



Is Internal Audit ready for its future strategic mandate in the era of AI?

The role of Internal Audit is evolving, from traditional assurance to a strategic business partner.

Organizations expect more than compliance.

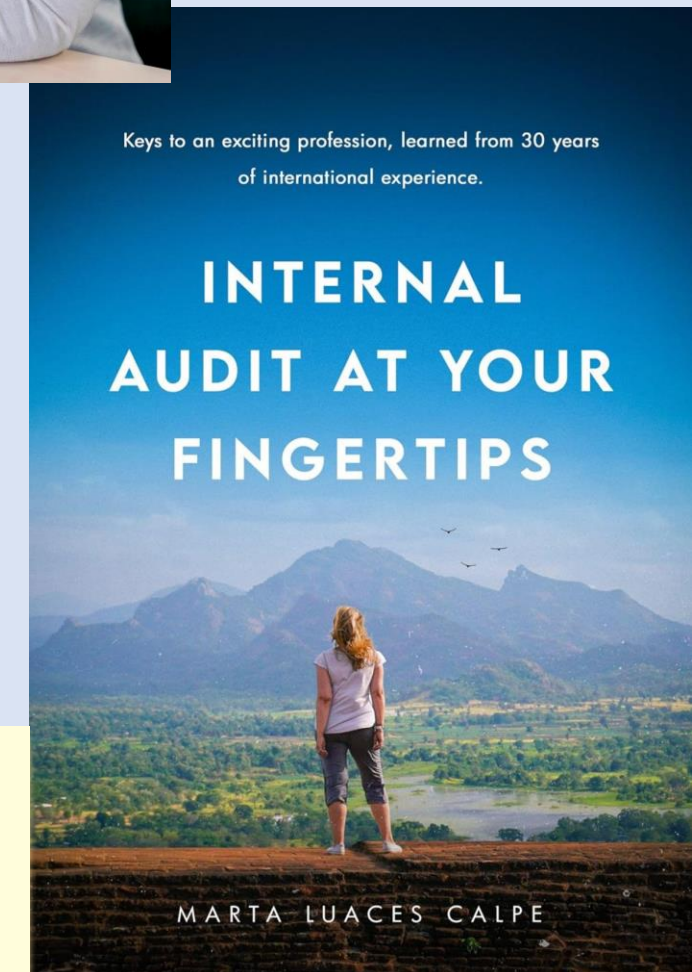
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 - ✓ “Internal Audit at Your Fingertips”
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What the Board and stakeholders expect today



Boards of Directors have rising expectations for Internal Audit, and no longer only compliance reports:

- anticipation of risks
- effective communication and
- strategic insight.



Forward-looking vision

Anticipate emerging risks: technology, cybersecurity, ESG and geopolitics



High-impact communication

Translate findings into actionable insights for the Board, effectively and with impact



