ONE TO MANY; MANY TO ONE: THE RESOURCE DISCOVERY TASKFORCE VISION

VISION: UK RESEARCHERS AND STUDENTS WILL HAVE EASY, FLEXIBLE AND ONGOING ACCESS TO CONTENT AND SERVICES THROUGH A COLLABORATIVE, AGGREGATED AND INTEGRATED RESOURCE DISCOVERY AND DELIVERY FRAMEWORK WHICH IS COMPREHENSIVE, OPEN AND SUSTAINABLE.

The diagram to the left illustrates the vision and highlights that the focus is aggregations of content.

Libraries, archives, and museums provide information about their resources to relevant aggregations.

Service providers use aggregations to build services.

Staff from libraries, museums, and archives use the services or provide them to researchers and students.
Background

The JISC and RLUK Resource Discovery Taskforce was formed to focus on defining the requirements for the provision of a shared UK resource discovery infrastructure to support research and learning, to which libraries, archives, museums and other resource providers can contribute open metadata for access and reuse. The Taskforce has produced this vision and an outline work plan for the period 2010-2012 which will establish the framework to enable institutions, other service providers and developers to provide resource discovery and delivery services to match the needs of end users.

This vision seeks to inform work with existing services and infrastructure. It will help to develop a more robust platform that deals with the issues of silos of data about resources that currently do not support integration or work well with other web services. The existing inefficient data flows between institutions and aggregations and inflexibility of metadata collections that inhibit reuse and development will be addressed. Providing open and flexible aggregations of metadata about institutional resources will permit the development of innovative new services that address the needs of people working in higher education and research.

The work informed by this vision will require the full participation of higher education institutions and service providers. For institutions, including those outside the higher education sector, this vision offers greater visibility of their valuable resources and improved services to their staff and end users. For service providers this vision offers a larger, more suitable and robust pool of metadata on which to build services leading to improved experiences for their end users. We hope the metadata infrastructure provided through this vision will also enable a new type of service provider to engage with the possibility of developing dynamic and innovative new services to benefit higher education. For the vision to be effective, all of these parties need to be engaged in the work and encouraged to use the data so that they can realise the benefits that this vision offers.

Objectives

The proposed framework will meet the following objectives:

1. Enable the provision of the infrastructure for discovery and delivery services to ensure that the sector is responsive to the needs of students, teachers and researchers.

2. Provide opportunities for institutions to work collaboratively to create opportunities for their metadata to be openly shared and exploited to optimise access for all.

3. Provide opportunities to support collection management processes through enabling the building of services that enhance efficiency and ease and continuity of access to the widest range of resources by the widest range of users and reduce unnecessary duplication of effort to permit a shift of focus to enhanced front line services.

4. Enhance the visibility of the full range of valuable resources held by institutions across the sector and potentially those outside it.

Approach

In order to realise these objectives there must be:

1. Open metadata about institutional collections that is collected into a data layer consisting of a number of discrete aggregations, some of which already exist and others that will need to be developed to aggregate specific resource types.

2. A licensing and sustainability model to bring together metadata provided by content providers, aggregation providers, and service providers committed to open metadata, including individual institutions, consortia, and commercial organisations.

3. Ways of ensuring that the aggregations are open, sustainable, reliable and suitable for reuse by service providers and their users.

4. Agreed core standards for metadata for the physical objects and digital objects in aggregations ensuring the aggregations are open to all major search engines.
Implementation

To address the technical, legal and policy issues that restrict open aggregations of metadata, JISC will set up an Infrastructure for Resource Discovery Programme (IRDP) in partnership with existing sector data providers, including RLUK, the National Libraries, MIMAS and EDINA, which will support implementation of the vision through a number of integrated work streams to produce:

1. A framework for producing, managing and using the aggregations that suits stakeholders and provides a sustainable base for service development. This framework will include business models for managing and using the aggregations. The IRDP will need to ensure that business models are appropriate for existing partnerships and arrangements, and that the framework for the aggregation layer is designed so that service providers, vendors and individual developers find it easy to engage with the aggregations to build services.

2. An investigation of the ownership of the metadata about resources in institutional collections, ensuring that the aggregations are designed to use the most appropriate and useful licences to ensure legal compliance while maximising openness and ease of reuse. The IRDP will need to ensure that licensing arrangements match the needs of existing consortia and other relevant bodies and organisations.

3. An identification of key resources for aggregation; determining the extent to which usage data for resources can be included.

4. A definition of the most appropriate metadata standards and technologies to manage the aggregations, ensuring that the metadata requirements are not overly stringent and therefore discourage engagement.

5. Projects to encourage the development of aggregations and the engagement of content providers, including publishers, national libraries and other key players in producing the aggregations.

6. Advice and support to those institutions who wish their metadata to be included in an aggregation.

7. A scoping exercise to address resource types which will prove difficult to aggregate, the results to be used as the basis of a potential second phase of work.

8. Engagement with service builders to ensure that the aggregations are used to construct services that are useful to institutions who manage content and those who wish to find and use the content.

The implementation plan that accompanies this vision describes these key activities in more detail and will expand during the lifetime of the vision to include other relevant projects and initiatives. The implementation plan can be found on the taskforce blog: http://rdtf.jiscinvolve.org

Timescales

This vision is designed to be narrow in focus to increase the possibility of a meaningful impact on the sector during the period covered by the new JISC Strategy. Therefore the timescales for this vision are relatively short. Significant progress towards achieving this vision should be seen by 2012. Partnerships between key stakeholders will be vital with making progress and delivering value to the sector. Through work related to this vision the resource discovery landscape in the UK will be significantly different in 2012.
Key Targets
The following targets will need to be met by 2012:

1. Wide consultation with relevant stakeholders in undertaking the implementation plan to accompany this vision.

2. Establishment of the ownership of the majority of the metadata about UK HE resource collections and the application of a suitable licence to the aggregations that have been developed or enhanced. This licence should be appropriate for any existing consortia or arrangements.

3. Identification and documentation of the metadata standards and technologies used to manage the aggregations and the implementation of those standards, ensuring that these are not too stringent so as to discourage participation.

4. The establishment of a framework for providing, managing, using and sustaining the aggregations and the signing up of the relevant parties.

5. Development of relationships with all relevant publishers, national libraries and other major players in producing the aggregations of metadata.

Key tasks will include:
- working with data providers to identify metadata that can be included in aggregations;
- working with service builders to ensure that their requirements are met.

6. Development of new aggregations of metadata and enhancement of existing aggregations and the production or enhancement of services that use these aggregations.

7. Development and publication of specific targets to monitor progress towards realising the vision and engaging the majority of UK HE institutions in contributing and using the aggregations and services produced.

Background information and related work
A full history of the development of this vision through the work of the JISC and RLUK resource discovery taskforce can be found on the RDTF blog: http://rdtf.jiscinvolve.org/

The blog also lists related work in the area of resource discovery that was important in the development of the vision. Updates on progress and major developments will be reported via the blog.

There is a relationship between this vision and the SCONUL Shared Services Study funded by HEFCE. The shared services study outlined 3 domains, which are ripe for change: the electronic resources management domain, the discovery to delivery domain and the ‘local’ library management systems domain. This vision addresses similar territory to the shared services discovery to delivery domain and the vision’s implementation plan will realise some of the recommendations of the shared services study. The two initiatives will continue to collaborate to ensure a joined up infrastructure is produced for higher education.

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