

Digital Audit Strategy 2017

Supporting world-class audit

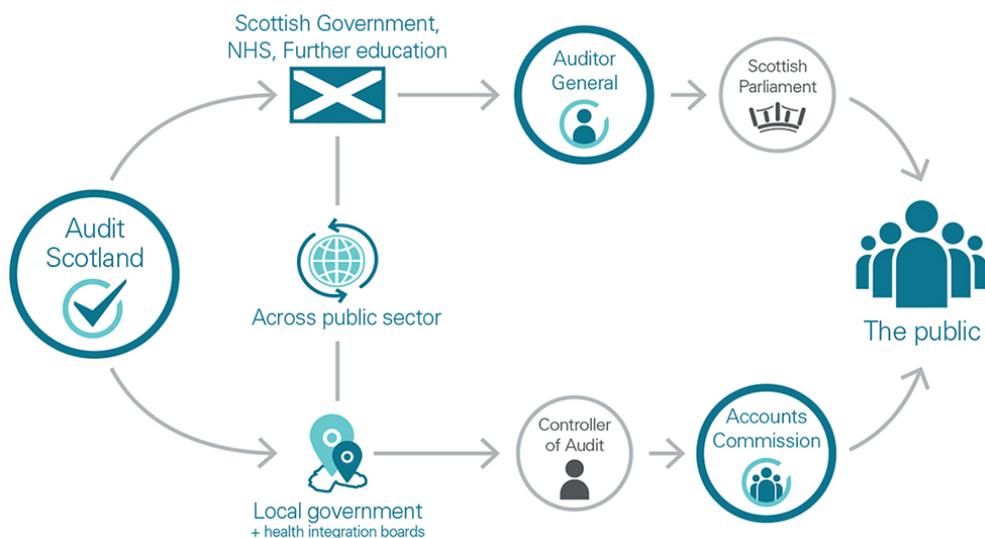


October 2017

Who we are

The Auditor General, the Accounts Commission and Audit Scotland work together to deliver public audit in Scotland:

- ✔ The Auditor General is an independent crown appointment, made on the recommendation of the Scottish Parliament, to audit the Scottish Government, NHS and other bodies and report to Parliament on their financial health and performance.
- ✔ The Accounts Commission is an independent public body appointed by Scottish ministers to hold local government to account. The Controller of Audit is an independent post established by statute, with powers to report directly to the Commission on the audit of local government.
- ✔ Audit Scotland is governed by a board, consisting of the Auditor General, the chair of the Accounts Commission, a non-executive board chair, and two non-executive members appointed by the Scottish Commission for Public Audit, a commission of the Scottish Parliament.



About us

Our vision is to be a world-class audit organisation that improves the use of public money.

Through our work for the Auditor General and the Accounts Commission, we provide independent assurance to the people of Scotland that public money is spent properly and provides value. We aim to achieve this by:

- ✔ carrying out relevant and timely audits of the way the public sector manages and spends money
- ✔ reporting our findings and conclusions in public
- ✔ identifying risks, making clear and relevant recommendations.

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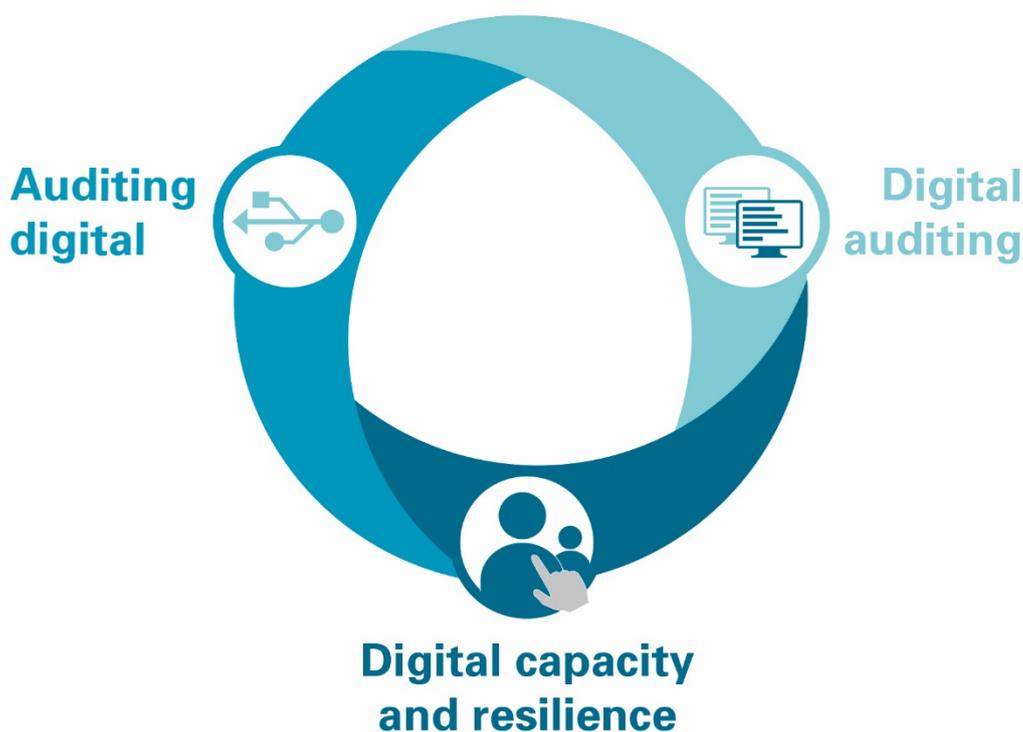
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Introduction

