

Building a Virtual Research Environment for the Humanities

Interim Results of the User Survey

01 November 2005

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Building a Virtual Research Environment for the Humanities

Interim User Survey Report

1. Introduction to BVREH:

1.1. Building a Virtual Research Environment for the Humanities:

'Building a Virtual Research Environment for the Humanities' is a 15 month JISC funded project designed to scope the technical needs of humanities researchers at Oxford University. The core aims of the project are to understand the needs of the humanities community, build a number of demonstrators that might address those needs and in the final stages to assess the effectiveness of these tools and to make recommendations as to what should be involved in a humanities VRE. The project seeks to inform both the future of humanities research at Oxford and those of the wider research community supported by the JISC.

1.2. Current Status

The BVREH project has been underway for a little over four months and is now well into the 'VRE Survey' which is detailed in Workpackage 2 of the Project Plan. Within this phase the aim is to conduct a detailed survey of research activities within the Humanities at Oxford bearing in mind at all times that the priority of the project is to allow the research process to direct the selection and the subsequent evaluation of the tools and demonstrators that result.

As such the project team are currently in the midst of ongoing interviews and meetings with researchers, research projects and technical staff whilst also gaining knowledge and input from other VRE projects both related to and outside of the humanities.

2. Methodology:

2.1. Methodology Overview

For the initial phase of the user requirements survey a distinction has been made between research projects and individual researchers. In light of this the project has approached each group using differing methodologies.

2.2. Unstructured Interviews

In order to progress the initial survey of Humanities ICT needs carried out in the summer of 2004, the project has visited and will continue to visit the wide variety of research projects that currently exist within the Humanities at Oxford. Meetings with the research projects comprise of unstructured interviews carried out in person with the lead individual/s on the project. The focus has been on finding out about the specifics of each project, its content, scope, technology, funding, audience and possibilities for VRE benefit and collaboration.

The purpose of these visits is to get a thorough understanding of the projects and their databases/collections which are vital for humanities researchers to carry out their work. Through unstructured interviews it has been possible to allow the course of conversation to develop naturally, allowing the interviewee to discuss their project openly, including its strengths and weaknesses, suggest ways in which a VRE might provide benefit to their project and to consider if they have that might be beneficial to others.

During these meetings it is the aim to discover how a VRE might enable access and perhaps provide greater visibility for humanities research projects but also to gain an understanding of the projects themselves and to gain insight into the support and functionality that might be provided to them through a Virtual Research Environment. It is also the intention to discover what tools and functionality the projects might already have which would be useful both to the VRE and to each other ensuring that no duplication of effort is undertaken at any stage.

Although it is acknowledged that the face to face approach takes a great deal of time to organise and arrange due to such a diverse range of projects, it is felt that this approach has been much appreciated. One project commented that 'it's lovely to be asked' and the hope is that through relatively informal meetings, excellent relations between the VRE project staff and the research projects can be built up and sustained through continued communication and collaboration.

2.3. Structured Interviews and Focus Groups

Interviews with individual researchers are approached from a more structured starting point. The aim of these interviews is to enable the VRE team to develop a thorough understanding of the 'research life-cycle' within the humanities and to discover exactly how, when, and where researchers carry out their work. The diverse range of activities within the humanities ensure that researchers in an arts subject may have a completely different pattern of work from that of an archaeologist or a musician, it is exactly these differences, but also the similarities that the team hope will provide a detailed understanding of the research processes within the humanities and as a result inform the development of demonstrator tools.

As interviews and meetings progress the project will begin a series of focus groups in which a cross-section of humanities researchers will be invited to share their experiences, demonstrate their daily working routines and help the project to define more clearly the differences and diversity between the disciplines and how they might each be served by a VRE. The focus groups will be held at the end of November 2005 and will play a significant part in helping to direct the future of the project to ensure maximum benefit for humanities users.

