



SEEMINGLY GLIDING: THE POWER OF METADATA IN ACADEMIC RESOURCE DISCOVERY SYSTEMS

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Introduction

- trends in information-seeking behaviour
- example of a powerful metadata tool: HASSET
 - indexing
 - HASSET's development
 - extension into a multi-lingual tool
- review of the UK Data Archive's resource discovery tools
- a vision for resource discovery
- applying the vision, using the existing tools

How do researchers find data in 2011?

- trends in information-seeking behaviour show that users prefer simple, Google-like interfaces...
- ...but which still return acutely-focused and highly-relevant results.
- the look and feel of the interfaces should be simple but the results must achieve academic rigour.

The metadata conundrum

- for data services to produce simple interfaces - which still return highly-relevant results - metadata are required which are both:
 - extremely powerful
 - increasingly invisible
- a conceptual shift has taken place: the work to focus searches has moved behind the interface
- a challenge exists for services to create resource discovery interfaces which are supported by **high-functioning, yet hidden, metadata.**

HASSET as resource discovery tool within UK Data Archive

- Humanities and Social Sciences Electronic Thesaurus (HASSET);
- in-house thesaurus;
- developed by the Archive over the past 30 years or so, initially based on the UNESCO Thesaurus (Jean Aitchison, 1970s);
- over time HASSET has been continuously expanded and updated for use as an online retrieval system;



HASSET as resource discovery tool within UK Data Archive

- HASSET is a multidisciplinary thesaurus developed initially to support the UK Data Archive collection;
- coverage more comprehensive in the core subject areas of social science disciplines, including politics, sociology, economics, education, law, crime, demography, health, employment, and, increasingly, technology and environmental studies;
- humanities disciplines such as history and linguistics also have a prominent presence;

HASSET as resource discovery tool within UK Data Archive

- the role of HASSET in the Archive is twofold:
 - it is used as a tool for adding value and improving resource discovery by indexing particular studies and series with appropriate HASSET keywords;
 - it is also a separate product developed in-house in the Archive and, as such, reflects the expertise that the organization possesses.

HASSET page on the UK Data Archive

The screenshot shows a Mozilla Firefox browser window displaying the UK Data Archive website. The address bar shows the URL <http://www.data-archive.ac.uk/find/hasset-thesaurus>. The page features a navigation menu with links for HOME, ABOUT US, CREATE & MANAGE DATA, DEPOSIT DATA, HOW WE CURATE DATA, FIND DATA (highlighted), and NEWS & EVENTS. A search bar is located in the top right corner. The main content area is titled "OUR HASSET THESAURUS" and includes a search bar, a "DEPOSIT YOUR DATA" button, and a "FIND DATA" button. The text describes HASSET as a subject thesaurus developed by the UK Data Archive, used for retrieving data and related documentation. It mentions that HASSET is based on the UNESCO Thesaurus and is continuously expanded and updated. The page also includes a "KEYWORD SEARCH" section and a "CESSDA CATALOGUE" link. The footer contains the text "In April 2011 the Archive embarked on a review of its controlled vocabulary tools, focusing on the Humanities and Social Science Electronic Thesaurus (HASSET) and the European Language Social Science Thesaurus (ELSSD). [VIEW STATEMENT](#)".

UK Data Archive - OUR HASSET THESAURUS - Mozilla Firefox

http://www.data-archive.ac.uk/find/hasset-thesaurus

UK Data Archive - OUR ...

HELP CONTACT US SIGN UP

THE UK'S LARGEST COLLECTION OF DIGITAL RESEARCH DATA IN THE SOCIAL SCIENCES AND HUMANITIES

HOME ABOUT US CREATE & MANAGE DATA DEPOSIT DATA HOW WE CURATE DATA **FIND DATA** NEWS & EVENTS

FIND DATA OUR HASSET THESAURUS

SEARCH OUR SITE GO

DEPOSIT YOUR DATA

FIND DATA

WATCH A VIDEO ABOUT US

DATA LIFECYCLE

PROCESSING DATA: entering, transcribing, checking & validating, anonymising and describing

Most of our data are free to use. You need to register to access data

ACCESS DATA

VIEW OUR CASE STUDIES OF USE

FIND DATA FAQ

JOIN OUR MAILING LIST

FIND DATA OUR HASSET THESAURUS

HASSET is our subject thesaurus that has been developed by the UK Data Archive over more than 20 years. It allows you to retrieve data and related documentation accurately and can help you select the most relevant search terms for your area of interest.

