'Discovery' Sessions: Report on Interviews

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1. Executive Summary

The Web Innovation Project 'Discovery' Sessions were interviews with key members of staff in the Summer of 2009, whose aim was to gauge web 2.0 use at the University and recommend actions based on the information gathered.

7 questions were asked ranging from thoughts on the meaning of web 2.0, the personal creation of innovations, their impact and benefits, how they were supported, personal use of web tools, and thoughts on the future of the web.

Analysis of the session responses have produced ten recommendations, grouped into general points and actions regarding specific tools:

General Points

- Ensure Web 1.0 Provision Reaches Certain Basic Standards
- Agree Policy for the Wider Adoption of Web "Writing"
- Create Guidelines for Institutional Use of Common Web 2.0 Tools
- Ensure Web-based Changes are Better Communicated
- Clarify the 'Close Follower' IT Strategy in Relation to our Goals

Recommendations for Specific Tools

- Create Internal Marketing Campaigns for Blogs & Wikis
- Institutionalise RSS Feeds
- Analyse Possible Benefits of Social Networking Service
- Consider Providing a Centrally Hosted Online Survey Tool
- Provide a Centrally Hosted Podcasting Service

2. Introduction

The Web Innovation Project 'Discovery' Sessions were carried out with a sample of the University of Exeter staff in July and August 2009. The aim of the sessions was three fold:

- to gauge how much Web 2.0/3.0 style innovation was currently in progress at the University
- to understand individual perspectives on the benefits, barriers and future prospects for web innovation
- to recommend future tasks and actions for the Web Innovation Project

53 staff members were identified as suitable candidates and were invited to be interviewed. These were selected both from personal knowledge of the members of the Web Innovation Project and from searches across the many websites that the University hosts, looking for web 2.0 keywords. Although the majority were from a technical background, both from Academic Services and from Schools, the group as a whole was quite diverse, including staff from academic research/teaching, the university chaplaincy and the student guild.

Of the 53 individuals initially invited 22 were eventually interviewed for the discovery sessions.

3. Interview Structure

Interviews were chosen to gather the data as it was felt this would be the best way to gauge a rich understanding of current innovations, and allow the interviewer to delve deeper into specific cases of web innovation as appropriate. The interviews used a structured approach with 7 questions about web innovation. They were designed to last approximately half an hour, although in some cases interview sessions lasted for longer, the length depending on the interviewees level of expertise and knowledge.

The 7 questions were:

1. What do you understand is meant by the term "Web 2.0"?
2. What "Web 2.0" or similar innovations have you personally been responsible for implementing, either by building yourself or by incorporating third party developments?
3. How have the innovations you have implemented been received and how have they benefited you and/or your colleagues?
4. What problems have you experienced in using web innovations, both technical and organisational?

5. How have you supported any web 2.0 style developments?
6. What personal use have you made of web 2.0 type websites or applications?
7. What do you think are the most important areas for future web developments?

In addition there was one final question not concerned with personal experience of web innovation, instead asking whether or not the individual would be interested in assisting with the 'open day', a proposed web awareness session allowing live demonstrations of web tools for which extra staff would be necessary.

- Finally, would you be interested in participating in an open day, where you would host a demonstration of a specific web 2.0 style tool that you are familiar with?

4. Interview Responses

Summaries of responses by the interviewees have been grouped according to each question.

Question 1: What do you understand is meant by the term "Web 2.0"?

Answers to this question were surprisingly varied, even amongst IT professionals. Several respondents suggested that it was simply the next generation of web development without specifying exactly how or what this might be. Others focused on the capacity for interaction and in particular the use of 'AJAX' type interface elements to simplify and enhance the usability of websites, whilst some focused on mash-ups or similar ideas where existing web resources were blended together in new and innovative ways. A fair proportion were more in-line with the generally accepted view that it is to do with the ability for everyday users to write to the web as well as read it, the so called "Read Write Web". Several interviewees mentioned that the term had become more generic as it had become more popular, with it's original meaning somewhat lost now, blurred by it's widespread adoption.

> *"Technologies are simply amplifiers for existing personality traits."*

Along with the positive comments about what was happening on the web with regards to Web 2.0 there was also a healthy level of scepticism, with many interviewees commenting that it was an overblown concept, with too much hype, some indeed dismissing it completely as an empty term with no real meaning.

From an Exeter point of view there was a feeling that we should be concentrating more on "Web 1.0" before starting to worry about "Web 2.0" or similar innovations.

