Implementing resource discovery techniques at the Museum of English Rural Life and Special Collections, University of Reading

Using resource discovery techniques to create a user friendly web presence

Alison Hilton & Adam Koszary

Case Study
August 2015 Updated
February 2017

1.0 Initial Application

1.1 Course attendees

Alison Hilton - Marketing Officer, the University of Reading Museums and Special Collections Service.

Adam Koszary - Project Officer, the Museum of English Rural Life.

1.2 The Museum of English Rural Life, University of Reading

The Museum of English Rural Life (MERL) houses the most comprehensive national collection of objects, books and archives relating to the history of food, farming and the countryside. As a University Museum and as the founder member of the Rural Museums Network, MERL has built up a reputation as the leading authority in its field and as a centre of excellence in teaching and learning.

It is situated in a Grade II* listed building with a 2004 modern extension for the museum collection and an Archive Store built in 2005. MERL shares the building with the University's Special Collections service, which is composed of rare books and archives.

1.3 Executive Summary of original proposal

Problems identified at MERL	We have huge amounts of digitised material but struggle to make it widely available
	We don't have the resources to provide content that will make University staff aware of the cross-disciplinary potential of our collections
	Our digital resources need to help users be aware of links across museum, library and archive collections
	Staff who manage digital resources are skilled in digitisation but don't have skills for sharing and optimising content for online discovery and vice versa
	Licensing concerns and lack of knowledge of best practise causes lack of confidence
	Lack of skills in user experience (UX) planning
Proposed future plans	A new DAMS already in development will enable us to make better use of digitised collections by combining our Object, Archive and Library holdings into a single database.
	Digital content to be aimed at deepening engagement with our research & teaching audiences, particularly within the

	University, partly delivered through 'Digging Deeper' area on the website (9 themes, 25 objects)
Proposed learning outcomes	Develop a strategy to improve links between our collections and popular websites & measure impact
	Explore uploading themed content onto other websites (Wikimedia)
	How best to apply Creative Commons licences to our digitised collections, with possible future plans for Wikipedia articles
	Review best practice for standard social media
Disseminating learning outcomes	Share findings and case study with staff
	Implement training for staff across the Collections to try and instil a digital culture, so that the justifications for improving digital discoverability are clear
	Present findings at a Staff Development Hour for non-special collections staff
	Embed knowledge in new or updated policies

1.4 Conclusions from Jisc training

The Jisc training was a good introduction to a range of techniques, methods, tools and terminology involved in digital discoverability. The course attendees gained knowledge of a number of areas relating to digital discoverability which can be applied to both *Digging Deeper* but also wider future planning. The team:

- Became aware of the need for extensive user-testing on the new website to ensure that it catered to both Digital Visitors and Digital Residents. The new design would have to learn lessons from user testing to ensure that it did not repeat the mistakes of the old website and focused on the areas most needed and requested by our users.
- Realised that although MERL's Social Media is well developed in terms of content and strategy, we could do much better work tying our online activity to our digital collections. The new website and particularly *Digging Deeper* should include options to share objects and documents through various social media channels.
- Should explore the use of a Creative Commons licence for digitised collections for which MERL owns the copyright.
- Became more convinced of the inadequacies of the current MERL website in terms of digital discoverability. Researchers, students and the public have to rely on the

user-unfriendly Adlib database or online exhibitions which are often hosted on pages made with a defunct CMS.

- Realised that although our team had made strides in making our collections more accessible through features such as an A-Z list, we still must improve our Title Tags and structured data to ensure that both collections and individual objects feature prominently in Google searches. The team must explore the use of better tagging to ensure that visitors only find collections through specific searches, but also through keywords related to the subject, through social media and perhaps through Wikipedia.

2.0 Proposed Project: *Digging Deeper*

2.1 Background

MERL is due to finish a major Heritage Lottery Fund project called *Our Country Lives* in spring 2016, when its entirely redeveloped galleries will open to the public. The project has involved a rethink of how the Museum interacts with its visitors both within and outside the galleries, with a three year programme of activities, projects and events which will tie us closer to our target audiences.

MERL has been aware for some time that its website is not fit for purpose as a public-facing museum. It is built on an outdated CMS which is difficult to navigate, and where there are few opportunities to have an overview of the collections held at the Museum and why people should find them interesting.