2.4. Limitations of study

The lack of availability of researchers during the summer months has led to a larger proportion of research projects being interviewed at this stage. Whilst this has been beneficial to the project in scoping technologies, tools and content currently in place within the division, it is felt that there were not yet enough contacts to establish a useful focus group or groups prior to this report of interim results. In order to gain full benefit from a diverse range of researchers as possible, focus groups have been postponed until the last week in November. To address the shortage of researchers interviewed the head of each faculty has been contacted and asked to provide the project with 4-5 candidates whom the project might interview. A good proportion of these contacts will be asked to go forward to the focus groups.

2.5. Dissemination within and outside Oxford

The project has had excellent feedback so far from a wide cross-section of the humanities community both within Oxford and outside. The project took an active part in presenting at a joint VRE presentation at the Digital Resources for the Humanities conference. The reaction was extremely positive, often focusing on the types of generic functionality that the project might provide. This type of functionality was perceived as benefiting the humanities community as a whole and alleviated the concern that tools might be both entrenched in and born out of technology, rather than arising from the needs of the humanities community itself.

Within Oxford the user requirements survey enables the project to approach a broad cross-section of the division, enabling individuals and research projects to find out about the BVREH project, its aims and objectives whilst providing vital input of what is needed in a humanities VRE. It is acknowledged that the contacts established during the user requirements survey will not only be the potential users of a virtual environment, but that they will also populate focus groups, provide user feedback and testing on demonstrator tools and will engender support for the future of the project should they perceive it as a success.

On this basis, it is vitally important that the project builds and maintains excellent relations within the humanities in Oxford, ensuring that the potential users of a VRE are the main focus and priority of the project at all times. To address this, all efforts will be undertaken to include, update and inform the humanities community both within and outside of Oxford.

The BVREH website at <http://bvreh.humanities.ox.ac.uk/> is currently being updated and will shortly include more information about the project including project reports, Project Manager and Technical Support thoughts and observations along with RSS functionality and the opportunity to sign up for project updates via email. Many of those already contacted, or who have expressed an interest in keeping up to date with the project will also be asked if they wish to join the mailing list which will send updates every few months. Alongside this the project will endeavour to keep in touch with researchers, passing on any relevant knowledge to individuals gained during the user requirements and tools surveys.

It is equally vital to maintain close contact with the VRE programme and the projects within it. The BVREH has had close contact with the IBVRE project also based at Oxford, benefiting from mutual experience gained within the user requirements surveys currently being carried out by both projects. The project also enjoys close links with the three other humanities-based VRE's

and as each of the projects progress, sharing of knowledge, technologies and tools will be of key importance.

The project presented posters at the JISC VRE Programme meeting and the JISC Joint Programmes meeting in Cambridge at the beginning of July and the E-Science 'All Hands Meeting' held in Nottingham in September. Again feedback was very positive and there was a great deal of interest in the future and the outcomes of the project. In addition a meeting of the steering committee was held on Monday 12 September 2005 and the project recently had a visit from Maia Dimitrova the VRE Programme Manager at the JISC.

3. Findings:

3.1. User Expectations

An common request from both researchers and research projects is that a VRE should address the issue of the need for many different usernames and passwords for the wide variety of databases, email accounts, image libraries and systems that a researcher might want to access daily. A number of comments suggest that it would be preferable for the VRE to automatically recognise the rights and privileges of an individual through their 'herald' username and password. This would allow the researcher to log in once and gain seamless entry to the areas in which they have rights of access.

Further support for a simplified log-in came through discussion of the VLE in which issues with "...passwords and corridors" were cited as being somewhat confusing, leading individuals to wonder "what's the point?" These researchers commented that potential users of a humanities VRE may have relatively low technical levels and in order to avoid alienation a research environment should be as simple and easy to use as possible.

The expectation that a research environment should be extremely user friendly and as accessible as possible is clearly apparent from speaking with those within the community. It is recommended that the project remains informed by the developments of the Google desktop interface, where possible emulating the ease of access that Google provides to its users. Specifically simple, effective design, the connected nature of the tools and ease of access to information are elements that a VRE would provide for researchers at the university.

