

Virtually there

**Understanding audiences for online collections
resources in the East Midlands**

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Final report

Virtually there: understanding audiences for online collections resources in the East Midlands

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1 Executive summary

1.1 Introduction

This report aims to provide digital resource managers across the East Midlands with:

Evidence of the motivations, expectations, needs and current levels of satisfaction of online audiences. This could be used to help you make the case for investment in online collections resources.

Insight into why users are using your sites, how well resources are meeting their needs at the moment, and how current and future resources could better meet needs. This could help inform improvements and new initiatives based on users' needs.

This report is based on findings from a research programme including:

- Audit of sites to gather original objectives, target audiences and monitoring methods for each project
- Collation and analysis of existing data, data collection methods and evaluations on projects
- Qualitative research (via depth interviews and discussion groups) with 37 individuals across the region to understand the motivations, needs and responses of target users.
- An online survey with users of digital collections, accessed via links advertised on 14 project websites.¹ This report includes the first 351 results from this survey.

1.2 Users' expectations are shaped by online experiences they have elsewhere

The British public is becoming increasingly reliant on and comfortable with **internet technology as part of everyday life**. As more people access an ever-increasing variety of information and experiences online, expectations are rising dramatically. Not only do potential users expect to be able to access museum's collections online, but they also expect

¹ This report includes preliminary results to January 2009. The surveys will remain live until July 2009, at which point the Renaissance East Midlands Digital Access Development Officer will be able to access the final results via the surveymonkey site.

to be able to access the information they need, in a format which is appropriate to them, any time, any place, using up-to-date multimedia tools. Whilst users appreciate that there are sometimes resource limitations to what museum sites can achieve, on the whole the **public expects museum-run sites to keep up** with the high standards set elsewhere. For example, with the rise of 'web 2.0' technologies comes the expectation that users will be able to experience meaningful human interaction on museum sites, and co-author and share materials.

But **online engagement isn't a replacement for real visits**. Rather, visitors are using web-based resources to extend and enrich their experiences by preparing for and following up on their real-world visit. 58% of respondents to the online survey said they were **quite or very likely to visit the museum in question as a result** of using its online collections resource.

Whilst we need to manage expectations, there is a **massive opportunity** for online collections and other museum resources to be used to **engage more people more deeply** in an increasingly competitive market.

1.3 Why do people use online collections resources?

In this research, we have focused on users' **motivations** to visit. If we can define and understand the reasons that someone is using your resource, it is much easier to understand and influence their levels of satisfaction: users' underlying drivers for visiting shape their expectations, behaviour and outcomes.

Instead of thinking of online audiences as a homogenous mass, we have attempted to **segment users into ten 'modes'** based on ten different reasons identified during the research. This is a quick way of understanding who uses online collections resources and why. It is important to note that an individual person could be in a different user mode on different days, according to what they were visiting for. The ten user modes below are designed to be **generic**, and have come out of discussions with users about a broad range of online collections resources. There may well be other, more specific user modes for particular sites. The user modes identified during this research are:

- 1 Family planning a visit**
- 2 Follow-up family**
- 3 Adult planning a visit**
- 4 Follow-up adult**
- 5 General interest surfer**
- 6 Pupil researching**
- 7 Hobbyist researching**
- 8 Professional / academic researching**
- 9 Teacher lesson / project planning**
- 10 Teacher visit planning**

1.4 What do users need?

We have identified a set of generic user needs for online collections resources – common to all of the user modes listed above, and regardless of the site in question. We have also identified specific needs for the specific user modes listed above – these are provided in the body of the report. The generic user needs identified are:

When arriving on the site

- 1** A clear proposition or promise on the homepage
- 2** Clear who the resource is for – target user modes
- 3** Features that grab attention and draw users in from the homepage
- 4** Clear signposts for each section, which indicate which needs each option will meet
- 5** Options from the homepage to be verb-based where possible

Site design

- 6** Enables users to quickly access content relevant to them
- 7** Professional appearance, consistent with current standards in web design
- 8** Logical structure of information
- 9** Features to help users navigate the site: menu bars and short introduction for each section
- 10** Links to lead users on to related sections – no dead ends

Content of site

- 11** All information is up-to-date
- 12** Content suitable for browsers, with ways in to deeper information
- 13** Objects linked together in narrative themes
- 14** Interpretation that meets the needs of target user modes in terms of depth and breadth

- 15 Interpretation connects into users' existing frameworks of knowledge
- 16 Layered information that allows users to control the depth of information
- 17 Use of the most appropriate media to deliver objects and interpretation
- 18 Users are able to explore through interaction
- 19 Opportunity to interact with staff and other users

Following on

- 20 Links onwards to broader and deeper information – both from the organisation and other related resources
- 21 Information about where objects can be seen in real life
- 22 Reasons to return to the site: dynamic material, updated information, expanded or changed content and repeatable experiences
- 23 Opportunity to sign up to alerts / other prompts to return

1.5 How far is current provision meeting users' needs?

At the moment, it is very **difficult to establish a baseline of users** for online collections in the region. This is due to the range of methods and technologies used to monitor use of web resources across the different organisations involved. The full report contains a summary of existing data.

Preliminary results from the online survey (which runs until June 2009) have revealed that whilst some sites geared towards researching user modes have a strong core of specialist, repeat users, for most other sites the majority of users are first time visitors. And whilst most users are broadly satisfied by their visit, **at least one in five visitors experience some difficulty** finding the information they need.

Certain issues recurred throughout the discussion groups (detail and recommendations are provided in the body of the report):

- **Low awareness** of sites amongst target audiences, and potential to engage far more users through marketing existing resources
- **Lack of a clear proposition** for the site: users are confused about what the site is, what it's for and why they should use it
- Confusion about **who a site is aimed at** – is it for me?
- Museum sites **embedded within council pages** confuse many visitors
- **Out-of-date** information

- Content of the site **falls short** of users' expectations, often due to the lack of a clear proposition or target audience
- Users **expect multimedia content**
- Lack of **opportunities to follow on** from the online visit, including how to see objects in real life and ways to start a relationship with the organisation – for example mailing lists

1.6 Monitoring and evaluation: current practice and recommendations

As discovered in previous research and consultation exercises on this topic, monitoring and evaluation to understand the audiences for online collection resources is patchy, with methods, extent of analysis and ways of using the data varying from project to project.

Web statistics

Web statistics are a useful monitoring tool because they:

- + allow the sites monitor change over time
- + are mostly low cost to collect, often using free software
- + are an effective tool for reporting performance indicators to funders
- + can provide detailed and reliable information about who actually uses your site, and how

However, there are limitations to this method, including:

- limited depth of information
- no consistent approach or software
- lack of knowledge and/or control over data

At the moment there is a wide range of practice in the region, in terms of what data is collected, how and what this data is used for. This leads to a **lack of comparable data** across different sites, with different software giving significantly different results. Whilst most sites are only monitoring the minimum level of data required by funders at the moment due to time and resource constraints, others demonstrate that it is possible to **obtain valuable information about users** which can be used to inform site adjustments and advocate the value of the resource. All this information is available with free or low cost software.

Many managers of online collections resources do not have **direct access** to web statistics relating to their resource, due to where their site is hosted or the structure of the organisation - meaning that they don't have access to the full depth of information available from web statistics. Furthermore, several managers reported issues with funders not accepting certain sites as eligible for inclusion in performance indicators, due to narrow definitions of what museum website activity should constitute.

Web statistics could be used to provide all sites in the region with valuable insight with relatively little effort. Some project managers are already collecting, analysing and using this more detailed level of information from web statistics. It would be useful for these managers to **share their knowledge** in this area with other project managers in the region.

Given the challenges discussed above around lack of control over data, it may not be possible to adopt a **consistent web data collection package** for web statistics across the region. However, there are free / low cost software solutions readily available, which may help to make the case.

And whilst web statistics are very valuable, results will still need to be set in the **context** of what else you know about your online visitors - from feedback, surveys, and from user testing.

1.7 Online surveys / feedback

Eight of the online collections resources reported that they currently offer the facility for feedback via online form or email from the website. However, none of the project managers we contacted currently have a systematic way of finding out more about their users and gathering their views.

Data gathered directly from users of your resource via the internet can be a useful tool as this:

- + can provide a detailed picture of who your users are
- + can reveal why they are using the site, how far the site met their needs, and potential improvements
- + can be very low cost or free to set up, using free online survey programmes.
- + provides users with a way of reporting particular issues or strongly held views (positive or negative) about your resource, and feel that they have a say - providing that they get a response / acknowledgement of their comment

However, this method has drawbacks:

- any online survey is self-selecting – results will only ever be of people who want to respond
- whilst the software itself is low-cost or free, it can be time consuming to set up and analyse a survey
- a certain amount of expertise is needed to ask questions in a way that will get you useful information

By collecting feedback via surveys, you can also collect some profile information that helps to **contextualise** comments and understand which users' needs you are satisfying at the moment.

Offering a **prize draw incentive** can encourage users of all types to take part in the research. This helps to reduce bias resulting from self-selection and provide a wider range of viewpoints, especially moderate ones. However this will not entirely eliminate skew as shown in the results.

A survey such as the one set up for this research project is useful as it allows some comparison between sites in terms of the different user profiles. This also shares out the burden of time and effort to set up and output the results. We recommend that Renaissance East Midlands repeats a similar exercise on a regular basis if possible, which would enable partner projects to monitor change over time.

Pop-ups are generally not popular with users and can be difficult to set up with IT departments. We recommend having a short blurb for the online survey and related prize draw **on the homepage**, or even on a menu bar across every page where possible.

Online surveys can be a useful way of **finding respondents willing to help with future research**. A tick box and capturing email / phone details allows you to build a panel of people of real users. This panel can then be contacted to consult on future developments.

1.8 User testing / evaluation

Two of the project managers were able to share the results of previous user evaluation with us. Another of the project managers knew that the site had been tested with a particular specialist user mode by sending the link to relevant people around the world and asking for feedback.

However, it seems that testing sites with target user modes both before and after launch is not common practice.

