



Using data and technology to drive innovation in internal audit

20 June 2025

Ask a question



The screenshot shows a mobile application window titled 'Q&A'. It displays a question 'What happens when I raise my hand?' asked at 18:03, and an answer 'I can take you off of mute.' by Molly Parker at 18:04. Below the answer is a large text input field with the placeholder 'Please input your question'. At the bottom, there is a checkbox labeled 'Send Anonymously' and a blue 'Send' button. An arrow points from the 'NOTE' text to the 'Send' button.

To ask a question

Click on the **Q&A** button in the bottom toolbar to open the submit question prompt.

Type your question and click send

NOTE: If you wish to ask your question anonymously check the **send anonymously** box shown on the illustration.



Did you know?

ICAEW's revised Continuing Professional Development (CPD) Regulations brought in new CPD requirements, including a minimum number of hours and an ethics requirement.

This webinar could contribute to up to 1 hour of verifiable CPD, so long as you can demonstrate that the content is relevant to your role.

Find out more about how these changes affect you at [icaew.com/cpdchanges](https://www.icaew.com/cpdchanges).



Today's speakers



Carolyn Clarke
BRAVE



Riaan Thiar, Prelude
Business Solutions



Dr Iain McGregor,
GIAA



Aaron Altrock,
Wise



Peter Tansley,
BBC

Data, Technology, Innovation.

Carolyn Clarke
Founder
Brave Within LLP

carolyn.clarke@braveconsultancy.co.uk





Data Analytics & AI in IA

Developing an Internal Audit Strategy



Riaan Thiart
Riaan@preludeconsulting.co.uk

#IA&AI

How to create a DA/AI Strategy

Just Ask ChatGPT to write one!

INTERNAL AUDIT STRATEGIC PLAN

Vision Position Internal Audit as a forward-looking, technology-enabled assurance function that enhances stakeholder confidence through advanced data analytics and responsible use of AI.

Topic 1: Optimising the Use of Data Analytical Techniques

Strategic Objective Establish data analytics as core enabler of audit coverage, insight generation, and risk responsiveness.

KRA 1: Embed Data Analytics into the Audit Lifecycle

KPI 1.1 % of audits incorporating data analytics techniques
KPI 1.2 Reduction in average time to complete fieldwork due to analytics use

KRA 2: Enhance Auditor Capability and Confidence in Data Tools

KPI 2.1 % of audit staff trained and certified in data analytics tools
KPI 2.2 Auditor self-assessment scores on data proficiency

KRA 3: Develop Reusable Analytics Assets and Infrastructure

KPI 3.1 Number of reusable analytics scripts/modules in library
KPI 3.2 Improve Data Quality and Access Across the Function

Topic 2: Using AI in the Audit Process

Strategic Objective Utilise AI to enhance audit effectiveness, efficiency, and insights while maintaining trust, governance, and transparency.

KRA 1: Identify and Pilot High-Impact AI Use Cases

KPI 1.1 Number of AI tools/use cases piloted
KPI 1.2 Audit efficiency improvement (hours saved) from pilots

Topic 3: Auditing the Use of AI by the Business

Strategic Objective Utilise AI to enhance, efficiency, and insights while maintaining trust, governance, and transparency.

KRA 1: Establish Audit Coverage of Enterprise AI Use

KPI 1.1 % critical AI/ML systems mapped and risk-rated
KPI 1.2 % business units with AI coverage in audit universe

KRA 2: Review Ethical, Regulatory and Privacy Dimensions of AI Use

KPI 2.1 % of AI systems reviewed for GDPR and fairness risks
KPI 2.2 Number of AI audit findings linked to ethical or compliance gaps

Vision

Position Internal Audit as a forward-looking, technology-enabled assurance function that enhances stakeholder confidence through advanced data analytics and responsible use of AI.

Topic 1: Optimising the Use of Data Analytical Techniques

Strategic Objective:

Establish data analytics as a core enabler of audit coverage, insight generation, and risk responsiveness.

