Making sense of the researcher experience

a selection of findings from Futurelib’s ‘North Star’ project

Andy Priestner
@andytraining
What is Futurelib?

Futurelib is an innovation programme exploring the future role of academic libraries within the University of Cambridge. It employs ethnographic research methods and human-centred design techniques to examine the current user experience (UX) of libraries and draws on the skills of librarians from around the institution to test new service concepts.

It is funded by the University Library and works with external design and innovation partners. The programme is managed by myself and led by Sue Mehrer, Deputy Librarian, Cambridge University Library.
North Star

Scoping a new research platform for Cambridge for use by academics/researchers which could simplify their publication process and help them promote themselves and their research output via a single academic profile and act as a shopfront for our world-leading research.

To simplify the bewildering array of platforms and processes with which academics/researchers currently have to engage (or currently choose not to).
Why ‘North Star’?

‘North Star’ was the name chosen for the project due to that star’s use in navigation, its legendary brightness, and the fact that the entire northern sky moves around it - optimistically reflecting how the new platform might become embedded in, and fundamental to, the academic process!
Previous research (meta-analysis)

34 x contextual interviews
12 x co-design workshops
10 x 48hr shadowing studies
Behavioural patterns, attitudes, goals, motivations and frustrations of academics who took part in the research informed the creation of 4 design personas, each with a different motivation for their academic output and approach to scholarly communication. The personas deliberately described fictional ‘extreme’ academics but were based on real academics’ responses rather than demographic averages.
North Star Timeline & Method

**Stage 1: December**
Project briefing with key personnel. Sourcing of academics from different disciplines for interviews and collaboration with communications and research offices.

**Stage 2: December - January**
20+ interviews with academics conducted. Testimony gathered was analysed and a set of needs identified ahead of further findings and design workshops.

**Stage 3: February**
Creation of an ‘Experience Blueprint’ to define how the platform would work for different user groups (should North Star be invested in).
Interview approach

Explore participants research interests, current work, recent publications, profiles, collaborations, skills sharing, methods, grey literature, research outputs, academic activities beyond publishing and public awareness of their work.

Also looking for points of friction and difficulty. Specifically those touchpoints that currently failed.

And to answer some questions... Could we improve the scholarly process? Would common themes and issues emerge across disciplines? Would career stage be a defining factor? Could a new single platform be the answer?
Research Findings:
Key pros and cons
Con: Differences between disciplines

Example: journal article authorship
In many disciplines the lead author of a research article is typically the person who carried out the research, wrote and edited the paper. The list of trailing co-authors reflects, typically, diminishing contributions to the work reported in the manuscript. However, in others authors are listed alphabetically and interviewees reacted very strongly to an authors name being shown in bold on an author list.

Example: journal selection
Although participants described a clear hierarchy of journals for their discipline, usually based on impact and audience, there were differences in selection criteria – where their research might be ‘the best fit’; in response to departmental guidelines on where to publish; to contribute to an ongoing conversation or narrative. Of course some academics wrote solely for professional journals and others wrote for the Press, but many did not.
Con: Differences between disciplines

Example: purposes of conferences
Wide range of purposes: opportunity to get their work in front of potential employers; to identify promising future Postdoc researchers; to test new ideas and directions for future research; advertise latest publications; publication and non-publication of conference proceedings.

Example: research outputs
Some disciplines revolve around research outputs other than a peer-reviewed journal papers. Some disciplines would never share unpublished research, even at a conference. Some disciplines have special considerations like patient confidentiality.
Con: Career stage differences

Early career researchers:
• Learning how to teach effectively
• Establishing a research reputation
• Requirement to publish
• Networking, conferences, organising events
• Understanding college and departmental culture

Senior academics:
• Less willing to comply with regulations and requests
• Following their research interests regardless of publication/prestige
• More administration – college and department
• More consultancy

Inappropriate to generalise too much but different needs and different levels of engagement with research platforms
Con: Academic collaboration is not intra-Cambridge

One of the anticipated benefits of the new platform was that it might provide more opportunity for collaboration across the Cambridge academic community, but...

- Academics are just as keen to collaborate with individuals at other institutions
- Conferences and contacts seemed to be more popular sources of finding people in another discipline

But perhaps North Star would change this preference?
Con: Yet another platform

If North Star was to become yet another platform/place for academics to update then this would not be welcomed...
Pro: One platform

North Star would replace the need for academics to have to engage with such huge myriad of platforms. All the necessary connections between them would still happen (e.g. Symplectic, VIVO, DSpace) albeit behind-the-scenes.

