

With reference to digital heritage literature, write a history of that technology's adoption and influence within a specific cultural heritage institution.

This case study concentrates on the influence of the World Wide Web on access to archival holdings by the National Archives (UK). This case study will be looking at an overview of the web presence of the National Archives (TNA), rather than the entire online offering, as the range of services provided is extensive. The reason for this focus is that a 'normal' user attempting to locate a relevant record is most likely to visit the National Archives website first; therefore this is the experience that can be enhanced and supported by a well organised, well managed, well stocked and well supported graphical user interface. The annual reports from TNA detail their developments of its web offering and it is from this information that a chronological record of achievements and influences can be plotted.

The National Archives is an institution with the brief of storing, preserving and presenting the governmental archives of the UK and is the latest incarnation of the Public Record Office (PRO). The PRO was established by the Public Records Acts of 1838, with the brief of retaining and preserving important public records and making them available to the public. The National Archives is now an amalgamation of The Public Record Office, the Royal Commission on Historical Manuscripts (HMC), Her Majesty's Stationery Office (HMSO) and the Office of Public Sector Information (OPSI), creating a cultural heritage organisation that has evolved to a great extent since its

inception. The National Archives and the OPSI merged in 2006 to create an organisation that is "uniquely well positioned as a policy leader, adviser and facilitator in this field, with a wider remit to support good information management." (TSO, 2007:9). Not only is TNA satisfying its remit as an archive, but it is also committed to taking the initiative in developing strategies and policies in the UK to work towards an integrated information management system.

The approach of TNA, as outlined in "Living Information: The Vision of The National Archives", is "bringing history to life for everyone". They contend that they are "committed to providing people worldwide with access to the records we hold and to helping everyone to use them to excite and enrich their lives." (TSO, 2009:3). The National Archives not only needs to provide responsive, effective and responsible access to its collections, but as a government archive, they also have a responsibility for accountability. The National Archives believes that because of its role within government and because of the information it holds, it is "uniquely placed" to capitalise on the potential offered by emerging technologies. (TSO, 2008:9)

Inclusive public access to the collections held by TNA, whilst utterly dependent on supporting information management processes, would have been unthinkable before the development of the web. Today, with people expecting to find information relating to anything and everything at their fingertips and be able to use and interact with that information, heritage

organisations have to respond quickly and appropriately to move to being 'archives without walls'.

The definition used here of the web needs to have some consideration before examining its influence. The web is the software that sits on top of the Internet, "combining text, image, sound animation, moving image and graphics of previous media into...interactive forms." The web has developed as the most recognised and used aspect of the internet and both terms tend to be interchangeable in the mind of the general user. (Lister et al, 2003:166)

The first incarnation of TNA website in April 2003 initially acted as a portal to the websites of the PRO and HMC. On the PRO and HMC websites it was possible to explore catalogues; order or download document copies; shop for books; access education material, exhibitions, the Census site and ARCHON.

This gateway website was getting 77 million information requests a year, and the National Archives were already looking to the future of their website, with the idea of being a single access point for research relating to any aspect of British history. They also wanted to provide "practically all initial access to The National Archives - and a high proportion of [our] services to users" through the website by March 2006. Initially this was based around an aggregation service of all of the principal historical and genealogical websites in the UK, with an inclusive electronic catalogue of holdings. (TSO, 2003)

Already there is a move to having a comprehensive online indexing system to not only find records at TNA but also at other archival institutions globally. This emphasises the need for standardised cataloguing on a national and international scale – a subject of much debate – as well as standards for production, as per the formal guidance offered by the World Wide Web Consortium (W3C). It is also evident from the availability of digital records that a digitising process was already in place in the organisations making up the National Archives.