As part of the project the whole website is being redesigned and rebuilt, which will necessarily involve user-testing, an updated sitemap and a new approach to presenting online collections. The majority of MERL's collections are catalogued and available online through our Adlib database and we are implementing a DAMS to manage the large numbers of digital assets that have been created in recent years. Although a very useful research tool for researchers and staff, ADLIB has an unfriendly UI that puts off students and public visitors. An important aim of the project is to expose more of our collections and make it easier for people to make personal connections between them.

2.2 Description

The Jisc training came at a time when we were already considering a section of the website dedicated to user-friendly pathways into the collection that do not rely on our ADLIB interface. Our provisional title for this section is *Digging Deeper*. It will allow students, researchers and the public to discover our digital collections in an easier and more intuitive way. *Digging Deeper* will:

- Utilise tagging and metadata to make the connections between our Library, Archive and Museum collections more obvious
- Present curated groups of objects based on accessible themes, with the possibility of users being able to curate their own collections
- Be primarily visual and will rely heavily on digitised collections

- Be integrated with our social media channels and make it easier for visitors to share what they find interesting
- Potentially be tied to a planned social media campaign that will allow visitors to upload their own photographs and integrate them with our collections

2.3 Application of Jisc training components to *Digging Deeper*

Component	Overview	Action
Social Media	MERL already has a well-established social media presence, but we do not effectively tie our online presence to our digital collections. *Digging Deeper* will have to be integrated into our social media presence rather than stand apart.	Revisit the MERL Social Media calendar and plan more collections-related posts to allow more diverse routes into our digitised collections.
		Conduct a collections review and to find more narratives around international and national themes that resonate with our identified target audiences. To be used on our Wordpress blog, Twitter and Tumblr.
		Implement the policy that any Social Media content which includes objects should be hyperlinked to either their catalogue record or to their specific page on *Digging Deeper* element of new website.
		Include in website tender a requirement that each page, object or document should include an option to share our content on social media channels.
Data	MERL currently has a mass of digitised content with detailed metadata. There are already plans in the wider University to design and launch a new Digital Asset Management System (DAMS) so that our internal file storage system can be integrated with an online, searchable catalogue that can also pull relevant metadata from our Adlib database. Items featured on *Digging Deeper* will have to source their metadata and structured data from the new DAMS, so we will have to ensure	To research and explore the best way for our users to cite articles, journals, books and objects found on our website. Possible options include a 'Show me how to cite' feature on each object, or a general help webpage.
		Development of an overarching information architecture relating to the collections would be useful and could feed into wider University work on developing IA.
		Organise training so that relevant staff have a working knowledge of the terms involved in data, what

	that we are in keeping with best practice.	structured data is and how it works. Implement this knowledge in website redesign.
		Review of our current use of metadata and structured data in our developing DAMS to ensure that we are in keeping with best practice, and that our data is being properly analysed by Google.
		Ensure new DAMS has a tagging function compatible with *Digging Deeper*.
Digital Collections as resources	The Jisc training made us realise that although researchers, professors and teachers are capable of using traditional online catalogues, they do not have the time to pull together the resources they need for teaching. We will use research on themes for MERL's new galleries to contribute to resources for lecturers and secondary school teachers as part of *Digging Deeper.* We will also research the best methods of presenting these packages on *Digging Deeper*.	Implement our awareness from Jisc training of how researchers discover online resources to ensure that our new DAMS and *Digging Deeper* are structured properly and user-friendly.
		Research and create resource packs containing our objects, archives and books that can be used immediately by university staff.
		Prioritise improving discoverability of collections by academics. Carry out research into their needs and preferences, including subject packages for teaching.
Digital Visitors vs. Digital Residents	We found the concept of [Visitors vs. Residents](#) particularly useful when feeding back to colleagues about the need to cater to different audiences in the way we present our collections online. We identified that the way our digital collections are presented online is primarily for Digital Visitors, as it used by researchers and staff who know what they are looking for, find it and leave. We want *Digging Deeper* to cater to Digital Residents by making our collections more easily accessible, explorable and sharable. *Digging Deeper* will now be designed with different user	Carry out user-testing to discover how easily our visitors can find our collections, including how quickly and easily visitors can find topics, subjects and individual items. Implement findings from this research into redesign of Museum website and *Digging Deeper*.
		Carry out research into User Experience Planning to ensure that *Digging Deeper* works properly as a user-friendly, browsable resource of MERL's digitised collections.
		Ensure the new website is designed so that there is an option of allowing users to create their own collections of material they find in *Digging Deeper*, both as a

