



Internal Audit Service - Data Analytics Strategy

2023–2026



Contents

Introduction and Vision

The Challenge

Data Analytics Maturity Model

Internal Audit's Objectives



Introduction and Vision

The council has a large amount of information and data that it holds. Everything from social care for vulnerable children or adults, education, procurement and finance to planning applications produces huge quantities of data. There can be difficulties in analysing the data, in particular where it is not structured or easily accessible, or where it includes personal and / or sensitive information. It is, however, all potentially hugely beneficial in helping the council's decision-making processes and in making services more targeted and effective. As such the council is becoming a more data driven organisation using data to inform decisions such as where council resources should be allocated to have the biggest impact, to save officer time in front and back-office processes. Data can provide insight into the causes of problems and aid in finding solutions to these problems.

The increased use and reliance of data across the council is both a threat and an opportunity for Internal Audit. The traditional approaches to sampling and manual testing within a growing and complex population of data provides challenges to Internal Audit. We need to adapt and align our approach and skills sets to best meet the challenges posed through modern and evolving ways of working. As Internal Audit we need to re-think our approach to data, how we analyse and utilise this data in a timely manner. Data analytics has become a critical tool to add to the auditors' toolkit providing an opportunity to assist in the credibility of assurance work, and the maximisation of audit findings and value.

Data analytics has a range of alternate definitions, however it can be summarised as the process of examining data sets in order to find trends and draw conclusions about the information they contain. For example: running through a number of data sets to look for meaningful relationships between them.

This strategy outlines Internal Audit's aim to work towards a position where data analytics is fully embedded within our activities, and we are regularly and successfully using data analytics to provide insight and foresight to our partners and clients.

This strategy also supports conformance with the Public Sector Internal Audit Standards (1220.A2): 'in exercising due professional care internal auditors must consider the use of technology-based audit and other data analysis techniques'.

Internal Audit – 'The Challenge'

The challenge to any Internal Audit service within any organisations is to improve their strategic relevance, to be insightful and innovative in understanding what is over the horizon.

To meet this challenge a modern Internal Audit team needs to develop the tools to enable more advanced risk analysis, challenge the focus of internal audit activity, challenge existing resources and techniques and find ways to access information to optimise intelligence to help drive change in meeting the organisations objectives.

There is a challenge for the audit team to ensure we bring the client along with us during the development. Client engagement is key to the success of these new techniques. This is to



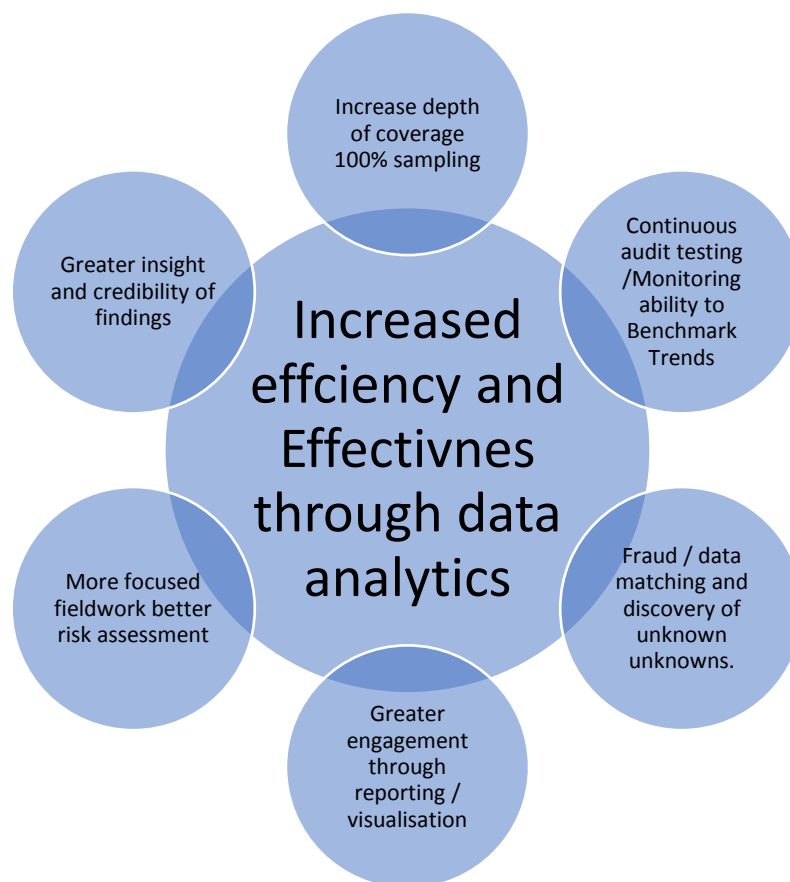
ensure that clients have trust in the results, provide prompt and full access to data and they gain value from continuous auditing.

