Facing the Future: Challenges & Choices

A personal reflection on the UKeiG 2016 Members' Day - 16th June 2016

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This year's UKeiG AGM and Members' Day was held at the King's Fund in London on Thursday 16th June. The theme of the day was "Future Facing" (#ukeigfuture) and the three excellent presentations (and the interactive event following) bore this out, albeit in very different ways.

Setting the scene was Nick Poole, Chief Executive of CILIP, talking about the future of the information, library and knowledge professional. He has the challenging role of running a professional association, while at the same time confronting an external world in which the very job title "librarian" seems to have negative connotations. One of his most telling anecdotes was about a government department where a few years ago there had been fifteen qualified librarians and twenty or so para-professionals. Today, all the staff were still in post, but not one of them had retained the title "librarian". Instead, they had a gamut of job titles, including "information manager" and "knowledge manager". What that story suggested is that the profession is reinventing itself right down to the very job title. What we call ourselves was to be a recurring theme throughout the day.

Nick highlighted traps to avoid when considering the future, articulating Vijay Govindarajan's (Tuck Business School) three key warnings:

- The physical trap legacy investment in systems and materials prevents us pursuing more relevant investments
- The psychological trap leaders fixate on what made them successful in the past and fail to notice when something new is displacing it
- The strategic trap companies and organisations focus on meeting today's needs and fail to plan for new and emerging needs

Most pertinent, I felt, was the second "psychological trap" - concentrating on what you did in the past as a guide for the future - (a theme that emerged very clearly during the afternoon workshop).

Nick also referenced five significant trends identified by IFLA:

New technologies will both expand and limit who has access to information

"An ever-expanding digital universe will bring a higher value to information literacy skills such as basic reading and competence with digital tools. People who lack these skills will face barriers to inclusion in a growing range of areas. The nature of new online business models will heavily influence who can successfully own, profit from, share or access information in the future."

Online education will democratise and disrupt global learning

"The rapid global expansion in online education resources will make learning opportunities more abundant, cheaper and more accessible. There will be increased value on lifelong learning and more recognition of non-formal and informal learning."

The boundaries of privacy and data protection will be redefined

"Expanding data sets held by governments and companies will support the advanced profiling of individuals, while sophisticated methods of monitoring and filtering communications data will make tracking those individuals cheaper and easier. Serious consequences for individual privacy and trust in the online world could be experienced."

Hyper-connected societies will listen to and empower new voices and groups "More opportunities for collective action are realised in hyper-connected societies, enabling the rise of new voices and promoting the growth of single-issue movements at the expense of traditional political parties. Open government initiatives and access to public sector data will lead to more transparency and citizen-focused public services."

The global information economy will be transformed by new technologies "Proliferation of hyper-connected mobile devices, networked sensors in appliances and infrastructure, 3D printing and language-translation technologies will transform the global information economy. Existing business models across many industries will experience creative disruption spurred by innovative devices that help people remain economically active later in life from any location."

Nick summarised issues such as information overload, effective knowledge management and the need for agility and informed decision-making in an ever-changing environment as "people, information skills and ethics" issues, not simply IT or digital concerns. He also stated that information professionals were uniquely placed to shape and lead on these changes.

However true this may be, the problem with the broad IFLA trends as described above is that they are expressed at such a level of generality that it is difficult to formulate any specific action plan from them. Like a mission statement, about which Nick was rightly disparaging, these trends can be subscribed to without changing one's daily behaviour.

What of the role of the information professional? Nick very pertinently pointed out that the very title "information professional", understandable to everybody in the room, would elicit blank stares if you mentioned it to a person on the street. Nobody would have a clue what it meant. In this context a key challenge for the information professional, he

continued, is proving your worth by being able to solve your boss's problems; particularly challenging when your boss may not be an information professional him/herself.