The pre-existing PRO digital image delivery website was relaunched in March 2003 and renamed DocumentsOnline. This service provided almost 750,000 digital images of The National Archives' most popular records. Nearly 40,000 images were downloaded from the original PRO site in 2002, with an over five times increase in downloads from launch from the new site. As a supplement to the availability of online records, users could also request a copying service via secure form on the website. According to the annual report, this resulted in a 15% increase in demand for document copying. Similarly the revamp of the online bookshop resulted in a 23% uplift in sales from 2002/2003. (TSO, 2003: 22, 24)

Already it is clear that TNA has a far-reaching plan for its web presence and has ambitions to be the first stop for anybody looking to carry out any research. It is also clear from the statistics provided in this one annual report that enabling online access is proving to be a success. Whilst in 2002/2003 the services and functionality offered by the National Archives website was

limited, the fact is that the merger between the PRO and HMC has enabled new thinking and ambition to enter into the dusty world of archiving.

The site was re-launched in June 2004 (TSO, 2005). The record copying service was improved again in 2004, with a secure account facility, although as this information was linked with the National Archives customer database, the issue of personal privacy may have reared its head. Additional content is continually being added to the site whether through catalogue records via Access to Archives or digital content via DocumentsOnline.

Highlights of the development of TNA website taken from the annual reports include in July 2005, the Access to Archives database was expanded to include over 7.53m catalogue entries from nearly 400 records/archive offices outside of the organisation itself. Over 2.6 million searches were performed through this database in 2004. Links to other organisations, for example English Heritage's National Monuments Records were also beginning to be included at this time. (TSO 2005:25)

During 2006 TNA ran a pilot digitisation on demand scheme called 'Digital Express'. This allowed users to request the digitisation of any document they required within a 24 hour turnaround. This scheme proved so successful that it was formally launched in 2007. (TSO 2006:18) Whilst providing a valuable service to users, this also provided ad-hoc digitisation of records – useful but not a cohesive strategy of digitisation and probably causes more complication.

User experience was being considered during this time, so in March 2006 the National Archives introduced the 'Global Search Facility', which enabled website users to query over 30 million documents "at Google-like speeds", searching all of TNA websites in one hit, providing a single point of entry to a vast range of documents. (TSO 2007:4) At this time, the organisation claimed that for every document delivered to the onsite reading room at Kew, there were over 100 documents delivered online. The expectation from TNA was that eventually they would become a predominantly online service delivery organisation. (TSO 2007:10)

A major collaboration established in 2007/8 was one with Microsoft. The two organisations began a partnership to develop technology to prolong the preservation of digital records, both born digital and digitised. (TSO 2008:10) This is a very important step as it shows that TNA is not just responding to the impact of the web on its business, but also looking to the future to ensure that collections are not lost through storage on potentially obsolete technology.

This thinking is also represented by TNA's Records Management Advisory Service. This service, which was launched in May 2003, aims to accumulate all the experience and knowledge held by TNA in several areas, including management of central government electronic records and local authority archives and records. The institution supports public authorities in developing effect records and information management. As the National Archives is one of the largest archive repositories in the UK it can have an influence on both

local and national government policy for records management and the sector in general, in respect to the development of innovative schemes.

In the final available annual report it is stated that 174 documents were produced online compared to one in the reading room and there were just over 100,000 visitors onsite. Comparing this with previous years, there has been around a 50% drop in the number of physical visitors. (TSO 2009:4-5) This in itself is indicative of the impact of the success of the website as many users can see the records available without leaving the comfort of their own home. The report also mentions the first class support provided by the organisations IT team, and describes the projects that the team is working on which includes environmental improvements of systems, simplification of navigation and the stability of the website. This demonstrates the importance to the organisation of continually developing the website, and also the realisation that the web is not simply to be used as 'brochureware', but is an entity that impacts not only the customer interface, but also the configuration of internal systems and physical hardware. In the 2008/9 financial year, the frontpage was redesigned and a number of major online projects were launched and a number of collections were digitised. (TSO 2009:10-12)

One traditionally used benchmark for the success of websites is the visitor statistics. It would be useful to map the document production statistics onsite and online to broadly assess the impact of providing documents via the web. Unfortunately the available data for the National Archives websites/on-site

location is not consistent¹. There is some data available through the annual reports and this data has been analysed to attempt to provide some kind of evidence for the increased in access and availability that the web has had on TNA. Whilst DocumentsOnline are stated as producing nearly 47,000 documents in 2001/02, this increased to over 113m in 2008/09 – a phenomenal growth. When compared to onsite figures of 644,000 for this last year it is clear from these basic statistics and the charts produced at Figure 1, that the web has had a huge impact on the National Archives.

