



Emerging Technologies in Academic Libraries (emtacl10)

[Andrew Walsh](#) reports on a new international conference on emerging technologies within academic libraries organised by the library of the Norwegian University of Science and Technology and held in Trondheim, Norway in April 2010.

1 Introduction

The emerging technologies in academic libraries (or emtacl10) [1] conference was held from 26 - 28 April 2010 at the Rica Nidelven Hotel in Trondheim – winners of “Norges beste frokost” (Norway’s Best Breakfast) for 5 years running, as the sign proudly states outside the hotel. They certainly fed us copious amounts of fantastic food, and had evening functions including an organ recital in the impressive cathedral, but what about the contents of the conference itself?

There was a real mix of keynotes plus a choice of strands including Practical Web 2.0, Technologies, Supporting Research, Social Networks and Mash-ups, Mobile Technologies, New Literacies, and the Semantic Web. In this report, I outline my thoughts on the sessions I attended that stood out for me, along with my impressions of the event as a whole. As well as presenting at the conference [2], I live-blogged the event [3] and the majority of this report is adapted from that live blog. The references I give for each talk link to an MP4 video file of the talk, recorded and hosted by the conference organisers.

2 ‘The network has reconfigured whole industries. What will it do to academic libraries?’

Lorcan Dempsey, OCLC

Lorcan gave us his thoughts on how libraries are going to have to change their services in the “networked” future in the first keynote presentation of the conference [4]. I can only give a flavour of the issues he raised that resonated with me; as you may expect, he gave a detailed and thought-provoking keynote that touched on a lot of issues.

He gave us examples of how the network has change other industries, such as Netflix changing the way people view films in America, the strength of its service being its powerful recommendations system. Though Netflix is now such a powerful company, it recognises that its core competence is in recommending films and has moved much of their infrastructure to Amazon, a competitor. Netflix wants to avoid the distraction of running a data centre, content instead to focus on its core strength. Lorcan wanted us to recognise that this was equally applicable to academic libraries, we should focus on our core competencies and not worry about outsourcing other activities to third parties.

Once we network services, including those containing our data, with other people in shared

services we benefit from massive efficiencies of scale. It allows us to analyse data much more effectively, so we can better deliver what people want.

He reminded us that discovery now happens elsewhere, giving the example of searching Google Books to find a particular passage compared with flicking through a book. The norm is now online, external, no longer limited to physical access and familiarity. 'We are no longer limited to the 150 people....' of our real life networks, we can scale up to the whole Web. So we need to make sure our special, 'unique' collections are easily discoverable by people who don't want to use our tools, but use Google, etc, instead, ie 'Indirect discovery'. 'Disclosing' stuff to cloud services to allow this rather than messing about with making nice local catalogues, when in reality most discovery will happen through other tools on the Web.

He also gave us some predications for academic libraries in the future. He thinks we will get rid of most print books except the latest, most used materials, with a move to regional stores. 80% or more of spending on materials will be licensed electronic content from a few big suppliers.

We will move a great deal of infrastructure to the cloud and as part of this complex systems will have to be simplified. We need to realise network effects in this move, improving recommendations and benefiting from collaborative collection management. There will be a shift from library space as necessary storage and infrastructure (holding print books and journals) to social, *ad hoc* rendezvous space and a showcase for particular aspects of our expertise.

Toward the end he finished with the comment *with which* I most strongly agree, that we need to make expertise accessible and visible. We tend not to expose our expertise at the moment, we push to resources more than our own expertise. If there *is one* quotation I'll take away and use from his whole talk, *it is*, 'If the library wants to be seen as expert, then it's expertise has to be seen'.