	behaviours in mind and consider subject guides/ themed resources as well as A-Z list and catalogue search box as different access points.	way of researchers and students to keep track of objects but also as a resource for future projects involving digital collections.
Google and SEO	We were already aware of the importance of SEO and Google's place in discoverability. The statistics on how people find specific collections and objects is a very powerful tool for advocating SEO for our webpages and how we structure our data. The evidence presented gave us further impetus to request access to our website's Google Analytics from the University of Reading. We now plan on evaluating these Analytics in order that we can construct a website that works best with Google searches. The conclusions we reach will be integral to the redesign of the website and structuring *Digging Deeper*.	Request access to MERL website Google Analytics and ensure the data is sufficient to be passed onto website designers so they can make informed decisions about the new website structure.
		Ensure that our Google Analytics is analysed to ensure that the new website is structured to promote the most click-throughs from the main pages to our digital collections, shop and Visitor Information.

2.4 Application of Jisc training components to future planning

Component	Overview	Action
Dissemination	Make staff aware of '[Make your digital resources easier to discover](#)' Guide as a resource for future planning for discoverability of online collections.	Make presentations and speaker notes available on shared internal drive and via email to all relevant staff involved with digital collections.
	This will help ensure that future digitisation projects planned by archives staff will always include plans to make the new resource discoverable by potential users (and therefore to consider who the users of the new material is for and how it will be accessed)	Organise meeting with Head Archivist, Deputy Archivist and Librarian to discuss findings from Jisc training and their application.
		Share wider findings in next monthly Social Media meeting and ensure that Actions shown in table above will be implemented according to an agreed timetable.
Social Media	Tracking how our digital collections are dispersed across the internet is of particular interest. We were already aware of tools such as	Review of social media strategy to include collections-related aims and focus on digital collections discoverability.

	TinEye and Google Reverse Image Search, and have used them in the past to determine how far certain images have been copied. We currently use native analytics for sites such as Twitter, Pinterest, Facebook and Tumblr which give us a limited idea of how our content is being shared, but were already aware that a more professional tool such as Hootsuite could be useful.	Organise training sessions for collections staff in use of twitter and schedule regular blog posts on collections, linking through to *Digging Deeper* and catalogue.
		Conduct further research into tools for measuring use and impact of our social media platforms, such as Hootsuite.
		Carry out periodic reverse-image searches to discover how widely certain images have been shared, and whether their source has been cited, the source of the image and any copyright issues we will have to address.
Data	Research how metadata and structured data is currently being used in DAMS and in the other collection management systems (ADLIB / Enterprise) and ensure we are in keeping with best practice when presenting this resource in teaching and learning.	Organise a meeting with Head Archivist to share new knowledge on structured data to ensure that *Digging Deeper* and the new University DAMS are in keeping with best practice.
		Develop an overarching information architecture relating to the collections which could feed into wider University work on developing IA.
		The Balanced View Impact Model is something which we do not have the resources or time to carry out on our current digital platforms, but at the same time we are aware through other means that our current offer is not effective enough. We will use the BVIM as a model for a future analysis of *Digging Deeper* alongside our social media channels.
Digital Collections as resources	Prioritise improving discoverability of collections by academics. Carry out research into academics' needs and preferences, including subject packages for teaching.	Organise a review of University of Reading curricula and consult on what resources would be most useful to teaching staff.
Wikimedia	UMASCS holds various collections of national importance, not all of which	Review which digitised collections would be suitable for the

	are referenced on Wikipedia. We are interested in exploring how we can increase referrals to our digital collections through edited Wikipedia articles. As there are third party rights in many of our collections, there is limit to what we can make available under CC, but there is still considerable scope for putting resources into Wikimedia Commons.	Wikimedia CC licence and explore the relationship with our current approach to CC.
		Investigate recruiting a volunteer to upload the low-risk object collection photographs onto Wikimedia Commons, including: A review of relevant topics, areas of study and individual items and individuals we could improve Pages where it would be suitable to use a MERL image Adapting or adopting the correct format in which to publish metadata

