Two views of the digital library

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NetLab and Friends Lund, Sweden, 10-12 April 2002



Personal background

- Research Officer at UKOLN since 1996
- Studied Library and Information Studies (Loughborough)
- Worked in higher education sector from 1990-1996
 - technical services
 - running a small departmental library



UKOLN (1)

A national centre for digital information management:

- Based at the University of Bath
- Funded by:
 - Resource: the Council for Museums,
 Archives and Libraries
 - Joint Information Systems Committee
 - Project funding



UKOLN (2)

Main activities:

- Influence policy and inform practice
- Advance the state of the art and to contribute to knowledge
- Build useful and innovative distributed systems and services
- Promote community building and consensus-making through awareness and events services



UKOLN (3)

Research and development:

- 'Applied' research
- Mostly project-based
- Supports UKOLN's other roles, e.g.:
 - Services:
 - subject gateway development
 - interoperability
 - Policy and advice:
 - metadata
 - interoperability
 - digital preservation



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Digital library research (1)

Many different types of research and development:

- A 'continuum' from theoretical to practical
- Often based on key funding initiatives
 - Digital Libraries Initiative (DLI, DLI2)
 - Information Society Technologies (IST)
 Programme
- Concertation
 - EU/NSF Digital Libraries All Projects meetings



Digital library research (2)

UK approach to DL research:

- Tends to be practical and pragmatic
- Examples:
 - The Electronic Libraries Programme (eLib)
 - "... JISC's projects are concentrated at the near-market, practical application end of the spectrum." - Chris Rusbridge (*D-Lib Magazine*, July/August 1998)
 - JISC Information Environment (Distributed National Electronic Resource)



Digital library research (3)

Potential synergies between:

- Theoretical research
- Practical (applied) research
- Service development
- End-user requirements

Examples:

- Digital preservation
- Subject gateway development



Digital preservation (1)

- An important topic in digital library research (and for other sectors)
- Many research initiatives and pilot projects
- Urgent need for:
 - -services
 - e.g., RLG/OCLC WG on digital archive attributes
 - strategies that can be implemented
 - economic models
 - -skills



Digital preservation (2)

- The outcomes of research projects need to feed into the development of digital preservation tools and strategies
- Examples:
 - Australian Recordkeeping MetadataSchema (RKMS)
 - Cedars and JISC
 - OCLC/RLG Working Groups
 - Digital Archive Attributes
 - Preservation metadata



Subject gateways (1)

Definition:

 – "... A searchable and browsable database of Internet resources, selected according to strict guidelines" - (Roddy)

Focus:

- On end-user requirements
- On a particular subject
- All good motives

but ...



Subject gateways (2)

- Some people need different views:
 - interdisciplinary subjects
 - other sectors, e.g. further education
- Potential for duplication of effort
- Potential lack of interoperability
- Various research and development projects have tried to address some of these issues



Subject gateways (3)

Early projects:

- Resource Organisation and Discovery in Subject-based services (ROADS)
 - Standards:
 - Template registry
 - Cataloguing guidelines
 - WHOIS++ based cross-search
- Development of a European Service for Information on Research and Education (DESIRE)



Subject gateways (4)

Renardus project:

- Funded since 2000 by EC as part of IST Programme
- Project consortium comprised of European subject gateway initiatives and others
- Main task is the development of a broker service that can search and browse across a number of distributed gateways



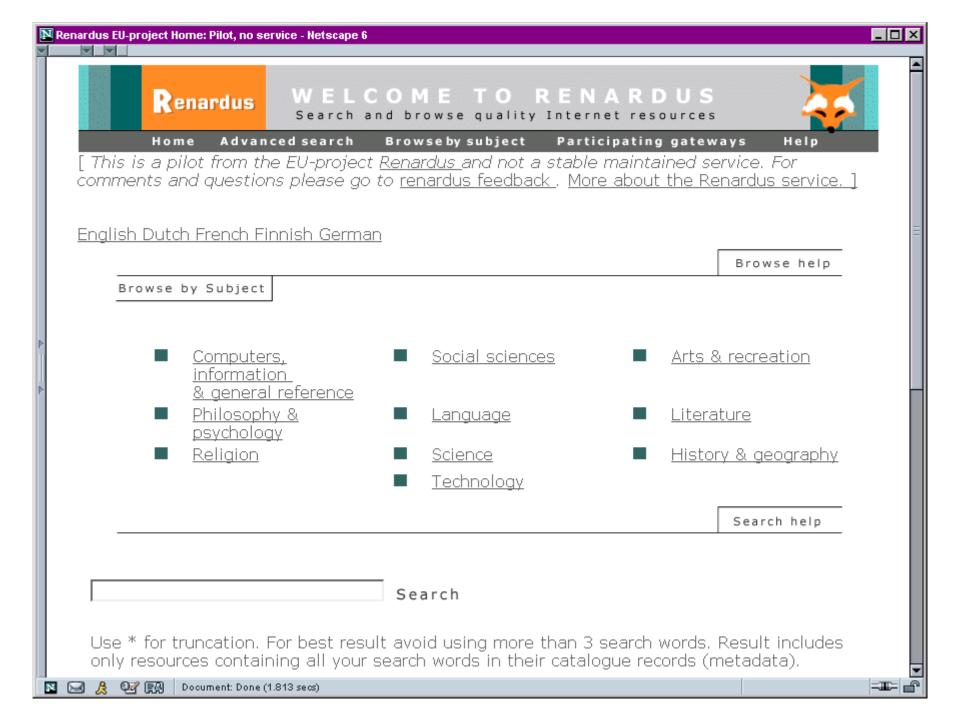
Subject gateways (5)