¹ The National Archives were contacted directly in an attempt to locate statistical data split into on-site and off-line, but I was informed "we don't currently format the stats in the way you require" personal e-mail correspondence (7th-10th December 2009). Consequently I was able to obtain on-site production figures from Peter Brooker, Head of Corporate Planning, The National Archives via email, but comparative figures were only available from 2005/06 onwards. Onsite figures also included productions to other government departments and to TNA staff. As an aside, it would be interesting to understand what statistics TNA actually keeps and whether the statistics are used as an element of their strategy.

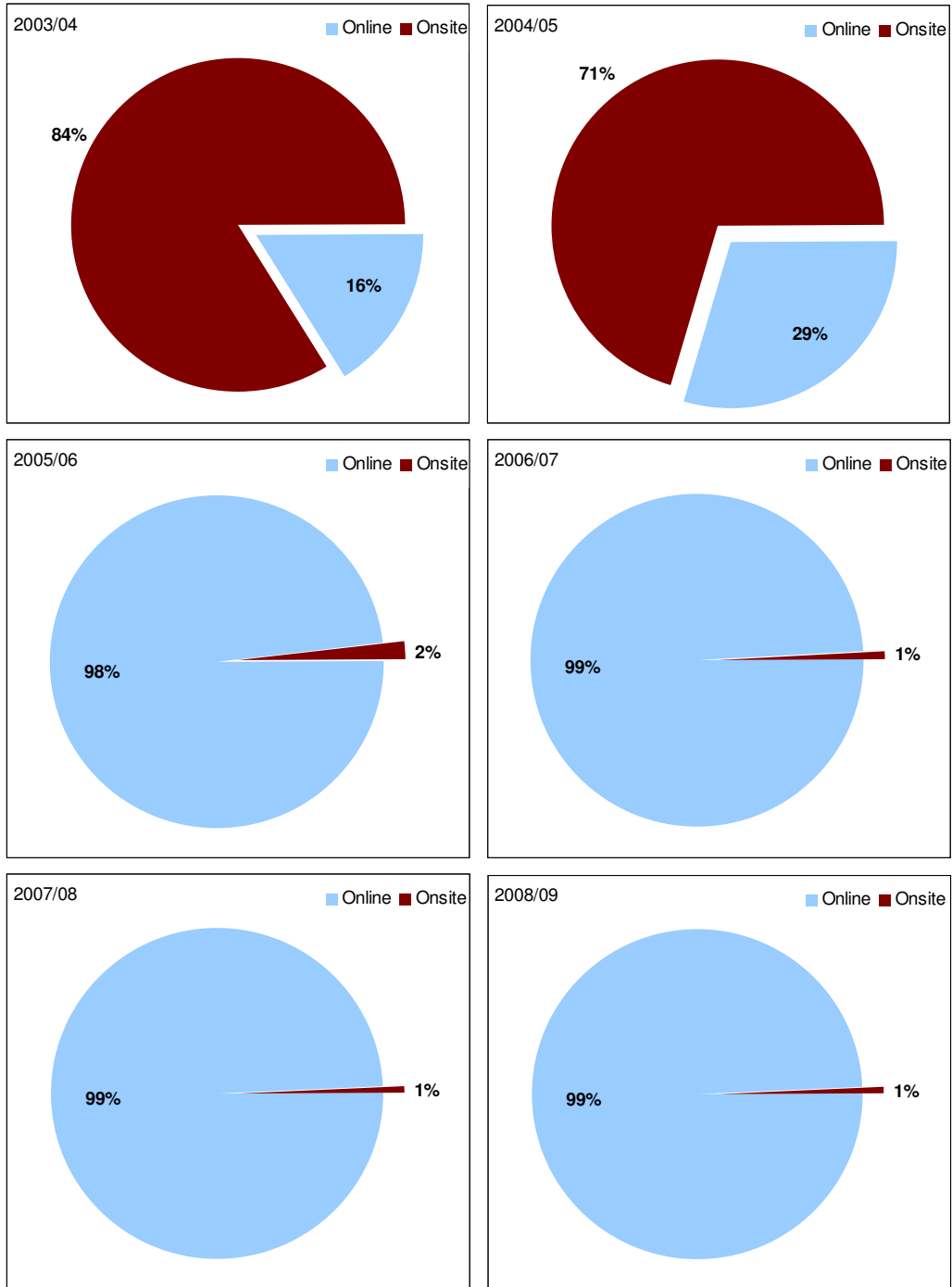


Figure 1 : Comparison of online and offline document production per financial year (see Appendix 1 for detail)

The National Archives online strategy, entitled "Provide and Enable", is a three year plan describing how they will adapt to the "changing online environment" (TSO, 2008:2). The organisation recognises that the web is shifting and that it has to react and evolve itself to continue to provide exemplary services now and in the future. It realises that the web is developing into a database of information, no longer simply a collection of single static pages but a collaborative effort providing the information that users can assemble and use as they desire. Access routes to the information are also changing, user expectations are growing higher: personalisation, speed and comprehensiveness are vital to the user experience.

Use of the web as a front-end invites the idea of collaboration across cultural heritage organisations. Whilst the database 'Access to Archives' is available through TNA website, the researcher still has to visit the appropriate physical location to gain access to the individual document. The idea of collaboration, as discussed in Waibel and Erway's article is fundamental to the future potential of the web. Aggregation services are becoming more prevalent as the quantity of information increases. No longer can cultural heritage institutions provide "small puddles of information on scattered websites".

(Waibel & Erway, 2009:324) Content also needs to be accessible anywhere the user demands it. Internet access is now available via smaller and more portable platforms. The increased use of the web for research has possibly revived "the gentleman scholar's dream of the world of information at one's fingertips", as internet access it is now ingrained into a user's 'normal' life.