User testing and evaluation both whilst the resource is in development (formative or front end research) and once it has been launched (summative research) can be an extremely useful exercise, allowing the project team to:

- + get real depth: by speaking to people about their needs, wants, opinions and behaviour, we can explore issues in detail and really unpick why and how people would or wouldn't use the site
- + help save time and money: especially at the front end / formative stage before a resource is launched, user testing and evaluation can help prevent costly mistakes by identifying potential flaws – not just usability issues, but also fundamental issues with the concept of the resource. Addressing these at the point of design or build rather than after the site has been completed is a much more efficient use of time and money.
- + Introducing user perspectives at an early stage gives the project team a chance to step out of their own positions and see the resource from users' point of view

However, there are some points to bear in mind before undertaking user testing:

- speaking to users does take time, although doesn't need to be complicated or expensive.
- You also need some basic expertise to carry out user testing, although there is often no need to employ an external professional.

User testing is often the part of the process that gets squeezed out in tight budgets and timescales. However, including visitors' opinions can be done **efficiently and effectively**, especially if it is planned into the process from the beginning.

Consultation with users can be carried out **by your staff** with some basic training, and there are many guides available on this topic.

Whilst it is a good idea to offer participants some **incentive** if you can, this could be relatively low cost – like good cakes, coffee and sincere thanks, plus an invite to the launch of the final launch or similar – for a short session.

As described above, online surveys and links can be used to capture people willing to take part. Existing mailing lists can also be a good source where permissions exist, and it is also easy to recruit people in your museum or library, and ask them if they would have 20 minutes to spare for a short discussion, if necessary. These respondents can then be **'panelled'** and recontacted for testing future iterations of the resource, although it is

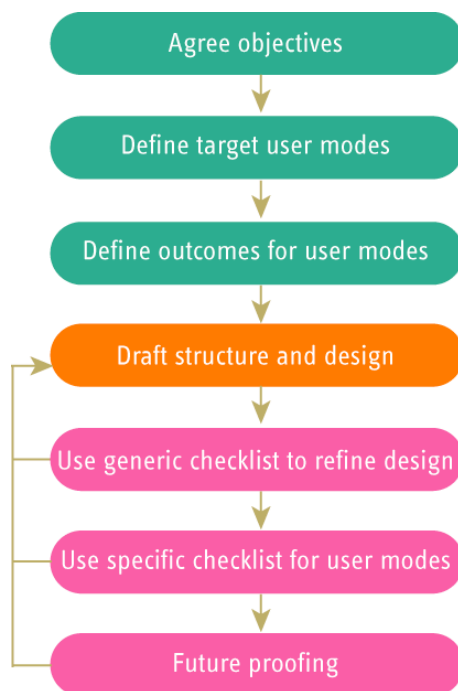
important that they do not get over-used and become unrepresentative of 'normal' users / visitors.

Even if the project is only at concept stage, it is really useful to have **something to show** respondents. This could be mock ups, other similar resources, mood boards. Users cannot tell you the 'answer', but they can give invaluable guidance on how best to satisfy their needs.

1.9 Embedding user needs in online collections resources

The diagram below summarises a process for planning an online collections resource which uses users' needs as a lens through which to focus content, structure and design of the resource to deliver your objectives. This approach focuses on the outcomes you want to achieve both for your organisation and for users.

User-focused project planning process for online collections resources



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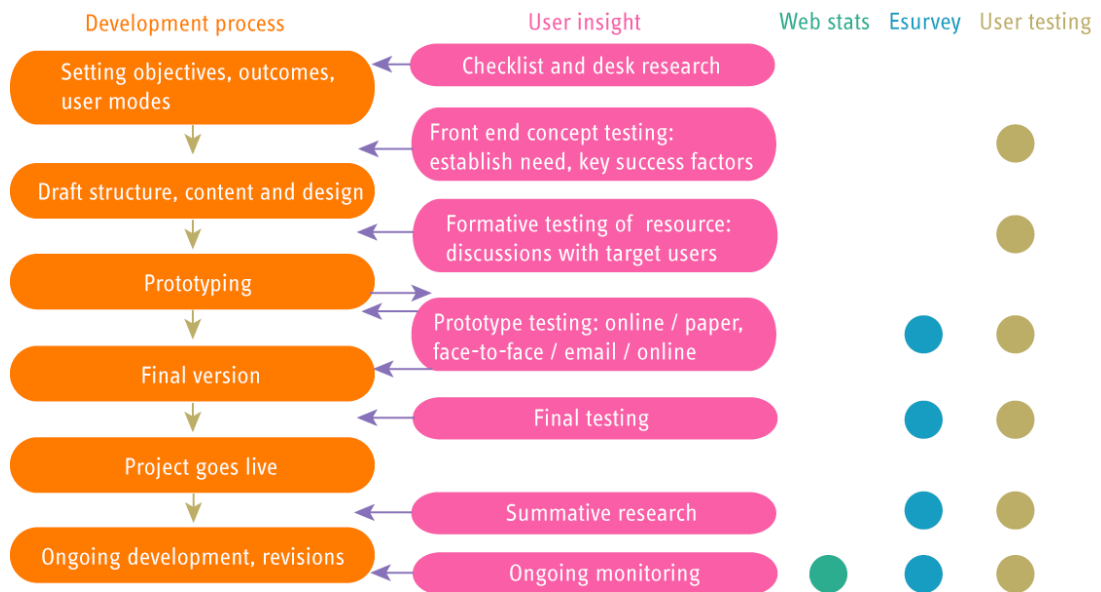
The model below sets out a process to develop the planned resource, including users' perspectives in the process to give the site the best possible chance of success in meeting users' needs (and therefore your objectives). User testing should be planned in at the start of the development process, to ensure it happens at the right time, when user insight can give maximum benefit.

The left hand column (in orange) shows the stages that the project team will need to go through.

The right hand column (in pink) indicates the stages where users' perspectives should be included where possible.

The relevant methods are indicated by the dots on the right hand side.

User-focused project development process



2 Introduction

2.1 Purpose of this report

The purpose of this report is to provide digital resource managers across the East Midlands with:

Evidence: of the motivations, expectations, needs and current levels of satisfaction of online audiences. Contents of this report could be repurposed to help you make the case to colleagues and funders for further and smarter investment in online collections resources.

Insight: into why users are using your sites, how well resources are meeting their needs at the moment, and how current and future resources could better meet needs. Contents of this report can help you plan improvements and new initiatives based on users' needs.

2.2 Background

Many different digital collections resources, many different ambitions

There are now around 25 digital collections projects in the East Midlands, highly diverse in terms of both scale and scope, from Picture the Past, an online collection of almost 70,000 images with supporting interpretation and a sophisticated e-commerce site to smaller, themed sites on particular themes such as Fox Hunting Voices.

Over the last ten years, there has been an explosion in the number of resources providing access to museum collections through the internet. This movement has partly been driven by audience demand and expectations for online access to museum collections. However, online collections projects have also often been linked with conservation - related to digitisation projects preserving fragile items using digital technology. Museums face many challenges in trying to engage visitors with digital collections, not least the often complex, conflicted and product-focused organisational objectives for a project, which can make it difficult for projects to satisfy users' needs.

Confusion about virtual visitors is commonplace

'Number of web visits' is a Key Performance Indicator for Renaissance partner museums - museums are obliged to collect and report this statistic, as well as a variety of additional indicators for other funders. However,

research carried out in 2006 identified confusion amongst museums in the region about how best to gather and understand data on virtual visitors:

*'Most museums had a website but only around half of these collected information about virtual users. There was confusion about definitions or related terms ... and how useful these were for understanding the needs and profiles of these users.'*²

Whilst museums cited lack of resources as a reason for this knowledge gap, lack of control over the website lack of control and lack of knowledge were also mentioned by many museums.

Further consultation with museums across the region in summer 2007 identified a lack of understanding of the needs of target audiences and a lack of adequate consultation on digital outputs. Research in 2008 gathered a more complete picture of the digital projects currently running in the region, and gathered some feedback from users and project managers.

2.3 Aims of project

The purpose of this research project is to build a more complete understanding of online audiences for museums' digital collections, in order to inform a more strategic, user-focused approach to digital content delivery.

Renaissance East Midlands commissioned Morris Hargreaves McIntyre to deliver the following:

- 24** A more complete understanding of the nature, motivations and expectations of online audiences
- 25** Increased involvement of audiences in defining and developing new digital outputs
- 26** Enable museum staff to prioritise collections for digitisation based on audience need, which may result in more relevant, engaging, user-centred online delivery
- 27** A practical methodology for online audience research and evaluation that can be used in the future
- 28** Evidence to inform business planning and funding bids for digital project development

2.4 Brief overview of research methods

This report is based on the following research elements:

² Zebra Square (2006), Renaissance East Midlands Regional Baseline Data Review Mapping

- 1 Internal audit to gather original objectives, target audiences and monitoring methods for each project
- 2 Collation and analysis of existing data, data collection methods and evaluations on projects
- 3 Qualitative research (via depth interviews and discussion groups) with 37 individuals across the region to understand the motivations, needs and responses of target users. This included:
 - 7 local history enthusiasts
 - 6 teachers (from a variety of key stages and subjects)
 - 9 young people (aged 14 to 15)
 - 3 Undergraduate students, reading Archaeology at the University of Nottingham
 - 3 nine-year-old children and their parents
 - 6 adults who visit museums on their own or with other adults
- 4 An online survey with users of digital collections, accessed via links advertised on 14 project websites.³ This report includes the first 351 results from this survey.

³ This report includes preliminary results to January 2009. The surveys will remain live until July 2009, at which point the Renaissance East Midlands Digital Access Development Officer will be able to access the final results via the surveymonkey site.

3 The world online – behaviour and expectations⁴

Before looking specifically at users of online collections, it is worth considering some macro trends in web use in the UK. Users' expectations are shaped by the online experiences they have elsewhere – and are rising fast.