HASSET - the Humanities and Social Science Electronic Thesaurus - displays the relationships between terms and so can help you broaden your search or make it more specific. Cross referencing to synonyms will suggest alternative terms as well as provide links to other conceptually related terms.

The thesaurus' subject coverage reflects the subject content of the UK Data Archive holdings focusing on the social sciences and humanities. Coverage is most comprehensive in the core subject areas of social science disciplines: politics, sociology, economics, education, law, crime, demography, health, employment, and, increasingly, technology and environment.

KEYWORD SEARCH

The thesaurus was initially based on the UNESCO Thesaurus (ISBN: 92-3-101489-2) and is continuously expanded and updated by the UK Data Archive. As new terms appear in our studies, new terms will be found in the thesaurus.

HASSET may be used by other organisations, for example to index materials, provided it is for non-commercial purposes and appropriate acknowledgement is given. A licence form allowing you to use or adapt HASSET in your own organisation can be requested from info@data-archive.ac.uk.

HASSET is the basis for the multilingual European Language Social Science Thesaurus (ELSSD) which is currently translated into nine languages and is used to aid retrieval in the

CESSDA CATALOGUE

In April 2011 the Archive embarked on a review of its controlled vocabulary tools, focusing on the Humanities and Social Science Electronic Thesaurus (HASSET) and the European Language Social Science Thesaurus (ELSSD). [VIEW STATEMENT](#)

start UK Data Archl... Microsoft Pow... HASSET Libm Search Desktop 16:42

The HASSET search interface online

HASSET - Version 3.0

Home | A-Z index | Site map | Contact | Login | Search:

Economic and Social Data Service

esds
Economic and Social Data Service

About Data Access and support Resources Offer and deposit News Events Which service?

Print-friendly page

Finding data

- Overview
- Catalogue search
 - Help on searching
 - About catalogue
 - Glossary of terms
- Variables search
- Browse by subject
- Major studies
- Major depositors
- New releases
- HASSET thesaurus**
- Other archives

About the data

Login

NEW USERS

How do I find data?
How do I register?
What data are available?

Humanities and Social Science Electronic Thesaurus

Search the Data Catalogue with the aid of the UK Data Archive's subject thesaurus HASSET.

Search Thesaurus

- [About the UK Data Archive's HASSET thesaurus](#)

HASSET keyword search tips

- to perform a search on the current term displayed click on the 'Search on Keyword' button
- to include narrower terms and/or Related terms in your search, check relevant box(es) then click on the 'Search on Keyword' button
- to explore the thesaurus further, select a hyperlinked term

Note: a HASSET keyword search will be performed on 'All Data Catalogue'.

[More help on thesaurus-aided searching using HASSET.](#)

Search box leading to HASSET terms and hierarchies

Indexing using HASSET

- HASSET is used by cataloguers in the Archive to index datasets compiled into studies;
- keyword indexing is done in conjunction with cataloguing;
- cataloguers receive in-house initial training as well as refresher training in cataloguing and indexing;
- regular meetings are held to share good practice and discuss updates and queries.

Indexing using HASSET

- quantitative studies indexing options:
 - a keyword is assigned to each variable;
 - a keyword is assigned to each question or group of questions in a survey;
- qualitative studies indexing options:
 - a keyword is assigned to each interview schedule topic, interview topic or any other topic occurring in qualitative types of data such as diaries, focus group notes or observation field notes.

The development of HASSET

- currently, new HASSET terms are developed regularly in order to cover the ever-growing collection of the UK Data Archive;
- cataloguers often flag up the need for new vocabulary to index a particular study;
- each request is analysed in the context of the collection as a whole;
- considering the place of a new term in the hierarchy is one of the main considerations when creating new terms;

The development of HASSET

- HASSET uses the following hierarchical relationships:
 - TT (top term);
 - BT (broader term);
 - NT (narrower term);
 - RT (related term);
 - USE (from non-preferred term to preferred term);
 - UF (from preferred term to non-preferred term).

