



Citation Services (Overview)

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Services and Repositories
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JISC

Decades of Achievement

Internet (packets)



Web (documents)



Repository (preservation)



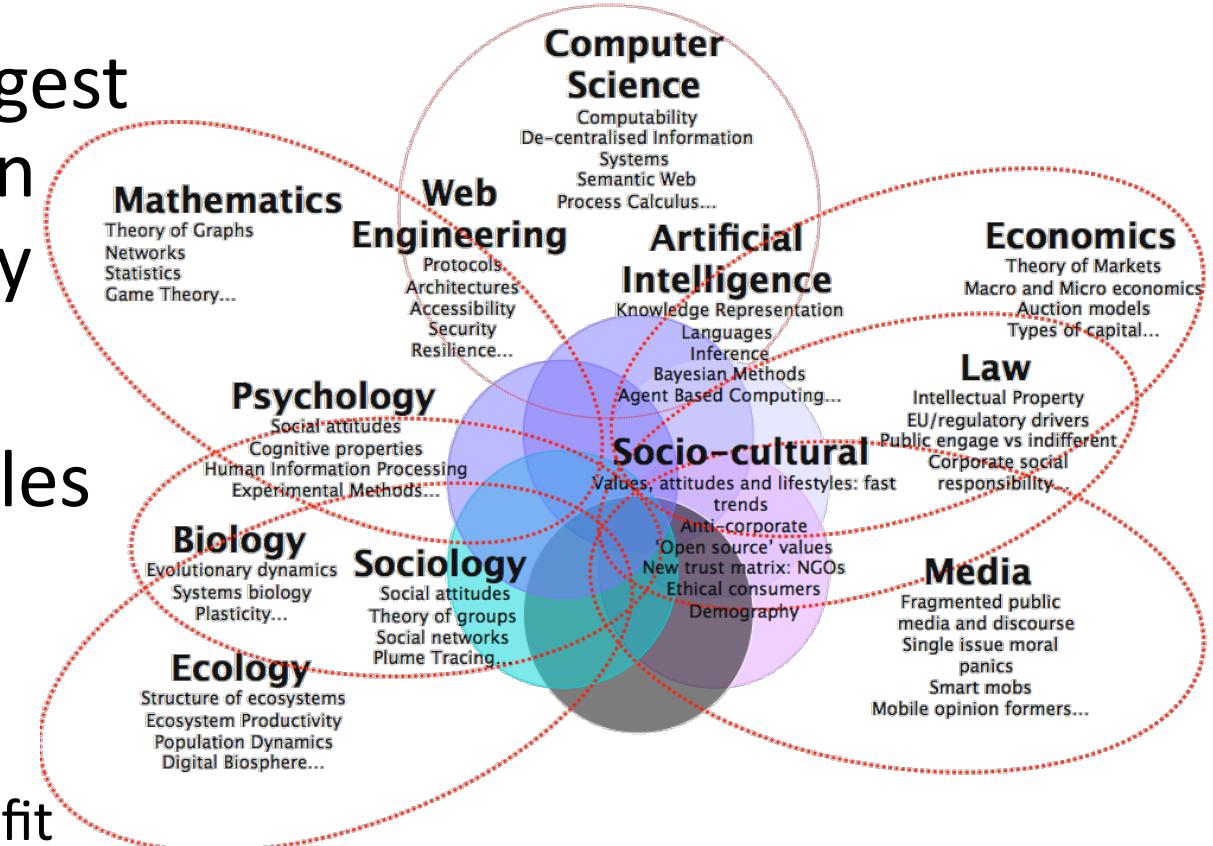
What have we achieved with this multilayered platform in the last decade?
What do we need to consolidate?

