PRACTICE GUIDE

INTERNAL AUDIT IN THE AGE OF GENERATIVE AI

A strategic approach to implementing AI in internal audit

The Institute of Internal Auditors Netherlands

ISACA Netherlands Chapter

Colophon

Internal audit in the Age of Generative AI -
A strategic approach to implementing AI in internal audit

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ISACA Netherlands Chapter

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Generative AI tools were used to support parts of the drafting and editing process of this practice guide. All content has been reviewed, validated, and, where necessary, adapted by the authors. The authors remain fully responsible for the final content of this publication.

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Executive Summary

Generative Artificial Intelligence (GenAI) is transforming how internal audit functions, offering new opportunities for efficiency, analytical depth, and strategic impact. For internal audit, this presents both an unprecedented opportunity and a crucial responsibility. As organizations accelerate their AI adoption, internal audit teams must adapt to ensure assurance, risk management, and advisory activities stay relevant, efficient, and adding value.

This was the reason for IIA Netherlands and ISACA to create a practice guide with a practical roadmap on how internal audit leaders can integrate Generative AI into the internal audit function. It provides guidance on:

- Formulating a GenAI Strategy aligned with the IIA's *Vision 2035* and *Global Internal Audit Standards*;
- Building a structured roadmap across five maturity stages, from basic AI prompting to autonomous audit agents;
- Transforming processes, governance, and culture to support sustainable digital adoption;
- Avoiding common pitfalls that hinder successful AI integration.

The paper positions internal audit not just as an evaluator of AI risks but as a *leader in responsible AI adoption* within the organization. Successful transformation relies not only on technology but also on leadership, ethics, and a culture of learning. Through gradual implementation and strong leadership, internal audit can transition from a control-focused role to a proactive strategic advisor, demonstrating how technology and human judgment combined can increase audit impact. By responsibly embracing GenAI, internal audit can shift from a retrospective review to a forward-thinking advisor that enhances both assurance and value creation across the organization.

1 Introduction

Artificial Intelligence is transforming every part of organizational life, from strategy development to day-to-day operations. For internal audit, this change isn't distant, it's happening now. The question isn't whether AI will impact the profession, but *rather how quickly* and *how significantly* it will do so.

Around the world, organizations are integrating AI into core business processes, risk models, and decision-making systems. Executives and audit committees increasingly expect internal audit to provide faster insights, more in-depth analytics, and forward-looking assurance without a proportional increase in resources. This requires a strategic transformation in how audit work is planned, executed, and communicated.

Generative AI is emerging as a powerful tool. It can analyze large data sets, simplify complex information, and produce insights or documentation quickly. However, its true value is not just in automation but in how it enhances human expertise. When used responsibly, GenAI allows internal audit to move from being just a review function to proactively identifying emerging risks. This perspective aligns with recent research, by for example Marc Eulerich (MAB), highlighting how advanced technologies such as AI can enhance the efficiency, effectiveness, and strategic value of the internal audit function[1].

However, with opportunity comes urgency. If internal audit does not take the lead in defining its role in the AI-driven enterprise, others will. Functions such as compliance, data offices, or risk management may set the pace and narrative, potentially sidelining audit's unique perspective on governance and control.

The message is clear: internal audit must take action now. By strategically adopting AI, the department can improve efficiency, deepen analytical capabilities, and boost its advisory relevance and impact, which are key goals in both the new Internal Audit standards (GIAS[2]) and the IIA's Vision 2035 report[3]. This practice guide offers a structured path forward, helping internal audit move from understanding AI to using it as a vital tool for generating value and insights.

1 Marc Eulerich et al. (2025), Technology and Internal Auditing: An Overview of Performance Effects, Maandblad voor Accountancy en Bedrijfseconomie, themanummer IAF

2 The Institute of Internal Auditors (2024), Global Internal Audit Standards

3 The Institute of Internal Auditors (2024), Internal Audit Vision 2035: Creating Our Future Together

2. Devising a Generative AI Strategy

2.1 The Strategic Imperative

The internal audit profession is experiencing a major transformation driven by technological advances, disruptive trends, and emerging risks. The IIA's Vision 2035 report highlights this shift and stresses the importance of internal auditors adopting new technologies to stay relevant. The report states that "*92% of respondents agree that new technology is key to helping internal audit add more value.*"

Simultaneously, the report cautions that audit functions that fail to harness emerging technologies like Generative AI (GenAI) risk becoming irrelevant. To uphold its role as an independent, trusted advisor, internal audit must integrate GenAI into its strategy, processes, and skills.