3.1 Life moves increasingly online: museums expected to keep up

69% of UK adults use the web every day or almost every day

During our research, respondents emphasised how reliant they are on the internet for almost every aspect of everyday life. Online working is now the norm for children and workers:

'The children have to download homework and send it back to school from home.' Family adult

Over half of UK adults have bought things online

*17% of broadband users watch live television online**

Users are becoming increasingly confident and skilled in accessing content through the internet itself. Downloading and streaming video have become mainstream activities with the launch of BBC's iPlayer, YouTube and highspeed broadband, and are only set to become more commonplace: the recent Digital Britain report⁵ outlines the government's ambitions for 100% broadband provision, high quality digital content, and equipping everyone in the UK with skills needed to benefit from digital resources.

People now assume that public organisations will deliver services online where appropriate. So digital access to museums' services and collections is no longer an added extra – it is a minimum expectation.

3.2 Users increasingly expect 'any information, any time, anywhere' access

The internet has long since overtaken the Encyclopedia Britannica as the first port of call for information. The internet is now seen by many as comprehensive – that everything will be there. And whilst people are still wary about the reliability of some information available, we are becoming more skilled in gathering, sifting, navigating and appraising potential sources at the click of a button:

'Google and see what comes up.' Family adult

⁴ All unmarked statistics in this section are taken from Office of National Statistics (2008), *Internet Access 2008 First Release*. Those marked * are from: Ofcom (2008), *The Communication Market 2008*

⁵ Carter, A. (January 2009), *Digital Britain: the interim report*, DCMS/ DBERR

Over one in ten UK internet users use news feeds, podcasts and alerts to pull the most up-to-date information to them from the web.

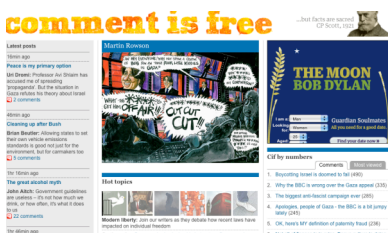
'Read the first few words of the Google result [to assess if it's what I'm looking for].' Young person

'You can actually go into things in a deeper way [online] ... there is somebody out there who knows the answer.' Family

And we increasingly expect to access this comprehensive information at any time - accessing the internet via mobile devices is increasingly rapidly, thanks to the rise of wifi and mobile broadband.

This constantly-on technology has given rise to an expectation that everything on the internet should be up to date - up to the second. So, whilst people we spoke to understood there would be resource limitations for museum-run sites, old-fashioned sites with out-of-date information were seen as unacceptable.

3.3 Users increasingly expect meaningful human interaction online



We are now conducting our personal and social lives online, using web technology to do things we couldn't do in the 'real' world, or do them quicker and more conveniently: massively multiplayer online games and worlds like Second Life and World of Warcraft; instant messaging; social networking via sites like facebook; interacting via chat sites and news groups.

With this 'web 2.0' technology comes an increasing expectation that sites will allow communities of interest to build, users to share ideas and opinions with each other and with 'experts', and that we can use others' recommendations and preferences to shape our own decisions - resources like last.fm, tripadvisor.com and amazon's reading lists provide trusted, personalised advice.

The respondents on this project expected to be able to interact with others in relevant and meaningful ways through museum collection websites - whether that was asking a question (and having it answered), reading and making comments, or reading reviews written by other visitors.

3.4 Users expect to co-author and share

The last few years have seen increasing interest in sharing and collaborating. With the rise in use of tools that enable users to help organise and revise information online - tagging, wiki resources like Wikipedia, like tagging and wiki resources, users now expect to be able to add their own expertise to a project.

24% of UK adults have uploaded self-created content to web

1 in 14 UK adults have their own blog, 1 in 5 read others'

*43% of people have uploaded photos to the internet**

*53% of online users claim to value user-generated content as highly as professionally-produced material**

With blogs and sites like flickr and YouTube, people also now welcome and in some cases expect the ability to share their own creations online. The younger users we spoke to are also a step further on: repurposing, embedding and sharing online content from any source is an expectation from these users – that any image, video or text will be ‘grabable’ and available for them to manipulate and embed elsewhere.

This democratic trend in web technology is significant for museum resources. Whilst experts are valued as much as ever, they are no longer seen as custodians of all knowledge. The people we spoke to wanted to share other perspectives on museum collections – memories, personal anecdotes – whilst also having access to the vast wealth of knowledge held by curators and archivists.

Real and virtual sources meld – using the internet to extend the visit

Web technology is becoming seamlessly integrated into ‘real’ life, and people increasingly expect to deepen and extend experiences using web technology. For example, GPS travel guides and tourism resources.

And as social interaction and professional life moves online, real live experiences are increasingly valued. The massive increase in popularity of festivals and intimate live music gigs is part of this trend. Rather than replacing real life, online resources can help us find and enjoy what we value more often and more deeply. This was borne out in the discussion groups during this research: users of the online collections resources never saw their online use as a substitute for visiting in person – in fact, online use was assumed to be a way of increasing real world engagement by giving potential visitors a taste of the collections.

In the last few years, we have noticed that visitors to museum exhibitions across the UK are arriving at the door better prepared to engage deeply with the exhibits, having briefed themselves on the topic at home via the web, and are also wanting to extend their experience beyond the timeframe of their physical visit, expecting that related online resources will allow them to recap their visit and go deeper into particular areas of interest.

The people we spoke to during this research expected links to be drawn back and forth between online resources and real world museum experiences. This was a minimum expectation where online resources show collections or cover topics related to real world experiences.

3.6 What does this mean for museums and galleries in the East Midlands?

On top of this tide of rising expectation, the government is urging public organisations to embrace digital technology as an efficient and effective method for delivering services to users. How does this fit with the aims and activities of your organisation?

Managing resources and expectations

Clearly, there is a need to balance audience expectations with what museums can actually deliver within the resources they have at their disposal. For example, social media tools change the flow of information from one way (museum to user) to many way (museum to user, user to museum, user to user to user ...) – this has resource implications when we think about how to moderate, maintain and manage forums, blogs, and user generated content.

Investment to attract visitors in a competitive market

However, there is also a strong case to be made for museums to embrace new media tools and web technology, and to fight for the resources and structures that enable us to do this. We would argue that web technology can help us deliver our services more efficiently and effectively to a wider range of people, and is therefore worth investment of time and money. This is not in any way to say that online provision should replace physical experiences and institutions: high quality online resources are expected by current and potential museum visitors, and can help us to reach more people.

Museums are competing for potential visitors' increasingly squeezed leisure time, not just with commercial visitor attractions with large marketing and web budgets, but within a wider leisure context.

The following sections detail what users are looking for from online collections resources and how museums in the East Midlands can best meet these needs.

4 Why do people use online collections resources?

4.1 Understanding motivations to visit

Over the past ten years, museums and archives have become increasingly visitor-focused. It is now accepted good practice to understand why people do or don't visit your building, what they are hoping to get from the experience, and to use this information to help attract visitors and improve their experience. Although it can be harder to 'see' online users, exactly the same principles can be applied to engaging audiences with digital resources.

In this research, we have focused on users' motivations to visit. If we can define and understand the reasons that someone is using your resource, it is much easier to understand and influence their levels of satisfaction. This is because users' underlying drivers for visiting shape their expectations, behaviour and outcomes, and are therefore a useful lens through which to focus on users' needs.

4.2 User modes for online collections resources

Instead of thinking of online audiences as a homogenous mass, we have attempted to segment users into ten 'modes' based on ten different reasons identified during the research. This is a quick way of understanding who uses online collections resources and why.

It is important to note that an individual person could be in a different user mode on different days, according to what they were visiting for. For example, many of the users we spoke to would be 'hobbyists researching' on one day, but then might revisit the same site the next week to find out about somewhere to go for a day out with grandchildren – when they would be 'family planning a visit'.

The ten user modes below is designed to be generic, and has come out of discussions with users about a broad range of online collections resources. There may well be other, more specific user modes for particular sites – for example if your site is about archaeological digs, there may be a user mode wanting to get information on how to volunteer on a dig in their area.

1 Family planning a visit: A parent, other adult or parent and child looking for information to plan a day out. This could include scoping various places to visit, finding out what's on of interest and practical information.

'Crich Tramway – they do a ticket now where once you've paid you can go as many times as you want in the year, so I'm on quite often looking at what was going on.' **Family adult**

2 Follow-up family: Family groups – often parents sharing with their children – looking to deepen their understanding of the topics covered by an exhibition or museum after their visit.

'The Science Museum we've been on a couple of times, we've rechecked the exhibitions we were looking at down there From the James Bond exhibition you go this card gadget where you could go online afterwards and take part in a bit of an adventure where you had to look at the museum.' **Family**

3 Adult planning a visit: Adults who are looking for somewhere to visit alone or with other adults (rather than children). This could include scoping various places to visit, finding out what's on of interest and practical information.

'For having a day out and thinking "where shall we go?". Looking and trying to decide which one to go to.' **Independent adult**

4 Follow up adult: Independent adults (ie without children) looking to deepen their understanding of the topics covered by an exhibition or museum after their visit.

5 General interest surfer: People using the website from a general web-use perspective. They may have found the site through a web search, or from another related site. For these people, the online resource exists independently to any physical organisation.

'Stumbling across the site and having a quick look just about the area or an interesting topic, just for general interest if I had a spare five minutes.' **Independent adult**

6 Pupil researching: School students looking for information or images to include in school projects and homework tasks. This might be following a school visit, or direction to a particular site by their teacher – although they are also likely to arrive on the site via web searches.

'If you need images or stuff for coursework.' **Young person**

7 Hobbyist researching: Individuals with a specific area of interest – and sometimes specialist knowledge – wanting to find out specific information about a topic, object or collection.

'I was looking into [a hosiery factory] – I searched generally on hosiery – that brought me likes to history of hosiery nationally and then narrowed it down to the East Midlands even down to pictures of stockings and adverts.'

Local history

'We had a minor stately home ad there was a suggestion that some of the items had ended up in a museum – I was delving to see if I could bottom that story out.' *Local history*

8 Professional / academic researching: Individuals looking for information – often specialist, technical and/or very specific for undergraduate or postgraduate level studies, or collections-related professionals.

'I'm more likely to hunt for "flint point" than for "hunter gathers"' *Student*

'Articles from actual archaeologists about it so you can go into more detail.' *Student*

9 Teacher lesson / project planning: Teachers (at primary or secondary level) looking for materials to use in class or to set as homework for pupils to use.