3.2. Generic VRE functionality

As meetings and interviews progress it is clear that many of those involved in the research process would see significant benefit in part of a humanities VRE being devoted to generic functionality which would benefit researchers across all faculties of the division. Supporting the 'Mechanism of Research' from funding applications to the 'bits and pieces' such as travel grants and easy access to expenses forms is seen by some as an essential element of a VRE and has the potential to gain researchers trust in providing a useful entry point into the virtual environment. Once a user is familiar with the generic support provided it is logical to suggest that they might then want to explore and utilise other available research tools and functionality within a VRE.

3.3. Potential types of generic functionality

A number of interviewees have asked for better access to information about the wide array of research and research interests that exist across the University. Various research projects pointed out that their work is often multi-disciplinary and ways of finding other researchers with similar interests leading to the possibility of collaboration was thought to be most useful. Closely related is the suggestion that searchable lists of conferences, lectures and seminars within faculties, across the University and beyond, would be very useful enabling users to pre-select their interests and have relevant information sent to them via their inbox or to their desktop.

Each of the above services within a VRE would enable humanities researchers to be aware of the work and interests of those around them without expending a great deal of energy trawling through and finding the information for themselves. This type of service would provide benefit to all those involved in humanities research without requiring a high degree of IT literacy and would provide a fundamental basis for the individual to utilise the VRE.

In supporting the ‘mechanism of research’ there is also considerable interest from humanities researchers and research projects for an area in which individuals or groups might seek support and guidance for obtaining and applying for research grants. One individual commented;

“I warmly support the idea that the VRE can advise and support applications for research grants. This is linked to the more general need to facilitate contact and pooling of information and expertise by existing research groups - not so much by them depositing research in a central area but by there being a central directory of projects (possibly with reports) and project workers. It is important that a lot of contact be personal rather than virtual”

This comment pulls together a number of aspects of generic functionality that are acknowledged most frequently during interviews. Within Oxford there is a vast range of knowledge and expertise which cannot always be tapped into by those who might benefit most. Humanities researchers do want to collaborate with one another, often across disciplines within Oxford, nationally and internationally. A humanities VRE would be an entirely suitable place to collate, present and disseminate information which will enable researchers to make connections and become aware of new research and/or funding opportunities.

The comment also highlights the concern that a virtual environment might take away the more ‘personal’ side of research, replacing human interaction with purely ‘virtual’ interfacing. Through generic tools it is felt that a humanities VRE can both enable researchers to work collaboratively whilst creating avenues for meeting, discovering and gaining a better understanding of the work of those around them, benefiting from and contributing to a ‘pool’ of expertise.

Further examples of generic functionality discussed during interviews include the availability of individual/departmental space for papers and personal information and also a forum for aiding the recruitment process.

3.4. Tools and services to address the need for generic functionality

There are already a number of services, tools and software available that might begin to enable the VRE project to address the types of generic functionality detailed above. As the user requirements survey progresses together with further identification of existing tools, it is accepted

that more and more functionality, both within the university and from other VRE projects will greatly enhance the pool of resources available to the BVREH. Some of those identified so far are detailed here.

Within the Medical Sciences division, the RDS (Research Discovery Service) project, currently being developed with the support of the ACDT (Academic Computing Development Team), is addressing the need for a database of research and researchers within the division. Discussions as to the possibility of extending the service to include the humanities have been met with enthusiasm from the RDS project leaders and they hope that the service might eventually be rolled out across the university.

Ongoing discussions with Research Services have proved that there is a great deal of interest in providing more detailed information in the area of grant applications and research funding. The Research Services website and backend systems are currently being upgraded and it is felt that a collaboration to provide resources for humanities researchers through a VRE could be a viable opportunity both to promote the support available from Research Services and to give researchers the specific information that they have asked for.

3.5. Actual and perceived difficulties in providing generic functionality

There may be some difficulties, both actual and perceived in supplying the generic functionality discussed above through a VRE. Some of these may be easier to overcome than others, however perhaps the largest obstacle is the possibility that the community may not contribute enough to expansion of the services provided. It is clear that for a fully searchable and personalised lecture or seminar list to work it must be kept up to date at all times; if users miss an important seminar due to the lack of accurate information they will quickly decide that the service is not reliable.

The need for accuracy, but also the importance of ensuring that researchers understand the benefits of a service such as the RDS will also be vital for its success. If the service relies on individuals adding their own research interests to the database, and there is insufficient user engagement, the service will, at best seem rather patchy.