KRA 1: Embed Data Analytics into the Audit Lifecycle

KPI 1.1: % of audits incorporating data analytics techniques
KPI 1.2: Reduction in average time to complete fieldwork due to analytics use

KRA 2: Enhance Auditor Capability and Confidence in Data Tools


KPI 2.1: % of audit staff trained and certified in data analytics tools
KPI 2.2: Auditor self-assessment scores on data proficiency

Ask anything

+ 🔊

KPI 3.2: % of audit engagements leveraging existing scripts





A Strategy is as much
about hearts and
minds as it is about
technical objectives

Hearts & Minds

Vision

Compelling, convincing, exciting

Buy-in

Audit Committee, Exco, Team

Communication

Creating the critical mass

Technical

Objectives


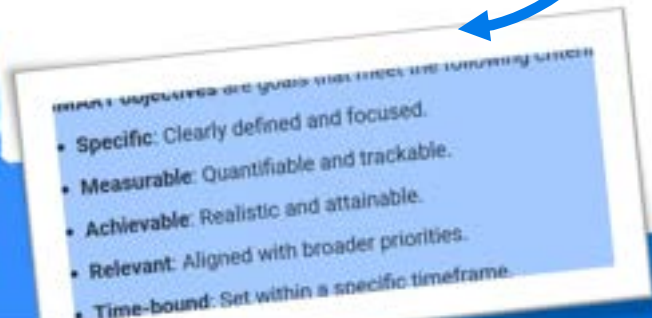
SMART Objectives, Outcomes, End-in-
mind

Key Result Areas

Milestones, Targets, Deliverables

Key Result Areas

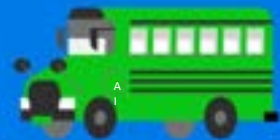
Leading (are we getting there), Lagging
(did we get there)

- 
- 
- SMART Objectives are goals that meet the following criteria:
- **Specific:** Clearly defined and focused.
 - **Measurable:** Quantifiable and trackable.
 - **Achievable:** Realistic and attainable.
 - **Relevant:** Aligned with broader priorities.
 - **Time-bound:** Set within a specific timeframe.



Did we miss the Data Analytics

Bus?



If you are still developing a Data Analytics Strategy for Internal Audit, you are not alone!

But is it too late? Should you not be running to catch the AI Bus?

Most Common Barriers:



Poor quality /
accessibility of data



Lack of skills /
champions

Use Cases: Data Analytics

- Internal Audit Planning & Risk Assessment
 - Risk-based prioritization
 - Trend Analysis
 - Real time monitoring
 - Predictive modelling
- Fieldwork
 - Scoping
 - Stratification
 - Process mining
 - Anomaly detection
 - Full population testing
 - Continuous Auditing/ Monitoring
- Reporting
 - Interactive dashboards
 - Visual storytelling
 - Quantification of the impact



Getting on the AI Bus

Strategic Questions to Ask?

1. What are the barriers to using AI in your organisation?
2. How can we use AI to the benefit of the internal audit process? (Efficiency / Insight / Foresight)
3. Which guardrails will we need to implement?
4. What skills will we need and where will we get these?
5. How will we audit the business' use of AI?

Use Cases: AI in IA

Uncharted waters, but here are some thoughts

- Research for planning audits
- Risk and control drafting (prompt)
- Drafting audit programmes / risk control matrices
- Quality assurance
- Drafting reports
- Visualization of reports
- Checking software code
- Developing DA script
- Developing your IA Strategy!
- Analysis of audit reports for themes / common root causes
- Searching organisational information assets
- Analysis of timesheets



Prompt Engineer

• Page 2: Attrition & Tenure

Visual Type	Data	Filters
Line Chart	Terminations by Month	Year
Gauge	Average Tenure	—
Matrix	Employee Name, Start/End Dates, Tenure	—

DAX:

```

Tenure (Years) =
DATEDIFF(
    'EmployeeData'[Employee Start Date],
    COALESCE('EmployeeData'[Employee End Date], TODAY()),
    MONTH
) / 12

-- Example: Tenure = DATEDIFF('EmployeeData'[Tenure (Years)])
    
```

Calendar - nam@preludeconsulting.co.uk

ICAEW Internal Audit Community webinar - Using data and technology to drive inno...