Question 2: What "Web 2.0" or similar innovations have you personally been responsible for implementing, either by building yourself or by incorporating third party developments?

Responses to this question were somewhat determined by answers to the first, as what people considered to be Web 2.0 dictated what they then included within their answer, giving perhaps a wider breadth of innovations here than are strictly "Web 2.0". Nevertheless a rich and varied picture emerged from the interviews.

The most prevalent use of Web 2.0 seemed to be blogging, with as much as a third of respondents currently using or having tried blogging in one form or another. Social networks had also been widely experimented with, most notably Facebook, though issues with privacy, security and acceptability to students had generally curtailed use for the majority. Long term social networking use (over 1 year) seems to have correlated with in-house or off the shelf systems.

Wikis were popular with various types in use, and many respondents had also tried podcasting. Indeed some had been using podcasts for some time, although it could be argued that not all the podcasting in place was what could be described as 'true' podcasting, instead simply being a list of MP3 files maintained on a website.

The use of RSS Feeds was surprisingly common, perhaps indicating that this is a technology that should be more widely adopted, as was the use of online survey tools such as Limesurvey and Survey Monkey.

There was a wide selection of other more 'niche' use across the respondents, including:

- Google maps for geolocating data
- Second Life for distant collaboration
- SMS Texting for quick updates to students
- Twitter for conferences and short updates
- Visualisation tools for rich interaction with research data
- Web conferencing software for distant collaboration (synchronous and asynchronous)

Web innovations were generally more prevalent at the School and local group level than within the core areas of university work.

Question 3: How have the innovations you have implemented been received and how have they benefited you and/or your colleagues?

Innovations were on the whole very well received, though there was a feeling amongst some respondents that the modern look and feel of Web 2.0 style tools and their cutting edge nature made them more popular than they perhaps deserved to be. The actual

benefits to the organisation were not always clear, but this is perhaps a wider problem with virtual space in general, and not specifically web 2.0 innovations, in that the virtual nature of these innovations makes them that much harder to perceive and therefore appreciate. Nevertheless specific cost savings were identified, particularly for online collaboration tools, and several innovations were felt to be directly responsible for success in applying for third party funding.

Some of the niche areas of exploration, such as Second Life, were perhaps not as well received as others, but given the extra complexity that these niche products entail this is perhaps not surprising.

Several interviewees mentioned that they felt the provision of these type of tools was more or less expected now by large numbers of our students and staff, but that the level of development of external spaces (such as Facebook, Flickr, etc.) meant that home grown provision could look unprofessional and weak in comparison.

A common problem with almost all web innovations was an initial excitement and high uptake followed by a rapid tail off.

Question 4: What problems have you experienced in using web innovations, both technical and organisational?

Perhaps surprisingly there were few reports of technical problems initiating web innovations. Those that were reported generally fell into three categories:

- those created by trying to do very complex or very new things, thus straining the existing hardware (e.g. streaming live media)
- those where central provision was not up to date enough to try new things, so didn't include the necessary functionality (e.g. older versions of centrally provided software or missing software libraries)
- those created by the 'locked down' nature of the web space where the innovation was going to be used (e.g. WebCT, Terminal Four).

From an organisational standpoint numerous problems were mentioned, including:

- Lack of time to develop a 'proper' solution, i.e. one that would be sustainable and secure for the longer term
- Ungrounded fears over the use of web spaces for University business (i.e. issues that can be managed, such as malicious content and vandalism)
- Grounded fears over the use of web spaces for University business (i.e. issues that are currently still unresolved, such as privacy and security concerns)
- Low web 'literacy' amongst a large percentage of staff, both support and academic
- Lack of enthusiasm to engage with new innovations
- Benefits of innovation difficult to communicate to decision makers

- Lack of understanding of levels of complexity by decision makers, leading to both unrealistic ambitions and easy solutions being overlooked
- Lack of personal skill (innovation generally means working at the edge of current ability)

Question 5: How have you supported any web 2.0 style developments?

Whilst some innovations were created (and therefore supported) as a result of specific funding bids, the majority were supported in an ad-hoc manner by their creators, having been developed in-house to answer specific local needs. There were a surprising number of tools that had become locally institutionalised though, perhaps as much as 25% of those that had been developed, where a School or service had come to rely so much on a particular provision that it had become budgeted for and included in strategy and staffing plans.

One point commented upon was that the distributed nature of some innovations makes budgeting difficult, as they tend to cross over into multiple streams of work and do not fit some traditional funding structures. This can lead to initial funding being approved for specific use of a web innovation, that innovation spreading and becoming more widely used for different purposes than were originally intended, but the initial funding ceasing leading to stagnation and therefore lack of use.

