

# Digital Research Roadmap

June 2017

**OGL**

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# 1. Executive summary

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## 1.1 Purpose

The National Archives' business plan for 2015-2019, [Archives Inspire](#), identifies digital as the greatest challenge facing the organisation. Our [Digital Strategy](#) further explores the nature of this challenge and sets out a vision of The National Archives as a 'second generation' digital archive – one that is 'digital by instinct and design'. Digital research will play a key part in helping us achieve that transformation.

This roadmap is a strategic plan for digital research at The National Archives. It articulates the 'why', 'what' and 'how' of digital research – why we do it, what kinds of digital research we will need to focus on in the future, and how we can change our practice to achieve the outcomes we want to achieve through digital research. It shows that digital research will be crucial to the implementation of both *Archives Inspire* and our Digital Strategy. It demonstrates that digital research will help us fulfil our archive sector leadership responsibilities, and is therefore highly relevant to our work on the strategic vision for the sector, [Archives Unlocked](#). It also complements our [Academic Engagement and Research Roadmap](#), which shows how we intend to develop our research activities and boost our profile as a researching organisation.

## 1.2 Main findings

The National Archives is not only a functioning digital archive that provides records research services but also, increasingly, an organisation that is itself engaged in digital research. It is essential for us to do research in order to develop our practice as a digital archive.

Our digital research will reflect the four key areas of the Digital Strategy (preserve, contextualise, present, enable use) and will explore how archival practice is developing in the digital age, asking profound questions about the nature of the digital record and the role of the digital archivist. The Digital Strategy will inform the continuing development of our research priorities across all fields, as we work to

create an embedded and cross-cutting research culture at The National Archives.

Our digital research is for the benefit of all of the main audiences identified in *Archives Inspire* (public, government, archive sector, academic sector). In particular, our interest in archival practice means that our digital research will be fundamental to the development of our leadership role in relation to the wider archive sector. We need to work with the sector in conducting research to address shared challenges. There is also potential to develop more international collaborations, working with archival institutions around the world.

To carry out these ambitions, The National Archives will need to enhance its digital research capability. This can be achieved in four main ways:

- Develop staff skills
- Create an environment for digital experimentation
- Embed research methods into digital work
- Promote The National Archives' digital research.

The development of staff skills will very important as we move forward. Research opportunities are integral to The National Archives' career offer, helping us attract and retain staff. Yet skills development is only part of what is needed to enhance The National Archives' digital research capability. A fundamental shift is required to invest in a different kind of environment at The National Archives – one that supports digital experimentation and is more collaborative, creative and flexible. Research practices should be embedded into our digital work across the board, with governance in place to ensure that digital projects are selected and managed to best support the digital research agenda. The communication and promotion of our digital research will be vital to help build our reputation, reach new audiences and create opportunities for partnerships and programmes. Our externally-facing work must also include active participation in digital research networks and engagement with digital research communities around the world.

The action plans at the end of this roadmap include some practical steps to help achieve these goals.

## 2. Background

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In 2015 The National Archives commissioned a digital research scoping study from Darryl Mead, Michael Moss and Norman Gray entitled Digital Research Challenges at The National Archives. This study identified the key digital research challenges facing us and recommended how we could best respond to these challenges.

The main recommendations in the study were that we should:

- Establish The National Archives' leadership in digital research
- Find funding for digital research
- Lead a transformation in how digital records are managed at scale (including ingest, storage, contextualisation and presentation)
- Link the analogue and digital worlds
- Align with customer expectations in a digital world.

The present roadmap is a response to these recommendations, and was produced through an extensive process of consultation within The National Archives.

## 3 What and why

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### **3.1 What do we mean by 'digital research'?**

For purposes of this roadmap, the term 'digital research' is defined as research done by The National Archives (either by itself or in collaboration) into digital archives.

Much of this research will be concerned with the evolution of our practice as an institution that collects, holds and provides access to digital records, information and data (including digitised and born-digital material).