'You can easily get hold of anything and throw it up on the interactive whiteboard, and there are a lot of interactive games available online.'

Teacher

'Rather than saying "go on the internet and look for ..." we try to guide them to specific sites.' *KS3/4 Humanities Teacher*

10 Teacher visit planning: Teachers scoping for places to take a school trip – deciding where to visit, assessing what there is to do on the day and looking for practical details.

5 What do users need?

Looking at users needs from online collections resources is a useful filter through which to assess site performance at the moment, and a useful tool to use when thinking about designing future resources.

5.1 General principles for all users

Throughout the research, a number of factors were identified repeatedly by all types of users as important, regardless of their user mode or topics covered by the resource.

When arriving on the site

When users first land on the homepage of the collections resource, they need to be able to grasp immediately what the site is and how it can help them. So they need a **clear proposition: what is it? And what am I going to get?** This can be communicated by the title of the site, but also the look and feel of the homepage, any introductory text and the options available.

Who the resource is for needs to be immediately obvious: if the site doesn't look like it is for them, users will click away.

And for specialist and general users alike, something has to **grab attention and draw them in** from the homepage.

All users want **clear signposts of where to go from the homepage**. These signposts need to match the needs of your target user modes (see below), and ideally be **verb-based**, ie 'explore ... search ... watch' rather than titles which relate to your internal structures 'education ... Military ...'.

Site design

Users need to be able to **access relevant content quickly**. One of the biggest bugbears was having too many clicks between the homepage and the content that the user is looking for. Or worse, wasting time or getting lost on the site because it is not clear where to find the relevant section.

Users in all modes expect online collections resources to be consistent with other sites they use – to use **up-to-date web design**

'The first thing is to get the title right so that I can see what the website is.' Local history

'They haven't got long to grab your attention ...' Family adult

'The first thing is to get the title right so that I can see what the website is.' Local history

'They haven't got long to grab your attention ...' Family adult

'Virtually all these sites are not really sure who they're

'Clearly designed ... so you can identify very quickly where you need to go.' KS3 teacher

'Laid out in a pattern where links make sense and flow.' Family adult

'On one page without having to scroll.' Independent adult

'You have to have two or three strap lines telling you what there is ... two or three lines then click on it if you want to know more.' Family adult

'There's no reason why they can't make things interactive ... bringing it to life.' Independent adult

'sharing comments ... something to give you an idea of what other people are looking at.' Independent adult

techniques, and for the site to **look professional**. This reassures users about the quality and authority of the resource.

Information needs to be **structured in a logical way** that makes sense to users: pages with large chunks of text covering a variety of topics or structures reflecting internal rather than user-focused categories quickly deter new site users.

Users in all modes expect standard features like **navigation bars** that remain constant throughout the site to enable easy wayfinding, and **introductory text** that can be read quickly and easily when arriving at each page / section.

Users expect **links across the site** directing them to related content, so that they never reach a dead end.

Content of site

Users in all modes have a minimum expectation that all information on the site will be **up to date**.

Whilst some user modes need to be able to search for specific information, most users expect that there will be the **opportunity to browse** content and easy 'ways in' to content of interest to them.

Users expect objects to be **linked together** using categories, themes, narratives – the exact nature of these depends on the user mode's needs. Similarly, users in all modes need **interpretation** that meets their needs for context – although the nature of this context is radically different for different user modes. This interpretation must enable users to link the object **into their existing framework of knowledge**.

From using other sites, users expect **layered information**, rather than delivered in one large block, enabling them to navigate to a depth that suits them.

Users expect that objects and interpretation will be delivered using the most **appropriate media** – including sound, video, 3D animations, as well as text and images. And they expect that they should be able to explore collections and individual objects through **interaction** with the site – zooming, navigating spaces, clicking for more depth.

Users in all modes also expect the **opportunity for human interaction** – dialogue with staff has to be two-way (ie they will get a response), and users also welcome the opportunity to share views and even content (via recommendations, own objects and interpretation of collections)

with other users. Even if they don't want to comment themselves, they like to read what others have said.

Following on

Users in all modes need **links onwards** to broader and deeper information – both other ways of accessing information from the organisation (contact details, other links) but also links to other related organisations and resources.

Users want to know **where objects can be seen** in 'real life' – whether on display or by appointment.

And users are assessing whether it will be worth returning to the site: changing or dynamic material, updated information, expanded or changed content and repeatable experiences (eg games) all provide **reasons to come back**. Users may also want to sign up to lists / other alerts (eg RSS) to be notified of relevant changes and be prompted to return, rather than check back themselves.

'It would be good to get alerts when something new is added.'

Family adult

'You need really good links.' *Local history*

5.2 Specific needs for user modes

1 Family planning a visit

Family groups need a lot of **reassurance** that a visit to this site will meet their needs and be worth the effort of organising the trip. They also need a good **reason to visit** this museum rather than anywhere else – events, particular offers for families (tickets, pricing) and crucially **endorsement** from other people like them via testimonials and comments.

As well as this information, users in this mode are also looking for a **taster** of the experience: if the website is family friendly, interactive, educational, fun and has content for parents as well as children, these users will assume that a real visit to the museum will provide a similar experience.

These users also crucially need **practical visitor information**: what's on, times, directions, and for this information to be very easy to find from the homepage. This should also include information to help **plan the visit** itself – routes around the building, gallery summaries / descriptions and even information and trails to print out and take with them.

'The Science Museum one, in terms of the various sections that's inside – if you're going to go, you have to plan it cos it's just such a big place.' *Family adult*

It was done in a really clear, concise way ... they've got children involved ... we're going to go now.' *Family adult*

'From the James bond exhibition you got this card gadget where you could go online afterwards and have an adventure where you had to look at the museum.' Family adult

2 Follow-up family

These users are looking for ways to **recap, broaden and deepen** their engagement with the exhibition online. This is effectively a way of extending the timeframe of the visit and personalising the content of the exhibition. Crucially, they want **interactive** challenges and activities appropriate both for lone child users and for adults and children to **explore together**.

These users need to be **directed to the site** from the exhibition, and preferably given a prop or email reminder to engage with the online resources.

These users also want to get **recommendations** for other sites and museums to try on related topics – either through physical visits or online.

3 Adult planning a visit

'So you're looking for what they've got there to see.' Independent adult

These users are looking for a **taster** of the real-life experience of the museum, to see if it is worth visiting. Will a visit be appropriate to my interests? Will the information be at the right level? Crucially, these visitors are looking for **points of connection** with the collections or exhibitions – how will this connect to what I already know or experiences I have had before?

As well as easy-to-find **visitor information** – what's on, times, directions – these users may also need information on the types of work on display and hints of the likely visitor experience and **visit planning** information – key objects to see, gallery summaries, maps or guides to download or print out. These users also need **prompts to visit**: events, new content, endorsement from other people like them via comments and quotes.

4 Follow-up adult

Like the 'follow-up family', these users are looking for ways to **recap, broaden and deepen** their engagement with the exhibition online. This is a way of extending the timeframe of the visit and personalising the content of the exhibition. They want to explore particular objects, themes and tangential / specific subjects **in detail**.

These users need to be **directed to the site** from the exhibition, and preferably given a prop or email reminder to engage with the online resources. These users also want to get **recommendations** for other resources to try on related topics – either through physical visits or online.

5 General interest surfer

'They haven't got long to grab your attention.' Independent adult

'Museums have got to be living.' Independent adult

'I want to know what they were used for ... only anoraks want the technical detail.' Independent adult

'It all comes back to you because you've lived round here.' Independent adult

'Maybe a picture of the present day street to compare.' Independent adult

'I'd use it - it's easy to use, well laid out.' Young person

'Not too many words to start with.' Young person

These users need to immediately be given a **strong reason to stay** on the site: they often have no existing relationship with the organisation and no reason to use this resource rather than another one. A clear proposition which relates to topics of interest and / or points of connection will hook them on the homepage, and clear, appealing and verb-led propositions for each section will encourage them to click on.

Whilst each site will have different topics, themes, objects and interpretation relating to: **places, people and / or personal and social histories** are successful in engaging browsing general users. But **weird** and wonderful items from your collection can also be a powerful hook – intriguing objects can draw users deeper into the collections.

Interpretation for these users must **contextualise objects in the wider historical period and social circumstances**, with interpretative tools which help users relate to objects by connecting them to their **existing knowledge and everyday life** – using human scales, modern day equivalents etc. These users expect the site to use multimedia tools to grab their attention and **bring objects to life**.

They also want the opportunity for **meaningful interaction** with experts and other users – sharing personal stories connected to the collections if relevant, and the opportunity to share questions and responses.

6 Pupil researching

Users in this mode are looking for **clear, reliable information** on a specific topic and a clear proposition that matches their needs from the homepage. They want to be able to search – and their **search terms** are unlikely to match internal collections categories eg 'Victorians' rather than 'Vase 1870'.

These users want an **overview** of a topic, then **routes on** to deeper information and links. **Images** and other content that can be used for projects and presentations must be easy to grab (and credit/ reference where necessary). These users may also enjoy learning through **interactive** activities / games where there is a clear educational value to these.

7 Hobbyist researching

These users need a clear overview of what the resource can provide them with from the homepage: details on the **extent and nature of the collection** and ways to find specific information must be easy to find.

'I'd be looking for one specific thing.'
Student

'If you are interested in something particular, as we often are, it would be useful to know where else you can go - county record office, specialist archive.' Local history

'I would love to have [full catalogue information] on there but I can understand why you don't put it on.' Local history

'I'd like more information about where it was found and what else was found with it.' Student

'I would like links to academic articles with references.'
Student

'You don't have time to search around, you want things that are there and then.'
Primary teacher

'Get information out to schools so they are aware ... sign up to our weekly newsletter.' KS3/4 ICT teacher

These users will be looking for individual objects / types of objects and specific information, so a **high quality search of the catalogue** is essential for them. This also means that this catalogue must be as comprehensive as possible – these visitors want access to the whole collection, not just to a partial selection.

As well as particular objects, they may want an **overview of a specific subject** area / collection – to provide them with a bedrock of knowledge for further research. However, they do not expect the level of detail they need to be available online. These users expect the resource to provide them with names and **contact details** of relevant staff, other references and **links to more specialist resources** on the topic.