In some more external facing groups within the University initial successful adoption of innovation had led to increased funding and support due to client demand.

Question 6: What personal use have you made of web 2.0 type websites or applications?

The majority of those interviewed were not great users of web 2.0 style tools on a personal level. Many used Facebook for social networking, but made very little use of other tools such as online document storage, mapping tools, etc. Those who did make use of web 2.0 style tools were generally using lots, so there was something of an all or nothing type of split.

> *"I'd rather get away from tech after work."*

For those who were not big users, reasons given were either they were too busy out of work doing others things, felt the need to have a break from the technology whilst at home, or simply felt that there was little useful for them on a personal level from a web 2.0 perspective.

Question 7: What do you think are the most important areas for future web developments?

There was a widespread appreciation that the continued growth in web content would require not only management of the content itself but more critically it's internal and external integration. It was remarked that the 'peopleware' was in some ways the missing component in this need, i.e. that having people with the right knowledge and experience in the right places, and with the ability to influence decision making appropriately, needs to be addressed.

Usability was seen by several interviewees as a critical issue, one that was often overlooked. It was also suggested that User-Centered Design should be more widely adopted, and that it's benefits were properly understood at all levels.

Several respondents noted that there was an increasing need to meet rising student expectations with regards to web content, that we were inevitably playing a game of 'catch-up' compared to the wider world (i.e. when comparing ourselves to the business and social world, as opposed to our peer group).

Openness was a popular concept, both in terms of using open source solutions and in terms of opening up our data to a wider audience, internally and externally. Some respondents felt there was already a move away from the 'behemoths' of the past, i.e. single software solutions that aimed to do many things, to using a wider selection of lighter open source software tools to answer specific local needs whether in-house or externally hosted. It was commented though that we need to be sure we are using mature and reliable products rather than just what is currently fashionable.

There was some concern however over still unresolved issues such as privacy and data ownership when using third party web spaces.

From a technological standpoint, various innovations were mooted, such as wearable computers and the development of more location aware devices. The possibility of the resurgence of the thick/thin computer debate alongside the rise in Cloud Computing was suggested, as was the issue of the role of support in a world where individuals were routinely using third party web based services. It was pointed out that how web sites were accessed may also change as Televisions and other home based technology becomes more web aware, raising questions about what types of services and customers we will be serving in the future and how we need to design for this diverse audience. The possibility of a shift in interface, due to devices such as the Wii and the touch support in modern phones and operating systems like Windows 7, may mean we need to rethink how we design interaction in our web spaces.

5. Recommendations

Recommendations for future actions are split into general points raised across the sessions, and actions applicable only to specific web tools. Possible responsibilities and timings have been included, and where applicable benefits to the University have been indicated, though in some cases the recommendation is simply to explore an area in more depth to highlight the benefits/dangers, as opposed to listing these in detail at this stage.

General Points

Ensure Web 1.0 Provision Reaches Certain Basic Standards

Proposed Responsibility: Staff Learning and Development Team, Web Team
Proposed Timescale: Spring-Summer 2010

Although overall support for the web is good, there remain pockets of poor practice and ignorance which harm the way we use it. In addition, as more and more non-experts use emerging tools to create web content, many of the tenets of good web design are being lost which can result in a poor experience for our virtual visitors. This poor experience has a direct affect on all types of virtual visitors, whether prospective or current, staff or student, researcher or funder, and erodes the positive work that has been achieved to date. In commerce this type of poor experience has been shown to directly lead to poor conversion (i.e. from virtual visitor to paying customer), a state of affairs which must have its parallel in our business model.

It is therefore recommended that new courses are created and run by the Staff Development Unit, in partnership with the Web Team, that focus on the key 'soft' skills to do with creating online content (in contrast with 'hard' skills such as as how to use Terminal 4). This will ensure better dissemination of good practice for "Web 1.0", e.g. how to write for the web, creating good links on web pages, building for search engines, managing content over time, etc.

Agree Policy for the Wider Adoption of Web "Writing"

Proposed Responsibility: Web Team, University Innovation Group
Proposed Timescale: Spring-Summer 2010

Accepting that the core of web 2.0 is about allowing website visitors to write to web pages as well as just read them, we need to ensure that present and future web developments enable such action by default. The ability for the average user to *change* web content as well as simply read it and move between it is significant and growing trend we need to adopt if we are not to fall behind our competitors.