For 25/06/25 10:30 - 12:00

Zoom - See Individual Links Below

ICAEW Internal Audit Community webin... 44

Accepted Change



sky news · 12d · on MSN

Did ChatGPT lie?

Goal 1		Goal 2		Goal 3	
Objectives		Objectives		Objectives	
Objective 1		Objective 1		Objective 1	
Objective 2		Objective 2		Objective 2	
Metric 1	Metric 2	Metric 1	Metric 2	Metric 1	Metric 2
Target	Target	Target	Target	Target	Target



Government
Internal Audit
Agency

AI in Internal Audit

Dr Iain McGregor

Government Internal Audit Agency

June 25





Government Internal Audit Agency

- Internal Audit and Counter Fraud and Investigation
- 500 staff
- 15 of 17 Central Government Departments
- 130 other Government Organisations



Uses of AI in Internal Audit



Writing emails,
reports, policies



Communications
including image
generation



Analysis of text for
insights



Q&A

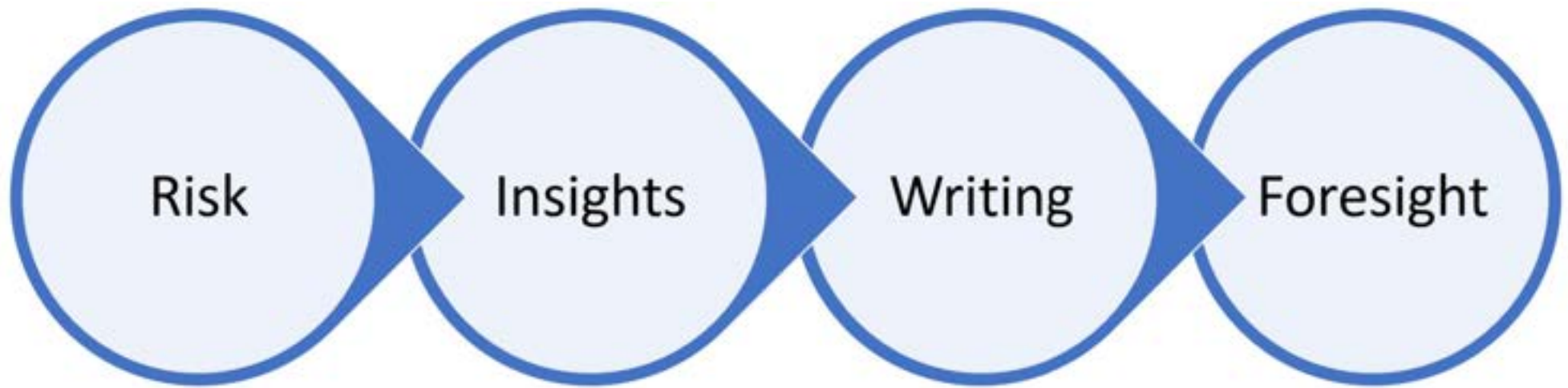


Risk articulation



Analysis of numbers

GIAA Efficiency Engines



Implementation

- Security
 - AI hosted in the UK
 - No sharing of data
- Engagement with staff
- Benefits

The screenshot displays the GIAA Risk Engine interface, which is a web-based tool for risk assessment. The interface is divided into several sections:

- Header:** GIAA Risk Engine, About, Risk Articulation, and Government Internal Audit Agency logo.
- Step 1:** Insert the Business Objective (do not input personal information). The Business Objective field contains "Use AI effectively and securely". A button "Now go to Step 2" is visible.
- Step 2:** Choose a risk category. A dropdown menu shows "Any". A button "Get potential causes" is present. Below, a list of potential causes for not meeting business objective is shown, with "[2] Lack of expert knowledge: Knowledge and expertise in AI are critical factors in ensuring effective and secure deployment. A lack of expert knowledge can result in poor decision-making and compromised system security." highlighted in blue.
- Step 3:** Which cause would you like to use? A dropdown menu shows "2". A button "Get potential events" is present. Below, a list of potential events from the selected cause is shown, with "[2] Ineffective system performance: Lack of expertise in AI can lead to the creation of systems that do not meet the desired goals or objectives, resulting in ineffective performance." highlighted in blue.
- Step 4:** Which event would you like to use? A dropdown menu shows "2". A button "Get potential consequences" is present. Below, a list of potential consequences of the selected event is shown, with "[2] Decreased competitive advantage: Failure to effectively implement AI can lead to competitors gaining an advantage in terms of efficiency, productivity, and cost savings." highlighted in blue.