HASSET interface displaying hierarchies

The screenshot shows the HASSET interface in a Mozilla Firefox browser window. The page title is "Humanities and Social Science Electronic Thesaurus". The URL is <http://www.esds.ac.uk/findingData/thesaurusInfo.asp?keyword=VOLUNTARY+WORK>. The page features a navigation menu with options like "About", "Data", "Access and support", "Resources", "Offer and deposit", "News", "Events", and "Which service?". The main content area is titled "Humanities and Social Science Electronic Thesaurus" and displays the following hierarchy:

Current term (Click the term for *KWTC* Display n)

VOLUNTARY WORK

Synonyms

CHARITABLE WORK

| Broader terms | <input type="checkbox"/> Narrower terms | <input type="checkbox"/> Related terms |
|---|---|--|
| <ul style="list-style-type: none">▶ EMPLOYMENT▶ HUMAN BEHAVIOUR▶ LABOUR AND EMPLOYMENT▶ PHILANTHROPY | | <ul style="list-style-type: none">▶ CHARITABLE ORGANIZATIONS▶ CIVIL RENAISSANCE▶ FUND-RAISING▶ SOCIAL SUPPORT▶ SOCIAL WORK▶ VOLUNTARY ACTIVISTS▶ VOLUNTARY WELFARE ORGANIZATIONS |

Additional elements include a "Finding data" sidebar, a "NEW USERS" section with a photo, and a "Search on Keyword" button. The browser's taskbar shows the Windows Start button, several open applications, and the system clock at 16:47.

Searching data indexed by HASSET terms

The screenshot shows a web browser window displaying the ESDS website. The address bar shows the URL: <http://www.esds.ac.uk/findingData/thesaurusInfo.asp?keyword=VOLUNTARY+WORK>. The page title is "Humanities and Social Science Electronic Thesaurus". The main content area displays the search results for the term "VOLUNTARY WORK".

Humanities and Social Science Electronic Thesaurus

Current term (Click the term for *KWIC* Display n)

[VOLUNTARY WORK](#)

Synonyms

[CHARITABLE WORK](#)

| Broader terms | <input type="checkbox"/> Narrower terms | <input type="checkbox"/> Related terms |
|---|---|--|
| <ul style="list-style-type: none">EMPLOYMENTHUMAN BEHAVIOURLABOUR AND EMPLOYMENTPHILANTHROPY | | <ul style="list-style-type: none">CHARITABLE ORGANIZATIONSCIVIL RENAISSANCEFUND-RAISINGSOCIAL SUPPORTSOCIAL WORKVOLUNTARY ACTIVISTSVOLUNTARY WELFARE ORGANIZATIONS |

Search on Keyword

HASSET keyword search tips:

- to perform a search on the current term displayed click on the 'Search on Keyword' button
- to include Narrower terms and/or Related terms in your search, check relevant box(es) then click on the 'Search on Keyword' button
- to explore the thesaurus further, select a hyperlinked term

Note: a HASSET keyword search will be performed on 'All Data Catalogue'.

More help on thesaurus-aided searching using HASSET.

HASSET search results

HASSET - search results - Mozilla Firefox

Home | A-Z index | Site map | Contact | Login | Search:

Economic and Social Data Service

esds
Economic and Social Data Service

About Data Access and support Resources Offer and deposit News Events Which service?

Print-friendly page

Finding data

- Overview
- Catalogue search
 - Help on searching
 - About catalogue
 - Glossary of terms
- Variables search
- Browse by subject
- Studies
- Major depositors
- New releases
- HASSET thesaurus**
 - Other archives
- About the data
- Login

NEW USERS

How do I find data?
How do I register?
What data are available?

HASSET search results

Keyword(s) : VOLUNTARY WORK

Studies found: 262 | sorted by study number : (Showing: 1 to 10)

SN 6757 **European Values Study: Wave 4, Great Britain, 2009-2010**
Abstract: The *European Values Study (EVS)* and *World Values Survey (WVS)* series were designed to enable a cross-national, cross-cultural comparison of values and norms on a wide variety of topics and to monitor changes in values and attitudes across the globe.
The EVS/WVS...
[\[Study Description/Documentation\]](#) | [Download/Order](#)

SN 6746 **Eurobarometer 73.5, June, 2010**
Abstract: The Eurobarometer (EB) survey series is a unique programme of cross-national and cross-temporal comparative social science research. Since the early seventies representative national samples in all European Union (EU) (formerly the European Community (EC)) member states have be...
[\[Study Description/Documentation\]](#) | [Download/Order](#)

SN 6741 **Active People Survey, 2009-2010**
Abstract: The *Active People Survey* is the largest ever survey of adult participation in sport and active recreation in England. The survey provides a reliable and robust measurement of participation in sport and recreational physical activity at a sub-regional and local level. It provide...

