

Outgoogling Google: connecting your users to content through a single search

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Abstract

For many libraries, Google remains the key challenge and indeed threat for the continued delivery of services. Attempts to downplay or criticize the reliability of this search tool have generally proved fruitless as more and more users forgo libraries to begin and end their search through the Google interface. The desire to route enquiries through Libraries are, the author argue, a pointless and backward step that misunderstands the new paradigm for information retrieval. The role of Libraries as enabler rather than intermediaries calls for a new approach to servicing the needs of our users. This paper outlines how the National Library of Scotland has taken a very different approach to information provision and rather than encouraging users to make use of intermediaries such as librarians, instead positions the Google type interface as the principal means to enable relevant content to be delivered to the user.

Introduction

Even to the most sympathetic librarian, Google evokes strong and sometimes ambivalent feelings. Its stated mission to “..organize the world’s information and make it universally accessible and useful” (<http://www.google.com/about/company>) seems a direct challenge to the role of libraries, while in its ambitious and indeed controversial plans to digitize out of copyright book it offers the possibility of bypassing content held within many research libraries. However, it is in its provision of the web search tools Google Search and Google Scholar that it offers the most immediate and direct impact on libraries and the role of information professionals.

Google and the web searcher

The dominance of Google in web searching is clearly evident in multiple studies. Research into use of the web by US adults indicate that 91% claim that they always or most of the time find what they want through the use of search engines.¹ Of those using such search engines Google has an overwhelming share of this market with 83% of US adults indicating it is the search engine they most often use.² In the UK, the figure is even higher with 88% of searches conducted through Google.³ The profound impact of Google is particularly visible in specific research communities with 94% of teachers in the United States stating that pupils equate research with using Google.⁴ This tendency to use Google or Google Scholar as the starting point or only point of research is also evident in the university

sector despite the assumption that university students would demonstrate a higher degree of sophistication in terms of their research methodology. A study into the research behaviour of doctoral students in the UK indicate that an alarming 30% used Google or Google Scholar as their main source to find research.⁵ Equally worryingly, 33% of such students never made use of library staff to gain assistance in finding research resources.⁶

Librarians and disintermediation

While libraries continue to challenge the value of the resources retrieved by Google the fact remains that they are facing an uphill battle. Evidence from those using Google suggests that there is a high degree of trust in the data retrieved. For Libraries the problem is one of a new paradigm where their role as intermediaries is increasingly becoming irrelevant as consumers conduct their own research and through social media tools, share such data with each other. An attempt to downplay the importance of search tools such as Google or question its value misses the point. For information seekers the experience is the product. Google and Google Scholar provides a very easy, fast and user friendly experience and deliver content that is deemed valuable and relevant to the users' needs.

Issues for a National Library

Little research has been conducted on the impact of Google on national libraries although the National Library of Scotland has itself been one of the few to attempt to define a future role for such libraries in a digital environment.⁷ The impact of changing user behaviour in how they find and use content is occurring at a time when national libraries themselves are being affected by a changing publishing model. The growth in digital content and the ability and expectation of users to find and view content outside the Library walls creates particular pressures on national libraries. The historic reliance of national libraries on their extensive print collection, principally acquired through the benefits of legal deposit i.e. the legal right to receive books published in their own country is becoming increasingly irrelevant in a digital age. As their existing users migrate to digital resources and potential users expect instant access to content the challenges for national libraries become significant. Since the bulk of existing and potential users already utilize Google/Google Scholar as one or indeed the principal starting point for research – how do national libraries compete to ensure their content remains relevant and visible?

Competing with Google

This challenge for libraries and librarians has been debated at length in the literature. However, to date librarians have focused on aspects such as the benefits of human interaction, their proven research skills and their ability to guide users to relevant content as reasons users will or at least should continue to use libraries. Unfortunately, this focuses on a library-centric view of information provision that assumes consumers appreciate a more tailored information service that claims to offer higher value/increased comprehensiveness while requiring human interaction. The evidence of the impact of Google on other sectors that offer similar claims for tailored services e.g. travel agents, insurance brokers etc. and

who all have significantly declined in numbers in recent years suggest such optimism is unfounded. Clearly, when faced with the option of an easy self-service search and find option or a tailored service with human interaction, consumers are generally voting with their pcs, laptops and mobile devices and choosing Google.

To compete in a real sense libraries must instead adopt alternative strategies that focus on the find and discover process. In the case of find this means focusing on the search experience. In the case of discover, it means ensuring that their data is open, discoverable and accessible through sources such as Google and Wikipedia. These strategies I term imitation and integration.