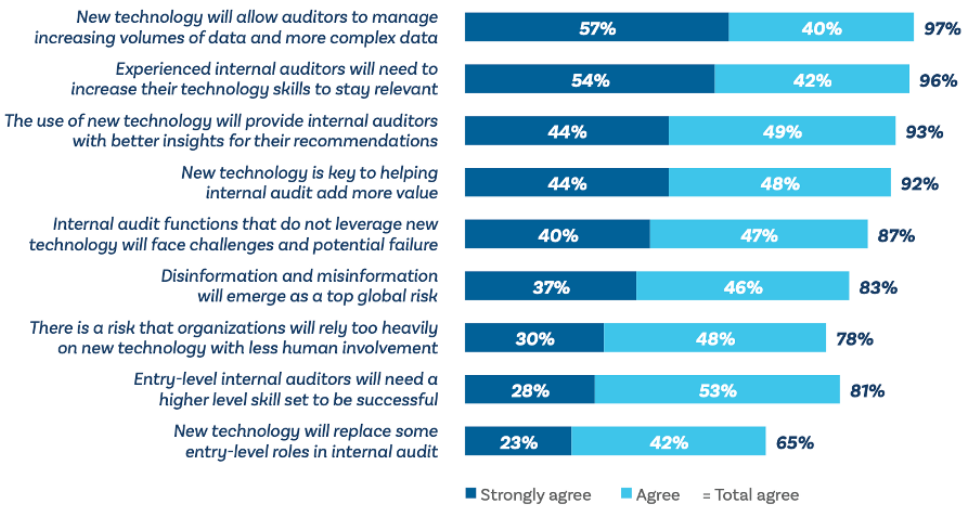

Figure 1: Q38. Please indicate your level of agreement with the following statements about new technology (such as AI, machine learning, and automation) and its impact on internal audit in the future. (n=6506). Source: Vision 2035 Survey.

This chapter offers a framework for developing a GenAI strategy, incorporating guidance from the Global internal audit Standards (GIAS) and aligning with the IIA's Vision 2035.

2.2 Grounding the Strategy in the Standards

When developing the GenAI strategy, internal audit functions should base their approach on the GIAS. Standard 9.2 requires the chief audit executive (CAE) to create and execute a strategy for the internal audit function that supports the organization's strategic objectives and meets the expectations of the board, senior management, and other key stakeholders. This strategy should include a vision, strategic objectives, and supporting initiatives.

Figure 2: An internal audit Strategy, from vision to initiatives

Additionally, the GIAS stresses the importance of technology. Standard 10.3 requires the CAE to ensure the internal audit function has the necessary technology to support the audit process and to regularly seek technological improvements. Auditors must be properly trained in using these technologies. Integrating these requirements into a GenAI strategy is essential for achieving efficient and effective use of technological resources in the internal audit function.

A strong GenAI strategy begins with adherence to the GIAS principles:

Standard 9.2	Develop and implement strategy	The Chief Audit Executive (CAE) must design a strategic plan that aligns internal audit with organizational objectives and stakeholder expectations. GenAI should be positioned as a key enabler of that strategic vision.
Standard 10.3	Use appropriate technology	The CAE is responsible for ensuring that the function has the right technol°gy and capabilities in place to support audit delivery. This includes ongoing training, evaluation, and enhancement of AI tools.

Table 1: Relevant GIAS Principles

By integrating these standards, internal audit ensures that technology adoption becomes a fundamental part of its mandate and governance, rather than an isolated initiative.

2.3 Strategic Design: From Vision to Initiatives

As outlined in the Global Practice Guide 'Developing an IA Strategy[4]' to shape the internal audit strategy, the chief audit executive should start by considering the organization's overall strategy, objectives, and the expectations of both the board and senior management. The CAE may also evaluate the types of services to be provided and the expectations of other stakeholders served by the internal audit function, as defined in the internal audit charter.