HASSET keyword search tips

- to perform a search on the current term displayed click on the 'Search on Keyword' button
- to include Narrower terms and/or Related terms in your search, check relevant box(es) then click on the 'Search on Keyword' button
- to explore the thesaurus further, select a hyperlinked term

Note: a HASSET keyword search will be performed on 'All Data Catalogue'.

More help on thesaurus-aided searching using HASSET.

List of studies in the online catalogue indexed with the chosen HASSET keyword

HASSET as a source for multilingual thesauri

- HASSET is the source for the multilingual thesaurus European Language Social Science Thesaurus (ELSST), building on the projects LIMBER and MADIERA;
 - the LIMBER project, 2000-2001, developed multilingual tools to support user access to the data stored at social science archives across Europe and to integrate with data from other domains;
 - following on from LIMBER, the MADIERA project, 2002-2006, aimed to create an effective operational web-based infrastructure for the European social science community.

HASSET in use beyond the UK Data Archive

- the UK Data Archive was approached already in the early 1980s by outside organisations who were interested in using HASSET for their own purposes;
- in 1997 permission was received from UNESCO to consider HASSET as a separate product;
- since then, HASSET continues to be used by organizations outside the Archive.

HASSET in use beyond the UK Data Archive

- external users normally wish to receive a copy of HASSET for
 - evaluation
 - to be used in a project
 - or to become the basis for separate systems tailored to their needs.
- several prestigious organizations use HASSET as a controlled vocabulary to serve their own collections
- other organizations use HASSET to inform the development of their own controlled vocabularies.

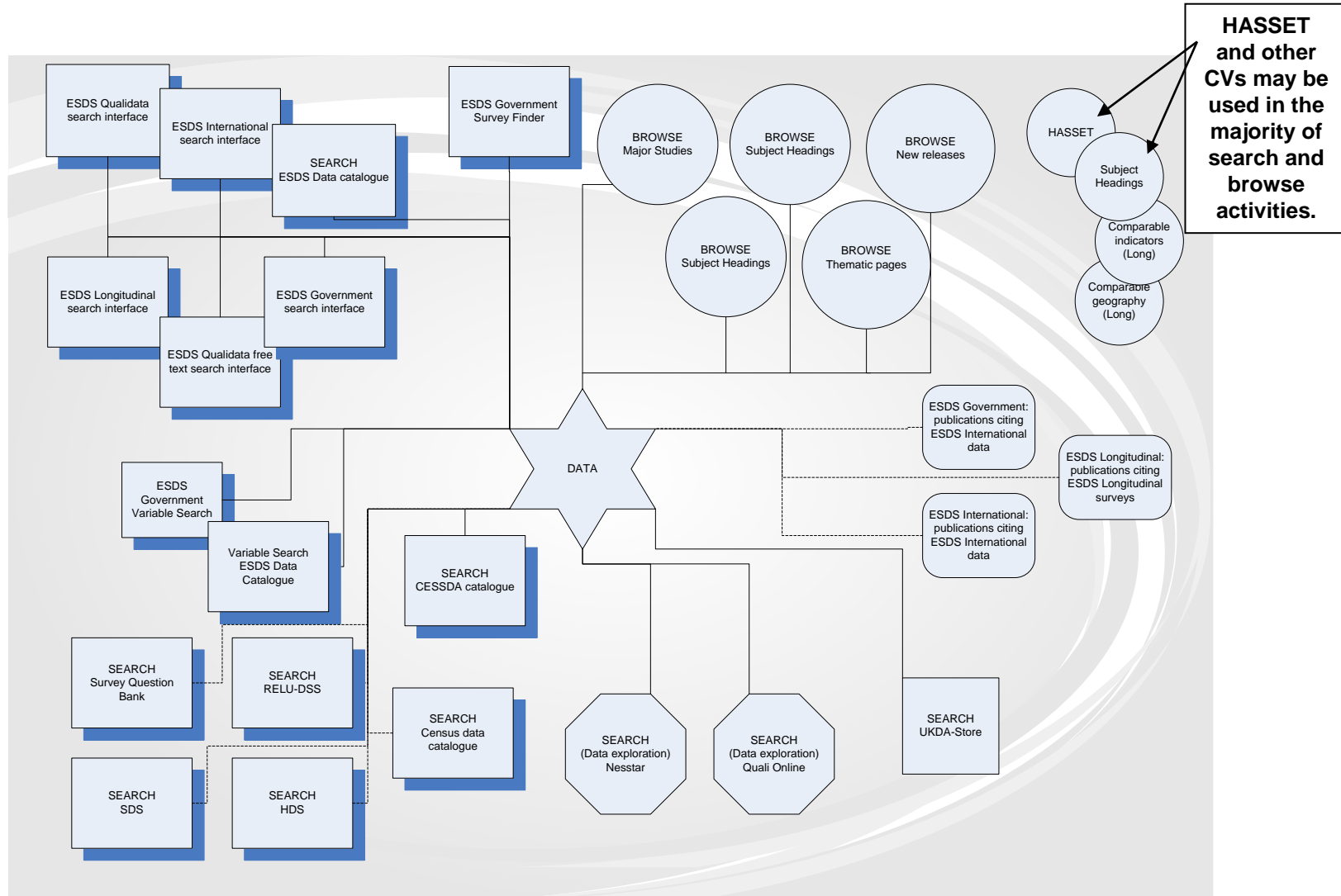
Enhanced resource discovery in a service