Government
Internal Audit
Agency

Iain.Mcgregor@giaa.gov.uk

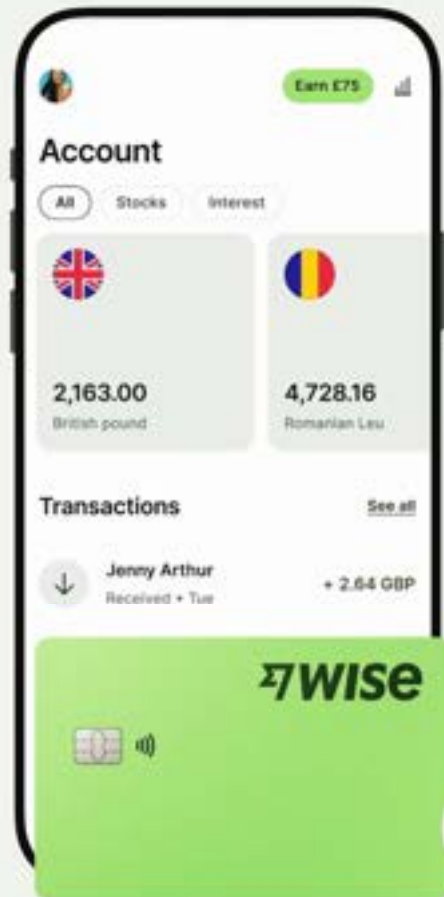
[Linkedin: /in/iainjmcgregor](https://www.linkedin.com/in/iainjmcgregor)



INNOVATION IN INTERNAL AUDIT IN FINANCIAL SERVICES

OPPORTUNITIES AND CHALLENGES
Aaron Altrock, Head of IT Audit





Wise Account



Wise Business



Wise Platform

Provide independent, objective and timely assurance, insight and advice to Wise's Boards and Leadership Team, enabling 'money without borders' by supporting effective risk management, growth and scalability.

Financial services are inherently complex in general

Range of products and services

- Wide range of financial products and services
- Diverse corporate and retail customers
- Global integrations

