



The
University
Of
Sheffield.

Implementing resource discovery techniques at the National Fairground Archive and Special Collections, University of Sheffield

Using Google search Console to track impact and use of collections at the University of Sheffield

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Case Study
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In partnership with 



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Background

Collection focus:

- University of Sheffield - **National Fairground Archive**

Twitter: @fairarchives

Facebook: www.facebook.com/nfa20

Homepage: www.shef.ac.uk/nfa

Digital collection:

<http://cdm15847.contentdm.oclc.org/cdm/landingpage/collection/p15847coll3>

Based at the University of Sheffield Library, the National Fairground Archive is a unique collection of photographic, printed, manuscript and audiovisual materials. The Archive collects material from the early fairground and the allied industries that developed within it, including early cinema, circus, freak shows, magic, boxing, variety and amusement parks. It represents a primary source of research and teaching material on popular culture and social history from Victorian times to the present day and represents an important part of the cultural heritage of the nation. The digital collection includes 78057 items, the majority of which are digitised photographs.

- University of Sheffield - **Special Collections**

Twitter: @speccollshef

Homepage: www.shef.ac.uk/library/special

Digital Collection:

<http://cdm15847.contentdm.oclc.org/cdm/landingpage/collection/p15847coll5>

The Special Collections department is home to the University of Sheffield's distinctive collections of rare books and archives, and includes medieval and later manuscripts, photographs, sound and video recordings, printed ephemera and music scores. It is a unique resource which supports research and teaching, and is open to both the academic community and the wider public. The digital collection, encompassing some of our most visually appealing materials, consists of 7087 items including digitised photographs, lantern slides, printed ephemera and manuscripts. The subject range is very broad, taking in travel and exploration, medicine, literature, botany, local history, World War I and the Great Exhibition of 1851.

What is the problem/issues(s) your organisation is trying to solve?

The Library's digital collections work to date has centred on the implementation and initial population of our digital asset management system (OCLC's CONTENTdm), closely integrated with our local resource discovery solution (Ex Libris' Primo) via OAI-PMH metadata harvesting. Building our distinctive digital collections, underpinned by rich descriptive metadata, remains the main focus of staff time and energies in this area, but the Spotlight Scholarship provides a welcome opportunity to pause for reflection, to gain a better understanding of our users' needs, and to review our progress based on actual usage data - areas which we have not previously had an opportunity to explore in depth.



Understanding the role of search engines like Google is key to this, as we recognise students and researchers are increasingly using them as the starting point for their research. Equally, looking to emerging technologies, we need to understand and respond to the opportunities presented by new metadata models and linked data methods to ensure that our collections continue to be visible and can be made available to other systems to promote the greatest level of discovery. Reviewing best practice here, and building local capacity to support it, will ensure our collections can reach the widest audience and have a measurable impact on learning, teaching, and research both within the institution and beyond.

How did the training components help?

The training programme presented a valuable opportunity to expand our organisational understanding of a range of issues related to resource discovery in its widest sense. In particular, it provided new insights into best practice in the sector and focused our thinking around four key themes, discussed in more detail below:

1. Promoting and increasing awareness of our collections
2. Supporting the discovery behaviours of our users
3. Making our collections easy to navigate and use
4. Effective measurement of the usage of our collections.

An additional benefit of the training came through sharing experiences and discussing alternative perspectives with colleagues from the other participating institutions, something which would certainly be useful to continue via networking opportunities and an ongoing forum for digital collection services in the future.

1. Promotion and awareness

The workshop 'Enabling use of digital sources in teaching and learning' gave a good introduction to the variety of web destinations (such as Wikimedia Commons, Flickr, and Pinterest) that could be used for promoting and sharing our digital resources. It also gave helpful advice on how to choose the most appropriate destinations for our content. Decisions about copyright and licensing issues are obviously unavoidable when considering how and where to share content on the public web and the training programme has prompted useful discussion within our organisation around this subject.

The second webinar 'The potential of Social Networks and Social Media' gave us a greater understanding of how useful social media tools could be for increasing awareness of our unique digital collections. Selecting the best social media platforms to promote our collections is something which requires careful consideration, both in terms of staff time to monitor and maintain, and in terms of taking our collections to where potential user communities are already engaging with relevant material.