(Waibel & Erway, 2009:325)

The National Archives are primed to be the market leader in the UK for an aggregate portal for the archives of the whole UK (and possibly beyond), but this would require much planning and much discussion, perhaps along the lines laid out in Waibel and Erway's article, as well as the forward thinking outlined in TNA's online strategy document.

The institution believes that the optimum solution is to provide its information in such a way that others are able to 'harness the power' of the information held. In this way, The National Archives can provide an extensive suite of products and services that it alone could provide as a market leader. One way the online strategy describes its progress path is technological - coding the information in such a way that any type of machine or program could reinterpret the data enabling an audience to access and re-use this data according to their requirements. The other is almost philosophical, where a panel would examine each of the services offered and identifies areas that could hold the potential for redevelopment to be more collaborative. This 'online panel' will involve experts from within TNA, which could be an inward-looking, potentially restrictive practice. Although it proclaims to consider audience input through research and testing, it may be that ideas and suggestions offered may not actually reflect the real needs of the audience. As early as 2004, TNA was requesting suggestions and comments from its website users, so this should add a more wide-ranging input to the planning panel. (TSO:2008)

The institution is also planning to keep up with technologies and trends that are utilised by researchers online and to reflect these trends in the development of the information portal used to access the records. The current site already has a wiki in the form of 'Your Archives' (launched in April 2007), that allows users to contribute to a body of knowledge relating to the collections held not only by TNA, but also by other UK archival organisations. As well as comments about the archive themselves, users can suggest additional functionality, perhaps allowing TNA to anticipate changes in market demand. As with any wiki, the authenticity and validity of any information held is not sanctioned by The National Archives itself.