Extensive regulatory landscape

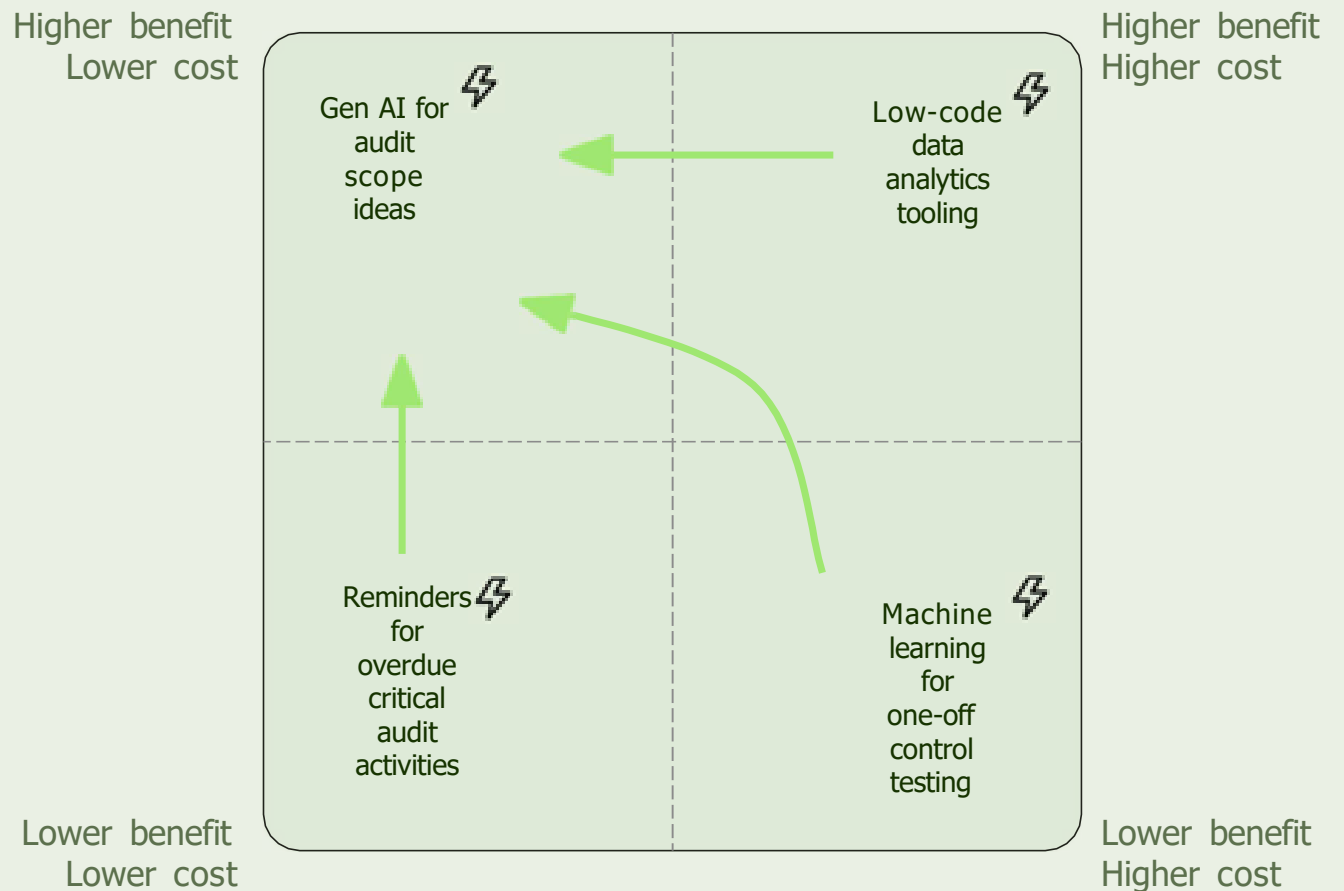
- Highly regulated
- Varying international and local regulatory requirements
- Ever changing

Highly interconnected

- Wide range of channels
- Increasing scale and volume
- More real-time than ever before

Not all use cases are equal.

- Unique for each organisation
- Focus on outcomes
- Find newly opportunities to unlock
- Direct and indirect benefits and costs
- Strategic vs tactical