On reflection it is clear that each of our collections engages different audiences and that these can best be addressed in different ways: e.g. Facebook for social engagement in specific interest groups and Twitter as a more general means of promotion, with serendipitous connections through hashtags, and retweets. Nevertheless, there remain



concerns around the staff time commitment and image licensing requirements which may necessarily limit the extent to which we can fully implement some of the practices we have explored.

2. Supporting discovery

The training programme gave us valuable insight into typical discovery behaviours of HE students and researchers, informed by the latest research. Reflecting on our work since implementing CONTENTdm in 2012 we were pleased to find that our digital collection is already well integrated into our local discovery system, Primo, and therefore is easy for users within our institution to find and access.

Nevertheless, the workshops on 'Enabling use of digital sources in teaching and learning' and 'Making Google work for your digital collections', as well as the webinar 'Challenges and opportunities', served to re-emphasise the importance of reaching beyond our own institutional boundaries, to Wikipedia and general search engines (especially Google), as crucial starting points for our students and researchers in their research and learning behaviours. Supporting this behaviour is something which has not been fully explored with our digital collections previously. In this context the importance of facilitating item level discovery within general search engines becomes clear and is something we intend to review.

The training was particularly useful in expanding our knowledge in this area, providing insights into how vital it is to make our collections visible outside our own systems in the wider information ecosystem, both nationally and internationally. Improving the exposure of our collections in Google would also serve to increase discoverability among a wider audience, the general public, as well as our own student and researcher communities. Public engagement is very important to us at Sheffield and we are strategically committed to finding ways to bring our unique resources to new audiences. We had already begun considering this in relation to our digital collections, see for example <http://aacasey.blogspot.co.uk/> - a blog publishing excerpts from the WWI diary of a University of Sheffield student as a way of exposing this material to a wider audience as part of national reflections on the 1914-18 war, but the training components have given us ideas for further work in this area.

3. Making our collections more usable

The sessions on 'Challenges and opportunities' and 'Working with researchers' both emphasised that a key discovery behaviour for researchers is citation chaining. The sessions stressed the importance of making resources easily citable so as to encourage researchers using our digital collections to cite the digital rather than the physical version and provide support to cite them correctly. This should ensure that other researchers can easily follow their colleagues into our collections to generate new areas of study.

The 'Working with researchers' webinar and the workshop 'Enabling use of digital sources in teaching and learning' both discussed the importance of licensing for enabling use of digital collections. Best practice is to apply the most permissive licenses possible to our resources



and to give clear guidelines for reuse. As discussed, this is something we are considering within our institution.

Website usability - the virtual experience of our digital collections - is also an important issue to consider here. We seek to offer engaging experiences with people and content that enrich the University's learning and research communities in both physical and digital spaces. The Spotlight Guide provided helpful guidance in this area and we hope to look at the current experience and make interface and display adjustments to facilitate discovery and enjoyment of our collections online.

4. Measuring usage

The importance of measuring usage was stressed throughout the training programme with several sessions providing useful insight into particular tools and approaches, linking actions to measurable outcomes. Usage analysis of our digital collections was one of the activities which had been comparatively underdeveloped in order to focus on digitisation activity to support initial collection growth. However, the new insights gained from the Spotlight Scholarship sessions have encouraged us to revisit this important area and to recognise the centrality of metrics in moving forward.

The workshop 'Enabling use of digital sources in teaching and learning' outlined various web destinations which could be used for our collections and gave advice on how to measure the effect of promoting collections in this way. This included in-built analytics tools for services such as Twitter and Facebook as well as external services such as Topsy.com. The webinar on 'The potential of Social Networks and Social Media' helped to consolidate this with examples of metrics on common social media channels.

The second workshop 'Making Google work for your digital collections' gave a great deal of advice on web analytics and using Google Analytics in particular. Although we do already use Google Analytics at Sheffield across University webpages and also some web-based electronic services, these sessions provided us with a lot of useful advice and references to in-depth documentation on how to get more value from it as a service, for instance by using Google Analytics goals based on desired behaviours. Having links to tutorials and even a shared analytics template, the Getting Found SEO Dashboard from the solutions gallery (see <http://www.clir.org/pubs/reports/pub165>), provided much practical food for thought and a starting point to tailor our own analytics needs.