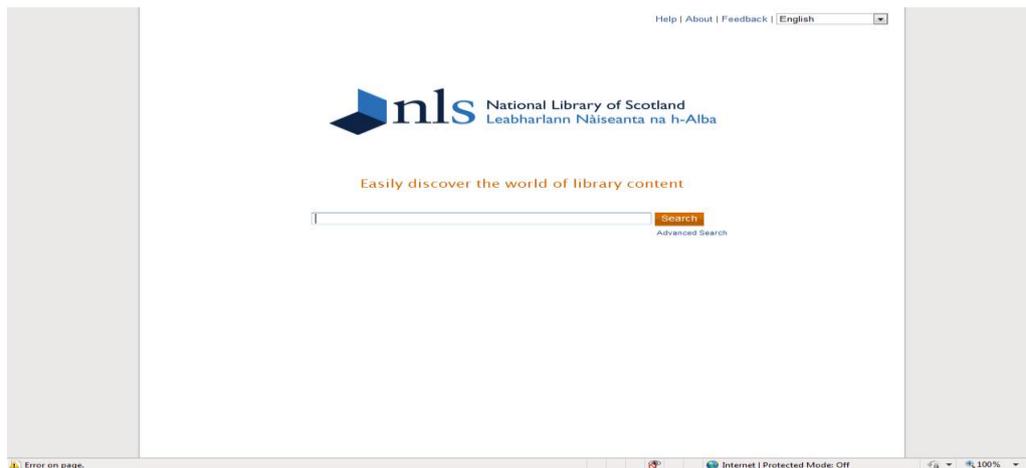
Imitating to succeed

For the purposes of this paper I am focusing on the first strategy – imitation. As stated, to compete with Google in a meaningful way libraries must address the search experience that for many users is the defining reason for foregoing libraries. To this end, the National Library of Scotland has adopted a webscale discovery tool called Summon that utilizes a simple single search box to search across library resources. Summon is one of a number of newly emerging search tools that replicate Google in terms of appearance but are actually searching the library's own collections. Other competing products include OCLC WorldCat, Ebsco Discovery and the Ex Libris Primo Central service. Webscale discovery works in essence by creating a single centralized index using a combination of metadata provided by publishers/aggregators as well as locally harvested library content. A simple Google-like box then provides a fast search service that retrieves such content and enables users to click through to retrieve full-text content where such access is enabled. Such webscale tools thus offer the opportunity for libraries to bring quite different collections together into the same discovery process.

Summon Implementation

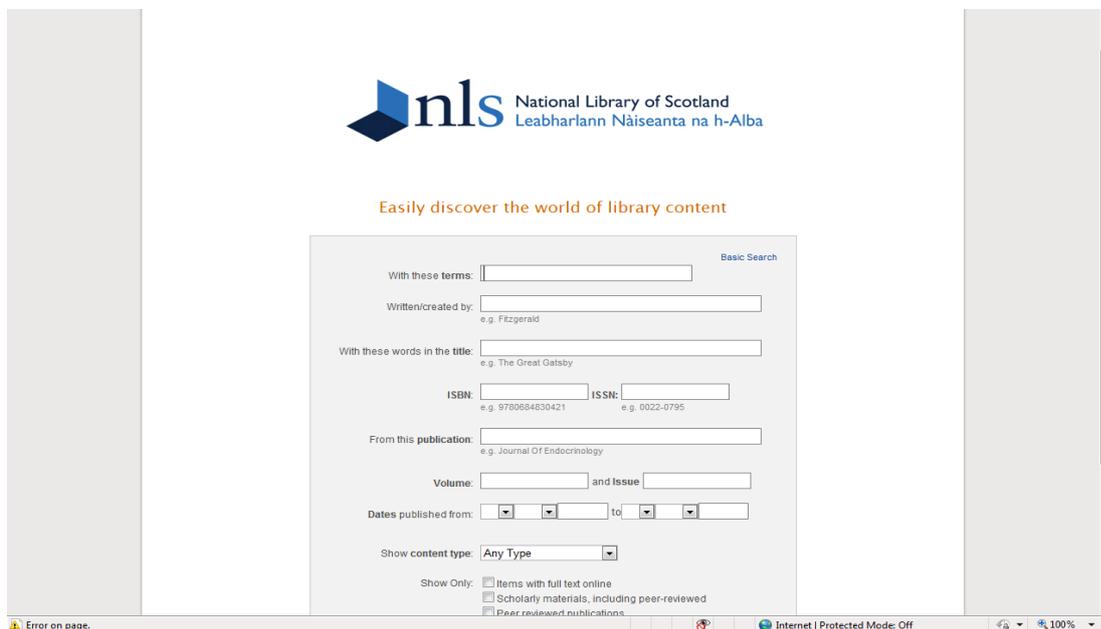
In the case of the National Library of Scotland, initial implementation of Summon commenced in autumn 2012. The Library opting for the out of box version of Summon. Figure 1