8 Professional / academic researching

These users are looking for **technical detail** rather than context. They bring their own framework of existing knowledge to bear on the resource, and are looking to populate this framework with more detail.

They are interested in the **physical details of the object itself, conservation, provenance and related archival material**. They may also be interested in wider interpretation, but only where this is authored by recognised authorities from **academia or related professional fields** and is fully referenced.

These users do not expect the level of detail they need to be provided online – they want **contact details**, other references and **links onwards** to more specialist resources.

9 Teacher lesson / project planning

These users are looking for activities to use in class or to set as homework – both whole resources to use as they are and also content to **repurpose** to use in class.

Crucially, these users lack time and often rely on tried and tested resources that they know (from experience or recommendation) will give them what they need. Benefits of using this resource therefore need to be clearly and concisely **communicated and marketed** to this user mode, including how content fits with National Curriculum requirements. challenges to encourage engagement. **Endorsement** from other teachers and trusted sources, in the form of quotes and links from trusted educational sites is key to attracting these users.

'Our server locks anything that mentions the word "Holocaust".' KS3/4
History Teacher

'Video [of a Jimson engine] streamed online - bringing the museum into the classroom.' KS3/4
History Teacher

'Who used it, why it was used and the context.' Primary
Teacher

'Anything that makes my life easier!' KS3/4
Science teacher

'It's having follow up material and pre material.' Primary
teacher

It is crucial that any online resources are **accessible through school networks**, with their rigorous firewalls and difficulty streaming and accessing certain file formats. Resources must also be free or very low cost wherever possible.

Users in this mode want ways to **use museum objects online**, when a physical visit is not practical. They need high quality images, multimedia ways of accessing the objects where appropriate (video, animation, sound) and accompanying exercises and information that can be used in class, relevant to the curriculum.

Crucially for museums in the East Midlands, users in this mode value **locally-focused content** which helps them to engage pupils and deliver National Curriculum topics.

10 Teacher visit planning

Users in this mode need clear information to help plan a school visit to the museum or archive. This includes both **practical details** to make it as easy as possible to visit - how to book, risk assessments, cost, travel - but also information to help **plan content of their visit** - what topics can be covered, any taught sessions available, site layout and materials to use.

These users would also like **pre- and post-visit activities** to use with their class: ideally interactive and available to use online or to download.

6 How far are current sites meeting users' needs?

6.1 Overview of online audiences in the East Midlands

Levels of usage

At the moment, it is difficult to establish a reliable picture of overall usage for online collections resources in the East Midlands. This is due to the nature of web statistics collection across the sites: these issues are detailed further in section 7 below.

The table below gives a summary of statistics available. We have attempted to compare these by calculating a monthly average figure. However, the table below does not take into account the variances resulting in different data collection methods (inclusion / exclusion of data from spiders and robots, based on web logs / browser data).

| Organisation | Date range | Monthly average | | |
|-------------------------------------|-----------------|--------------------------------------|------------|---------------------------------------|
| | | Visits to the site | Page views | Visitors |
| Snibston | Jan 06 – Oct 08 | 18,780 | 21,757 | Not collected |
| Bosworth Battlefield | Jun 07 – Oct 08 | 8,890 | 31,735 | Not collected |
| Knitting Together | Apr 07 – Mar 08 | 23,863 | 148,405 | Not collected |
| Northampton Museums | Unknown | 1,350 (approx) + 500 Flickr views | Unknown | Unknown |
| Derby Peregrines | Feb 07 – Jan 09 | Not collected | 106,806 | 35,849 (of which 16,453 returning) |
| Nottingham Brewhouse Yard Museum | Aug – Sep 08 | 537 | 2,064 | 449 |
| Picture the Past | Apr 07 – Dec 08 | Unknown | 125,690 | 7,928 |

Types of use

A note on the online survey results

The results describe below are based on a sample of 351 respondents to the survey. This includes responses from users of 13 different sites altogether. However, the vast majority of responses (226) are from one site: Picture the Past. The next highest represented site is the Derby Peregrines site (60 responses). The remaining 10 sites had less than 20 responses each, with some receiving just one or two responses. The survey has not been weighted by visit figures due to small sample sizes and lack of available comparable

data. It should also be noted that respondents are self-selecting, and therefore cannot be truly representative of all users.

This survey cannot therefore be read as representative of all users of online resources in the region: the results are most useful when considering each site individually, and relevant results are included in each site's appendix.

The online survey is running until July 2009: this will hopefully provide Renaissance East Midlands and individual sites with more detailed information about who their users are and what they think of the site.

Repeat visiting

In total, 66% of survey respondents had visited the site in question before. However, this is skewed heavily by the Picture the Past and Peregrines visitors: these sites attract a very loyal following, with 71% of Picture the Past visitors being repeat users of the site, and four out of five Peregrines users having visited the site more than five times before. Web statistics show that 50% of Peregrines users are returning visitors, suggesting that there is skew in respondents towards more avid Peregrines fans.

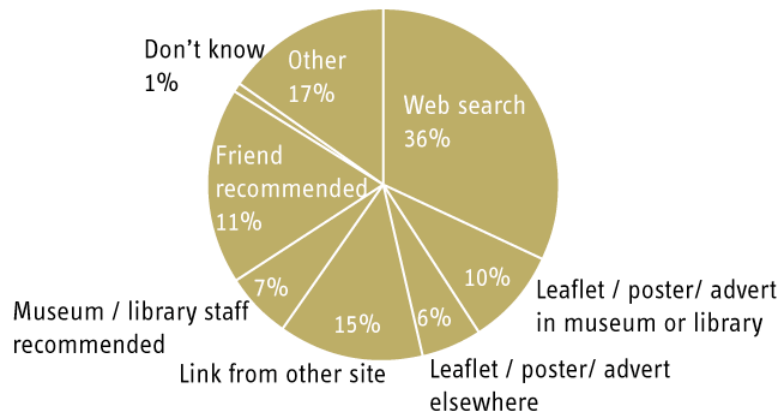
For all other sites, the **majority of visitors were first time users** of the resource.

Finding out about the websites

The chart below shows that the most common way of finding out about a site was **web searches**, followed by **personal recommendation**. 'Other' sources mainly included local papers and specialist magazines.

Please note that the percentage figures add up to more than 100%, as respondents were asked to tick all that apply.

How did you find out about this website? [Please tick all that apply]



Reasons for visiting / user modes

The table below shows the split of respondents across the user modes. This shows a roughly even split between people coming to the site with a research need, and people using the site for general use and visitor information. This is particularly interesting given the skew towards Picture the Past repeat users and skew presented by self-selection: this shows the extent to which sites attract general browsing users as well as those seeking more specialist functions.

What is your main reason for visiting the site today?⁶

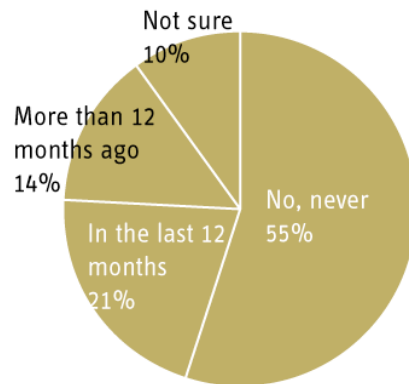
| Mode | % |
|------------------------------------|----|
| Family planning a visit | 6 |
| Follow-up family | <1 |
| Adult planning a visit | 5 |
| Follow-up adult | 1 |
| General interest surfer | 32 |
| Pupil researching | 2 |
| Hobbyist researching | 35 |
| Professional/ academic researching | 14 |
| Teacher lesson/ project planning | <1 |
| Teacher visit planning | 1 |
| Other (specific to site) | 4 |

Visiting the related museum or library

The chart below shows that most site users have **never visited the physical institution** related to the site. This is consistent with the results above, which show some users who may be planning their visit, but general interest users and those with a specific research need predominate.

⁶ As the question in the survey does not exactly match the user modes (which were devised on analysis of the whole project) we have reallocated some results. A suggested list of questions to capture user modes accurately has been provided to Renaissance East Midlands.

Have you ever visited the museum or gallery related to this site?



Levels of satisfaction

Whilst overall levels of satisfaction are high (which is unsurprising given that many respondents are repeat visitors), there is a significant group – at least **one in five users – whose needs are not satisfactorily met by the site** and have trouble with the level or type of information provided, or navigation around the site. This might not be a big problem – these users might not be the target audience for the sites in question. However, when larger and more robust sample sizes are available in July it would be worth analysing these results in more detail – eg looking at which user modes these less satisfied users are in.

Sites are meeting main needs of users

60% of respondents' said their main reason for visiting the website had been fully satisfied.

But one in five users might not have found the information they were looking for

57% strongly agreed that the website in question gave them the information they were looking for. However, 18% disagreed or answered 'neither'. 15% disagreed or were ambivalent that the information on the site was at the right level for them.

One in five users had problems navigating around the site

54% strongly agreed that they could tell where to go from the homepage to find the information they needed. However, 21% disagreed or were ambivalent about this. 17% disagreed or were ambivalent about the layout and ease of navigation throughout the site.

Impact of site use

The survey results show the likely positive impact of a visit to the site on 'real life' visits to museums in the East Midlands, and on repeat visiting to the site itself.

As a result of their visit to the website in question:

- **58%** felt they were quite or very likely to **visit** a museum or library featured on the site
- **93%** felt they were quite or very likely to **visit the site again**
- **82%** were quite or very likely to **search for more** related information on other sites

4 in 10 users also felt they were likely to **contact the museum** directly for more information: unsurprising given the proportion of specialist users.

6.2 Overarching issues and recommendations

Throughout this research project, several issues recurred across a variety of different sites for a range of user modes. This section highlights these key issues, and provides recommendations for future development based on these.

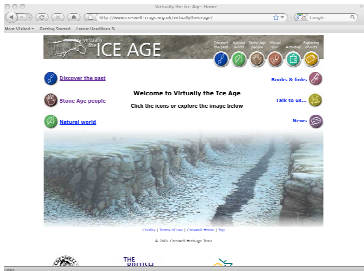
A more detailed summary of the feedback on each site is included in the appendix to this report, looking at how far existing sites are meeting users' needs at the moment from the discussion groups, online survey and audit.