What did you implement to address the issue(s)

1. Promotion and awareness

The Informed by the 'Working with researchers' webinar, we plan to establish a Special Collections blog to highlight areas of the collections that are being used in student research. The blog will feature short articles written not by our staff, but by the students who use the collections for dissertations, PhDs, and placements. It will serve to highlight the excellent work which is already taking place locally, promoting awareness and use of the collection in learning and research through practical case studies, as well as providing a platform for a



range of new researchers to expose their research outputs with a wider audience and hopefully engage the wider academic community.

We have been using social media channels for some time to engage with audiences for our digital collections where they already congregate. However, the training has shown us the value of formalising our activity in this area. As such, working with our Library Marketing and Communications team, we plan to devise social media strategies for both digital collections to ensure that, whilst allowing for differences in the collections themselves and their audiences, our approach is consistent and effective. Our strategies will need to address issues including staffing, which channels to use, and how to manage the licensing of our unique content for sharing via social media.

We also intend to improve the links between our collections in CONTENTdm and our existing library subject guides (see <http://www.sheffield.ac.uk/library/subjects/subjects>). We will map our digital collections to institutional disciplines and ensure that links to relevant content are included in appropriate guides. This relates our content to current teaching, learning and research activity within the institution and provides parity of esteem for our digital collections alongside more established print and electronic resources.

Similarly, we intend to create links into digital collections within CONTENTdm from the collection level descriptions and finding aids of material in the Special Collections and NFA (see <http://www.shef.ac.uk/nfa/collections/atoz>; <http://www.shef.ac.uk/library/special/specalph>). This had not previously been done consistently but, when complete, should assist users in accessing our digital collections as efficiently and easily as possible, increasing awareness and discovery from collections down to items.

As discussed above, we are considering the licensing issues raised by the idea of sharing items from our collections on web services such as Wikimedia Commons and Pinterest. This leads us to consider whether we would wish to join in to groups like OpenGLAM (<http://openglam.org>). We recognise the potential benefits of sharing our content in this way and we are seeking find a balance between promoting appropriate reuse while still protecting our unique collections. As such we may be able to implement changes in this area in the future but we are still considering the most appropriate way to pursue this.

2. Supporting discovery

Greatly informed by the 'Making Google searches work for you' workshop and the Spotlight Guide, we have begun work to improve the search engine rankings for our collections. Initially, we have registered our CONTENTdm site with the Google Search Console to help us to better understand and manage how Google presents the site in its results, as well as discovering what search terms users are entering into Google that lead to our content. One thing we particularly plan to explore is the implementation of sitemaps for our CONTENTdm site in order to ensure that all items are exposed to search. We anticipate that work in this area will be ongoing.



In order to support this activity we recognise that it will be necessary for relevant staff within our organisation to keep up to date with developments in the area of search engine optimisation (SEO) in order that we are prepared to adapt to changes which will undoubtedly occur. Going forward, we feel strongly that any SEO insights are likely to prove invaluable for our management of not just collection websites, but the Library's web presence as a whole.

Informed by the Spotlight Guide, as well as the 'Working with researchers' and 'Enabling use of digital sources in teaching and learning' sessions, we plan to explore the use of content aggregators. We recognise that aggregators can also surface content in existing resource discovery solutions, e.g. Primo Central Index which we and many other academic institutions are already using. Initially however, we are considering adding Special Collections material to OCLC's Collection Gateway as it is closely integrated with CONTENTdm and the harvesting and mapping work can be supported by local metadata specialists within our institution. This would enable WorldCat discovery of our digital collections and also the prospect of linked data enrichment of that data - something which we are keen to explore over the next few years.