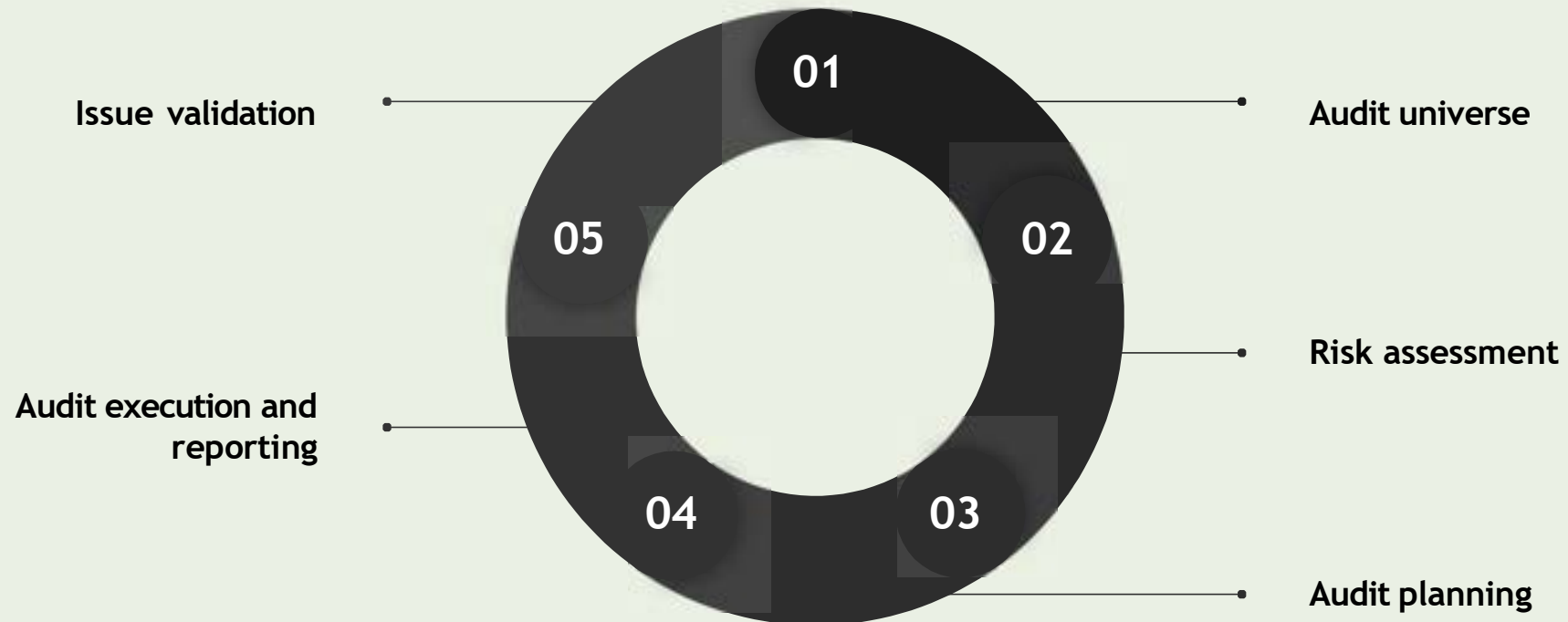


Internal audit-wide

More breadth focused: Benefits likely across the whole function.

Portfolio specific

More depth focused: Benefits to specific audit portfolios.



Challenges to overcome, generally in internal audit.

Often, the biggest challenges aren't technical ones.

People

- **Not empowered** → named owners and senior sponsors
- **Fear of unknown** → clear roadmap and engagement
- **Fear of failure** → training, support and psychological safety
- **Personal impact** → focus innovation on user experience and not functions


Process

- **Unclear scope** → define outcomes and success at the outset
- **Delay** → agile approach to bring value early iteratively
- **Non-compliance** → early engagement for clarity and unblock obstacles
- **Not fit for purpose** → consider integration with current processes in design

Technology

- **Poor data** → reduce scope vs hold-off and treat first
- **Unknown benefit and cost** → proof of concepts
- **Barrier of entry** → collaborate with others to onboard new capabilities

THANKS

A solid blue horizontal bar spanning the width of the slide, positioned at the top.

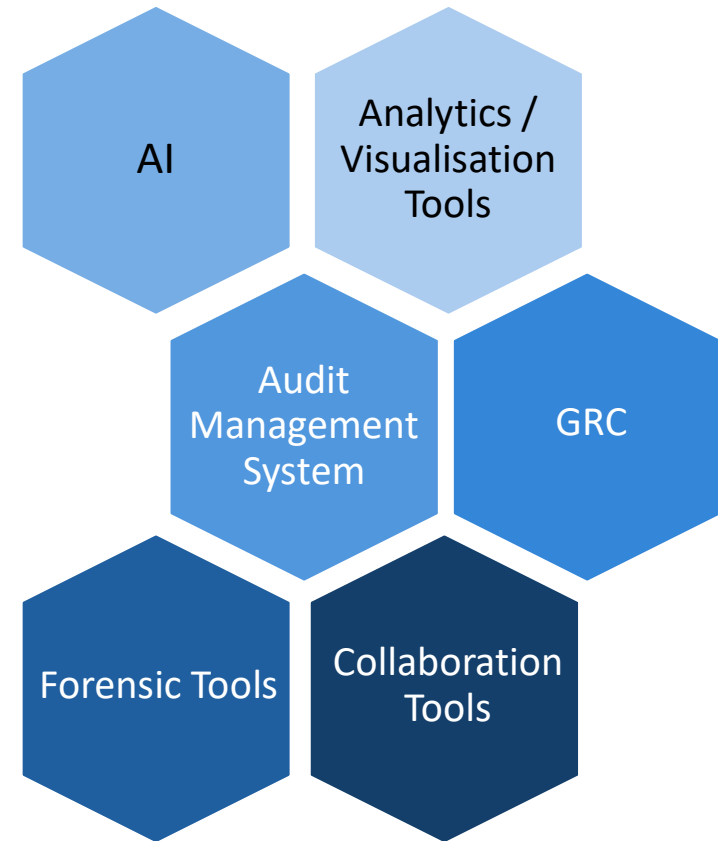
Techniques and tips for internal audit uptake including visualisation