4 The Institute of Internal Auditors (2025), Global Practice Guide: Developing an Internal Audit Strategy

A variety of approaches can be used to develop a strategy, and common analytical tools can help shape this strategy, for example:

- **SWOT analysis:** identifies the internal audit function's strengths, weaknesses, opportunities and threats, to determine areas for improvement. This is a foundational tool in business strategy, helping to align internal capabilities with the external environment.
- **Gap analysis**: compares the current and desired states of the internal audit function. This approach is essential for identifying the steps needed to bridge the divide and achieve strategic goals.
- **Porter's Five Forces:** While traditionally used to analyze industry competition, this framework can be adapted to assess the internal audit function's position within the organization. It can help in understanding the power of stakeholders (board, senior management), the threat of substitute services and the function's competitive advantages.
- **Balanced Scorecard:** This approach translates the internal audit function's vision and strategy into a set of performance measures across four perspectives: financial, customer (stakeholder), internal processes and learning and growth.

Regardless of the approach, it is important to note that GenAI should be integrated into the overall internal audit strategy, with initiatives aligned accordingly. A single, cohesive strategy is more effective than multiple ones, since GenAI is a foundational technology that disrupts and influences all types of activities, organizations, and sectors. However, it is recommended to have an individual or team lead these GenAI initiatives to speed up implementation.

The supporting initiatives outline more specific tactics and steps for achieving each strategic objective. The initiatives that support the strategy should aim to:

- Developing internal auditors' competencies.
- Introducing and applying technology to improve the internal audit function's efficiency and effectiveness.
- Improving the internal audit function as a whole.

2.4 Defining Objectives for GenAI in internal audit

A clear internal audit strategy should define what the internal audit function aims to achieve by adopting GenAI. Typical objectives and corresponding initiatives may include:

Objective	Example Initiatives
Efficiency Gains	Automating repetitive tasks to free up auditors' time and accelerate report turnaround while at the same time achieving the same audit coverage.
Effectiveness Gains	Maintain current audit timelines but significantly enhance quality through broader and deeper data analysis. AI systems can ingest entire data populations (rather than samples) and highlight anomalies, trends or root causes that might be missed by traditional methods.
Talent Augmentation and shortage mitigation	Using GenAI as a force multiplier to address the talent crunch in internal audit by increasing the productivity of the existing internal audit team. In addition, embracing AI in the audit workflow can improve job appeal and productivity for younger auditors, helping attract and retain talent.
Reduced Reliance on Data Science Expertise	Leveraging user-friendly GenAI platforms to perform advanced analytics without requiring every auditor to be a data scientist. This allows auditors with general business and audit expertise to utilize GenAI tools.
Enhanced Advisory Capability	Reallocate auditor time from manual work to forward-looking advisory activities.

Table 2: Objectives of using GenAI

These objectives view AI not as a replacement for human auditors, but as a *force multiplier* that enhances the function's capacity and analytical depth.

During a presentation at the IIA Netherlands Conference 2025 by the authors of this practice guide, the relevance of these objectives was surveyed, as highlighted in figure 3.

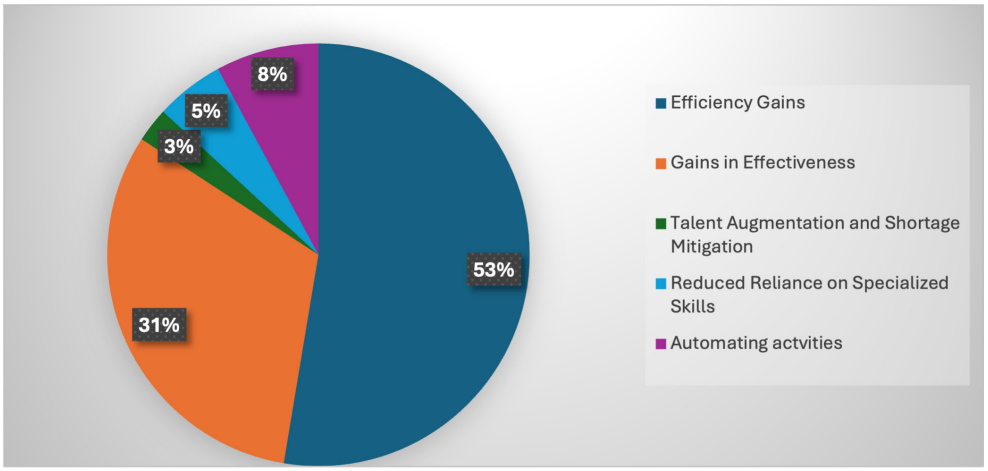

Figure 3: Which of these strategic objectives are most the relevant for your audit function. Source: Live survey during IIA Netherlands Conference 2025.