- the UK Data Archive, based at the University of Essex, is the curator of the largest collection of digital data in the social sciences and humanities in the United Kingdom. It holds several thousand datasets relating to society, both historical and contemporary. It has been in existence for over 40 years.
- May – October 2010: a review was carried out of the UK Data Archive's resource discovery tools.

Reviewing the UK Data Archive's tools

- the primary resource discovery tools reviewed:
 - ESDS (www.esds.ac.uk)
 - UK Data Archive (www.data-archive.ac.uk)
 - Census Portal (www.census.ac.uk)
 - Survey Question Bank (www.surveynet.ac.uk)
 - History Data Service (hds.essex.ac.uk)
 - RELU-DSS (relu-data-archive.ac.uk)
 - controlled vocabularies (**HASSET and subject categories, supporting the search experience**)
 - plus a comparison of resource discovery elsewhere
- the brief:
 - review the Archive's resource discovery tools making recommendations on how they can be improved;
 - undertake a detailed examination of the website;
 - describe each method of resource discovery;
 - document all existing internal procedural documents, standards documents and current user guidance noting gaps;
 - collate evidence from existing reviews about user satisfaction and usability.
- White Paper was submitted to the Archive and ESDS SMTs in November 2010.

The wider Archive context: 21 interfaces





The issue:

- *how to integrate these interfaces and the metadata?*

The vision:

- *a single search interface,*
- *plus, at the results, the ability to move seamlessly from one service/type of data to another:*
 - *via faceted browsing and*
 - *directly from within each resource type*
- it means cross-referencing ESDS data collections with publications, with research outputs, with citations, with question text with web pages and beyond
 - using **metadata**
 - in the context of a move to **DDI 3**