2.5 Timetable

Month	Action or Event
June 2015	Conclusion of Jisc training.
	Meeting arranged with Head Archivist, Deputy Archivist and Librarian to discuss findings and conclusions from Jisc training by attendees. A discussion of how to apply these findings to the website redesign.
	Meeting with Deputy Head of News and Curator of the Herbarium to discuss findings from Jisc training, to request access to MERL's Google Analytics for current website and to formulate a single social media strategy for the University.
	Social Media meeting where the course attendees disseminated the findings from the Jisc training which are pertinent to social media.
	Writing of the Brief for the website redesign and tendering process.
	Revisit the MERL Social Media calendar and plan more collections-related posts to allow more diverse routes into our digitised collections.
July 2015	MERL received access to its Google Analytics and immediately began exploring conclusions from the data and how this can inform how we structure our data properly, how to improve out sitemap and how people navigate the current website.
	Obergine appointed to redesign MERL's website.
	Obergine met with MERL team to discuss details of the project and agree a plan.
	MERL social media team to experiment with Hootsuite as a tool for analysing social media data.
	Review of our current use of metadata and structured data in our developing DAMS to ensure that we are in keeping with best practice, and that our data is being properly analysed by Google.
August 2015	Obergine to begin carrying out testing and research, including the creation of a site map and content plan.
	Review which digitised collections would be suitable for the

	Wikimedia CC licence and explore the relationship with our current approach to CC.
September 2015	Obergine to present proposal for the new website and to discuss this with MERL and University of Reading staff.
	Obergine to deliver final site specification
	Possible launch month of MERL's social media campaign for its re-opening in Spring 2016.
October-December 2015	Obergine to build and test website. MERL to review progress.
January 2016	Launch of new website.

3.0 Appendix: Brief for the MERL website developer, June 2015

The Museum of English Rural Life, University of Reading

Project Brief

Project title: The Museum of English Rural Life website development (Stage 1) and build (Stage 2)

Owner: Alison Hilton, UMASCS Marketing Officer

Contact details: Alison Hilton a.c.hilton@reading.ac.uk (Project lead)
Adam Koszary a.j.koszary@reading.ac.uk (Project officer)
Guy Baxter g.l.baxter@reading.ac.uk
Joe Buchanunn (Deputy Head of News and Content, University of Reading)

Value of work:

Deadline: September 2015 (Stage 1) December 2015 (Stage 2)

Required: Conduct content analysis and carry out user consultation of current MERL website to create detailed specification and design for a new website for the new museum. Build the site according to the agreed specification.

Stage 1 includes:

Analysis of current website content

Plan and carry out user testing (or advise MERL staff)

Evaluate and user test current site architecture

Help MERL to develop new content plan & site architecture (Advise on content to keep, edit, ditch or add / content plan for new site), including new collections portal area

Deliver template designs for new site using new MERL brand and new 'Discover Reading' (CMS/design?), including:

Integrated social media

Collections portal area ('Digging Deeper')

Advise on photographic requirements for templates

Deliver custom template for MERL Our Country Lives Wordpress blog (and other social media platforms) to The MERL brand

Create detailed specification for build stage 2

Complete existing Museums and Collections portal on University of Reading website

Stage 2 includes:

Build website to specification agreed in Stage 1

Test, review and launch the new site

Background

The Museum of English Rural Life is currently closed for a Heritage Lottery funded redevelopment project, 'Our Country Lives' which will transform the Museum and the way a new generation engages with rural heritage through new, themed displays, innovative interpretation and an exciting programme of activities.

The new Museum will connect people to the countryside by revealing the relevance of rural life, past and present, to our modern and urban lives and exploring its vital place in addressing questions of identity, environment, sustainability and health.

The project will involve creating new galleries that are designed to deliver a more engaging experience for our visitors by introducing more interactives, handling opportunities and innovative digital interpretation.

The Museum's website was developed in 2007 when the University adopted a new CMS and branded all University department sites. The content was prepared by staff, overseen by Alison Hilton, Marketing Officer, and the site was built by the Digital Development team. Parts of the website containing collections information was moved over in its entirety from the old server, whilst the rest of the site was created from scratch. Alison Hilton has administered the site since then, with several members of staff being trained in the CMS and adding content on their own pages, or as part of projects. Some pages have been relatively static since the site was launched, others, such as the homepage and events pages, have been constantly updated. As our activity has increased and grown more complicated, the site has grown, with more and more pages added, resulting in a lack of structure and complicated layers of navigation.