It is interesting to note that none of the respondents considered enhancing advisory capability by using GenAI to shift towards these advisory products as a relevant strategic objective. Meanwhile, from the Vision 2035 report, we see that CAEs and their stakeholders expect a shift in the product offerings of internal audit functions toward advisory services, moving away from traditional assurance-based products.

2.5 Prerequisites and Catalysts for Adoption

Implementing GenAI successfully requires more than just technology. internal audit must carefully address people, process, and governance aspects. Key steps and prerequisites to accelerate its adoption include:

People

- Increase Digital Fluency: Begin upskilling the audit team on digital terminology and AI concepts. Auditors don't all need to become engineers or coders, but they should understand AI capabilities and limitations. Investing in training, workshops and pilot projects helps build comfort with AI tools. A higher "digital IQ" in the department will accelerate acceptance and creative use of AI.
- Fostering a Culture of Innovation: an innovative mindset is a powerful catalyst for GenAI adoption. The CAE should encourage experimentation with new technologies and not penalize failures from pilot efforts. Internal audit departments that cultivate curiosity and continuous improvement tend to embrace change more readily. Over time this will increase adoption and integration into everyday audit work.

Process

- Engage Technology and Security Teams: Collaborate with IT and data governance professionals to understand the organization's position on GenAI use, data privacy requirements, and security protocols. Identify the appropriate decision-makers to secure approval for specific AI tools or to gain IT support for integrating these with existing audit systems. By getting involved early, internal audit can also advocate for budget allocations for AI tools that enhance assurance and compliance initiatives.
- Ensure Data Readiness: AI is only as good as the data it uses. Before deploying GenAI, internal audit should assess and improve its data assets. This includes standardized templates, cleaning up historical audit reports, risk and control matrices and other knowledge repositories. For example, one approach is to create a repository of past audit reports, findings and recommendations – a curated internal knowledge base that an AI assistant could draw upon to answer auditors' queries or identify common risk themes.

Governance

- Define Clear GenAI Goals: Articulate how GenAI will help achieve internal audit's objectives and broader organizational outcomes. This involves reviewing all audit process and tasks to identify use cases where GenAI can add value.
- Implement Robust GenAI Governance and Risk Management: Establish governance processes for the use of GenAI within internal audit and across the organization. The internal audit team should follow the organization's AI policy. Controls should be put in place for any AI used in audits, including approvals, testing, access management, and ongoing monitoring.

Each of these elements acts as both a prerequisite and a catalyst for sustainable adoption. In that regard, aligning with important stakeholders will be key. Engaging

with the board and senior management early is a prerequisite to success. Executive support can provide funding, promote cross-department cooperation and signal that the organization is serious about safe and effective AI use. This importance of leadership alignment is reflected in Figure 4, where 80% of respondents indicate that the board and senior management leverage internal audit to help achieve organizational objectives. Strong tone at the top, in turn, empowers internal audit to be bold in transforming itself through technology.

Figure 4: Q26. Indicate your level of agreement with the following statements describing internal audit's relationship with management at your organization. (n=4145). Source: Vision 2035 Survey.

2.6 Addressing Restrictions and Challenges

Internal audit departments may encounter various restrictions and challenges when pursuing GenAI, such as organizational policies on AI use, the need for partial adoption and data anonymization, and ethical considerations related to AI deployment. Organizations often impose strict rules on generative AI tools due to concerns about data security and privacy. As a result, internal audit must operate within these policies, exploring options like on-premises GenAI solutions or secure sandboxes.

While caution is necessary, completely forgoing GenAI carries risks for internal audit. If the audit department lags in GenAI adoption, it may experience knowledge gaps and be seen as less innovative or efficient. The Vision 2035 study warns that internal audit functions that do not leverage new technology will face serious challenges and potential failure.