3 New Applications Derived from Behaviour-based Recommendations

Marcus Spiering and Andreas Geyer-Schulz, Karlsruher Institut für Technologie

This session [5] was about BibTip [6] and how it has allowed the speakers to develop resource recommendations based on what users do, not what they say. It *seemed* to be based on analysis of co-inspections (full views within *the* same browser session). Slightly strangely, although this conference *heard* a lot of people talking about linked data, and the efficiencies in scale that Lorcan Dempsey detailed just prior to this talk, the recommendations *reflected* local user behaviour, not wider usage amongst collaborative libraries. They have brought in some sharing of data, but only to populate the recommendations when there is insufficient local data for an item. BibTip is *language-independent* and works on any media in the catalogue, due to *its* working purely on browser history.

The speakers explained that in their library they have found that 20-25% of users on any particular day click on the recommendations.

I wasn't totally convinced by this, either by the deliberate focus on local data when broader data *might* be available, or by the way recommendations *were* produced. My key question would be how do we know the pages people are viewing are useful? It may be that everyone clicks on the

same poor book because it comes high up in the list of search results within the catalogue. This system **would** then recommend it to others, reinforcing that (possibly poor) choice as a recommended book. **This is, I should add**, purely my opinion based on a short talk though; so I may be completely wrong.

4 Mashup of REST-ful APIs Only Using RSS Feeds to Support Research in a High-demanding Research Environment

Santy Chumbe, Heriot-Watt University

This interesting session [7] told us all about mash-ups using *JournalTOCs API* [8] to make a friendly interface for staff to use. **Santy Chumbe gave** us several examples including creating alerts for a repository manager when authors from their institution have published; and **how to** create useful alerts about full-text material by cross-referencing RSS feeds from publishers with university subscriptions.

There seems to be lots of interesting bits and pieces you can do with this, though I feel a little uneasy about it. They seem to be suggesting turning RSS feeds into a search for the latest materials on a topic. I think my feeling of unease is purely because it shows that our search tools are not up to doing this job already and perhaps they should be!

5 'To face or not to face'

Vi?nja Novosel, University of Zagreb

Vi?nja's talk [9] covered using Facebook (the most popular social network in Croatia) within the University of Zagreb. She suggested that they are up to 10 years behind some other countries in some ways, so Facebook is still up and coming there while most academic libraries in Croatia lack even fairly basic Web presence. They put news type items from the wider country and the world on their own Facebook wall, along with links to other pages. **It would appear** they are using it to push useful links to people. In the first 5 months they went from 0 to 1,100 fans (1,400 **at time of writing**). It sounds **as if Vi?nja and her colleagues** really got in at the right point to surf the peak of interest in Facebook in their country.

They are disappointed that people aren't using it as social space, just as a feed of information, though it sounds **as if** they've **enjoyed** a fantastic uptake. A really interesting talk, not because of the **Facebook** tool itself, but because it helped me reflect upon how we are still experimenting with other social media, which have a lot of parallels with their experiences in Croatia.

6

7 Linking Education Data

Chris Clarke, Talis

The second day started with a keynote from Chris Clarke of Talis [10]. He used the analogy of

waves (which can be disruptive) to talk about technology evolution, suggesting that every 10 years there is a wave of change in the Internet. In the run-up to year 2000 there was lots of data placed in large silos, big databases or systems such as those developed by our Library Management Systems; but innovative thinking and development in this area is pretty much finished now. He typified the last 10 years (Web 2.0) as investment in us, so linking people and data, all happening in the cloud.

The next ten years, where we are moving now, comes back to linked data, a real theme of this conference. He thought linked data would make the Web *data*-centric, not *document*-centric and gave many examples of where this was already developing.

As with any wave, this means disruption. Disruption not just in the end-products, where we are likely to 'find, reuse, remix' data to give us the products we want, but in changing policy and licensing laws that struggle to cope with these concepts.

8 Library Trailblazing

Graham McCarthy and Sally Wilson, Ryerson University

I was especially impressed with this session [11], not just because it is partly about librarians playing (which I like!). Ryerson University did some great, but very cheap, work on providing mobile services to students. One of their first new mobile services was SMS from the catalogue, allowing users to text a catalogue entry to themselves; but they also asked students what they wanted to do online. The top six came out as 'Check opening hours, Book study rooms, check timetable, check borrower record, check catalogue, search for articles.'