Web Science

- The Web is the largest human information construct in history

- Web Science enables us to

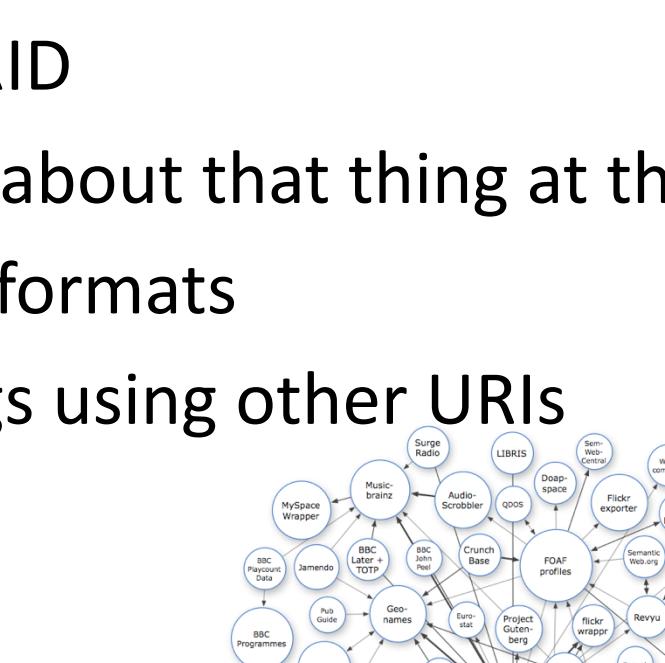
- Understand what it is
- Engineer its future
- Ensure its social benefit

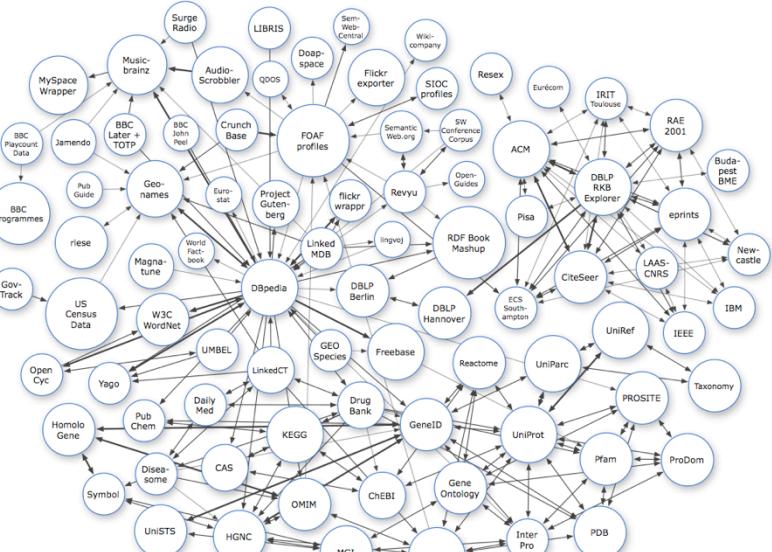


- What is the impact of the Web on society?

Four principles of Linked Data

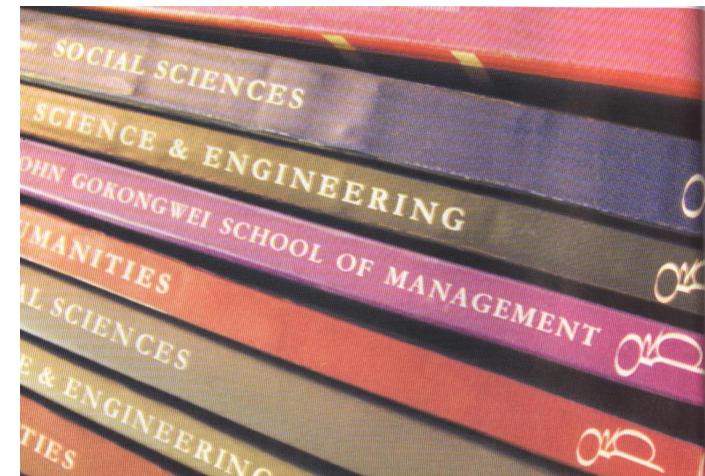
- Four principles of linked data
 1. Every thing has a URID
 2. Publish information about that thing at that URIs
 3. Use standard, open formats
 4. Mention other things using other URIs
- Result
 - An open web of open information





Four principles of scholarly comms

- Four principles of scholarly comms
 1. Every paper has a DOI
 2. Publish information at the DOI
 3. Use a standard format
 4. Reference other papers
- Result
 - The literature - a private web of licensed information that is not free to use
 - Even using the metadata is problematic