Successfully integrating GenAI into internal audit requires support from top leadership. The CAE should involve the CEO, CFO, and audit committee to secure funding and ensure strategic alignment. At the same time, internal audit functions should be cautious of attempts to cut internal audit resources based on not yet realized gains from GenAI usage. That's why having a strong internal audit Strategy is crucial, allowing the CAE to outline the plan for the internal audit function and how AI assists in achieving it.

2.7 Conclusion

A well-defined GenAI strategy empowers internal audit to remain efficient, relevant, and forward-looking. By aligning technology adoption with professional standards, clear objectives, and strong governance, the function can transition from "checking compliance" to *shaping assurance in the digital age.*

The next chapter turns this strategy into a clear roadmap, highlighting the maturity phases and practical steps for integrating Generative AI into the audit process.

3. Building the GenAI Roadmap

3.1 The Rationale for a Roadmap

Generative AI (GenAI) is changing the internal audit function from just focusing on efficiency to becoming a data-driven source of foresight and strategic insight. However, adoption usually takes time. Most audit teams are still in the early testing phases, exploring use cases without a solid long-term plan or governance structure.

To advance from isolated pilots to enterprise-level integration, IA needs a **well-defined roadmap** that connects ambition with implementation. This roadmap should outline distinct stages of maturity, practical milestones, and the cultural and organizational factors necessary for lasting success.

3.2 The Five Maturity Levels of AI in internal audit

Internal audit can harness increasing value from AI by advancing through five maturity levels, from basic prompting skills to fully autonomous AI agents. Each stage builds on the previous one, integrating AI more deeply into the audit process.

Maturity Level	Core Focus	Key Competencies	Practical Benefits
1. Prompting	Learning to interact effectively with GenAI tools	Prompt engineering, context framing, iterative questioning	Time savings, improved decision support, consistent outputs
2. Prompt Library	Capturing and sharing successful prompts	Knowledge management, documentation, standardization	Faster audits, quality consistency, onboarding support
3. Fine-Tuning	Customizing AI models with audit-specific knowledge	Data preparation, supervised training, validation	Greater relevance, domain accuracy, deeper insights
4. Retrieval-Augmented Generation (RAG)	Connecting AI to internal data sources	Data indexing, governance integration, secure access	Real-time knowledge retrieval, traceable insights
5. AI Agents	Deploying autonomous digital audit assistants	Workflow automation, continuous monitoring, coaching	Continuous quality, real-time coordination, performance improvement

Table 3. Maturity levels of AI in IA

Each stage provides measurable value—from personal productivity improvements to enterprise-wide intelligence, but reaching level 5 is not an end goal in itself.

3.2.1 LEVEL 1: PROMPTING – ENHANCING HUMAN-AI INTERACTION

The first step is learning to communicate effectively with AI tools. Auditors develop *prompt engineering* skills—formulating structured, contextual questions that lead to relevant, accurate responses.

Practical Actions

- Train auditors to craft effective prompts for planning, risk assessment, and reporting.
- Encourage iterative refinement: use follow-up questions to sharpen AI outputs.
- Integrate prompt use into daily audit workflows (e.g., drafting work programs, summarizing policies).

Key Benefits

- Faster access to knowledge and draft materials.
- Consistency across audit deliverables.
- Empowerment of auditors to use AI confidently and responsibly.

Prompting forms the cultural foundation of AI adoption. A mindset shift from "using a tool" to *collaborating with a digital assistant.*

3.2.2 LEVEL 2: PROMPT LIBRARY – INSTITUTIONALIZING AI KNOWLEDGE

Once individual auditors are comfortable using AI, the next step is standardizing best practices.

A Prompt Library captures the most effective prompts and makes them reusable across the team.

Implementation Steps

- Collect and refine effective prompts from pilot projects.
- Organize prompts by audit phase (planning, execution, reporting) or topic (IT, compliance, finance).
- Maintain version control and ensure easy accessibility via internal knowledge platforms.

Benefits

- Faster, more consistent audit execution.
- Higher quality outputs through standardized wording and structure.
- Improved onboarding: new auditors can start using proven prompts immediately.

The Prompt Library transforms GenAI use from individual experimentation to a scalable, repeatable capability within the audit function.

