

# Information science & digital information management research

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## Information science



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## What is information science

- Science about information
  - Application and usage of information and knowledge
  - Interaction between people, organizations and information systems
- Interdisciplinary



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## Example: Libraries, museums, archives → Digital centres



- Organization
- Dissemination
- Preservation
- Users
- Management



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## Example: Information systems

- Libraries, archives, museums
- Any organization's or institution's
- The Web (search engines, subject gateways, repositories...)
- Personal collections
- ...



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UK Office for Library Networking

30th Birthday

<http://www.ukoln.ac.uk/events/anniversary-2008/timeline/>

# Mission

- To inform practice and influence policy in the areas of
  - Digital libraries
  - Information systems
  - Bibliographic management
  - Web technologies



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# Research & development

- Information infrastructures
  - Metadata
  - Terminology services and registries
  - E-science
  - Web 2.0
  - KIM...
- Repositories
- Digital preservation and curation...



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# UKOLN

- A to Z of projects and activities
  - <http://www.ukoln.ac.uk/activities/>
- For everything else on UKOLN
  - <http://www.ukoln.ac.uk/>



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# EnTag project



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# Project context

- Partners
  - UKOLN
  - University of Glamorgan
  - STFC
  - Intute
  - Non-funded
    - OCLC Office of Research, USA
    - Danish Royal School of Library and Information Science
- Period: 1 Sep 2007 -- 30 Sep 2008



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## Background

- Controlled vocabularies improve information retrieval and discovery
  - But, costly to index with, especially the amount of digital documents
- Social tagging holds the promise of reducing indexing costs
  - But, tags entirely uncontrolled
  - Still, may identify new trends and hot concepts



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## Purpose

- Investigate the combination of controlled and social tagging approaches to support resource discovery in repositories and digital collections
- Aim
  - Investigate whether use of an established controlled vocabulary can help move social tagging beyond personal bookmarking to aid resource discovery



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## Objectives

- Investigate indexing aspects when using only social tagging versus when using social tagging in combination with a controlled vocabulary
- Investigate above in two different contexts: tagging by readers and tagging by authors
- Investigate influence of only social tagging versus social tagging with a controlled vocabulary on retrieval



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## Overall approach

- Main focus:
  - free tagging with no instructions
  - versus
  - tagging using a combined system and guidance for users
- Two demonstrators
  - Intute digital collection <http://www.intute.ac.uk>
    - Major development
    - Tagging by reader
    - DDC
  - STFC repository <http://eprints.cclrc.ac.uk/>
    - Complementary development
    - Tagging by author



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## Intute demonstrator: searching

## Intute demonstrator: basic tagging

## Intute demonstrator: enhanced tagging

The screenshot shows the EnTag Project SST interface. At the top, it displays 'EnTag Project SST' and 'Current Location: Document Tagging Page'. Below this, there are sections for 'Main Tag Cloud' with terms like 'cycling', 'freedom of speech', and 'Human Rights'. The 'Document Details' section for 'Arts Council England' includes its URL and a description. At the bottom, there are three columns: 'Related Headings', 'Derive Hierarchy', and 'Suggest Hierarchy', each containing a list of related terms and categories.

## EnTag: Intute user study (I)

- Test: comparison of basic and advanced system:
  - Indexing
    - Perspective, specificity, exhaustivity
    - Linguistics (word class, single word/compound, spelling, language)
    - Consistency
    - Efficiency (time used, user satisfaction)
    - Use (tags selected, clouds consulted, order of consultation)
  - Retrieval
    - Degree of match between user and system terminology
      - user tags, DDC tags, controlled Intute keywords, title terms, text terms



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## EnTag: Intute user study (II)

- Test setting
  - 50 graduate students in political science
  - 60 documents, covering up to four topics of relevance for the students
- Data collection
  - Logging
  - Pre- and post-questionnaires



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## Thank you

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