The Museums and Collections portal was originally conceived as a full 'area' on the CMS, with a homepage linking to events, social media, news stories and the other main University collections and pages containing information relating to cross-collection activity, such as Museum Studies and volunteering. As the project was begun at a time of planned change to the University systems, it was never fully developed and is currently just a single-page portal linking to the other museums and collections, but with broken/incorrect links and which museum staff do not have access to.

We are currently taking part in a Jisc Digital Spotlight pilot project focussing on improving accessibility of digital collections for teaching and learning, and we are planning to integrate work as part of this project into the new website development, with particular focus on a new collections portal.

Scope of project

As part of the 'Our Country Lives' project, the museum needs to redevelop its website to reflect the changes taking place in the physical museum. The website project will include analysis of current content; user testing, development of site architecture and content, creation of a new collections portal for use by different audiences, and linked to the content in the new galleries; design to conform to the museum's new visual identity and the University's 'Discover Reading' site; building the new site within the University's content management system.

The website development project will include 'completing' the Museums and Collections portal on the University of Reading website.

Aims of the project

To evaluate the current website & usage and create a design and content plan to reflect the results of user consultation

To design a website which:

Reflects the nature of the new Museum of English Rural Life visually and in content

Presents the Museum as an exciting an accessible visitor attraction as well as a centre for study and research

Has a clear structure is easy to navigate and which meets the needs of a range of audiences, including visitors, researchers (key user groups) and key funders (HLF – info for visitors, HEFCE – emphasising strength of collections, and UoR – use of collections for research, teaching and learning (&WP))

Acknowledges and (profits/benefits from) the link between the Museum and the University Makes our digital collections and resources accessible to students, academics, teachers, and researchers.

Encourages website visitors to visit the museum, use our online resources and actively engage with the museum via social media and blogs

To test and launch a new website by January 2016 to coincide with the beginning of the relaunch marketing campaign

To complete the existing portal for access to the University's Museums and Collections websites and create a solution for shared information.

References and constraints

The website will need to be developed in the ActivEdition CMS, and be developed in line with the University's web and content best practice – brief to be given by the Content Team.

Outputs

Stage 1: The specification for a new website for The Museum of English Rural Life to be built using the latest UOR content management system & a completed Museums and Collections portal on the University of Reading website.

Stage 2: Launch of a new fully functioning website

Timescales
End of June - Tender agreed

Beginning of July – meet MERL staff to discuss details & agree plan

July & August – carry out testing and research, create site map and content plan

Sept – present proposal, discuss with MERL & UoR staff

End Sept – Deliver final site specification

October-December – build, test and review site

January 2016 – launch new site

JISC Digital Spotlight Case Study: Museum of English Rural Life and Special Collections, University of Reading
February 2017 update

Introduction

Since our original case study the Museum of English Rural Life (the MERL) has gone through significant changes. The new permanent galleries opened to the public on 19 October 2016, and the new website was launched on 7 September 2016: www.reading.ac.uk/TheMERL.

The website took its steer from the JISC Spotlight training and, although we completed many of the Actions resulting from the training, the final product did not fulfil all of our original aims.

The barriers to implementing all of the Actions from Spotlight were mostly down to a lack of resources, and in particular a lack of staff time. The redevelopment of the physical galleries and the arrangement of all that comes with a reopening of a museum – last minute changes, private views, snagging etc. – meant that some of the website content was not completed in time and is still a work in progress.

The MERL also began a significant new Arts Council England project in November 2016 focusing on training in digital skills, revamping the museum's digital offer, and working in collaboration with Reading Museum. Many of the aims of this project were a direct result of Spotlight training.

Implementation of website and Digging Deeper

The website, completed in September 2016, was built during a time of transition at the University when the official CMS was under review. As a decision had not been made at the time of development the site was built using the ActivEdition CMS, which causes delays in adding content. However the website was completed on time and with Google Analytics tags, goals, tracking, interactions and filters built in. The initial design and structure were user-tested by staff and volunteers, and a thorough review of the previous website's content resulted in a massive reduction in word-count and imagery.