3.2.3 LEVEL 3: FINE-TUNING – ADAPTING AI TO AUDIT LANGUAGE

In this stage, internal audit refines existing AI models with its own audit-specific data, terminology, and context.
Fine-tuning creates an *AI assistant that speaks the audit department's language.*

Key Activities

- Identify internal documents to train the model: audit methodologies, reports, risk frameworks, control libraries.
- Work with IT or AI partners to prepare and anonymize data for model training.
- Validate outputs regularly and retrain as methods evolve.

Outcomes

- AI delivers more relevant, context-aware results.
- Improved accuracy in draft reports, findings, and recommendations.
- Increased efficiency for complex tasks like policy comparison or thematic risk analysis.

Fine-tuning shifts the relationship from *generic AI use* to *custom intelligence* tailored to the organization's audit environment.

3.2.4 LEVEL 4: RETRIEVAL-AUGMENTED GENERATION (RAG) – CONNECTING KNOWLEDGE

At this maturity level, AI is connected directly to internal data sources such as previous audit reports, policies, and risk matrices.
This enables real-time, evidence-based responses backed by the organization's own documentation.

Practical Enablers

- Establish an internal, searchable knowledge base (e.g., using vector databases).
- Link AI to relevant repositories with proper access controls.
- Maintain continuous data updates and quality checks.

Benefits

- Auditors can instantly retrieve relevant insights ("What were last year's findings on procurement?").
- Consistent application of internal audit methodology.
- Faster, traceable decision-making based on factual references.

A RAG system essentially creates a *living memory* for internal audit, combining GenAI's reasoning power with verified organizational knowledge.

3.2.5 LEVEL 5: AI AGENTS – TOWARDS AUTONOMOUS AUDIT ASSISTANCE

At the highest maturity level, AI agents act as autonomous digital assistants capable of coordinating audit workflows, monitoring progress, and ensuring quality in real time.

Capabilities

- Track audit planning, task assignments, and deadlines.
- Review audit documents for completeness and consistency.
- Provide real-time feedback or coaching to auditors.
- Continuously learn from past audits to improve recommendations.

Impact

- Seamless coordination of complex audit processes.
- Continuous quality assurance through automated reviews.
- Personalized feedback and performance insights for auditors.

While fully autonomous audit agents are still emerging, early pilots demonstrate significant gains in productivity and quality. They represent the future of AI-enabled internal audit, featuring a hybrid model where human judgment and machine intelligence complement each other.

3.3 Designing the AI Transformation Roadmap

To transition from maturity level, IA should develop a multi-year transformation roadmap that aligns with its strategy, resources, and culture (considering that GenAI is a rapidly changing field). It should adopt an agile approach.

Key Building Blocks of the Roadmap

1. Governance:
   Establish a steering committee led by the CAE to oversee AI adoption, ensure ethical use, and manage risks.
2. Strategic Objectives:
   Define measurable goals linked to organizational priorities (e.g., "Achieve 50% process automation within two years").
3. Budgeting:
   Adopt a zero-based budgeting approach to free capacity for innovation. Start small, prove value, then scale.
4. Culture & Change Management:
   Promote curiosity and psychological safety for experimentation. Communicate clearly that AI augments, not replaces, auditors.
5. Process Redesign:
   Re-engineer audit workflows to integrate data analytics and AI insights at every stage.
6. Partnerships & Realism:
   Leverage existing enterprise data platforms, collaborate with IT and external experts, and focus on achievable, high-impact use cases.

These pillars ensure that AI transformation remains pragmatic, sustainable, and value-focused.

3.4 Phased Implementation Roadmap

A realistic roadmap translates the five maturity levels into actionable phases:

Phase	Focus	Key Actions	Expected Outcomes
1. Foundational	Establish data and skill baseline	Train team in digital literacy, launch first AI pilot	Awareness, basic capability
2. Structured	Standardize and document	Build prompt library, formalize methodology	Efficiency, consistency
3. Integrated	Embed AI into core audit tools	Connect GRC and analytics systems, introduce ML pilots	Deeper insights, agile planning
4. Optimized	Innovate and collaborate	Create innovation fund, strengthen external partnerships	Continuous improvement culture
5. Intelligent	Fully data-driven audit function	Deploy AI agents, automate coordination and QA	Predictive, adaptive audit function

Table 4:The 5 levels translated into 5 phases

Each phase builds confidence and momentum while maintaining clear governance and measurable success criteria.