Figure 1



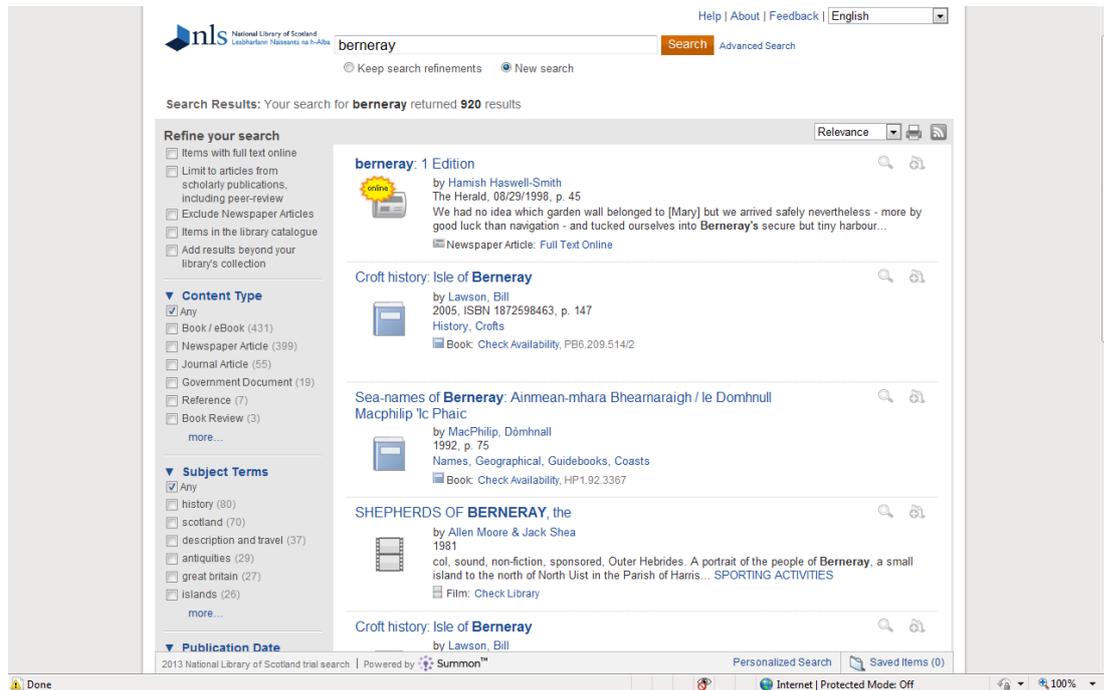
It can be seen from the Figure 1 that the presentation of search via Summon is deliberately designed to provide a simple search box that mimics Google and thus requires no explanation. Research into such interfaces show that users principally conduct very similar searches to that which they would use in Google. However, Summon also provides an advanced search option (Figure 2) which offers a more library type search interface for who wish to configure their search with more precision as a starting point.

Figure 2.



One of the key strengths of web-scale discovery tools such as Summon is that by searching across a range of formats they can enable users to discover content previously hidden or difficult to find. An example search (Figure 3) on the topic of the Scottish island Berneray demonstrates the range of resources retrieved through such search. Results here include full-text news articles, printed books and film content all accessible from the National Library of Scotland.

Figure 3



Clicking on the above links will generate the appropriate response to the user request based on both the type of material selected and the users' access rights. For books held within the Library this will bring the user into the Library catalogue request option enabling them to request the book for consultation and then view it onsite. For electronic content, the user will normally be given direct access to the full-text, subject to their access rights. The purpose is thus to provide the user with direct access to content, whenever feasible, without requiring any human interaction.

Although the initial search replicates Google, Summon provides a much richer experience in terms of results retrieved enabling the user to refine their results by a range of categories such as content, subject etc.

These options and the ability to refine searches are very important for the National Library of Scotland which needs to take into account not only a very diverse user base but the differing needs of such users, dependant on their location when searching. For instance, those searching onsite may be principally interested in consulting print-based resources not easily accessible elsewhere while those offsite and not able or willing to visit the library in person are likely to be specifically interested in accessing full-text online content. By enabling users to further refine their search by such categories it also enables them to match such content to their specific needs.