In discussions regarding the provision of personal space within a VRE, there were differing attitudes as to the benefit to the individual researcher. One individual pointed out that they wouldn't use the system as they couldn't guarantee that they would be staying at Oxford. This researcher felt that it would be much better to have an independent website which would hold information and papers regardless of which institution one was affiliated to. This is an understandable concern when considering that Humanities research is clearly a national and international pursuit not confining the individual within the bounds of a single university. Making portability to an individual's website, or to another institution possible alleviates this fear.

3.6. Collaboration and cross-searching across databases

The many and varied projects within the humanities division currently hold significant digitized collections including pottery, sculpture, photographs, manuscripts and more. Some of the larger projects are currently working on providing a more interactive, 'research enabling' experience with the premise of allowing the user not just to view the collection, but to save the images to a secure area, annotate, manipulate and compare copies, send the copy to and converse with other

researchers and to return their research back to the archive, continuously growing and informing what is known about pieces within the collections.

Whilst this functionality is not currently available within all of the projects mentioned here, it is clear that there is a genuine desire to provide collaborative and interactive tools to humanities researchers, benefiting both the research process and the projects that make the collections available. Projects currently developing this type of functionality include the Classics based Beazley Archive, the DIAMM project within the Music faculty and the Forster Project at the Pitt Rivers Museum.

A direct benefit of a humanities VRE might be to provide smaller projects across the division with functionality that has been developed elsewhere. One project which is working on an interactive research area, commented that their work should not be repeated by other research projects or by the VRE. Discussions with many projects affirm that there is no desire for functionality to be replicated if the work has been successfully carried out within the University. Through a VRE it might be plausible to pool this functionality, making it openly available to all, benefiting researchers by providing a consistent interface.

Ongoing throughout the user requirements survey, and through the participation of researchers within focus groups, the project will continue to assess the effectiveness and need for further collaborative tools which have already been highlighted during interviews. The project will continue to assess those tools currently being developed by other VRE projects which are likely to address some of the functionality required. Some of these requests and tools include; the ability to work collaboratively on documents, project management tools such as wikis and shared calendars, access to chat facilities and in one instance a researcher's comment that use of the access grid would be very beneficial to their own collaborative work.

3.7. Functionality to address collaboration and cross searching of databases

The project has begun looking at various ways in which searching across multiple databases and image archives might be possible within a research environment. The Virtual Lightbox for Museums and Archives (VLMA) <http://lkws1.rdg.ac.uk/vlma/vlma.htm> is a piece of open source software, demonstrated at the Digital Resources for the Humanities conference. The software allows the user to construct personal collections accessing images and data from a range of databases. It is then possible to export the collection, annotate and make notes and to share your collection with other VLMA users.

If the VLMA were used as a tool to enable cross searching of multiple databases within a VRE, there would need to be some significant work to improve its usability and functionality. However, the VLMA may provide the starting point for a useful tool, bringing together some of the disparate projects and enabling active and collaborative research.

4. Conclusion:

At this stage in the user requirements survey it is already clear that there is considerable enthusiasm for a virtual research environment providing a range of tools and functionality to serve the needs of the humanities community.

Generic functionality will be important in gaining the trust and support of users throughout the division and would provide a point of access through which researchers could start to explore other, more specific tools and services. Support for the management and administrative aspects of a researcher's work are widely held to be beneficial and the needs highlighted by the survey are not at this point available as online, easily accessible resources within the University. Many humanities researchers would benefit from such tools.

The methodologies used during the first stage of the user requirements survey have proved successful in allowing the project to gain insights into the views and activities of the research community. Plans for the next stage of the survey should enable the project to further flesh out its coverage of researchers within the division, strengthening understanding of generic needs and uncovering new examples of the tools specific to the specialities of the individual researcher.

The project will soon make decisions on the demonstrators which comprise the next phase. Tools and services which may address some of the requested functionality have already been identified and the project feels well placed to select viable demonstrators, covering the range of generic and specialised activities which will be fully uncovered by the complete survey.