When arriving on the site

Many of the respondents that we spoke to were very interested in the online collections resources they were shown, but had been **unaware of the sites** before taking part in the research, despite having visited museums in the East Midlands in the past year and being in the target user modes for the sites tested. Users in all groups questioned why they were not already aware of the resources, and concluded that the sites could be better marketed to target users, especially where there was a direct link with particular exhibitions. Potential users expect to find out about collections resources through leaflets and posters on display in museums, but also through reciprocal links with related sites and local information resources.

'I would never have thought to use this: there's no connection to the exhibition.'
Independent adult

Recommendation: many of the resources could attract a wider audience by communicating the existence of the site and the benefits of using it to target user modes.



'Virtually all these sites are not really sure who they're aiming at.' Local history

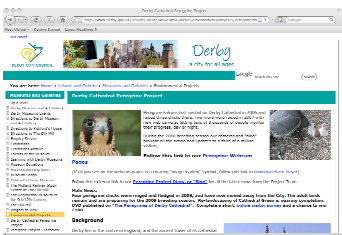
Some of the current resources **lack a clear proposition** when landing on the homepage. Visitors were left confused what the site was offering them and why they should stay. For example, the site shown on the left had lots of content which respondents found very engaging, but it was not immediately clear what the site was offering: some thought it would be a virtual reality environment to explore, or were unclear what sorts of information would be available.

Recommendation: the title, introductory text and appearance of the homepage need to accurately reflect the content and experience on the rest of the site so that users can clearly tell what they are going to get.

Similarly, many respondents were **confused about who the resources were aimed at**: there was often a mismatch between the visual cues given by the design of sites and the level and type of information. Users were surprised to find content suitable for academic researchers on sites that looked child-friendly, and similarly overly-basic information on sites which looked like specialist resources. There was often also a mix of types of information in the same section, so users would be faced with interpretation not suitable to their needs.

Recommendation: target user modes for a site should be defined from the outset of the project – who is this site for? The outcomes that we want to give users should also be defined by user mode, and the contents and structure of the site designed with this in mind so that different users are signposted to different sections of the resource.

Site design



The biggest issue in terms of site design was with online collections resources **embedded within council pages**. Some respondents thought they had come to the wrong site initially, and were unclear how the site related to the general council links (in the example, there are on the left), often clicking on options here and accidentally leaving the resource site.

Although the resource is part of a museum funded by the council, users do not automatically associate online collections resources with council services, and the primary proposition of a collections source must be 'visit the museum' or 'explore collections' – not 'use a council service'. Sites branded in this way made the resources appear dull and/or confusing, and made it easy for users to drift away or click off the resource.

In a competitive market, museum-based online collections resources need to be able to clearly communicate their proposition and have sites comparable with those of their commercial competitors.

Recommendation: whilst councils may get kudos and web hits from having museum and collections resource sites embedded within the overall council page, this only serves to confuse users and reduces usage. Sites would be better used and better liked if they were able to have independent identities, and could still be associated with the council through reciprocal links.

Content of site

Out-of-date event and programme information

displayed on sites made users feel they were on a 'dead' site and question the validity of other information on other parts of the resource. 'Last updated on...' lines also put off some users if the date shown was some time ago.

Recommendation: information about events and other time-limited content needs to be kept up to date as part of routine marketing activities, or removed from the site. 'Last updated on ...' lines are not helpful especially on fairly static sites and could be removed if possible.

Information provided sometimes falls short of users' expectations

, or is not what they expected – in style or in content. This was most problematic where the design or proposition of sections led users to believe that they would find content suited to them, whereas the actual content provided was aimed at a much more specialist or generalist user.

Recommendation: again, this is a case of being clear about who the site is for when planning the resource, and where they can find content relevant to them when designing the structure and navigation tools for the site.

Resources often **fell short of users' high expectations** of contemporary web resources: in particular, many respondents felt that the resources could embrace **multimedia tools** and **interactivity** to deliver the content in the most appropriate ways. Whilst the quote on the left indicates the level of expectation that users bring to the sites, many would also have welcomed more basic techniques, for example inclusion of video clips or animations where this is integral to understanding, or using images that contextualise objects in room settings.

They could have a virtual tour ... you walk around it and it gives you all the information on the rooms.' Family adult

Recommendation: Resources need to be designed not just with current web standards but future expectations in mind. This is obviously difficult to achieve in practice: flexibility in the structure of sites to include other elements at a later date and the potential to set up and link to subsidiary sites without users necessarily noticing they are leaving the resource (eg using blog site, Flickr) may help.

Recommendation: Explore using cheap / free ways to include multimedia in sites, for example embedding YouTube videos.

Following on

It was not always clear where objects can be seen in person: this was especially important for users planning a visit, and users in general expected there to be a more explicit **link between the virtual and physical** museum sites – with each driving visitors to the other.

Recommendation: make it obvious how visitors can see objects in 'real life' and explicitly encourage them to make a visit to the museum if they want to see more. Similarly, online collections resources need to be marketed to visitors at the museum.

Users also expected to be able to **begin a relationship** with many of the sites: to register for updates, or be given a reason to return, for example by being told that objects on display were changed / added regularly, or the presence of updated event information.

Recommendation: provide opportunities for users to sign up for prompts to return, and communicate the benefits of repeated use.

7 Monitoring and evaluating performance: current practice and recommendations

7.1 Overview

As discovered in previous research and consultation exercises on this topic, monitoring and evaluation to understand the audiences for online collection resources is patchy, with methods, extent of analysis and ways of using the data varying from project to project.

7.2 Web statistics

Advantages and disadvantages

Web statistics are a useful monitoring tool because they:

- + allow the sites monitor change over time
- + are mostly low cost to collect, often using free software
- + are an effective tool for reporting performance indicators to funders
- + can provide detailed and reliable information about who actually uses your site, and how, requiring little or no analysis by you

However, there are limitations to this method, including:

- limited depth of information: web statistics can tell you how many people, how many visits, from where and so on – but not who they are, why they are visiting, or how satisfied they are.
- no consistent approach or software: as detailed below, different web statistics programmes can produce vastly different results, so it is difficult to benchmark results across projects.
- lack of knowledge and/or control over data: as detailed below, project managers often have limited access to the statistics they would like, and some lack time and/or skills to interpret the data.

Current practice

The table below summarises how online collections resources are currently monitoring usage statistics, and what they are using this data for. These results raise a few key issues:

Lack of comparable data across sites

As shown in the table at 6.1 and below, different sites are using different technology to measure usage data. Different software packages take different approaches to gathering statistics. There are two types of software being used: one type uses log analysis of the files generated by web servers, whilst another type adopts a browser-based approach, which is generally more accurate. The use of these two types of software can give significantly different statistics for the same measure eg log analysis can report up to 400% more page impressions than browser-based analysis tools. There is also no standard approach to the inclusion or exclusion of spiders and robots (non-human internet activity), which can dramatically increase page hit, visitor and visit data.

Most are monitoring the minimum – but possible to get rich information

It is understandable that most sites are only analysing statistics requested by funders: project teams are often pressed for time and have many other priorities.

However, several sites are using the same data to obtain valuable information about: their users' length of visit and activities whilst on the site; point of origin both geographical and where they found the site / search terms they used; relationship with the site (repeat usage etc); and the relative popularity of different site elements. This intelligence is then used to inform site adjustments in order to better meet users' needs, to advocate for the value of the resource internally and externally, and also as a morale boost for staff. All this information is available with free or low cost software.

Organisational limits on web stats collection

Many managers of online collections resources do not have direct access to web statistics relating to their resource, due to where their site is hosted or the structure of the organisation - meaning that they don't have access to the full depth of information available from web statistics.

And because web monitoring is currently geared towards reporting performance indicators to funders (see table below) rather than informing site improvements, much data is not collected or analysed.

Furthermore, several managers reported issues with funders not accepting certain sites as eligible for inclusion in performance indicators, due to

narrow definitions of what museum website activity should constitute (ie not live webcams of wildlife, not sharing content with users through Flickr).

| Organisation | Software | Used for | Issues |
|---|---|--|---|
| Northampton Museums | | Reporting for Best Value Performance Indicators | Stats gathered for homepage only. Recently added Flickr stats to count |
| Knitting together | Urchin | Monitoring indicators to Big Lottery Fund | |
| Nottingham Museums | Web Tracker | Performance indicators to MLA, Renaissance East Midlands | |
| Leicestershire Museums | Web Trends | Performance indicators to MLA. Informs development of site eg popular items made more prominent. | Takes time to build expertise on gathering and analysing web stats. |
| Leicester Arts & Museums Service | Urchin | Performance indicators to MLA, DCLG. Informs development of site eg popular items made more prominent. | |
| Treasures of Derby - Derby Museum & Gallery | Collect stats via partner as own software does not work (clicktracks) | Performance indicators to MLA, Audit Commission Bets Value and Derby City Council | Issues with software and lack of resources to analyse data. |
| Derby Flora | statcounter.com | As per Derby Museum & Art Gallery see above | Specialist resource, so figures are fairly low, but growing |
| Derby peregrines blog | Clustrmaps | | Additional data collection tool: allows more detailed understanding of blog use |
| Derby peregrines site | statcounter.com | As per Derby Museum & Art Gallery see above Informs site improvements, source of staff morale | Audit commission rejected high figures from Peregrines site due to site being about live birds rather than museum objects |
| Nottingham Brewhouse Yard Museum | Google Analytics | | |
| Sleaford Museum | Matrixstats | | |
| Mansfield museum | Unknown | Reporting to funders | Limited information – hits from homepage only monitored by council |

| Organisation | Software | Used for | Issues |
|---|-----------|----------------------|---|
| Lincolnshire Museums the collection | Unknown | | Statistics include visitor numbers only and search function usage |
| Leicestershire Museums: Collections Online | Webtrends | Feedback to partners | |
| Leicester Museums: 3 centuries of transport | Webtrends | Feedback to partners | |

Recommendations

Using web statistics for more than KPI reporting

As described above, some project managers are using web statistics to inform development of their resources, as well as satisfying funders' reporting requirements. Several project managers mentioned information that they would like to know about users which can be easily gathered from web stats:

- Visitor numbers
- How long people are logged in for
- How many people use which pages
- Where are they coming from? Geographical location, and what site they are referred from
- It is also possible to get some idea of your users' needs by tracking search terms

Sharing knowledge

some project managers are already collecting, analysing and using this more detailed level of information from web statistics. It would be useful for these managers (Derby and Leicestershire museums services appear to have some expertise in this area from audit responses but there will be others too) to share their knowledge in this area with other project managers in the region. This could include:

- How to get useful web statistics, even if you rely on council-run servers and IT departments at the moment
- How to analyse the results to get useful insight rather than just evidence for funders
- The benefits of using web statistics in this way.