3.5 Conclusion

A well-crafted GenAI roadmap transforms ambition into organized progress. By progressing through clearly defined maturity levels and integrating governance, training, and cultural change, internal audit can develop into a digitally empowered, insight-driven function.

The key is to start small, learn quickly, and scale wisely. Even modest pilot projects, like AI-assisted risk assessments or automated reporting, can provide tangible value and lay the foundation for long-term transformation.

The next chapter explores the pitfalls and risks that internal audit must anticipate to ensure that GenAI adoption remains responsible, ethical, and sustainable.

4. Pitfalls and How to Overcome Them

4.1 The Challenge of Responsible AI Adoption

GenAI provides internal audit a unique chance to improve efficiency, analytical depth, and advisory relevance. However, digital transformation rarely happens smoothly[5]. Many audit teams underestimate the behavioral, cultural, and governance changes needed to embed GenAI effectively.

This chapter details the most common challenges faced during GenAI adoption and offers practical strategies to address them.

4.2 Common Pitfalls in Digital Transformation

Pitfall	Root Cause	Typical Consequences	Recommended Mitigation
Overestimating AI's capabilities	Unrealistic expectations of immediate impact	Disappointment, loss of trust, stalled projects	Set clear, measurable goals; communicate that GenAI is an enabler, not a replacement for professional judgment.
Undervaluing technology	Traditional mindset that human effort outweighs digital tools	Missed opportunities, slow adoption	Demonstrate quick wins through small pilots; link AI use directly to audit value and efficiency gains.
Unclear ownership or leadership	Ambiguity between IA, IT, and management roles	Confused decision-making and project drift	Appoint a clear AI champion within internal audit and ensure CAE sponsorship.
Lack of executive sponsorship	Limited engagement from senior management or audit committee	No funding, no momentum	Secure early buy-in; position AI as strategic to assurance and compliance objectives.
Resistance among auditors	Fear of job loss or lack of digital skills	Low adoption, passive resistance	Provide training, emphasize augmentation rather than replacement, and celebrate learning successes.
Status-quo culture	"We have always done it this way" mentality	Slow innovation, declining relevance	Promote experimentation and psychological safety; include innovation in performance metrics.
Skills gap	Insufficient AI or data-analysis capability	Misuse of tools, poor-quality insights	Upskill auditors through structured learning paths and on-the-job mentoring.
Weak strategic focus	No clear roadmap or priorities	Fragmented initiatives, wasted resources	Develop and communicate a structured AI roadmap with clear milestones and KPIs.
Limited resources	No dedicated budget or time for experimentation	Half-finished pilots, no scalability	Reallocate budget via zero-based review; start with high-impact, low-cost pilots.

5 IIA Nederland (2025), Practice Guide: De weg naar succes volle digitalisering - de rol van internal audit

Pitfall	Root Cause	Typical Consequences	Recommended Mitigation
Data-quality and integration issues	Inconsistent or incomplete datasets	Unreliable outputs, poor confidence in AI results	Clean and standardize data; collaborate with IT on governance and metadata standards.
Privacy and compliance concerns	Unclear policies or fear of breaches	Over-restriction, project delays	Work within defined data-governance frameworks; use secure, sandboxed environments.
Technical incompatibility	Legacy systems not integrated with AI tools	Inefficient workflows, manual work-arounds	Align AI initiatives with enterprise IT roadmap; adopt modular, inter-operable solutions.
Rigid implementation	One-size-fits-all approach	Poor fit with audit practices	Customize AI tools to audit use cases; involve end-users in design and testing.

Table 5: Common pitfalls

4.3 Transformation Team Pitfalls

Even when technology and vision are clear, transformation efforts often stumble within the team itself.

Common mistakes include:

- Following management pressure too closely — losing the independence required to innovate responsibly.
- Focusing on satisfaction rather than impact — prioritizing acceptance over measurable improvement.
- Avoiding difficult conversations — failing to address scepticism or fear openly.

Mitigation:

Empower the transformation team with clear authority, explicit mandates, and direct communication channels to both the CAE and senior management. Promote transparent dialogue and reward constructive challenge.

4.4 Management-Level Pitfalls

Leadership commitment determines whether AI initiatives scale or stall. Frequent executive missteps include:

- Launching AI projects without defined KPIs or measurable business outcomes.
- Assigning AI as a "side project" instead of embedding it in strategic plans.
- Overemphasizing technology while neglecting cultural change.
- Failing to communicate a clear vision of AI's purpose and benefits.