Usability Testing

Although the National Library of Scotland offered initial access to Summon via the out of the box version it has been conducting a series of customer research projects. These

projects are specifically designed to determine how effectively Summon meets the needs of a webscale discovery tool in terms of the Library’s very broad and diverse collection formats. In addition, the Library also seeks to evaluate the customer experience in searching Summon against both traditional library search tools as well as against Google and comparable products. The latter objective is important in targeting non-users who may be interested in library content but would expect a similar experience to Google in being able to find and use such data.

Research was conducted through an external market research company initially through an online survey placed both on the National Library of Scotland homepage and Summon search page and this was then supplemented by one to one interviews with a range of existing and non-users of the Library accessing content both onsite and offsite. In total 128 users provided feedback. As Summon is an externally hosted solution with a simple search box as the front-end, the research focused on the overall search experience of the customer as well as the results retrieved given that the Library has control over both the display as well as the order of results.

In terms of the audience researched, the sample was split between 46% personal users, 40% using it for academic/educational research, 8% for work purposes and 6% given as “Other” Research was based on the users’ experience of searching Summon and did not make any assumptions in terms of prior use or experience of this search service. Figures 3 and 4 provide details on the results.

Figure 3

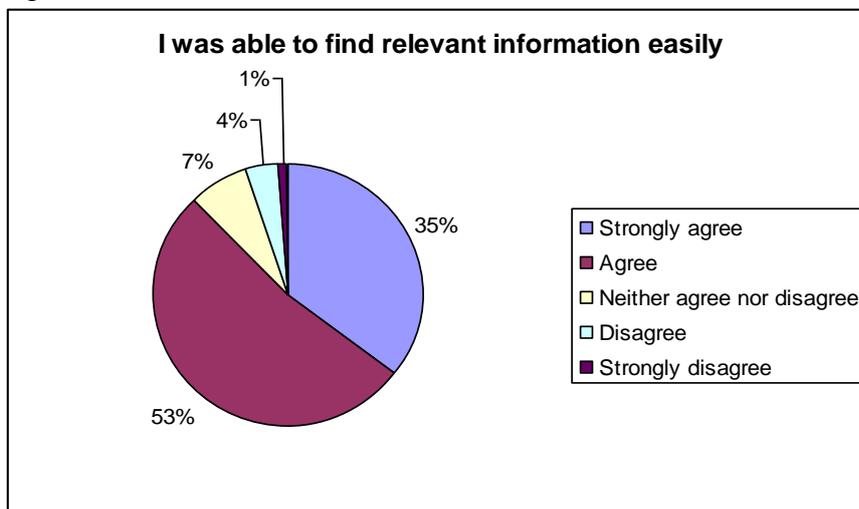
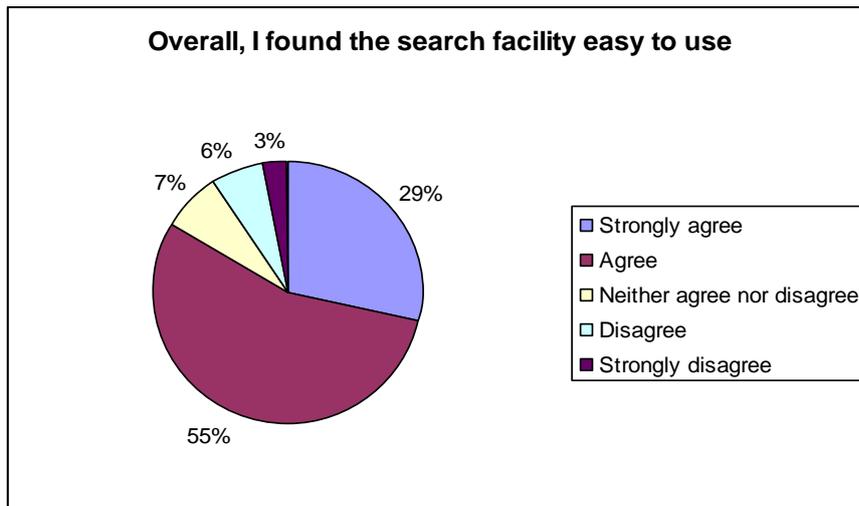


Figure 4



87% of respondents agreed or strongly agreed that they were able to find information easily through Summon which for an out of the box version provides an encouraging response. Although the number of users who agreed or strongly agreed that they found the search facility easy to use was lower at 82% this seemed to have been more a reflection on the refine options Summon provides to enable users to limit content to different formats and to local (onsite) and non-local (offsite) collections. The more sophisticated search facility of Summon is thus both a weakness and strength. A weakness in that it is less intuitive to the novice searcher than Google but a strength in that it allows a more tailored result than Google can provide and of even more importance, to content not necessarily accessible via Google. Of key importance for the Library in this usability testing was whether those who took part in the initial research were willing to use Summon again. Encouragingly, 92% indicated they would use Summon again and 91% indicated they would recommend Summon as a starting place for research.