The Internal Audit service has a unique opportunity to achieve this through the effective use of data analytics to assist in the identification of risks and provision of insight into the organisation.

While it is management’s responsibility to ensure that risks are appropriately mitigated, Internal Audit can focus its use of data analytics to home in on areas or transactions where controls do not exist or are not operating effectively.

The effective use of data analytics can provide significant benefits to internal audit and the wider organisation through increased efficiency and effectiveness across a range of key areas (see Figure 1. Bellow)

Figure 1



Data Analytics Maturity Model

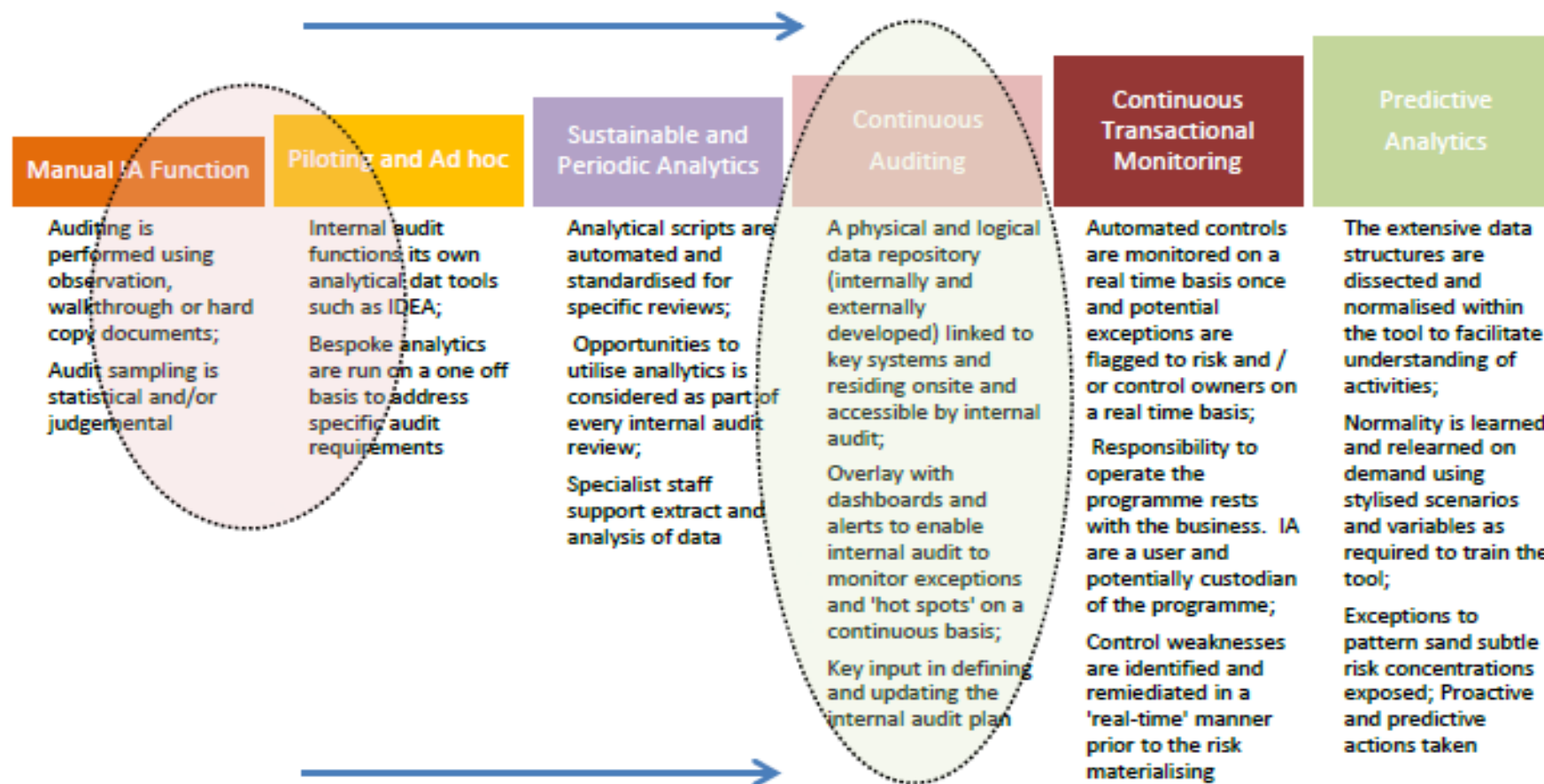
The Internal Audit service is starting its data maturity journey from a low base. An audit team's data maturity can be measured on a sliding scale from a 'manual audit Function' at one end of the scale to embedded 'Predictive Analytics' as the optimum position. Over the last few years there has been very little investment in data analytics in terms of the technology and skills the auditors require. However, within the team there are a number of Auditors who have some data analytics knowledge and skills that provides a good base for the team to build from.