After presenting these trends, Nick articulated some future challenges:

- We need to ensure that everybody has information skills in the same sense that thy have core skills and increasingly "digital" skills
- Function is more important than form. "We need to be defined more by our core purpose, ethics and values - and the impact they deliver for our users - than by the specific context, format or medium in which we are working." I didn't quite understand this
- User experience matters. "Our services need to be defined around great customer service, anticipating and adapting to meet user needs and the quality of the interfaces (physical and digital) we provide. We still need to deliver 'traditional' library and information skills, but without an effective interface, these will continue to be devalued."
- Market failure and the price of knowledge: "The cost of content has outstripped our resources (and there is no mechanism to align cost to value). Open Access hasn't (yet) reached the tipping point beyond which it corrects market failure."

Moving on to facts and figures about the profession today, Nick revealed that there are approximately 87,000 people in the profession. Of that total, 79% are female, yet only 53% of the top earners are female, so there is something wrong there. 45% of CILIP's current membership is within ten years of retirement. Since currently 59% of that workforce is based in libraries, and only 20% in information management or knowledge management, then perhaps we should expect a further dramatic shift in job titles during the coming decade along the lines of the government department that "lost" all of its librarians, with new graduates bringing "new skills and a fresh perspective." Perhaps, and this is purely my conjecture from the talk, information professionals will only feel secure in their profession when none of them retains the title "librarian".

Nick Poole concluded his talk with some initiatives underway at CILIP for the coming four years, including very welcome plans for a simplified, better value and affordable membership structure (2018) and a UK Information Skills Strategy (2019.)

David Milward, the CTO and a founder of Linguamatics, a Cambridge-based text analytics company, gave a fascinating presentation about the remarkable reputation the company has gained in its fifteen-year life, developing automated tools for text mining in pharmaceuticals, life sciences and health care. These automatic tools can be used to answer such questions as, for example, "How are people comparing my product with others?" "Which diseases could my drug treat?" or "Which patients are at risk from pneumonia?" simply by examining a sufficiently large collection of textual content, such as patient records and scholarly research articles.

It was fascinating that he touched on the role of the librarian; the work at Linguamatics involves information professionals who work with the automated text tools to configure and customise them for the specific requirements of the client company or institution.

Milward pointed out, researchers and practitioners today don't just want a search result; they want categorised answers, with relationships defined between them. I think this is absolutely true, but to identify relationships and to understand why users ask the questions they do implies a substantial development for the information professional beyond simply helping to formulate a search query: it involves understanding much more about the researcher and the goals of their research. With over ninety staff, making it one of the largest companies in this field in the UK, Linguamatics is undoubtedly well placed to understand these research goals.

Although he described problems that still remain to be solved (for example, trying to disambiguate different words with the same meaning, cyclosporine, ciclosporin, Neoral, for example or different expressions with the same meaning like 'non-smoker', 'does not smoke' or 'denies tobacco use), Milward gave the impression that all these problems are ultimately solvable, and the opportunities for companies like Linguamatics look to be enormous.

The final presentation was perhaps the most dramatic. Lin Lin, a user experience researcher from EBSCO Information Services, drew on EBSCO's wide experience of observing search behaviour with students ranging from age seven to postgraduate, and described a typical search strategy for a student writing a research paper. The student starts his or her research between 11pm and midnight, sitting on a couch, not at a desk. The research comprises four steps, which can be summarised as:

- Panic
- Google
- Wikipedia
- Then "serious research"

To explain this in a little more detail: Students often exhibit last minute anxiety, even panic about the whole process of writing a paper. They deal with their anxiety by going to a resource they find reassuring, their "oxygen" Google. They are familiar with Google and how it works. After they have looked for the topic with Google, they usually turn to Wikipedia, and the students use three features of the Wikipedia entry:

- The overview of the topic, at the start of the article, in lay-person's language (this confirms they are looking at the correct topic)
- The table of contents for the Wikipedia article this becomes the table of contents for the student's research essay
- The external links and references at the end of the Wikipedia article. This is where the student gleans further information

In other words, what is contained in the Wikipedia entry becomes the framework for the entire research essay.