Move to consistent software where possible

If online collections projects in the East Midlands want to compare visitor data, they would need to coordinate gathering and analysis of comparable data. Given the challenges discussed above around lack of control over data, this may not be possible. However, there are free / low cost software solutions readily available, which may help to make the case.

Analyse alongside other research

Whilst web statistics are very valuable, results will still need to be set in the context of what else you know about your online visitors – from feedback, surveys, and from user testing. These more qualitative methods can also be used to probe into why and how people are using your site eg why is nobody looking at certain pages? how far is the site meeting people's needs?

7.3 Online surveys / feedback

Current practice

Eight of the online collections resources reported that they currently offer the facility for feedback via online form or email from the website. However, none of the project managers we contacted currently have a systematic way of finding out more about their users and gathering their views.

Advantages and disadvantages

Data gathered directly from users of your resource via the internet can be a useful tool as this:

- + can provide a detailed picture of who your users are: demographic profiling (which could contribute to wider targets within your organisation about reaching audiences) but also understanding psychographic issues: what are their attitudes?
- + can reveal why they are using the site, how far the site met their needs, and potential improvements.
- + can be very low cost or free to set up, using free online survey programmes.
- + provides users with a way of reporting particular issues or strongly held views (positive or negative) about your resource, and feel that they have a say - providing that they get a response / acknowledgement of their comment.

However, this method has drawbacks:

- any online survey is self-selecting – results will only ever be of people who want to respond, as you cannot force everyone to answer to ensure a representative sample.
- whilst the software itself is low-cost or free, it can be time consuming to set up and analyse a survey, especially if you ask lots of open-ended questions which gather lots of long responses!
- a certain amount of expertise is needed to ask questions in a way that will get you useful information.

Recommendations

Short surveys are a useful format

By collecting feedback via surveys, you can also collect some information (eg demographic profile, user mode, whether they are a repeat user, whether they have visited your museum) that helps to contextualise comments and understand which users' needs you are satisfying at the moment.

Offer a small incentive where possible

Offering a prize draw incentive can encourage users of all types to take part in the research. This helps to reduce bias resulting from self-selection and provide a wider range of view points, especially moderate ones ie the only people who will want to respond are those who have an extreme positive or negative view that they feel the need to air. However this will not entirely eliminate skew as shown in the results above from the online survey carried out during this research project.

Use a repeatable region-wide survey where possible

A survey such as the one set up for this research project is useful as it allows some comparison between sites in terms of the different user profiles. This also shares out the burden of time and effort to set up and output the results. We recommend that Renaissance East Midlands repeats a similar exercise on a regular basis if possible, which would enable partner projects to monitor change over time. This could be done cheaply and easily, using the existing survey (set up on Renaissance East Midlands' Survey Monkey account) as a starting point.

A prominent position for the link

Pop-ups are generally not popular with users and can be difficult to set up with IT departments. We recommend having a short blurb for the online survey and related prize draw on the homepage, or even on a menu bar across every page where possible.



Partners have advertised the link for the current online survey in different ways. It is interesting to note that, where the link is given a prominent position on a popular page it attracts many results (eg Picture the Past has received 226 responses so far), whereas links advertised at the bottom of scrollable pages or in a ‘feedback’ area of the site attracted far less responses.

Analyse alongside other research

Survey results can add useful context to web statistics, and can also be used to identify to explore further in qualitative consultation with your users, or to understand how extensive views identified through other feedback are.

Capture details for future research

Online surveys can be a useful way of finding respondents willing to help with future research. A tick box and capturing email / phone details allows you to build a panel of people of real users. This panel can then be contacted to consult on future developments.

7.4 User testing / evaluation

Current practice

Two of the project managers were able to share the results of previous user evaluation with us. Another of the project managers knew that the site had been tested with a particular specialist user mode by sending the link to relevant people around the world and asking for feedback.

However, it seems that testing sites with target user modes both before and after launch is not common practice amongst online collections resources in the East Midlands.

Advantages and disadvantages

User testing and evaluation both whilst the resource is in development (formative or front end research) and once it has been launched (summative research) can be an extremely useful exercise, allowing the project team to:

- + get real depth: by speaking to people about their needs, wants, opinions and behaviour, we can explore issues in detail and really unpick why and how people would or wouldn't use the site.
- + help save time and money: especially at the front end / formative stage before a resource is launched, user testing and evaluation can help prevent costly mistakes by identifying potential flaws – not just usability issues, but also fundamental issues with the concept of the resource. Addressing these

at the point of design or build rather than after the site has been completed is a much more efficient use of time and money.

+ Introducing user perspectives at an early stage gives the project team a chance to step out of their own positions and see the resource from users' point of view. This can sharpen internal thinking, and bring focus to internal differences of opinion.

However, there are some points to bear in mind before undertaking user testing:

- speaking to users does take time, although doesn't need to be complicated or extensive.
- You also need some basic expertise to carry out user testing, although there is often no need to employ an external professional.

Recommendations

Doesn't need to be formal or expensive

User testing is often the part of the process that gets squeezed out in tight budgets and timescales. However, including visitors' opinions can be done efficiently and effectively, especially if it is planned into the process from the beginning.

Consultation with users can be carried out by your staff with some basic training, and there are many guides available on this topic.

Whilst it is a good idea to offer participants some incentive if you can, this could be relatively low cost – like good cakes, coffee and sincere thanks, plus an invite to the launch of the final launch or similar – for a short session.

Use existing contacts - surveys, eLists etc

As described above, online surveys and links can be used to capture people willing to take part. Existing mailing lists can also be a good source where permissions exist, and it is also easy to recruit people in your museum or library, and ask them if they would have 20 minutes to spare for a short discussion, if necessary. These respondents can then be 'panelled' and recontacted for testing future iterations of the resource, although it is important that they do not get over-used and become unrepresentative of 'normal' users / visitors.

Have something to test

Even if the project is only at concept stage, it is really useful to have something to show respondents. This could be mock ups, other similar resources, mood boards – but something to help them make the leap of

imagination and help stimulate other ideas. Users cannot tell you the 'answer', but they can give invaluable guidance on how best to satisfy their needs.

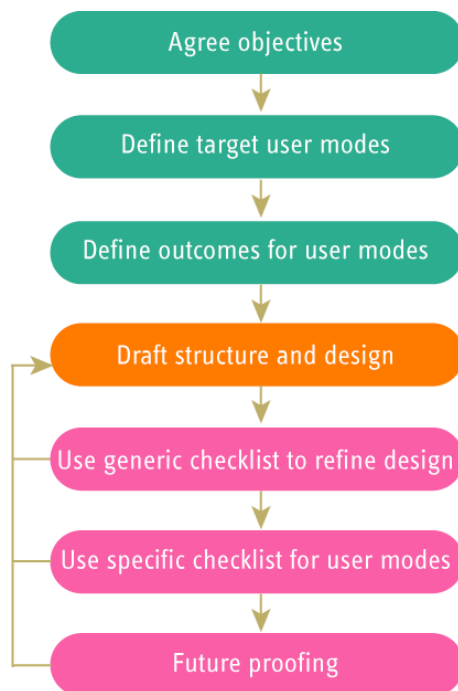
8 Embedding user needs in online collections resources

This section provides an approach to planning, testing and ongoing monitoring online collections resources in a user-focused way.

8.1 User-focused project **planning** process

The diagram below summarises a process for planning an online collections resource which uses users' needs as a lens through which to focus content, structure and design of the resource to deliver your objectives. This approach focuses on the outcomes you want to achieve both for your organisation and for users.

User-focused project planning process for online collections resources



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As the model shows, the process begins by agreeing the objectives for the site: **what is the site aiming to achieve for your organisation?** The decisions made in all following steps must contribute to achieving these objectives.

The next step is to define the target user modes for the site: **who is the site for?** Many current sites are aiming to increase access for the public in general – however, it is not easy for this to result in a site which does not meet the needs of any users, as it is not designed with these users in mind. This research has shown that it is very difficult for an online collections resource to meet the needs of many user modes at the same time: it is a good idea to prioritise users so that you are clear who you are catering for.

It is important to define outcomes for user modes at an early stage: **what will the target users get from using the resource – what will they think, know, feel and do as a result of their visit to the site?** This can then be used to sharpen the focus of site content and structure – if something doesn't help to deliver one of the desired outcomes for one of the desired user modes, it has no place on the user-facing resource.

Only once objectives, user modes and outcomes have been defined can an appropriate resource be **designed**. This draft should then be **refined** internally, by using the checklists of user modes' needs (given below) to check that all aspects of content, interpretation, structure and design are going to deliver these objectives and outcomes by meeting the needs of your users. As shown in the model below, you may also want to undertake some **desk research or informal discussions** with potential users to better understand users' existing knowledge or specialist requirements – the earlier the better.