By 'change' content it is not proposed that free form editing is put in place, but that we utilise the webs ability to engage with the public in a two way process, rather than just as a one way dissemination medium. By allowing visitors to comment on pages, ask questions, even engage with each other directly at the web level we will start to create a richer web presence which will naturally draw more people into our websites. The very fact that more voices are connecting at the web level will lead to a greater spread through search engines, and on through to social networking sites and the like.

We hope that by first agreeing policy this will create the opportunity for the provision of better web 2.0 style engagement tools at a later date.

Create Policy & Guidance for Institutional Use of Common Web 2.0 Tools

Proposed Responsibility: Web Innovation Project, Web Team, EEU
Proposed Timescale: Spring-Summer 2010

There was a definite lack of clarity over just what staff (and students) should and should not be doing with new web tools such as YouTube, Flickr, Facebook, etc. which has the result of creating both very good and very bad web content, stifling some individual creativity whilst simultaneously allowing poorly thought out content to propagate freely. We therefore need to ensure both policy and guidance is written, disseminated and maintained which allows staff and students to make informed choices when selecting third party web provision.

By creating and disseminating policy & guidance for the use of public sites such as YouTube, Flickr, Facebook, etc., that encourages users to engage with these services whilst at the same time informing them of the dangers they present, we will be able to spread our virtual presence much further than is the case at present. It should also mean that staff who have until now avoided the use of such tools will feel more confident about them, and hence we should see an bottom-driven increase in use that will benefit the University by exposing some of the richness of activity in more user-friendly forms, and also more prevalently within those types of spaces that some of our key audiences are likely to be moving in.

Ensure Web-based Changes are Better Communicated

Proposed Responsibility: Web Team, ICSD, Steve Vinall
Proposed Timescale: Ongoing

Unlike the real world, where we are constantly reminded of new developments as we physically move around it, the virtual world can be a difficult place to navigate. This means that places and services within it can easily become hidden and obscured. New methods for communicating both the addition of new web services and the development/updating of existing web services should therefore be considered.

Across the wider web world most web sites make extensive use of 'opt in' tools, i.e. those tools that allow individuals to choose whether or not they wish to remain updated about a particular topic. This is usually done by adding specific email subscriptions, though may also include services such as RSS or Twitter - an appreciation that the end user may be using a selection of different tools, so multi-channel approaches might be more suitable.

At present the University communication channels are very top down, with regular emails issued at regular intervals and the average user, whether staff or student, has little choice in whether or not they receive these emails. By moving to a model where more subscription-based email lists are in use, that these list are maintained by a wider selection of individuals at varying levels of the organisation, and that they can be subscribed to and de-subscribed to by students and staff as they wish, people would be able to tap into a much wider pool of information, and hopefully connect those who need to know information with the places at which that information is available much more readily.

Clarify the 'Close Follower' IT Strategy in Relation to Our Goals

Proposed Responsibility: Head of ICSD
Proposed Timescale: Summer 2010

There was a feeling amongst those that were aware of our IT Strategy of 'Close Follower' that this policy directly harms innovation, as it allows a generic justification for quashing the implementation of new ideas. Several interviewees directly contrasted the universities intention to be top 10 in the UK and top 100 worldwide with this policy, suggesting that there is an inherent mismatch between being a close follower and a worldwide leader.

This was felt much more at the centre than at the edges of the organisation, where the policy is more widely known and implemented, and is probably partly responsible for the wider adoption of web innovations at the School and local group level compared to the center.

It is suggested that the purpose of the strategy should be clarified, as it may be that the way in which it is locally interpreted is not how it is intended. In addition, although the policy as a whole is of obvious benefit to the University in managing risk, it may be that maintaining a close follower position in *all* aspects of ICT use may be limiting some areas of work whilst actually creating risk in others - i.e. that not all levels of ICT development within the University can be considered equal. The discovery sessions in themselves have, for example, exposed areas where some areas of the University have been leading other areas (and indeed competitors) by quite large margins.

Recommendations for Specific Tools

Create Internal Marketing Campaigns for Blogs & Wikis

Proposed Responsibility: Integration & Web Services, Steve Vinall
Proposed Timescale: Spring 2010

Blogs were the most popular web 2.0 tool, and are already in widespread but pocketed use. It is suggested that the new blogging service should be promoted more widely, as there is a definite demand for it, and it seems that blogging is now an accepted (and perhaps expected) method of communication, particularly for short term projects.