Peter Tansley

BBC Internal Audit

BBC Internal Audit

- Our Technology v the EQA
- Quick update on AI audit approach



IIA Standard: The chief audit executive must strive to ensure that:

- *Internal audit has technology to support the internal audit process.*
- *Technology requirements and usage are regularly evaluated, and opportunities to improve effectiveness are pursued.*
- *Appropriate training is implemented for internal auditors in the effective use of technology.*
- *The IA strategy considers and incorporates technology requirements.*

EQA Opinion: Use of Technology – “Good”:

- ❖ *“There is still potential to adopt more of a 'digital-first' mindset across the Function; which would demonstrate how the team is staying in lockstep with the organisation. This means thinking digital proactively in every stage of the life cycle”*
- ❖ *“....showcasing technology and innovation is important to demonstrate the forward thinking of the function. Stakeholders interviewed commented they haven’t seen innovation in the way that audits are delivered and reported”*
- ❖ *....an overdependence on co-source for analytics and forensic work.....*

Technology Suite

AI

Microsoft Co-pilot and Chat GPT. Access (and training) to a secure version of Co-pilot where content is not added to large language models. Used for all parts of audit cycle, including translation

Audit Builder – AI tool using the **Mistral LLM**. Based on prompts the tool will create a generate work programme that can be tailored for BBC. Working to roll out for use from 2025.

Analytics/
Visualisation

SQL – We currently utilise a secure server which is running SQL. This is used for reviews requiring analysis of large data sets. Examples have included working capital management, sickness and absence, and editorial reviews.

Visualisation and Reporting – continued development of **Tableau** used in conjunction with the output of SQL to visualise review findings.

AI – smaller data sets interpreted using co-pilot/ chat GPT

Work flow
tools

Teammate – Cloud based system implemented since 2022, mandated usage by staff and partners.

Offshoring – Action tracking and routine assurance outsourced to TCS/ Chennai (using **Teammate**)

Nearshoring – FRC testing and routine assurance to PWC Belfast using **Workiva**

Technology Suite

Collaboration tools

Dropbox – overdependency and issues around data quality, version control and sharing with partners.

Egress – for secure sharing of documents

Multiple collaboration tools, add to control risk

Teams and Teammate – now mandated tools

Canva – used for reporting, communications etc

Forensics

Social and public media scraping – we use tools to review editorial usage and impartiality risk, often in conjunction with Big 4

Axiom - email interrogation software, used to support on approved investigations, very easy to use.

Analytics – prefer dedicated tools rather than gen AI given sensitivity

GRC

Exploring options

BBC IA – Auditing AI



Our Involvement

- Auditing AI has been an established part of our plan since 2020
- Focus was on internally developed ML, procured AI was expensive, and less common, limited end user input. Focus on R&D and use case.
- Now - cheaper to procure and functionality much more common; Gen AI has accelerated end user challenges
- Shift from central governance and set standards, to controlled usage and adoption.
- Key BBC risk is an editorial one



Audit Activity

- AI Development – controls around R&D cases
- AI Procurement – risk assessment and concurrence for acquired AI, e.g. for recruitment
- AI Usage – editorial tools used by journalists to produce copy or content and verify assertions and data
- AI local development – proliferation of AI initiatives, both a control, VfM and opportunity risk.

Questions?