8.2 User-focused project development process

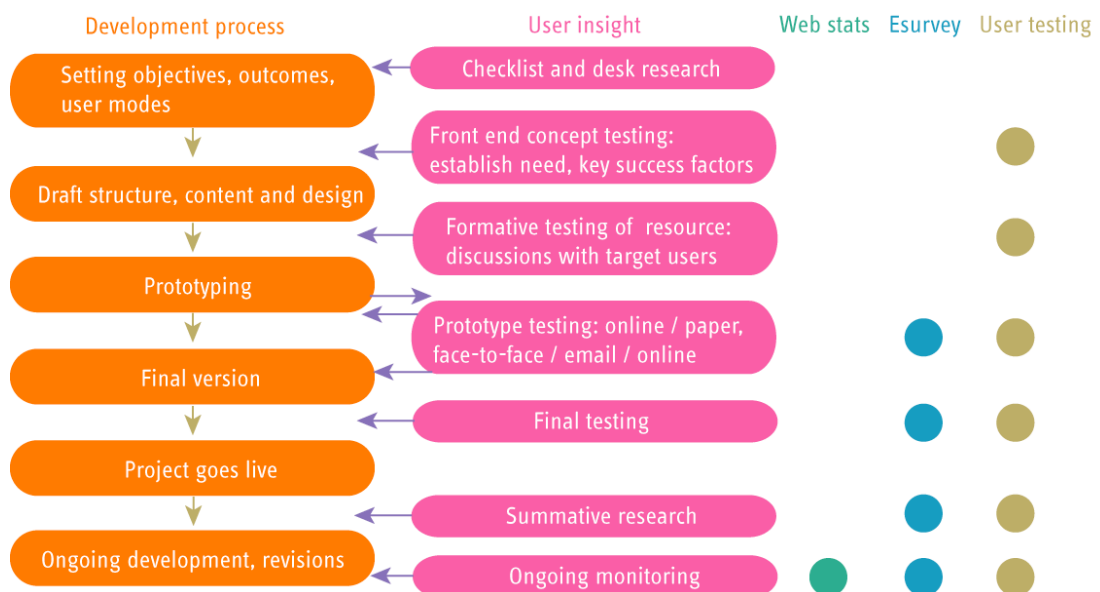
The model below sets out a process to develop the planned resource, including users' perspectives in the process to give the site the best possible chance of success in meeting users' needs (and therefore your objectives). User testing should be planned in at the start of the development process, to ensure it happens at the right time, when user insight can give maximum benefit.

The left hand column (in orange) shows the stages that the project team will need to go through.

The right hand column (in pink) indicates the stages where users' perspectives should be included where possible.

The relevant methods are indicated by the dots on the right hand side.

User-focused project development process



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8.3 User modes and needs

These lists can be used as tools to define target user modes and design resources with their needs in mind, as described in 8.1 above.

User modes

- 1 Family planning a visit**
- 2 Follow-up family**
- 3 Adult planning a visit**
- 4 Follow-up adult**
- 5 General interest surfer**
- 6 Pupil researching**
- 7 Hobbyist researching**
- 8 Professional / academic researching**
- 9 Teacher lesson / project planning**
- 10 Teacher visit planning**

Generic user needs

When arriving on the site

- 11** A clear proposition or promise on the homepage
- 12** Clear who the resource is for – target user modes
- 13** Features that grab attention and draw users in from the homepage
- 14** Clear signposts for each section, which indicate which needs each option will meet
- 15** Options from the homepage to be verb-based where possible

Site design

- 16** Enables users to quickly access content relevant to them
- 17** Professional appearance, consistent with current standards in web design
- 18** Logical structure of information
- 19** Features to help users navigate the site: menu bars and short introduction for each section
- 20** Links to lead users on to related sections – no dead ends

Content of site

- 21** All information is up-to-date.
- 22** Content suitable for browsers, with ways in to deeper information
- 23** Objects linked together in narrative themes

- 24 Interpretation that meets the needs of target user modes in terms of depth and breadth
- 25 Interpretation connects into users' existing frameworks of knowledge
- 26 Layered information that allows users to control the depth of information
- 27 Use of the most appropriate media to deliver objects and interpretation
- 28 Users are able to explore through interaction
- 29 Opportunity to interact with staff and other users

Following on

- 30 Links onwards to broader and deeper information – both from the organisation and other related resources
- 31 Information about where objects can be seen in real life
- 32 Reasons to return to the site: dynamic material, updated information, expanded or changed content and repeatable experiences
- 33 Opportunity to sign up to alerts / other prompts to return

Specific needs of user modes

1 Family planning a visit

- 1 Reassurance that a visit to the museum will meet their needs and be worth the effort.
- 2 A reason to visit this venue rather than elsewhere – offers, events.
- 3 Endorsement from other families
- 4 A taster of the likely visit experience: family friendly? Interactive? Educational? Fun? Content to suit the whole group?
- 5 Practical visitor information found easily from the homepage: what's on, times, directions.
- 6 Information to help plan the itinerary of the visit.

2 Follow-up family

- 1 Ways to recap, broaden and deepen engagement with the exhibition online.
- 2 Interactive challenges that families can explore together
- 3 Directed to the resource from the exhibition, ideally with a pop or reminder
- 4 Recommendations for other resources to try – either physical visits or online.

3 Adult planning a visit

- 1 A taster of the likely visit experience: appropriate to interests? Information at the right level?

- 2 Points of connection with the collections or exhibitions – how will this connect with what I already know?
- 3 Practical visitor information found easily from the homepage: what's on, times, directions.
- 4 Information to help plan the itinerary of the visit: key objects to see, gallery summaries, guides.
- 5 Reasons to visit: events, new content, endorsement from other visitors

4 Follow-up adult

- 1 Ways to recap, broaden and deepen engagement with the exhibition online.
- 2 Ability to explore objects, themes and subjects in detail.
- 3 Directed to the resource from the exhibition, ideally with a pop or reminder
- 4 Recommendations for other resources to try – either physical visits or online.

5 General interest surfer

- 1 A strong reason to stay on the site
- 2 Content and interpretation related to places, people and/ or personal and social histories
- 3 Interpretation contextualises objects in wider historical period and social circumstances
- 4 Interpretation helps users relate objects to their life and existing knowledge
- 5 Multimedia used to bring objects to life
- 6 Opportunity for interaction with staff and other users

6 Pupil researching

- 1 Clear, reliable information on a specific topic
- 2 Search terms that match their understanding of topics rather than catalogue categories
- 3 Overview of a topic, with routes onwards to deeper information
- 4 Images and other content to download
- 5 Interactive activities where relevant to the topic

7 Hobbyist researching

- 1 Details on the extent and nature of the collection
- 2 High quality search of the catalogue
- 3 Overview of a specific subject area or collection
- 4 Contact details for staff, references and links to specialist resources

8 Professional / academic researching

- 1 Technical detail rather than context

- 2 Information about an individual object, including physical details, conservation, provenance and related archival material.
- 3 Interpretation from recognised authorities – academia or related professional fields, fully referenced
- 4 Contact details for staff, references and links to specialist resources

9 Teacher lesson / project planning

- 1 Activities to use in class or set as homework
- 2 Whole resources to use as they are
- 3 Content to repurpose for use in class
- 4 Benefits of using the resource clearly communicated and marketed
- 5 Endorsement from other teachers
- 6 Online resources accessible through school networks – issues with streaming and rigorous firewalls.
- 7 Resources free to download where possible
- 8 Ways to use museum objects online, with multimedia ways to access objects and accompanying exercises relevant to the curriculum
- 9 Locally-focused content relevant to National Curriculum topics

10 Teacher visit planning

- 1 Practical details: how to book, risk assessments, cost, travel
- 2 Information to help plan visit itinerary: topics to cover, taught sessions available, floor plans, materials to use.
- 3 Pre- and post-visit activities – interactive or available to download and print out

8.4 Guides on DIY user consultation and research

As discussed above, user research can be undertaken quickly and cheaply, without using external agencies. There are already many guides on how to conduct this: a few are listed below as places to start.

Dazzled by data? (2008), Audience Data UK / Arts Marketing Association (UK)

Workshops available at: http://www.a-m-a.org.uk/dazzled_by_data.asp

Supporting resources available to download from: <http://www.a-m-a.org.uk/ADUKresources.asp>

Dazzled by data? is a free online resource to help organisations develop audiences through research. The site includes a range of guides, exercises and examples, including supporting resources on specific aspects of collecting and auditing data (commissioning market research, samples, desk research) and workshops on carrying out audience research:

- Panning for Gold – A guide to collecting valuable visitor information in ticketed organisations (Roisin Jones)
- Diving for Pearls – Collecting valuable visitor information in non-ticketed organisations (Beth Aplin)

Visitor Research Made Easy (2007), Arts Victoria (Australia)

Available to download from:

http://www.arts.vic.gov.au/arts/publications/publications/research_guides.htm

A detailed step-by-step guide to conducting, analysing and applying visitor research in museums and galleries, including case studies and templates.

Information Sheets (2008), Australian Museum Audience Research Centre (Australia)

Available to download from:

http://www.amonline.net.au/amarc/resources/info_sheets.htm

Range of resources, including a brief introduction to audience research for small museums, and sheets on evaluation techniques.

Research information sheet (2003), Arts Council England (UK)

Available to download from :

http://www.artscouncil.org.uk/publications/information_detail.php?rid=0&sid=&browse=recent&id=25

A basic introduction on designing a research project.

How To Manage a Consultation, MLA East Midlands

Available to download at:

<http://www.mla.gov.uk/>

Thorough guide on the process of managing visitor consultation.

Inspiring Learning for All

Available at: <http://www.inspiringlearningforall.gov.uk>

Developed by MLA, the Generic Learning Outcomes provide a framework for measuring learning impact. The Inspiring Learning for All website provides practical guidance on how to undertake research to measure learning outcomes.

Visitor Studies 101 (2008, 2006), Committee on Audience Research and Evaluation (US)

Available to download from: <http://www.care-aam.org/Visitor+Studies+101/default.aspx>

Useful introductory presentations and handouts on conducting visitor studies in museums, including the benefits and drawbacks of different research methods.

Various resources and guides, Visitor Studies Group (UK)

Available at: <http://www.visitors.org.uk>

A range of practical tools for conducting visitor research, plus articles and reports, links, directory of consultants and further recommended reading. Available to members only.

Survey Monkey – online research tool

Available at: <http://www.surveymonkey.com>

Easy-to-use and low cost resource for undertaking online surveys, enabling users to design, distribute and analyse bespoke online questionnaires.

Google Analytics

Available at: <http://www.google.com/analytics>

Free to use service which enables users to monitor website statistics. Includes tailored reports and a customizable 'dashboard' function.