- 1.** Like organisations across the public sector, at Audit Scotland we aim to continuously improve to deliver on our vision. For us, that vision is to be a world-class audit organisation. Digital plays a key role, and this strategy sets out how we can use digital in our audit processes to support this vision. Importantly, it also sets out how we can use audit to support the public sector in its use of digital to improve outcomes for citizens.
- 2.** Digital technology has become an increasingly familiar part of everyday life over the last ten years. It's part of the fabric of how we live our lives and citizens, businesses and public services are dependent on it operating successfully. This is brought into acute focus by the impact of cyber-attacks, for example hospitals needing to cancel operations and turn away patients following the WannaCry incident.
- 3.** New technology creates opportunities to deliver public services in different ways, it also creates new expectations of how public services should look and operate in this digital age. It opens new possibilities for interacting with and empowering citizens, but also creates risk that not all of society can benefit from these changes.
- 4.** This digital audit strategy recognises that over the last few years Audit Scotland has adapted to the digital age. We have introduced new technology and digital methods into our audit processes, and we have published a range of audit work looking at the implementation of digital within the public sector. However, we recognise that we can, and need to, do more. This strategy sets out the vision for a step-change in our approach to digital audit. By the end of this three-year strategy, the aim is that digital risks and thinking are embedded in our processes.
- 5.** Digital is a theme that will be assessed across our audit work, at a local, sectoral, and national level. We aim to support and encourage improvement across the public sector in using digital to help transform people's lives. This will involve thinking innovatively about how we best deliver our messages and encourage discussions about how to move forward.
- 6.** This strategy also sets out our ambition to ensure that as an organisation we are making best use of what digital can offer. Digital audit supports activity across our strategic improvement programmes, delivering added value, efficiencies, and more opportunities for cross-organisation working.
- 7.** We recognise that we need to think about what this means for our workforce: what new skills will auditors need, what specialist knowledge will we need access to, and what efficiencies in audit processes might mean for changes in the type of work we do. These are all questions at the centre of the strategy, and we set out how we will consider these as we develop our plans.
- 8.** We want to be at the forefront of the opportunities that digital offers; helping the public sector to understand and make the most of the opportunities, at the same time as grabbing the opportunities for ourselves.

Vision

9. We will use digital audit to enable our vision to be a world-class audit organisation. It will deliver activity across the strategic improvement programmes. Our approach in digital audit has three main components



- **Auditing digital** – taking a flexible and risk-based approach to auditing digital public services. Integrating digital risks into our performance and financial audits and developing products to add value to stakeholders.
- **Digital auditing** - using digital technology, tools and technologies to support and deliver audit work. Making best use of available data to inform audits.
- **Digital capacity and resilience** – working across the organisation to involve the right experience and skills in the right places. To upskill our workforce to support digital audit and ensure our resilience.

10. At the centre of this activity will be the establishment of a digital centre of expertise, bringing together the people across the organisation who are involved with digital audit. This centre will act to share expertise and intelligence and coordinate audit activity.