Mitigation:

Management should incorporate AI into the overall enterprise strategy, allocate resources appropriately, and foster the desired mindset through transparent engagement and consistent communication.

4.5 A Strategic Approach to Overcoming Pitfalls

To overcome these obstacles, internal audit should follow eight guiding principles:

1. Create a clear AI vision and roadmap – Link every AI initiative to audit objectives and organizational value.
2. Secure executive buy-in early – Make AI part of board-level conversations.
3. Nominate an internal AI Champion – A dedicated leader to coordinate projects, training, and communication.
4. Invest in skills and learning – Blend formal training with on-the-job experimentation.
5. Adopt a flexible, iterative approach – Start small, evaluate impact, scale what works.
6. Manage data quality and governance proactively – Treat data as a strategic asset.
7. Embed ethics and compliance from the outset – Define policies for transparency, explainability, and bias control.
8. Measure, learn, and adapt continuously – Regularly review outcomes and update the strategy accordingly.

4.6 Conclusion

Generative AI presents internal audit with both opportunity and responsibility. Without clear leadership, strategic focus, and thoughtful implementation, AI risks becoming just another temporary trend.

Audit functions that address these pitfalls early, by aligning people, processes, and technology, can position themselves as forward-looking, data-driven partners to the business.

The future of internal audit is unmistakably digital. The question is not whether to embrace AI, but how proactively and responsibly the function chooses to lead this transformation.

5. Conclusion — Leading with Insight

5.1 The Evolving Role of internal audit

Internal audit stands at a decisive crossroads. The profession is moving beyond its traditional focus on compliance and control into a new era defined by data, intelligence, and continuous insight.
Generative AI is not simply a tool, it is a catalyst that reshapes how auditors think, work, and add value.

This transformation does not diminish the human element of auditing; it amplifies it. By automating what is routine, AI allows auditors to focus on what truly matters: critical judgment, ethics, and strategic foresight.
In doing so, internal audit can evolve from the *guardian of the past* to the *navigator of the future.*

5.2 The Opportunity and the Obligation

The rise of GenAI brings unprecedented opportunities:

- Efficiency gains through automation and intelligent workflows;
- Deeper insights through advanced data analysis;
- Enhanced advisory impact through predictive and real-time capabilities.

But with these opportunities comes obligation.

Internal audit must ensure that AI is deployed responsibly, transparently, and ethically, within both the audit function and the wider organization.

This dual responsibility defines the new leadership mandate for the Chief Audit Executive (CAE) and the audit community: To guide the organization toward innovation, while safeguarding integrity, trust, and accountability.

5.3 Five key takeaways for CAEs

Theme	Core Message	Action for internal audit
Strategic Positioning	AI adoption must align with the audit strategy and organizational objectives.	Embed AI into the function's long-term vision and annual plans.
Roadmap & Maturity	Progress through clear stages—from prompting to AI agents.	Define measurable milestones and revisit them regularly.
Governance & Risk	Ethics, data integrity, and compliance are non-negotiable.	Build robust governance structures for AI use within IA.
People & Culture	Auditors need curiosity, courage, and continuous learning.	Foster digital fluency and reward innovation.
Collaboration & Leadership	IA should lead by example and support responsible AI use across the organization.	Partner with IT, risk, and compliance to build cross-functional AI capability.

Table 6: Key take aways for CAEs

5.4 The Path Forward

The audit functions that will thrive in the AI era are those that:

- Start now, rather than waiting for perfect conditions;
- Experiment safely, balancing innovation with control;
- Invest in people, not just technology;
- Share learning, to build collective intelligence across the profession.

internal audit has always been built on curiosity and integrity.
In the coming decade, those same qualities will define how effectively it harnesses AI. By combining human ethics with machine intelligence, internal audit can continue to deliver assurance that not only protects value but creates it.

5.5 Final Thought

Generative AI is not replacing the auditor, it is redefining what auditing can become. The internal audit function that embraces this responsibility, strategically and confidently, will emerge not just as a *witness to change* but as a *leader of transformation.*

The future of assurance is intelligent, ethical, and human at its core.

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