4:00 PM ET / 2:00 – 3:00 PM CST



Join Us!

Top 10 SOX Priorities and Considerations for Internal Auditors

TUESDAY, SEPTEMBER 30, 2025
3:00 – 4:00 PM ET / 2:00 – 3:00 PM CST



Join Us!

**Executive
Presence Unleashed:
The Internal
Auditors' Guide to
Building Relationships**

TUESDAY, DECEMBER 9, 2025
3:00 – 4:00 PM ET / 2:00 – 3:00 PM CST





About BDO USA

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