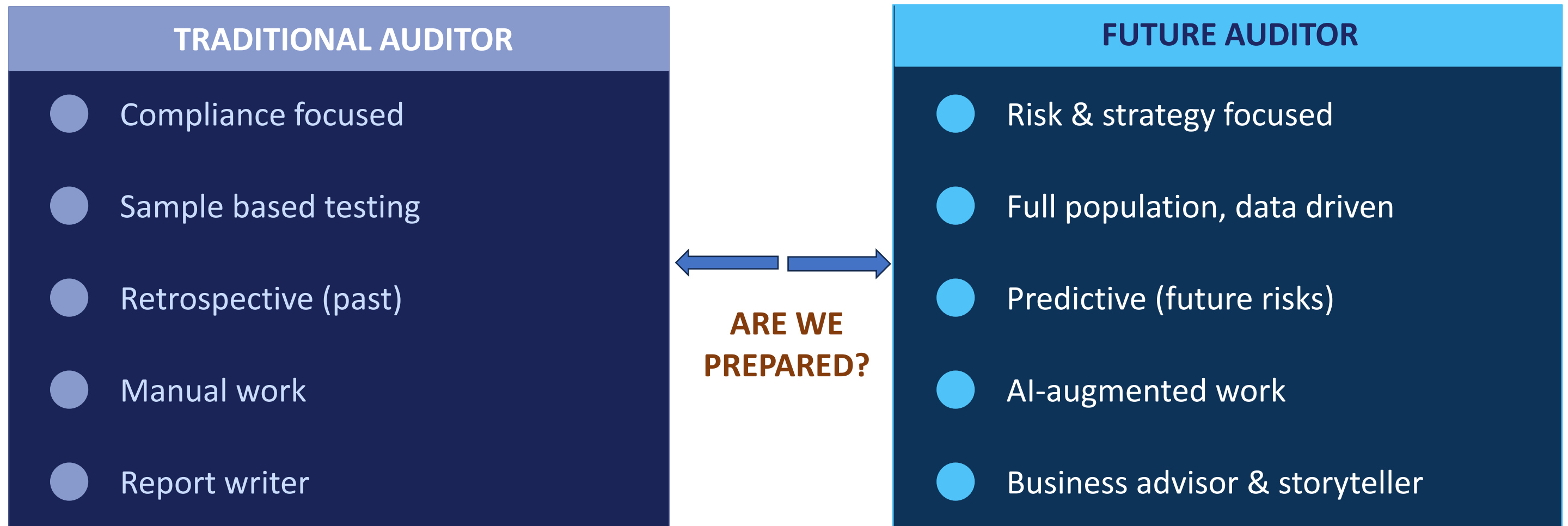
Balance of roles

Balance the roles of control assurance, advisory service and strategic insight



The profession is not disappearing — It's upgrading

Routine work will be automated. **AI is already automating repetitive audit work** and testing entire data populations. Auditors must interpret outputs, not just produce them. **Human value will be the judgment, insight and influence.**



Advantages of DA and AI

- Higher coverage & depth
- Faster and more timely insights
- Better risk detection
- Results consistency
- Efficiency gains and cost leverage
- Better audit quality
- More value-added activities



Constraints of DA and AI

- Inadequate Internal Audit approach
- Data quality, availability
- Data governance
- Model risk & reliability
- Regulatory expectations
- Privacy, security & access
- Skills gaps
- Cost





Auditors need to understand the process

CASE 1: Duplicate payment analysis without understanding payments process

What the auditors did:

- DA analytics test to identify duplicated payments for Health services, by filtering transactions with the same provider, date, client, and amount.
- They found multiple “duplicates” and directly concluded overpayments or fraud.

What the auditor missed (process understanding gap):

- Ambulances provide a service at a standard rate to pick up and return patients on the same day. This is a common service and it's not an issue.

Why the conclusion is weak:

- What looked like duplicate payments were actually correct transactions. **Without understanding how the services are provided and paid, and the controls in the process, the analytics produced false positives**, leading to unnecessary investigation and incorrect conclusions.



Auditors need to understand the process

CASE 2: Analysis of overtime costs without understanding operations

What the auditors did:

- Analysis of payroll data with DA and identification of a 30% increase in extra time costs over 3 months.
- They concluded there was poor cost control or potential abuse of overtime.

What they missed (process understanding gap):

- The period verified was the typical seasonal production peak.
- A hiring freeze prevented onboarding temporary staff.
- Overtime was pre-approved as part of a cost-efficient strategy instead of outsourcing

Why the conclusion is weak:

- DA correctly identified a trend, but the interpretation was incorrect. **Without understanding business cycles, workforce planning decisions, and management strategy, the auditor incorrectly raised a control issue.**



Auditors need to understand the process

CASE 3: User Access Review in IT Systems (Segregation of Duties, SoD)

What the auditors did:

Auditors extracted user access data and ran rules like :

- No user has both “create” and “approve” roles
- No user has administration privileges combined with business roles
- All access is aligned with predefined role matrices

Result: 99% of users comply with SoD rules

First conclusion: Access controls are well designed and operating effectively



Auditors need to understand the process

CASE 3: User Access Review in IT Systems (Segregation of Duties, SoD)

What auditors didn't understand (process gap):

They didn't dig into how access actually works in practice:

- Users can request temporary “firefighter” or emergency access.
- Emergency access logs are not regularly reviewed.
- Some critical actions can be done through indirect roles not in the main role matrix
- Shared accounts are used in certain teams for operational convenience

What was really happening in reality:

Users were requesting temporary privileged access:

- Performing sensitive transactions (e.g., creating and approving changes)
- Not being properly monitored afterwards
- Some users exploited indirect access paths
- Shared accounts made impossible to trace accountability



Auditors need to understand the process

Case 3: User Access Review in IT Systems (Segregation of Duties, SoD)

Why this created false assurance:

The auditor ignored how access is actually used.