Aims of Citation Services

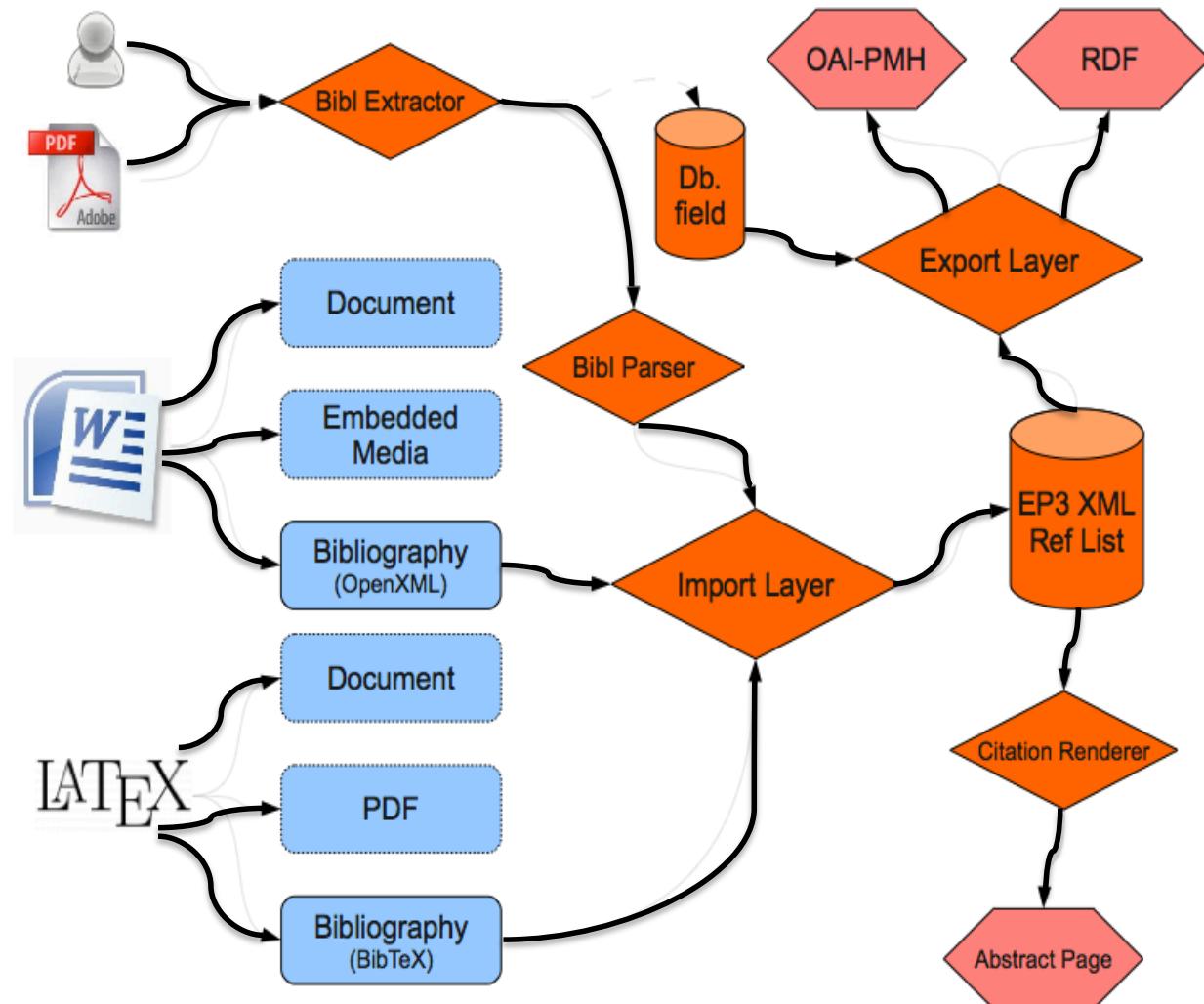
- improve the ways in which citation data relating to open access research documents are identified and shared
- current services and bibliographic research is restricted to a small number of commercial actors
 - insufficiently developed for the academic community
- citation information needs to be recognized as a part of the Commons
 - a freely shared citation infrastructure
 - format-agnostic
 - transdisciplinary,
 - international
- used by a wide variety of services