11. This strategy outlines an approach to digital auditing that will provide:

- ✔ common, shared intelligence
- ✔ common priorities
- ✔ consistent findings and judgements
- ✔ coordinated action
- ✔ best use of the available skills
- ✔ a flexible and rapid response.

12. The strategy sets out our objectives and approach against each of the three components. It summarises our current position and outlines an action plan for the next year, and the following two years of the strategy.

Auditing Digital

Our objective is to take a flexible and risk-based approach to auditing digital public services. Integrating digital risks into our performance and financial audits and developing products to add value to stakeholders.

Our approach will be to:

- Develop a digital risk assessment to look at the risks affecting the public sector and audited bodies, and the wider external environment.
- In consultation with the Auditor General and the Accounts Commission prioritise audit activity based on the risk assessment.
- Take a layered and targeted approach to audit work. This would involve
 - considering those public bodies with greater digital-related risks for a differentiated audit approach
 - upskilling audit teams to ask questions about and make judgements on digital risks
 - layering digital risks into all our audit work, including performance audit reports, annual financial audits, and Best Value audit
 - considering the extent to which public bodies use digital to support service improvements.
- Develop our audit approach to ensure cyber-resilience in the Scottish public sector.
- Deliver and contribute to a wide range of audit outputs. This could include:
 - guidance for auditors
 - intelligence briefings
 - annual audit reports, performance audits, and Best Value Assurance reports
 - other outputs, for example, questions for non-executives and explanatory guides on key issues and risks such as agile project management or data protection arrangements, and contributing to conferences and round-tables.

Progress to date

We have:

- ✔ undertaken IT audit activity in individual audited bodies, reporting issues through the annual audit report where appropriate
- ✔ published statutory reports on significant issues with a digital dimension (including [CAP futures](#), [NHS24](#) and the Police Scotland [i6 project](#))
- ✔ undertaken performance audits and published reports on issues, including superfast [broadband](#), and reviews of processes within the Scottish Government to improve the [management of ICT contracts](#)
- ✔ produced a different-style output pulling together the key lessons from previous ICT programmes into a set of [digital principles](#) to help support improvement
- ✔ shared information on digital risks with auditors and developed some specific audit programmes, e.g. cyber-security
- ✔ gathered intelligence for cluster briefings and monitored a risks relating to digital transformation as one of the strategic risks for the Scottish public sector
- ✔ developed networks with relevant organisations and stakeholders.

Priorities for 2017/18

We will:

- develop and undertake a digital risk assessment of the external environment and public bodies and decide on the digital themes we are to prioritise
- develop a differentiated audit approach for those public bodies which face significant digital risk, ensuring that the audit teams have access to appropriate skills and experience
- use the planning guidance to direct all auditors to ask questions, gather evidence, make judgements, and report on, some of the prioritised digital themes
- develop guidance and training for auditors to enable them to undertake the digital audit work
- agree the audits in the forward work programme where digital should feature as a key theme, and put in place arrangements for digital expertise to feed into the audit
- produce statutory reports on individual digital programmes as required
- consider and develop our audit approach to cyber resilience and security across the Scottish public sector.

Priorities for 2018-2020

Over the following two years we will:

- integrate digital risks into audit processes, through updating risk assessments and audit programmes, and regular inclusion of digital risks in the planning guidance
- assess the differentiated audit approach for higher digital risk public bodies, and refine and continue as required
- work with auditors to assess the level and type of support required. Hold information sessions and produce briefings as required
- deliver the performance audits on digital in central government and health, and local government included in the forward work programme, and report on significant individual digital programmes as required.

Digital Auditing

Our objective is to use digital technology, tools and technologies to support and deliver audit work. Also to make the best use of available data to inform audit work.

Our approach will be to make the best use of digital technology, data and analytics to:

- **support risk assessments** - including decisions on the future work programme, and audit planning, by:
 - analysing data within, and across, policy, places and sectors to gather intelligence on emerging risks and patterns
 - using data to support appraisals of potential future audits.
- **enhance the audit process** - including analysing financial and non-financial data trends and outliers, and undertaking transactions testing, by:
 - using data analysis to support audit evidence and judgements and help target our work to identify potentially fraudulent activity
 - using appropriate tools to support the sorting and testing of financial transactions data
 - discussing and sharing intelligence on different tools and techniques with other audit organisations.
- **getting our messages out** - find new ways to present our messages and audit work, including data analysis tools, greater use of social media, and e-hubs on our website, by:
 - embedding the use of data presentation software, e.g. interactive data graphics in our audit reporting
 - considering new ways to use technology to engage stakeholders and audiences for our reports, including social media, our website, video.