Root cause of the failure:

The auditor didn't understand:

- the lifecycle of access
- the existence of workarounds and operational shortcuts.
- the difference between defined controls and effective controls

Key takeaway

Data analytics answered: "Do users have conflicting roles on paper?"

But missed: "Can users perform conflicting actions in reality?"

Lessons learned

Data analytics can highlight patterns, but without process knowledge, it often answers “**what is happening**” while completely missing “**why it is happening**”. That gap is where **poor audit conclusions** usually emerge.

Another **risk of not understanding the process is to provide false assurance**. Data analytics can be technically correct but misaligned with the process reality. That leads to the **most dangerous audit outcome: “We tested it, and everything looks fine”, when it isn’t.**

Activities of Internal Audit & use Artificial Intelligence



Risk Assessment

- **Defining & updating Audit Universe**
- **Evaluating** risks of the Entity
- **Assessing** the design & effectiveness of internal controls by
 - Data gathering
 - Interviews
- **Conclusion** and summary



Planning & Scoping

- Defining audit scope, objectives
- **Understanding the process** under review
- Preliminary risk assessment
- Developing the **audit program**



Execution

- Identify and **assess controls** by
 - Data gathering and analysis
 - Interviews & testing
- **Interpreting** results of testing
- **Identifying** root causes
- **Assessing** impact and likelihood of risks
- **Decide conclusions**



Follow up

- Monitoring if:**
- **agreed actions** have been **implemented**
 - **issues** have been properly **solved** **by:**
 - Data gathering
 - **Interviews**
 - Re-testing



Reporting & Communication

- **Writing audit reports** and **discussing** them
- Regular reporting **& Communication** with Management & Board

Use of Artificial Intelligence

AI is most useful where the work is: **data-heavy, repetitive, pattern-based or language processing intensive**

AI VERY USEFUL

1. Data analytics & anomaly detection

AI excels at:

- **spotting unusual transactions** (outliers, patterns, trends)
- **identifying hidden correlations** humans wouldn't see
- **monitoring 100% of transactions** instead of samples)

2. Document review & text analysis

AI is very effective at:

- **scanning** contracts, policies, invoices
- **extracting key clauses** or inconsistencies
- **comparing documents** against standards

3. Process mining & process understanding **(to a degree)**

AI can:

- reconstruct actual processes from system logs
- identify bottlenecks or deviations

4. Risk assessment & audit planning support

AI can help:

- analyze **historical audits**
 - identify **recurring issues**
 - suggest **higher-risk areas**
- But it should support, not replace, judgment.**

5. Drafting and documentation

AI is very useful for:

- **drafting audit reports**
 - **summarizing findings**
 - **structuring working papers**
- It saves time but needs review**

Use of Artificial Intelligence

Where AI struggles (and can create serious risk) is in areas that **depend heavily on context, judgment, human behavior and skepticism.**

AI STRUGGLES

1. Understanding the real process (the “how things actually work”)

With AI data can be analyzed but:

**it doesn't naturally understand.
Informal practices, workarounds, or culture**

Why this matters: most audit failures come from:

- undocumented practices
- human behavior
- exceptions to the “official process”

2. Evaluating control effectiveness **(beyond design)**

AI can check if a control exists and if it was executed But struggles with **whether the control is meaningful or easily bypassed**

3. Interviews, challenge, and professional skepticism

A big part of Internal Audit is:

- asking uncomfortable questions
- reading hesitation or inconsistency
- challenging management explanations

AI cannot sense evasiveness, apply pressure, adapt questioning dynamically like a human

4. Ethical judgment and materiality decisions

AI doesn't truly “understand” what is materially important in context and what is acceptable versus unacceptable behavior.

These require:

- experience
- business understanding
- judgment under uncertainty

5. Root cause analysis

AI can identify patterns, but root cause often sits in incentives, culture, or management decisions

AI apps

 **General-purpose AI assistants**
ChatGPT - Gemini - Copilot – Perplexity - Claude

 **Writing & communication**
Grammarly - Notion AI - Jasper

 **Data analysis & productivity**
Excel (with Copilot) - Tableau - Power BI

 **Coding & development**
GitHub Copilot - Python - Visual Studio Code -
Replit - Cursor - Lovable

 **Design & creative work**
Canva AI - Firefly - DALL·E - Synthesia
Runway – ElevenLabs - Midjourney

 **Meetings & productivity automation**
Otter.ai - Zoom - Slack - Granola -
Wispr Flow - Superhuman Mail - Notion AI

 **Customer service & sales**
Salesforce (Einstein AI) - HubSpot - Zendesk

 **Automation & workflows**
Zapier – Make

How to estimate potential FTE impact

Map all current relevant tasks:

- list all audit assignment activities by phase (e.g. planning, data gathering, testing, issue writing, reporting, follow-up)
- list rest of audit activities (e.g. reporting, presentations in AC, staff management, quality assurance, budget management, fraud)
- estimate time spent.