This led to their using students (with a librarian in charge) to take these most commonly requested services and develop a mobile site around them for the library. This progressed to being asked to launch a university-wide mobile portal as well.

A fantastic example of innovative librarians introducing a trailblazing service to their university.

9 The Strongest Link

Lisa Goddard and Gillian Byrne, Memorial University of Newfoundland

This incredibly popular talk (it was standing room only) summed up for me the semantic web and open data theme running through the conference [12]. It gave practical examples and ideas as to how libraries can get involved in the semantic web and open data movement. Alongside the practical ideas, however, was a fantastic enthusiasm and energy for the topic and a real challenge for those of us who hadn't really thought too much about the topic previously.

10 Thunderstorms in Hallward

Neil Smyth, University of Nottingham

This session [13] focussed on some fantastic teaching technologies used by the speaker, in particular on the use of a thunderwall area in his learning commons. This area is a series of four

screens controlled by software that allows [users](#) to control the screens together or separately, annotate them as required, and move back and forth through slides [providing](#) more non-linear presentations. This is used to [create](#) ‘open space’ presentations, where they can try and draw in people who weren’t formally attending the talk, but passing [through](#) or on the periphery. Lots of other ideas were thrown out into the audience as well, including a great idea for using glass walls around their library’s special collections as multi-touch screens.

11 ‘I’ve got Google, why do I need you?’

Ida Aalen, NTNU

The final keynote was a student’s perspective on academic libraries. This was a really good, perceptive talk [14], though she did start with a warning that she [wasn’t](#) a typical student (‘I think of myself as a nerd’). That said, [Ida](#) may be at the extreme end of a group of [technologically](#) aware students, but I wouldn’t be surprised if her type of studying becomes the norm before long. [So this talk provided us](#) some advance warning!

[Ida has](#) been a paperless student for about a year, working solely from screens, which influences a great deal of what she does. Importantly she stressed that studying is a whole lot more than [just](#) reading. She [said](#) she [was](#) annoyed by all the tedious tasks you have to do as a student. ‘When are the exams, what modules am I doing, can I look at previous resources for courses to allow me to decide what to do?’ She [could not](#) see why it [wasn’t](#) the library’s job to catalogue [those sort of resources](#) and make [them](#) accessible. She [was](#) annoyed by books (does the library have a book, does the bookshop have it, do second-hand hand bookshops have it, do her friends have a copy, etc?) and [wanted](#) to know why we as librarians [couldn’t](#) make it easier for her to find these things out. [Ida](#) showed us plenty of tools she uses to be a paperless or digital student, from direct tools such as Evernote [15], Google Docs [16] and Quizlet [17] to tools that allow her to concentrate such as Rescue Time [18] that can block applications and help her focus on ‘productive’ work.

Really interestingly, [Ida said](#) she makes sure she [obtains](#) good [material](#) from resources (print and online) [to place in](#) her notes [to which she will later refer](#). I [felt](#) that this [was](#) a move back to how students used to work, but tend not to nowadays, often requiring the original book next to them when they write essays rather than their own notes from the book. Importantly for libraries, this incredibly technologically aware student, who spends her working life online finds university databases too difficult. She gave up and went to Google Scholar instead. She [didn’t](#) agree with the digital native idea, [concluding with](#) a great couple of soundbites: ‘screentime does not make you competent!’ and ‘just because I can use a wooden spoon, doesn’t mean I can use all utensils made out of wood.’ [14]

[Ida](#) finished with a challenge to us as well. After telling us repeatedly that she abandons our tools and systems when they [fail to](#) meet her requirements, she asked us ‘Should I adapt or you?’

12 Conclusion

[This was a](#) really interesting conference, with a strong, but not exclusive focus on linked data and the emerging semantic web. [There were](#) some excellent keynote speakers, not just the classic

industry experts, but an amazing keynote by a current student. I felt challenged and enthused by the conference and hope [it will be repeated](#) in years [to come](#).

13 References

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