Renardus project:

- Cross-search
 - -Z39.50-based
 - Completely distributed
 - Common metadata format (SUB Göttingen)
- Cross-browse
 - Local subject classification structure mapped to the Dewey Decimal Classification (DDC)

http://www.renardus.org/





Subject gateways (7)

Resource Discovery Network:

- Extended coverage to subject areas not covered by the original eLib gateways
- Enabled integrated access to whole RDN, e.g. through OAI-based ResourceFinder service
- Development of subject based portals
- Sustainability (ca. 45,000 records)

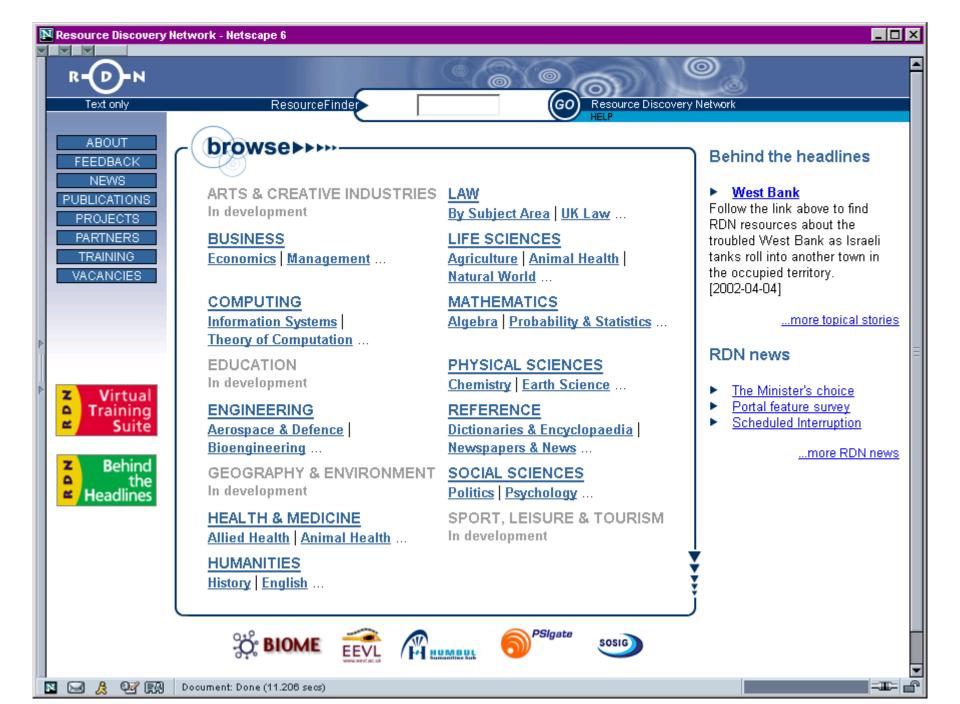


Subject gateways (8)

RDN Centre:

- Shared promotion and development
- Quality, consistency, and interoperability, e.g.:
 - Cataloguing guidelines
 - ResourceFinder
- Interdisciplinary and cross-sectoral views of RDN
- RDN-include





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Some lessons (1)

Digital library research:

- Remember end-user requirements
- Not to be overly technology-led
 - Because it can be done doesn't mean that
 it has to be done
- Need for interaction between:
 - Funding bodies, research institutes,
 cultural heritage organisations (including libraries), service and content providers
- Ultimately same aim (digital libraries)



Some lessons (2)

Central co-ordination:

- 'Best practice' can influence local implementations
 - e.g. local use of classification schemes (Renardus)
- Shared development effort (costs)
- Importance of interoperability
 - e.g. a common understanding of metadata semantics



Some lessons (3)

Central co-ordination (continued):

- Sustainability
 - acting together
 - economies of scale
- Subject focus is still available to end user
 - Not an either/or choice



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http://www.ukoln.ac.uk/