Identify automatable tasks: data extraction, standard tests, translation of documents to English, quality review of documents according to report writing rules, narrative of risk assessment considering all documentation available, automated creation of audit report taking the information from the database

Estimate efficiency gains: define the impact of DA and AI in terms of time saved for doing audit assignments, considering also the time invested in creating prompts and in ensuring data quality.



Impact on FTEs

- **Potential productivity gains:** Repetitive, data-heavy tasks (data extraction, basic testing) can be automated, freeing time for higher-value work.
- **Role evolution:** Staff shift from manual execution to interpretation, root-cause analysis, remediation tracking, and risk-based advisory services.
- **Possible headcount impact:** headcount reductions or reallocations in lower-value, high-volume tasks, staff increase with expert profiles in DA & AI.



Profile of the internal auditor of the future



01

Strategic thinking &
business acumen

Strategic thinking

- Internal audit is expected to become a **strategic advisor, not just a control checker.**
- **Why is this happening (root cause)**, what does it mean for the **future**, and how should we respond?
- **Ability to connect findings with business objectives and Board priorities**

Business Acumen

Understanding business, and value drivers

Profile of the internal auditor of the future



02

Executive
communication

Data to action

- Translating complex data into clear, concise and **actionable messages**

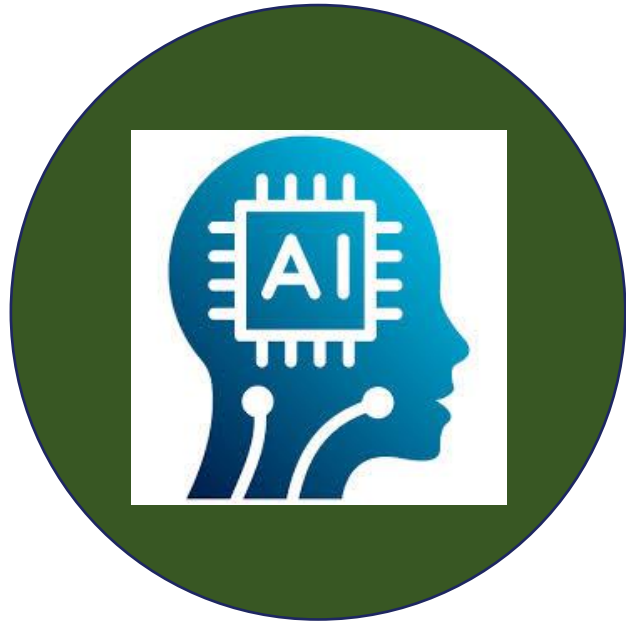
Impact

- Creating impact, **influencing senior stakeholders**
- **Writing impactful audit reports**
- **Building relationships** across the business

Storytelling

- **Storytelling** is now considered a **core audit competency**

Profile of the internal auditor of the future



03

**Technological
Proficiency**

Data Analytics & Artificial Intelligence

- Proficiency in **analytical tools & data** management
- **Comfortable working with AI and IT** transformation

Interpretation

Auditors must interpret outputs, not just produce them:

- **critical thinking & judgment**
- **risk interpretation** (not just identification)
- **challenging assumptions**
- **connecting dots** across business functions

Talent development and multidisciplinary teams



The Internal Audit function of the future requires **teams with diverse profiles**: auditors, data scientists, technology specialists and business experts, capable of addressing complex risks with depth and perspective.

Continuous training

Structured upskilling program in Analytics and AI

Rotation and diversity

Bring in external talent with experience in business, technology and communication

Learning culture

Encourage intellectual curiosity and adaptability to change as core values

The time to act is now

Internal Audit has a **historic opportunity to redefine its value.**

Organizations that **invest today in strategic capabilities, technology and talent** will be better positioned to lead tomorrow.

3

Key roles

Assurance, advisory and
strategic insight in balance

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Key pillars

People +
Artificial Intelligence

1

Final objective

Create real value for the Board and the organization



Questions? Let's discuss together i