Equally surprising is how the "serious research" is actually carried out. Rather than research as a sequence of questions students open multiple browser tabs and obtain

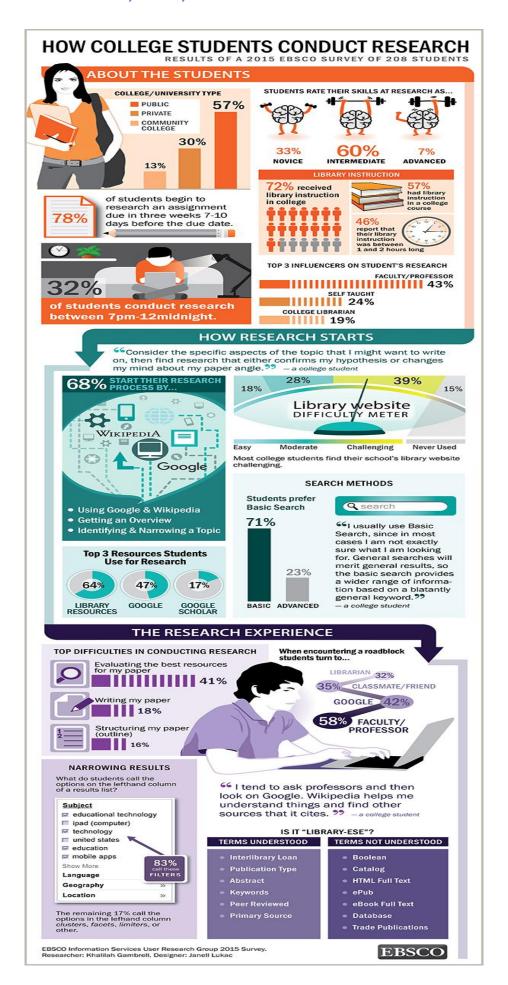
multiple search results for the same topic. This technique is derived from online shopping: multiple tabs en route to the chosen solution.

Another alarming discovery (at least for information professionals) is that the very vocabulary used for search and information retrieval is often not well understood by students using the Web. For example, based on a survey of 208 US students, the following terms were not generally understood:

- Boolean
- Catalog (or catalogue)
- ePub
- Database

The implications for information professionals are profound. Although, Lin says, information literacy is taught to students (they understand the terms "primary research" and "abstract" clearly enough), it is typically only taught once and then the student is left to their own devices afterwards. Clearly, there is an ongoing role for the information professional here, since students are still exploiting resources in such a limited way and with limited understanding. From the number of questions after the presentation it was clear that this talk had given the audience plenty to think about as many people had lots of experience working with students attempting to search and access content online.

Although this was not mentioned in the talk, there is an interesting infographic at the EBSCO website covering some of Lin Lin's talk, including a fuller list of "library-ese" terms and revealing that the sample set was actually US undergraduates only.



Finally, everyone (including the presenters) participated in a workshop about the role of the information professional. Called the "Future Cafe", it started by setting the scene, with two experienced information professionals (Sue Silcocks and John Wickenden) describing their career, before we all in groups identified challenges and responses to the information professional's current situation. It was in this session that, as far as I could see, some of the proposed solutions were falling into the second trap outlined by Nick Poole at the start of the day: information professionals trying to identify what to do in the future based on what they did in the past.

For me, the most inspiring moment of the day was a very brief presentation by John Wickenden, a retired librarian, who spent forty-six years working with one pharmaceutical company. After describing his wide-ranging and varied career, he completed his account by relating that he even outlasted the company library, which was abolished a few years before his retirement. Yet, remarkably, he remained working with the company even when there was no library left for him to work in - his last role was as a specialist in competitive information, working alongside the researchers. Here was someone who successfully changed his role throughout his working life to meet the changing needs of the organisation, and whose career demonstrates the ongoing need for the information professional in the workplace. Who needs a library, anyway?

Members can access all of the presentations from the day HERE.