The website can be found here: http://www.reading.ac.uk/TheMERL
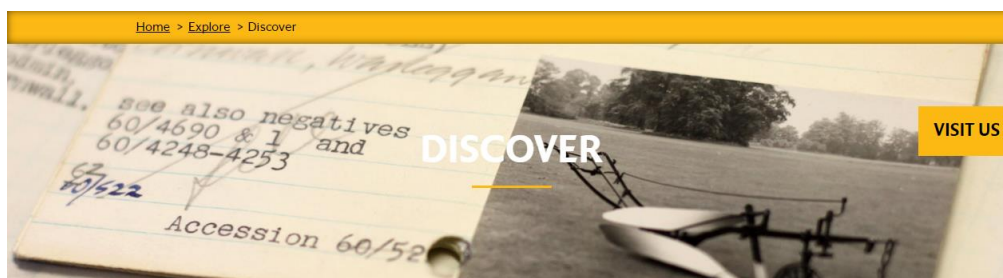
Digging Deeper was a significant outcome of the Spotlight training, but was the most difficult element of the new website to implement. After some user-testing the title of the section was changed to *Discover*: http://www.reading.ac.uk/TheMERL/Explore/TheMERL-Discover.aspx

It has these main features:

- The section allows users to browse a variety of objects, archives and books which are categorised into Universal Themes and Categories.
- Each object is linked to a specific Collections page and a Gallery page if the object is on public display.
- Each page is designed to have visual impact and function almost as a blog page, with high-quality photos and text.
- These pages are more useful to link to on social media than the object records on our Adlib database, which are intended for researchers.
- Online exhibitions will draw from *Discover*.

PLASTER CAST HANDS

DETAILS

Categories	Making Rural England
Theme(s)	Countryside, People
Collection	Domestic and Personal Objects
Date	1875-1899
Object number	75/16/1-2

Discover is a more attractive way to showcase our objects than through our online database Adlib (http://www.reading.ac.uk/adlib/)

Discover experienced issues in the development process as well as some snagging after going live, such as:

- The Search function is difficult to navigate and is somewhat unintuitive. It still feels too much like a research database, which was not the aim.
- The section is not populated with enough objects because of the time it takes to work with the ActivEdition CMS and the requirement to have professional photographs.
- Populating the section still requires manual entries in the CMS, rather than by pulling the information from the Digital Asset Management System (DAMS).

As part of the new project #Reading: Town and Country, we will be exploring how we can automate between our object database, our DAMS, and the website. We hope to pull pre-existing written fields and images straight from the DAMS onto *Discover*.

Social Media

Our Actions resulting from the case study were fairly simple, and policies of linking to the catalogue on all collections posts and including sharing buttons on all of our webpages were both implemented. We also revisited our Calendar and planned campaigns that would encourage more routes into our digital collections which worked with our new gallery content, but unfortunately due to lack of time and a dedicated post we could only implement these campaigns in a limited way. We did not have time to conduct a full collections review but still plan on doing one.

We did, however, put our social media on a more professional footing. We did not invest in an analytics service such as Hootsuite but have continued to collect data from native analytics tools and report on them quarterly. As part of the Museum's redevelopment, staff now actively encourage visitors to share their visit through social media and we are exploring new platforms such as Instagram (www.instagram.com/the.merl).

Spotlight training contributed to a more iterative and experimental approach to our social media, which was put to good use when our blog about a dead mouse went viral:

- https://blogs.reading.ac.uk/merl/2016/02/03/155-year-old-mouse-trap-claims-its-latest-victim/

- http://blogs.reading.ac.uk/merl/2016/02/09/how-we-went-viral-a-good-story-good-luck-and-good-friends/

Our storytelling approach to social media bearing fruit on Reddit.

#Reading: Town and Country

The various elements of the Spotlight training confirmed our suspicions that we needed to put the MERL on a sounder digital footing. There are differing levels of digital awareness, skills and confidence which we needed to address if we were to keep pace with developments in the sector.

The conclusions we made from Spotlight training contributed to and were featured in our application to Arts Council England for funding for a project focusing on training staff, incorporating digital technologies into our community work and embedding a digital culture in our institution. The bid was successful and began in November 2016 as a partnership between the MERL and Reading Museum.

As part of the project we are hoping to implement much of what we identified in the Spotlight training. In particular, we will be integrating the DAMS with our website and improving *Discover*'s Search function as a result of user-testing. By training staff in the uses of social media in their day-to-day work and in projects we also hope to encourage discovery of our online collections through our official accounts and the personal accounts of our colleagues.

We will also be reviewing our Social Media and Digital strategies to take account of what we learnt in Spotlight. This includes formulating an official policy on creative commons licensing, a plan for working with Wikipedia, reporting on our SEO and a training programme for all staff in digital skill

s.

Adam Koszary
Project Manager, #Reading: Town and Country, The Museum of English Rural Life.