Yet our research also engages with how archival practice is evolving across the wider archive sector, both nationally and internationally. The National Archives has a leadership role for the sector, and is fundamentally concerned with digital research

questions affecting the sector more generally. In a digital age, new concepts of the archival record are emerging alongside new understandings of the role of the archivist. We will need to work with the sector to consider these issues and develop practical solutions for the sector's benefit. Further, as the archive sector is part of a rich and diverse cultural sector, our research can potentially be of benefit beyond archives.

### **3.2 Why should The National Archives do digital research?**

Digital research is key to The National Archives' practice as a digital archive. Keeping and providing access to a digital archive comes with many challenges, and digital archival practice is evolving within The National Archives and around the world. Digital research is necessary for us to address those challenges and develop new kinds of archival practice.

Digital research can help us achieve our strategic aim of becoming a digital archive by design and show leadership as a national organisation. It is integral to our digital work, and should not be seen as a separate activity.

### **3.3 Who is our digital research for?**

Our digital research is for us and our audiences. We should address research questions that help us fulfil our statutory obligations and meet the needs of all of the main audiences identified in *Archives Inspire* (public, government, archive sector, academic sector).

Digital research can also help us grow our audiences: for instance, within the academic sector there is a lot of work to be done to engage people working in history and the humanities (who have traditionally made up a large part of The National Archives' user base) with the possibilities offered by born-digital material. Opportunities are emerging across scientific disciplines, especially data science, and therefore by investing in digital research we can extend The National Archives' academic reach.

### **3.4 Our research interests and how they are developing**

What kinds of digital research does The National Archives do? A mapping exercise conducted in June 2016 resulted in a list of over 30 digital research projects, either currently underway or recently completed. These include the two 'Big Data' projects funded by the Arts and Humanities Research Council, Traces through Time and Big Data for Law; various PhD studentships co-supervised by staff into topics such as dataset visualisation, email management and digital sensitivity tools; and a Masters dissertation on digital discovery tools.

Yet not all of The National Archives' digital research has been, or will be in the future, academic grant-funded research. Staff also contributed examples of work to develop our digital systems, such as [PRONOM](#), [Discovery](#) and the [UK Government Web Archive](#), which involve research in the broader sense of experimentation, investigation and iterative development – research and development or 'R&D'.

Our research interests reflect the variety of functions we carry out, for instance the ingest, sensitivity review and presentation of digital records, as well as the ways in which our digital archive is used.

The mapping exercise also identified some emerging interests which reflect some of the key concerns in the Digital Strategy, notably the implications of publishing digital records; the authenticity of digital records; the use of machine learning to innovate archival practice; and how archival practice is evolving in the digital world, in areas including selection and description.

### **3.5 Priority digital research areas**

The priority areas for The National Archives' digital research are the four main areas of the Digital Strategy:

- Preserve
- Contextualise
- Present
- Enable use

Each of these areas is a rich source of inspiration for research questions. These questions, in turn, can form the basis of new research projects. The National Archives will continue to define and develop its strategic aims for research across all fields, and the four priority areas for digital listed above will feed into future planning.

### **3.6 Recommendations: what we will need to do**

Pursuing the research agenda outlined above will require organisational change. We will need to grow our digital research capability. There are four main areas where we should focus on growing our capability for digital research.

- Develop staff skills
- Create an environment for digital experimentation
- Embed research methods into digital work
- Promote The National Archives' digital research.

The action plans below demonstrate how, through projects, initiatives and other practical steps, we can carry out these recommendations.

## 4 How

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How can we carry out the ambitions described above? This section consists of a set of action plans for the next ten years (2016-2026), divided into short term (from 2016 until December 2017), medium term (2018-2019) and long term (2020-2026). These should be viewed not in isolation but in relation to other plans, including the Academic Engagement and Research Roadmap and Archives Unlocked.