The current range of tools and platforms left academics unsure where to go and what to do. They also talked about how it felt like a chore: something they had to do in addition to their work.
Pro: Reducing the overhead of profile updating

More specifically, academics perceive that they are being asked to manage their profile and publication record in more and more places.

They see various IT systems with unclear purposes and boundaries asking for what appears to be very similar information. This can lead to fatigue, or non-reply to requests.

North Star would offer profiling in one place.
Pro: Intended ‘semi-automatic’ functionality

North Star would offer a ‘semi-automatic’ profile built from information that the University holds about individuals - saving scholars time and increasing accuracy. North Star would not be about data capture for the system’s sake. It would only ask once and use the answer intelligently. Data flow would also need to cut across existing platform boundaries.
Pro: Identifying Cambridge collaborators and experts more easily

When people with particular specialisms are currently sought within the University it is recognised to be very difficult.

• Collaborators tend to find each other through personal introductions, even through the most circuitous routes.
• Supervisors often find it hard knowing who to suggest that their PhD candidates reach out to.
• Central and departmental communications staff are not always aware of research expertise and specific projects.

North Star would unite this information in one place.
Pro: Time-saving

Most academics want to spend their time researching and the current multitude of platforms interrupts that activity.

If the University of Cambridge is going to attract and retain the best and brightest academics then it has to provide services that help them spend their time pursuing their research.

As a single research platform North Star should help with this goal.
Pro: Shared needs

Although there were often stark differences across disciplines and in respect of academic career stage, there are enough common needs:

- A profile they can update (or have updated for them)
- To make sharing of research easier
- To ensure actions are legally acceptable
- Statistics on article views, downloads, and citations they have received and from where.
- Every single interaction to be quick and easy
- Anything that could reduce their levels of stress and occasional feelings of inadequacy
Research Homepage

**Research Editorial**
This area provides an opportunity to present the research focus area of the University and may be an area where you might want to include research stories like those found on the homepage.

**Research Outputs**
This area displays the research output of the University. Controls on the top right of this module allow the user to choose how content is ordered and arranged.

**Carousel Control**
This is a standard carousel control, taken from the Project Light design standards.

**View Controls**
These controls allow a user to choose how content is ordered and arranged. In order these options are: card view (this view), list view, order chronologically, order by citation count, order alphabetically.

**Research Output**
Each of these cards is for a single research output e.g. a peer-reviewed paper. The card contains the title, journal and authors. Cards are colour coded in terms of type of output. The Quick Look button would show a preview of this item in a modal popover.

**Researcher Profile**
A card like this would link to a researcher profile.

**Research Group Profile**
A card like this would link to a research group profile.

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Academic Profile

BIOGRAPHY
This area enables the academic to describe their research and their research interests. It also contains the Research Groups they belong to.

The design research showed that people consider the University profile to be their ‘official’ profile and this was important to them. Giving the profile a University look-and-feel is key to fulfilling this academic need.

RESEARCH OUTPUTS
This area displays this academic’s research outputs (i.e. those where they are listed as an author). The familiar controls on the top right of this module allow the user to choose how content is ordered and arranged.

The design research showed that publishing behaviour is based on discipline and seniority. This area is capable of displaying a variety of research outputs, depending on what the academic uploads or where they are named as an author.

RESEARCH GROUPS
An academic can choose which research groups they belong to. The information shown here is automatically drawn for the relevant research group profile. If no research group profile exists then just the link to their website is shown.

PROFILE PHOTOGRAPHS
During design research many academics have told us how important photographs are on academic profiles. Most academics know most of the people of interest in their discipline and meet them at conferences and events. They may recognise the photos of people they have met before they remember their names or other details.
Vital ingredients of a new platform – approach, features and development

• A ‘minimum viable product’ before developing new features and advanced elements (HE too often adopts a monolithic approach – seeking platforms which seek to do everything possible immediately)
• Develop and design with academics not separate from them, ensuring they validate the platform
• Fully integrated with existing platforms
• Rewarding its users in some way for contribution to the platform e.g. gamification, profile completeness progress bar
• Memorable University URL for each academic’s profile
• Promoting of the multi-disciplinary Cambridge community
• Mindful of the importance of continuing dialogue with – and involvement of - the research office, the comms office, the University Library, departments and colleges
• Not called North Star, or indeed anything!
Any questions?

Andy Priestner

@andytraining  @futurelib
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