Specifically we recommend:

- Maintaining a list of all centrally managed blogs at http://blogs.exeter.ac.uk and at http://as.exeter.ac.uk/it/systems/blogswikisandforums/
- A short-term marketing campaign (6 months) showcasing blog activity in NiB and other relevant publications
- Ensuring that all blogs are indexed by the main Google Search Appliance, so that our work spreads to a global audience

Wikis are also in quite widespread use, so the central service (once fully operational) needs to be properly marketed, and similarly (where appropriate) searchable

Finally the use of, and need for, Bulletin Board Systems / Discussion Forums should be revisited. Although often perceived as out of date and old fashioned, this style of online communication tool still has its place amongst it's more modern counterparts, and may indeed prove particularly popular with certain student populations, such as those from the China where Bulletin Board Systems are in widespread use.

Institutionalise RSS Feeds

Proposed Responsibility: Staff Learning and Development, Web Team, Steve Vinall
Proposed Timescale: Summer-Autumn 2010

RSS is a useful addition to websites, in more use than is commonly thought, and although it is notoriously difficult to assess exact use of RSS feeds there is anecdotal evidence that students will use, and are using, the service where it is already available.

By ensuring more support for RSS across the University we will not only serve existing users of RSS better, leading to improvements in both staff & student satisfaction survey results, but also enable greater re-use of data between different virtual spaces, avoiding the duplication of work and saving costs directly. This can already been seen in some Schools, for example in the re-distribution of the Universities noticeboard information automatically across many different web pages simply using RSS feeds.

It is therefore proposed that it's use should be institutionalised, i.e. RSS feeds should be considered as the default when creating new web spaces, and not an optional extra. RSS readers should be also added to the list of supported software, training sessions should be created to educate staff on their use, and information regarding their use and these courses added to existing communication channels.

"If the students are using it then we need to as well"

Analyse Possible Benefits of Social Networking Service

Proposed Responsibility: Web Innovation Project, EEU
Proposed Timescale: Winter 2010

Although social networking was seen as a useful and necessary innovation to be involved in, most social networking experiments petered out due to issues over privacy, security and control. However an internal solution could surmount these issues. The Graduate School of Education in particular has been using an in-house social networking space to support teaching & learning activities since 2007 with great success, and their tool is now a critical part of the School's virtual infrastructure.

It is therefore recommended that the possible benefits of a University wide internal Social Network should be analysed with a view to whether or not a service should be centrally provided. Recognising that such a network would never replace what is commercially available, experience has shown that there may nonetheless be specific benefits to an internal system that outside provision does not, and could not, offer.

Consider Providing a Centrally Hosted Online Survey Tool

Proposed Responsibility: Web Innovation Project, Integration & Web Services, Academic Services, EEU
Proposed Timescale: Winter 2010

Online survey tools are a niche but popular tool, which particular relevance to our aim to be a research intensive institution. Many of our research departments are already heavily engaged in the gathering of both quantitative and qualitative data, and are increasingly turning to web tools in order to gather this data. However, entrusting what in many cases is sensitive personal information to a third party gathering service may be creating unacceptable levels of risk for the University. The Schools of Education and Psychology, for example, have both instigated internal systems for online data gathering in order to mitigate against this risk, and at the same time provide a customised service more in line with the needs of both staff & students.

Consideration should therefore be given to providing a central solution that would allow research academics and students in particular to create, manage and run online surveys within a secure and supported framework.

Analyse Benefits of Web Based Document Systems

Proposed Responsibility: Web Innovation Project, Integration & Web Services
Proposed Timescale: Winter 2010

Several staff from across the University are using web tools such as Google Docs as an easy way to share documents and collaborate. It is clear that the level of development of these tools has now reached the point at which they can be considered as an enterprise solution, and indeed several Universities both in the UK and abroad have already adopted tools, such as Google Apps, to provide services for both staff & students. Interestingly some seem to be providing the service for students only, suggesting that a mixed solution might be appropriate.

It is proposed that we start a project specifically aimed at evaluating the benefits of web based document tools, building on existing use where appropriate.

Provide a Centrally Hosted Podcasting Service

Proposed Responsibility: Streaming Media Project
Proposed Timescale: Summer-Autumn 2010

Although some consider podcasting practically old fashioned it remains a popular method of communication, with proven pedagogical benefits, and offers much for specific areas and for specific groups. We should be addressing this need soon, perhaps combining those areas already exploring the various options, such as the Web Innovation Project, EEU and the Streaming Media Project. It may well be the case that different solutions are required for the different types of audience that we serve, both internal and external, and that one single solution would be too generic to meet our diverse needs.