### 4.1 Short-term action plan (2016-2017)

Number	Action
1	Scope requirements for changes to the work environment to aid digital research and collaborative working for staff and non-staff: <ul style="list-style-type: none"><li>• Physical space</li><li>• Information systems</li></ul>
2	Extend The National Archives' networks: <ul style="list-style-type: none"><li>• Continue to meet staff from other organisations engaged in digital research, to exchange knowledge, share practice and explore opportunities for collaboration</li><li>• Gather intelligence about worldwide trends and digital research stakeholders</li></ul>
3	Carry out communications and engagement about our digital research: <ul style="list-style-type: none"><li>• Website, social media</li><li>• Host a meeting with key external stakeholders to celebrate our digital research and discuss our future plans</li></ul>

4	<p>Foster digital research skills and strengths:</p> <ul style="list-style-type: none"> <li>• Review and identify our current digital research skills, methodologies and training needs</li> <li>• Introduce staff knowledge-sharing sessions for digital and research skills</li> <li>• Identify how recruitment can increase digital research skills and digital experimentation across The National Archives</li> </ul>
5	<p>Lay the foundations to embed research into digital:</p> <ul style="list-style-type: none"> <li>• Establish digital governance with cross-organisational representation</li> <li>• Cross-organisational project teams working together to serve our audiences</li> <li>• Identify the most important digital research questions</li> <li>• Share and develop research methods that can be built into digital products</li> <li>• New digital projects to start with a research question and/or an R&amp;D phase</li> <li>• Allocate staff time for research</li> </ul>
6	<p>Provide academic support for digital research:</p> <ul style="list-style-type: none"> <li>• Encourage large, cross-cutting academic research projects where The National Archives can focus on its priority research areas, achieve benefits and, where possible, take the lead</li> <li>• Recruit to new posts with a digital research focus to support all digital research across the organisation</li> <li>• Create research funding plan for digital to review where we have previously been successful and identify key funding opportunities</li> <li>• Provide training and practical assistance with funding bids, projects and research methods</li> <li>• Create opportunities for staff with expertise and experience to share their knowledge with each other</li> </ul>

## 4.2 Medium-term action plan (2018-2019)

Number	Action
7	<p>Implement changes to office environment (see no. 1 above):</p> <ul style="list-style-type: none"> <li>Organise regular digital experimentation days to establish Kew as a site for innovation</li> </ul>
8	<p>Continue to raise the profile of The National Archives' digital research (see no. 3 above):</p> <ul style="list-style-type: none"> <li>New initiatives could include media campaigns, events, digital engagement, public programming</li> </ul>
9	Further develop staff skills and carry out recruitment (see no. 4 above)
10	Create criteria for project prioritisation and selection to ensure that we are focusing on the work that is most important to us
11	Regularly review digital research project objectives and delivery to ensure that research and collaboration are well-embedded and supported
12	<p>Review, refresh and promote our digital research programme:</p> <ul style="list-style-type: none"> <li>Priority thematic areas, research questions</li> <li>If relevant, put out calls for particular projects we have selected to work on</li> <li>Partnership and collaboration opportunities for our audiences and communities</li> </ul>
13	<p>Cultivate strategic partnerships with academic, government, archive sector or other external bodies to advance The National Archives' digital research agenda:</p> <ul style="list-style-type: none"> <li>Ensure we are represented on relevant boards and committees</li> <li>Extend our digital research networks</li> <li>Proactively generate opportunities for collaboration</li> </ul>
14	Create or develop academic programmes and partnerships to foster digital research skills
15	<p>Establish communities of practice for digital research:</p> <ul style="list-style-type: none"> <li>Based around the four main areas of the Digital Strategy (preserve, contextualise, present, enable use)</li> </ul>

	<ul style="list-style-type: none"> <li>• Internal and external participants, the external ones drawn from The National Archives' key audience groups</li> <li>• Shape digital research programmes and partnerships in response to ideas generated within these communities</li> </ul>
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### **4.3 Long-term action plan (2020-2026)**

Number	Action
16	Review medium-term actions (nos. 7-16) and carry them forward into the long term as appropriate
17	Develop an international strategy for our digital research