The service has recently purchased up to date software (Idea) and is currently reviewing how this can be best deployed within the key financial systems. Therefore, as detailed in Figure 2 the Head of Internal Audit has judged the service's maturity as moving from Manual Audit functions to Piloting and Ad hoc. A key aim of this strategy is to help move the service forward in its maturity level to a continuous Audits stage within the three-year life span of this strategy.



Figure 2



Internal Audit's Objectives

The strategic objectives of this strategy is for the Internal Audit team to:

- Use the vast amount of data the council maintains in an effective way to deliver effective and efficient audits, which will provide clients with greater insight and analysis of the systems and control frameworks.
- Improve the quality and efficiency of audit work, increasing coverage in specific audits and audit plans and reducing the impact on clients' resources through better understanding of client data and automated testing.
- Support audit feedback and reports to clients with convincing and substantial data from client's own systems.

The actions detailed below have been designed to help the audit service achieve the strategic objectives detailed above.

Actions	Outcome	Date	Responsible Officer
Gain a detailed knowledge and understanding of the data held across the organisation	To understand what data will be available for each audit on the audit plan.	December 2023	Head of Internal Audit. Audit Managers
To build expertise in the discipline of data analytics to provide added value across the organisation.	Expertise in the effective use and management of data analytics to be used flexibly across the organisation.	March 2024	Head of Internal Audit. Audit Managers
To optimise the use of data analytics to increase the credibility of audit observations through extended / 100% sampling. (Key Financial systems)	To provide credible / robust observations to management to contribute toward the delivery of organisational objectives.	March 2024	Head of Internal Audit. Audit Managers
To utilise data analytics to enhance strategic intelligence / risk assessment to inform the internal audit plan and ensure the most effective use of audit resource.	Ensure the most efficient, effective use of internal audit resource through strategic assessment and analysis	December 2025	Head of Internal Audit. Audit Managers



To embed data analytics as part of the standard audit process.	To embed a sustained approach to data analytics through the standard internal audit toolkit	March 2026	Head of Internal Audit. Audit Managers
To enable continuous auditing against risk 'hot spots' across the organisation.	To enable 'real time' auditing highlighting error, anomalies and control failure at the earliest opportunity. (Continual testing / monitoring of key controls and the ability to inform system owners promptly to implement corrections).	March 2026	Head of Internal Audit. Audit Managers