The National Archives digital surrogates (scanning) pilot started in 2003/2004, which aimed to make digital versions of the popular records available for researchers. A fundamental issue with archive documents is that handling can cause damage to the documents and reduce their lifespan. Creating digital copies means that the originals can be retained for longer periods. This digitisation project has been planned, in collaboration with commercial partners up to 2012 to enable more of the non-born digital collections to be accessible digitally. From the process and its length, it could be construed that the digitisation process being undertaken is long and arduous. For example, Collection IR 26 (Death Duty Registers, 1796-1903) consists of 254,000 images and, including conservation of the records, the digitisation is planned over a five year period (TSO:2008). This example is probably a worst case, as there are other collections that are taking a lot less time. Whilst this article is not querying the digitisation process used by the

National Archives, it is looking at the influence of the web on the institution and one of the major influences is the increase of demand for internet accessible collections. It is possible this demand will increase as web technology develops but if some organisations are not able to improve digitisation techniques, they may not be able to keep up with demand (whilst maintaining collection integrity) and lose their audience to alternative sources or even lose them completely.

This case study does not look at all of the offerings that TNA offers, but the wide range of facilities are worth a brief mention. The National Archives "Learning Curve", already five years old in 2002/2003, offers a valuable resource for students and teachers including online workshops and supplementary syllabus material. The Moving Here website provides 200 years worth of records relating to the migration experiences of overseas communities. The Family Records website is run by TNA on behalf of a consortium of government and other public sector bodies. This website provides information on popular family history topics, includes research guides and colour images of original documents. The National Archives has also developed a partnership with Ancestry.co.uk to provide access to Census Enumerator forms. A paid for online service – which would be free if the user visited the reading rooms at Kew – this service provides access to the actual enumerator forms that are available for the UK providing a incredibly valuable service for family historians primarily, but also for other researchers.

As a comparison of online records collection, notice should be taken of Ancestry.com. Founded in 1983, Ancestry.com is a heritage organisation that has embraced the web as a portal for its collections with nearly one million paying subscribers globally and 4 billion historical records as at June 2009. Whilst focussing on family history, Ancestry.com is also building an online community of people creating user-generated content, predominantly building personal family trees connecting facts and records including photographs, scanned documents, audio and video clips bringing together information to enrich the content available on the website. This connectivity is attaching Ancestry.com records in a process that is helping to organise the collection. There is also functionality for the users to amend the census records that have been transcribed incorrectly. An additional service that is available is the Ancestry World Archives Project. The organisation makes scanned documents available for transcription by users as well as being moderated by users. Ancestry.com can mobilise its massive community of users to enrich the content available. Also, the organisation is starting to develop additional tools and technologies to incorporate social networking and crowd sourcing to leverage these collaborative efforts. (www.ancestry.com, 2009) This networking and collaborative path is one TNA has started along with the development of its wiki, but considering the size of the collections, this may be a necessary step toward comprehensive digitisation.

In this brief overview, it is clear that TNA is a market leader in the UK for the provision of records online. The organisation believes that the emergence and growth of the web is the “simple most important technological and social

development of the era". (TSO 2008: 5) The web breaks down boundaries and empowers users to develop new ways to approach old problems. Organisations have to continually innovate to be able to keep up and anticipate new technologies that can underpin success on the web. The National Archives understands the changes happening with the web (as at 2008) and in its role as a "major strategic thinker" for governmental ideas relating to archive web provision it can create and enable new services. With defined missions, goals, principles and strategies the National Archive can remain focussed on their vision, which in turn can assist other cultural heritage organisations in developing their own web strategies. (TSO 2009:9)

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Wayback Machine

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Your Archives - The National Archives Wiki

<http://yourarchives.nationalarchives.gov.uk/> (accessed 3rd December 2009)

Appendix 1

Electronic Service Delivery (data taken from The National Archives Annual Reports)

To deliver a specified number of digital record images to users through
Documents Online

Onsite figures provided direct by Peter Brooker, Head of Corporate Planning,
The National Archives (e-mail correspondence December 2009)

Year	Online	Onsite
2001/02	46,545	
2002/03	29,994	
2003/04	103,653	543,000
2004/05	227,018	544,000
2005/06	34,772,077	602,200
2006/07	69,203,145	607,300
2007/08	85,054,113	567,200
2008/09	113,081,935	644,200