Our approach will also ensure that our use of digital to undertake audits will be secure and information gathered will also be held securely. It will be compliant with the requirements of the Data Protection Act and the new General Data Protection Regulation which comes into force in May 2018.

Progress to date

We have:

- ✔ completed phase 1 of the audit intelligence project delivering a data warehouse which currently includes a range of core datasets and data around health and social care. Phase 2 is underway to include more core datasets
- ✔ embedded a cross-organisation data analytics group to share intelligence and trial new software and approaches

- ✔ created an audit data analytics group to pilot new tools and techniques in the annual audit process
- ✔ used interactive data graphics to present, and allow access to, data from a number of our performance audit reports
- ✔ developed e-hubs on our website to provide a central place to promote our work on new financial powers and health and social care
- ✔ used animations to help showcase our work to new audiences
- ✔ used social media and online surveys to gather public opinion and experience for our Self-Directed Support follow-up audit and our audit of Early Learning and Childcare.

Priorities for 2017/18

We will:

- use data analysis to support several audits in the work programme, including the sector overviews, infrastructure investment financing and Best Value Assurance Reviews
- deliver phase 2 of the Audit Intelligence project by integrating more outcome and financial datasets and expanding the use of analytics tools
- complete the pilots of new analysis tools within the annual audit process and review the process
- consider how digital audit techniques will be subject to quality assurance and review
- develop an e-hub to present our work on digital audit
- discuss with other audit organisations the progress they are making with digital audit techniques and consider new ideas.

Priorities for 2018-2020

Review the development of the data warehouse and identify priority datasets to include:

- roll-out and embed the use of analysis tools in the audit process
- embed the use of data analytics across our audit work
- continue to develop and deliver innovative ways to consult and engage with stakeholders and report our messages using digital technology.

Digital capacity and resilience

Our objective is to work as one organisation to ensure that we have the people with the right skills and experience, the appropriate technology, and the right digital culture, to support all audit work.

Our approach is to:

- ensure that we identify the relevant digital skills of staff across the organisation and bring it together to create added value for our audit work
- identify digital skills and capacity gaps and take action to address them
- ensure that our workforce is fit for a digital future and that all staff can participate in digital audit activity
- make effective use of digital technology to support our audit work, focussing on resilience and innovation
- prioritise digital security and resilience as a key part of organisational activity
- develop a culture that is digitally aware and open to the opportunities digital can provide.

Progress to date

We have:

- ✔ a wide-range of people across the organisation working on digital-related activity, including:
 - ICT auditors
 - digital services team
 - performance audit teams
 - senior managers with digital policy responsibilities
 - team members with data analysis skills
 - the communications team
 - the data analytics group.

☑ developed our knowledge and capacity by:

- welcoming students from the Edinburgh University [Q step programme](#). The programme links students with quantitative social science skills doing social/political science degrees with employers
- delivering introductory training in data analytics to 45 colleagues across the organisation
- organising training sessions on new areas and tools, including agile development and IDEA
- supported staff to attend relevant specialist training, e.g. Agile programme development.

Priorities for 2017/18

We will:

- invest in technology, services and expertise through the new Digital Services Strategy
- create the digital centre of expertise to bring together digital skills, knowledge and experience across the organisation. Develop areas for sharing intelligence and mechanisms for prioritising activity and making decisions
- work with auditors to assess the skills requirements to be able to undertake audit work against digital priorities. Develop plans to fill these gaps in the short-term
- organise knowledge cafes with external speakers from across the digital environment to raise awareness of digital across the organisation
- maintain and build on relationship with key stakeholders, including working scrutiny partners, attending networking events and engaging with international audit colleagues.

Priorities for 2018-20

We will:

- based on a review of the first year of activity and forecasting future activity, undertake an assessment of the skills and capacity we require to undertake digital audit. Update workforce plans, learning and development plans, and recruitment plans for these needs
- assess the potential for digital audit to create efficiencies in audit processes and the subsequent impact on workforce and audit activity
- engage with public sector programmes to help recruit appropriately skilled staff where required
- continue to improve our digital security and engage expert external security.