Further Research

Promising as these results have been it is recognised that achieving an ideal interface for users is an iterative process and further research is planned. As Summon is now available in a range of libraries there is already a range of literature available on usability testing and customization.⁸ However, this is mainly focused on academic libraries. Given the nature of national libraries it is accepted that existing research cannot adequately guide further customisation and the National Library will continue to work with users and non-users in tailoring the results so that weighting of content being returned reflect the needs of the widest possible user base.

Impact on Librarians

The positioning of search at the heart of information retrieval does not imply that the National Library of Scotland has abandoned the role of librarians in the enquiry process. For the moment, specialist enquiry services will continue to be offered. However, increasingly,

many librarians will move to an enabling role, assisting users with advice and guidance on how they can effectively exploit such research tools to find appropriate content rather than conducting searches for them. This will inevitably require different skillsets with a far greater emphasis on such things as information literacy, soft skills such as listening and communication and greater technical expertise. Interestingly, the proposed upgrade of Summon 2.0 indicates that a chat function will be directly available through the Summon search. At a time when many in the library world talk of embedded librarians in the physical sense i.e. based among the research community etc. the developments in Summon and the growth of Google suggest that perhaps what is also needed is librarians embedded in the heart of the search experience. One of the obvious weaknesses of Google is that when your search fails, there is no one at Google to jump in and offer advice. An embedded chat within the search function of tools such as Summon offers Librarians a real opportunity to provide a level of service which is currently being missed.

The Future

The strategy of matching and improving the Google experience through the single search box is only one of a number of measures that libraries must adopt if they wish to “outgoogle Google”. Nevertheless, it is a crucial one. Research by OCLC into risks identified for research libraries in 2010 put forward the value proposition that the “..availability of online and other resources (e.g. Google) may weaken the visibility and necessity of the library” (Michalko et al., 9)⁹. As this paper argues, the evidence for this is now clear. For many of our users or potential users, Google is both the start and end of their research. However, the same OCLC paper also put forward a strategy for mitigating such a risk by “..presenting assets and services where the research library academic clientele do their work might renew their view and reliance on library services” (ibid. 19). Web scale discovery tools are such a solution. By incorporating a single search box through such services, users are offered the dual benefits of access to high-value content not available within Google but within a comparable Google search environment. For any library, this must be an attractive prospect.

Endnotes

¹ Kirsten Purcell, Joanna Brenner and Lee Rainie, *Search Engine Use 2012* (Pew Research: Washington D.C., 2012).

http://www.pewinternet.org/~media/Files/Reports/2012/PIP_Search_Engine_Use_2012.pdf

² ibid

³ James Murray, “2013 set to be another great year for UK search, Experian Marketing Services. “<http://www.experian.com/blogs/hitwise-uk/2013/02/13/2013-set-to-be-another-great-year-for-uk-search/>

⁴ Kirsten Purcell et al., *How teens do research in the digital world* (Pew Internet: Washington D.C. 2012), <http://www.pewinternet.org/Reports/2012/Student-Research.aspx>

⁵ Education for Change, *Researchers of Tomorrow: the research behaviour of generation y doctoral students* (2012). <http://www.jisc.ac.uk/publications/reports/2012/researchers-of-tomorrow.aspx>

⁶ ibid

⁷ David Hunter and Karen Brown, *National Library of Scotland in 2030* (National Library of Scotland: Edinburgh, 2010). <http://www.nls.uk/media/808985/future-national-libraries.pdf>

⁸ Unified Resource Discovery Comparison “Articles on Discovery”
<https://sites.google.com/site/urd2comparison/articles-on-discovery>

⁹ James Michalko, Constance Malpas and Arnold Arcolio, *Research Libraries, Risk and Systemic Change* (OCLC Research, Dublin, Ohio, 2010).

<https://www.oclc.org/content/dam/research/publications/library/2010/2010-03.pdf>