Project Outline

- 1) Author support tools: for Microsoft Word and BibTeX
- 2) Reference list deposit in repository metadata for general repository deposit workflow
- 3) OAI-PMH citation schema and protocol extension
- 4) Reference extractor (Perl)
 - extracts bibliographies from a research work (PDF, HTML, Office)
- 5) Reference deconstructor
 - breaks down a reference list into basic constituent parts for later analysis.
- 6) Large testbed of representative documents
- 7) One or more basic services (citation databases) which can collect, combine and disambiguate (recognise eliminate duplicate) citations
 - building on citebase
- 8) Exemplar advanced value-added services: examples of such services might be citation graph visualisation, network visualisation and trackback (track back through the literature using citation links) services
- 9) Infrastructure for auditing and quality assurance services

Citation Workflow

- Opportunities to obtain citation data
 - manually from author
 - explicit bibliography data (Office or BibTeX)
 - automated data scraping



Demo

Document1 - Microsoft Word

Home Insert Page Layout References Mailings Review View

Table of Contents Add Text Update Table
Insert Footnote Insert Endnote AB¹ Next Footnote
Footnotes Show Notes
Insert Citation Manage Sources Style: APA
Citations & Bibliography Insert Table of Figures Update Table
Insert Caption Cross-reference
Captions
Mark Entry Insert Index
Index Update Index
Mark Citation Table of Authorities

My First Office 2007 Document
Tim Brody

The content of my document.

It is important to remember in (Berners-Lee, 2000) that there is nothing to fear from the Web except the Web itself.

Abbate, J. (1999). *Inventing the Internet*. MIT Press.

Berners-Lee, T. (2000). *Weaving the Web*. New York, NY, USA: HarperBusiness.

Bowen, C., & Peyton, D. (1990). *Compuserve information manager: the complete sourcebook*. Bantam Books.

Bush, V. (1945, July). As We May Think. *Atlantic Monthly*.

Carr, L. (1999). Retrieved from EPrints Software: <http://www.eprints.org/>

Cats-Baril, W. L., & Jelassi, T. (1994). The French Videotex System Minitel: A Successful Implementation of a National Information Technology Infrastructure. *MIS Quarterly*, 18 (1).

RIN. (2009). *Patterns of information use and exchange: case studies of researchers in the life sciences*. Retrieved from Research Information Network: <http://www.rin.ac.uk/case-studies>

Page: 1 of 1 | Words: 135 | English (United Kingdom) | 100% |

Next Stages

- Build testbed
- Collect citation extraction software
 - Open source projects
 - Citebase, Citeseer etc
- Evaluate software against testbed

Building Testbed

- Previous solutions have not been general
- Reference Testbed
 - Interdisciplinary collection of documents
 - Wide-ranging exemplars
 - International scope
- A collection of material that is donated and curated by a community of people
 - ie a repository

Final Stages

- Build example services

Search Citebase Information and Help Impact Health Warning Login/Regis

Anti De Sitter Space And Holography

Authors: Witten, Edward

Recently, it has been proposed by Maldacena that large N limits of certain conformal field theories in d dimensions can be described in terms of supergravity (and string theory) on the product of $d+1$ -dimensional AdS space with a compact manifold. Here we elaborate on this idea and propose a precise correspondence between conformal field theory observables and those of supergravity: correlation functions in conformal field theory are given by the dependence of the supergravity action on the asymptotic behavior at infinity. In particular, dimensions of operators in conformal field theory are given by masses of particles in supergravity. As quantitative confirmation of this correspondence, we note that the Kaluza-Klein modes of Type IIB supergravity on $AdS_5 \times S^5$ match with the chiral operators of $N=4$ super Yang-Mills theory in four dimensions. With some further assumptions, one can deduce a Hamiltonian version of the correspondence and show that the $N=4$ theory has a large N phase transition related to the thermodynamics of AdS black holes.

