

National Library of Scotland

Horizon Scanning: Report September 2008 (to Senior Management Team meeting at Dunkeld)

Introduction

This paper identifies significant issues which have been raised through the Horizon Scanning process since the last report (November 2007). They have been grouped under three main headings:

- the application of technology to information,
- the development of the knowledge economy, and
- opportunities for NLS to contribute to the information society.

Theme 1 – the application of technology to information

There were four areas in particular where the impact that technology had had on information bore significance for the Library. The first area was the use of technology in the field of **digital repair and restoration**. There had been several news stories on this subject, including work on the Dead Sea Scrolls, the Codex Sinaiticus, and Froissart's Chronicles.

The second area where technology had had an impact was in the area of **widening access** to information. Key articles on this subject covered the European Digital Library, the launch of Charles Darwin papers online, and the development of virtual archives by a company called Plasmon.

The third area of interest to the Library was the application of technology to **digital images**, and two articles shed more light on this.

And the final area of interest, and particularly of relevance to the library community, was the development of **mass digitisation programmes**. The major news in this area was Microsoft's decision to discontinue the Live Search Books programme of digitisation.

There is an opportunity for the Library to get 'good news' stories out into the popular press about widening access to fragile material through digitisation. The Library should feel confident about the quality of its resources (digitised or otherwise) and demonstrate what it is doing in this area.

Theme 2 – the development of the knowledge economy

There were four sub-themes in this area too, the first being the emergence of what is being referred to as '**freeconomics**'. This economic model is based on the concept of giving things away for free on the assumption that advertising and related service agreements and tie-ins will generate profit. Bands like Radiohead made the headlines with their decision to allow fans to pay what they wanted for their latest album. Many people think that the model is in tune with a web 2.0-based society, but other people feel that there is no reason to believe that an economic model can be sustained purely by advertising revenue. There were several articles about this.

The significance for the Library is that information creators (authors, musicians and so on) are often in the vanguard when it comes to freeconomics, and this emerging model may impact on an already rapidly developing publishing industry. More immediately, the Guardian have been targeting a number of institutions as part of their Free Our Data campaign, including the Ordnance Survey, which may ultimately impact on the licensing agreements that exist between OS and libraries.

The second area where the knowledge economy is developing is in the area of **copyright and intellectual property**. This has been a continuing theme for some years, but what should be of interest to the Library is that whilst the official debate (Gowers) continues, elsewhere people are taking matters into their own hands. Creative Commons licences are beginning to proliferate far and wide, and crucially are now beginning to acquire validity in law.

The third area of interest to the Library is **technological politics**. The big players in the information industry continued to get bigger with Microsoft in one corner and Google in the other. Security and privacy were also matters of concern, particularly with regard to China in the run up to the Olympics. It is unlikely that the Library can do anything to affect things at this global level, but it is certainly useful to be aware that both of the major parties seem to be interested in championing the cause of widening access to information and working with established networks and organisations to deliver knowledge in innovative ways. Of more immediate interest, Microsoft is moving some of its operations to Edinburgh; and domain names are set to change in 2009, presenting issues and opportunities for all organisations, including the Library.

The final area of interest is more about developments to the information society rather than the knowledge economy, although the two are closely related. **'Technoculture'** (Web 2.0, blogs, Facebook, Flickr, YouTube, and so on) mainstreamed over the course of the year, changing the way that even more people create and share information and resources online. The Library has already responded in kind, piloting some of these technologies and monitoring the experience. There was enormous coverage of Facebook and web 2.0 generally, but the most useful thing to come out of the horizon scanning process for the Library was the JISC report on the Google Generation, which might help us to prepare for the research habits of the library user of tomorrow.

Theme 3 – opportunities for NLS

Given the number of developments in the information and knowledge sector, and some of the additional big news stories to make the headlines during 2008, there is no shortage of opportunities for the Library to investigate. Opportunities arose in three particular areas; librarianship, science, and partnerships.

Now that Web 2.0 has mainstreamed, it is only logical that planning for Web 3.0 is underway, and the good news for NLS is that this time round librarians seem to be on the invitation list. The Semantic Web (Web 3.0??) has been on the information profession's radar for some time. Classification, information retrieval, metadata and cataloguing / tagging all look set for a renaissance after the general free-for-all of Web 2.0. This should be of interest to the Library, especially as it develops the Trusted Digital Repository. The Library should seek out opportunities to participate at a high level in the development of Web 3.0. There were several articles on the future of the internet / development of Web 3.0, but an article about Jim Wales (Wikipedia) and his call to librarians is particularly relevant.

Science was under the microscope during 2008, mainly because of the interest surrounding CERN and the Large Hadron Collider. Environmental issues and the development of nanotechnologies placed an increasing emphasis on using science to find solutions to the pressing issues of the early 21st century. In sharp contrast to this was an article in The Independent that suggested there was a real gap in the market in terms of science education.

The Library has a wealth of resources related to the sciences (Royal Society of Edinburgh collection, modern science journals, legal deposit collections) and we ought to be looking very seriously at what we can do to make these collections relevant to as many people as possible. One possibility would be to have a 'Scientist in Residence', working with the collections to bring science alive via our website, a wiki, or blog.

Finally, opportunities for NLS to contribute to and benefit from new and unusual partnerships emerged. The 2012 Olympics and 2014 Commonwealth Games were excellent opportunities not to be missed and could stimulate innovation and new audience development for NLS. Another area for exploration should be other organisations that are working with Internet Archive on mass digitisation projects. NLS needs to broaden its spectrum of partnerships and in addition to the above should look in the first instance towards SLIC, SCRAN, JISC, the Strategic Content Alliance, and the World Digital Library.

Conclusion

Between the last Horizon Scanning report and this one, self-publishing via web 2.0 technologies mainstreamed, the general economy fell apart, science became the new rock and roll, the world nearly came to an end on the Swiss border, and the architects of web 1.0 started to plan web 3.0 and very gently asked for the help of librarians; digitisation of Biblical fragments grabbed the headlines, Microsoft and Google curled their lips at each other, Bill Gates retired, Copyleft established itself, and Britain enjoyed a fortnight of glory in China before going bust. Ice sheets continued to recede.

What does it mean for the Library? Well also during this period, the Library issued its latest strategy and added a new value to its corporate arsenal – innovation. The Scottish Government also outlined its vision for the nation by publishing the five national outcomes that it was placing at the heart of its policy making: wealthier and fairer, healthier, safer and stronger, smarter, and greener.

This provides plenty of scope for NLS to make valid contributions to the Government agenda, whilst also satisfying our own strategic objectives. The Library will need to consider how it will encourage and reward innovation, and how it will be managed. Decisions will need to be taken to pursue some ideas and not others, and a rationale needs to be designed to manage this process.

NLS should explore opportunities to match events, talks, and exhibitions to support environmental research, criminal justice research, social work training, science, and economic development and regeneration. There should be a conscious move away from the showcasing of history and literature collections. NLS should also fully engage in 'flagship' events such as 2012 Olympics and 2014 Commonwealth Games.

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