We plan to explore ways to make our collections more visible as centres of subject expertise through Wikipedia, reflecting the fact that it remains a prominent stop on our users' resource discovery journeys. We are considering the feasibility of staff contributing to relevant Wikipedia articles based on subject knowledge and metadata gleaned from our unique collections. This should include links back to relevant collection content in CONTENTdm itself, or collection webpages providing further background. We foresee this being particularly powerful for the National Fairground Archive where we are a national centre of expertise and where the Wikipedia entries and indeed even catalogue subject headings are currently underdeveloped (see for example <https://en.wikipedia.org/wiki/Fair>). Exposing our collections through Wikipedia in this way will have the added advantage that these pages already rank very highly in Google's search results and thus our collections will be made discoverable both through Wikipedia directly and more effectively within Google.

3. Making our collections more usable

Researchers are a critical audience for our collections and we recognise the importance of making our materials as easy to use for research as possible. A key component of this is citation. As informed by the 'Working with researchers' webinar, we propose to create a citation guide to support researchers to utilise our unique collections in their writing. This could take the form of a referencing tutorial like those that the Library already produces as part of its Information Skills Resource (<https://librarydevelopment.group.shef.ac.uk/>) to support good reference practice in line with the several citation styles used within the institution. This will be pursued as a joint piece of work between Special Collections, the NFA, and our Learning and Research Services team who manage all our referencing support.

We also intend to review the user experience of our existing digital asset management system, and identify areas for improvement which can be assessed from user feedback and rapidly implemented locally. There is a specific focus on the National Fairground Archive



collection which has recently begun to revise its web presence and port older webpages to our institutional CMS system, Polopoly. Specific CONTENTdm interface changes under consideration include revision of the collection landing page to provide a more visually engaging entrance to the collection and better exposure of newly added content.

We are also exploring functional changes to the default basic and advanced search settings to assist collection searching and browsing. Responding to users needs, we intend to 'declutter' the results display, reducing the amount of rich metadata displayed initially which, to non-specialists, may seem redundant or confusing. Linked to this, we also intend to ensure that the platform offers appropriate means for engaging user feedback and support for bookmarking and sharing, whilst ensuring our legitimate licensing and attribution concerns are addressed. Lessons from this work are relevant to all of our digital collections and will be an area for regular review.

4. Measuring usage

Key actions taken following the Scholarship have been to put Google Analytics into place within CONTENTdm to record and track usage. Crucial additional steps here are to register the site with Google Search Console using the Google webmaster tools, and then tie the verified site to the analytics reporting. By verifying the site and accessing the extra tools provided by the Google Search Console, we have already begun to see new data which is of real value to both collections: the sources of web traffic to the collections and the search terms being used in the discovery of the collections. These results will enable the collection owners to develop a much better understanding of the actual uses for and users of the digital collections.

Going forward, the purpose of this work is to establish some baseline analytics for the collections. Building collection-specific Google Analytics dashboards, we aim to develop a measurement plan to provide real collection insights and enable staff to assess the impact of their social media and awareness work, whether by increased use of the resources in general, or improved referrals from particular traffic sources. Without this wider analytical context the existing flat usage statistics from CONTENTdm itself are often difficult to interpret and certainly much harder to link to specific user groups or search terms, which could reveal new untapped audiences and help to inform strategic decision making around future digitisation priorities. We believe such a focus on metrics is a welcome and necessary discipline in order that we can make the best use of available staff time and resources. It provides a key mechanism through which we can regularly review our progress and also point to opportunities for further work.

What was the outcome?

The scholarship has equipped us with an overarching understanding of the resource discovery landscape for digital collections and clear examples of what other institutions are currently doing. It has given us the knowledge to benchmark our activity against others: how we align with current best practice and where there is room for improvement.



As outlined above we have identified range of activities across several key themes for taking our work forward in this area. It is currently too early to predict the outcomes of these planned actions, however we can see that we have been able to identify a number of specific areas where we can take steps to measure, assess, and improve the discoverability of our digitised collections with confidence that we are adopting best practices. This work will develop over the next few months and we hope to be in a position to report further positive results from what we have implemented by spring 2016.

To ensure that the benefits of the training programme are spread widely throughout our organisation we are planning to arrange a half-day workshop to discuss the major lessons with key stakeholders including colleagues in Special Collections, the National Fairground Archive, Metadata and Discovery, Marketing and Communications, Customer Services, Learning and Research Services, and Library Systems. Embedding the lessons learned through the training session is a key staff development outcome from the scholarship programme.