Comment: 40 pp.; additional references and assorted corrections

Full-text available from: [Cached PDF](#) [Linked PDF \(experimental\)](#)
[Adv. Theor. Math. Phys. 2:253-291, 1998](#)
<http://arxiv.org/abs/hep-th/9802150>

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Citations Downloads

Anti-de Sitter Space, Thermal Phase Transition, And Confinement In Gauge Theories [Abstract, 838 Cites, Pre-print PDF]

838 Witten, Edward (1998-03-16) oai:arXiv.org:hep-th/9803131

The correspondence between supergravity (and string theory) on AdS space and boundary conformal field theory relates the thermodynamics of $N=4$ super Yang-Mills theory in four dimensions to the thermodynamics of Schwarzschild black holes in Anti-de Sitter space. In this description, quantum phe ... Comment: 28 pp., added references and minor corrections

?

Show the top 5 most cited articles that have been identified by Citebase as citing this article (to see all citing articles identified by Citebase follow the bottom link)

[Large N Field Theories, String Theory and Gravity](#) [Abstract, 1461 Cites, Pre-print PDF]

1461 Aharony, O.; Gubser, S. S.; Maldacena, J. et al (1999-05-14) oai:arXiv.org:hep-th/9905111

We review the holographic correspondence between field theories and string/M theory, focusing on the relation between compactifications of string/M theory on Anti-de Sitter spaces and conformal field theories. We review the background for this correspondence and discuss its motivations and the evidence ... Comment: 261 pages, 42 post-script figures. Please send any comment to jmalda@fas.harvard.edu. v2: added references and small corrections. v3: minor changes and corrected discussion of SU(3)-invariant supergravity solution

[Strings in flat space and pp waves from al N=4 Super Yang Mills](#) [Abstract, 983 Cites, Pre-print PDF]

983 Berenstein, David; Maldacena, Juan; Nastase, Horatiu (2002-02-04) In JHEP 0204 013 (2002)

We explain how the string spectrum in flat space and pp-waves arises from the large N limit, at fixed g^2_{YM} , of $U(N)$, al $N=4$ super Yang Mills. We reproduce the spectrum by summing a subset of the planar Feynman diagrams. We give a heuristic argument for why we can neglect other diagrams. We also d ... Comment: 36 pages, 5 figures. v3: minor typos corrected, references added

Final Stages: Linked Citation Data

The screenshot displays the dotAC application interface, which is a semantic web-based platform for exploring the UK research landscape. The interface is divided into several panels:

- Top Left Panel:** A map of the United Kingdom showing the locations of project members. Major cities and rivers are labeled. A red marker indicates a specific location, likely the project's headquarters. A legend at the top right of the map area includes "Map", "Satellite", and "Terrain" options.
- Top Right Panel:** A search bar with a magnifying glass icon and the dotAC.info logo.
- Central Panels:**
 - Details Panel:** Displays project information: Name (dotAC: Exploring the UK research landscape), Start Date (01/06/2009), End Date (30/11/2009), Web Address (http://www.dotac.info/), and Description.
 - Project Members Panel:** A list of project members with their names and roles: David Flanders (JISC) and Dr. Nicholas Gibbons.
 - Participating Organisations Panel:** A list of participating organizations: University of Southampton.
 - Related JISC Projects Panel:** A list of related JISC projects: EP2MDC, Microviews, OpenPSI, Plugins for Advanced Export and Search, allAboutMePrints, Alfresco Management and Security Toolkit, and Artnotes.
- Bottom Left Panel:** A list of publications, each with a link and a help icon. The publications include:
 - 3store: Efficient Bulk RDF Storage
 - A Formal Model of Semantic Web Service Ontology (WSMO) Execution
 - A Formal Semantic Model of the Semantic Web Service Ontology (WSMO)
 - A Generic Agent Organisation Framework For Autonomic Systems
 - A Pragmatic Approach for the Semantic Description and Matching of Pervasive Resources
 - A Study of User Profile Generation from Folksonomies
 - A k-Nearest-Neighbour Method for Classifying Web Search Results with Data in Folksonomies
- Bottom Right Panel:** A detailed view of a specific project member, Hugh Glasser. It shows his profile picture, related people (including Ian Millard, Ahaz Jaffi, P.H. Hartel, and others), and a list of his publications, organizations, and courses & materials.