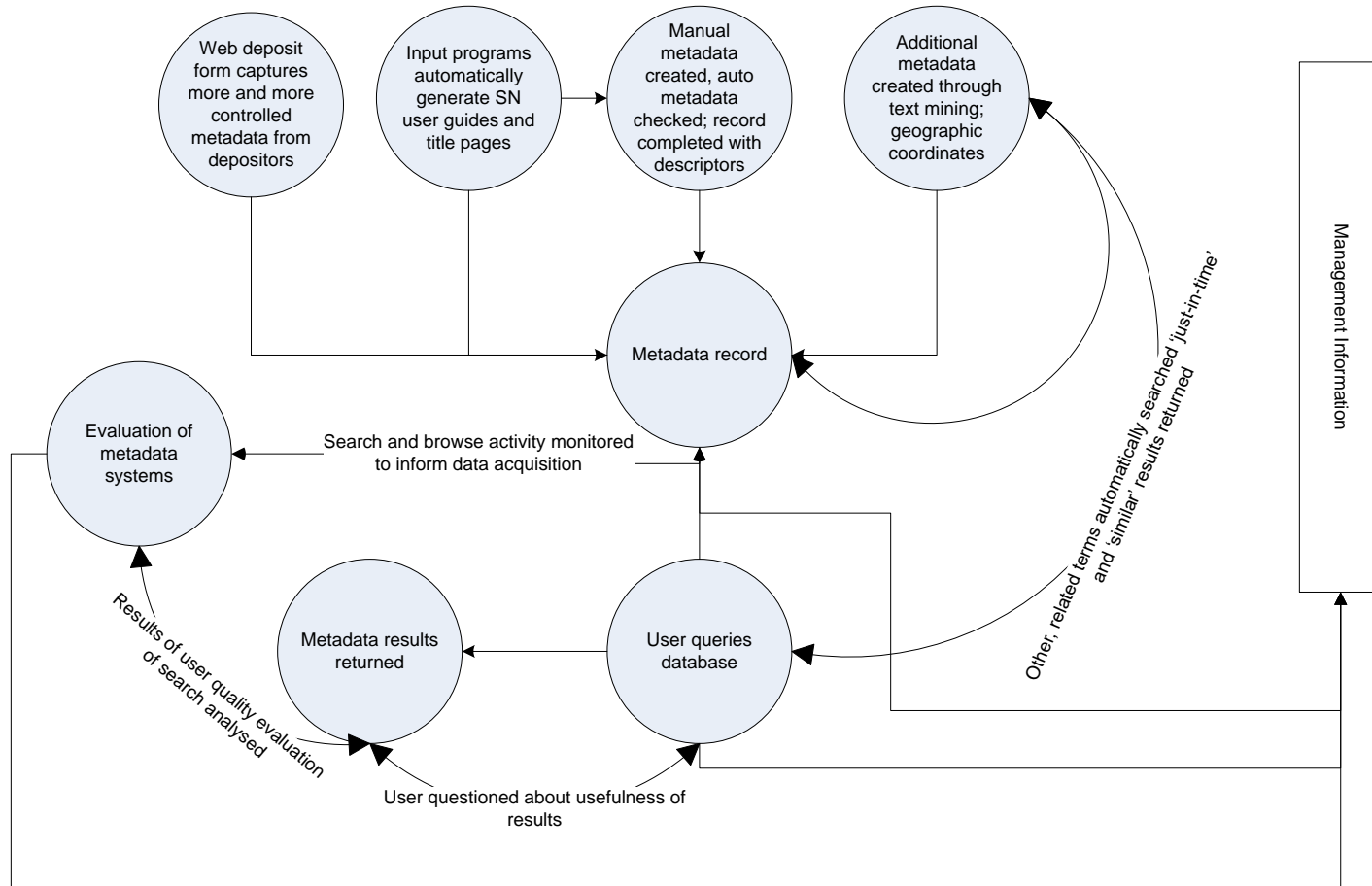
Richer metadata and tools

- building on work which allows **cross-service searching** and makes **linkages** between data held in different services
 - from question text in SQB to data visualisation in Nesstar
 - from RELU-DSS research outputs to data
 - and maintaining our OAI presence

Richer metadata and tools

- controlled vocabularies:
 - HASSET: augmented role within the search interface
 - DDI 3 version
 - controlled vocabulary for outputs
- extend HASSET's uses:
 - gather more metadata from depositors
 - use metadata to make connections via
 - relationship analysis
 - just-in-time indexing of searches/results/user backgrounds to present more data that may be of interest
- other Automatic Metadata Generation techniques (such as harvesting from other websites (ESRC, ONS etc.); text mining/geographic coordinates)

Richer manual/automatic metadata generation



Conclusion

- JISC Intrallect report; quotation from Vic Lyte:
 - “A new researcher wishing to approach scholarly inquiry to determine the impact of global warming on penguin populations in South Antarctica doesn’t walk up to a Librarian and shout ‘Penguins!’.”

(Duncan, C. & Douglas, P., (2009). *Automatic metadata generation: use cases and tools/priorities*. Intrallect (for JISC): 2009)

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