By establishing a Global Resources Collections Forum, CRL plans to create an integrated framework of information supporting timely decisions on collections investments by specialists at member libraries.

At a Collections Forum webinar on April 23, we presented prototypes for two key elements of this new framework. The first is a new type of critical review for digital collections and databases. Drawing on member expertise, the new Reviews should provide authoritative insights and durable information allowing ongoing comparative assessment. They also will be linked to Profiles of the major publishers and distributors of digital collections.

An additional element will be Field Guides, surveying essential research resources and the challenges of collecting in various domains. These Field Guides will expand upon and ultimately supplant the guides to various research topics currently available on CRL’s web site.

Included here are examples of potential Reviews & Profiles as well as Field Guides. We would like to hear from CRL members about the types of features you would value in these documents, as well as which databases to be reviewed and fields to be surveyed.
# Table of Contents

**REVIEWS**

- The Times of India (Pre-release review)................................................................. 5
- Foreign Broadcast Information Service Daily Reports, 1974-1996 .......................... 13
- The Making of the Modern World ........................................................................... 18
- Mass Observation Online ....................................................................................... 19
- EThOS – Electronic Theses Online Service ............................................................. 21

**PROFILES**

- ProQuest LLC ........................................................................................................... 28

**FIELD GUIDES** ........................................................................................................ 32
In 2008 Alison Jones of Tufts University investigated the uses of newspapers in scholarly research, and cites a linguist's experiment using a ProQuest product:

"Another linguist conducted an experimental research study using the Infotrac Times Digital Archive and ProQuest Historical Newspapers collection. Donald S. MacQueen searched on the integration of the word "million" versus "millions" into both British and American English using these two newspaper databases. He argues that despite some difficulties in developing a research methodology, the sheer magnitude of the number of words that can be searched makes these databases well worth using.

One major difficulty MacQueen found was that the searching defaults are set up with historians in mind. "Historical Newspapers caters mainly to historians and other social scientists who are looking to find as many references as possible to a themes or keywords... '"MacQueen explains "to maximize the number of hits for such users, the Proquest search engine automatically includes a plural look-up feature, conflating hits for the plural form of any singular word entered. This obviously presents an obstacle to linguists looking to distinguish inflected from bare forms." [1] Despite these caveats, he concluded that these databases "offer invaluable information about language usage in American and British newspaper writing across a period that is not yet well covered by principled linguistic corpora"[2] and they offer great insight into understanding changing patterns of standard usage in English."

Source:

Screenshot: The Times of India Pre-Release Review
The Times of India (Pre-release review)

Reviewer: Carolyn Ciesla, Center for Research Libraries
April, 2010

CONTENT

Abstract

ProQuest, LLC, has announced plans to release in 2010 a digital version of The Times of India from 1848-2001.

Collection Content

Title History

The Times of India was founded on November 3, 1838. It became a daily edition in 1850, and is the highest circulating English-language paper in India. The Times of India is published simultaneously in multiple editions (Mumbai, Delhi, Calcutta, and Ahmedabad among them), with some content differences in each.

The Times of India is published by Bennett, Coleman & Co. Ltd. as part of The Times Group. The Times Group publishes the business daily The Economic Times, the tabloid-style newspaper Mirror in several cities, and has other newspapers in Hindi & Marathi. The Times Group also owns Radio Mirchi, an FM Radio network and a business TV channel ET NOW and English-language news channel TIMES NOW. The group’s Times Internet Limited offers email, Social networking and a host of other services & sites. It is also significant in book publishing, music publishing, outdoor media and event management.

Microfilm Content & Holdings

See Appendix I: “International Coalition on Newspapers (ICON) Title Report: The Times of India”

Source of the digitized content

ProQuest reports the digital content will come from the microfilm produced by The Times of India publisher Bennett Coleman & Co., Ltd. ProQuest is digitizing only the New Delhi edition.

Timetable for release of the database

ProQuest reports they anticipate a preliminary release by June 2010. The full collection will be accessible by the end of the calendar year.
PROVIDER

Publisher

The collection will be digitized by ProQuest LLC in cooperation with The Times of India publisher Bennett Coleman and Company Limited.

See Profile of ProQuest LLC.

DELIVERY

Metadata

ProQuest provides information on all possible fields which may be attached to each digital object. See http://support.proquest.com/display/4/kb/article.aspx?aid=1913

Technical Platform

ProQuest reports that The Times will be migrated to ProQuest's "new unified platform, allowing The Times of India’s content to be cross-searched and integrated within a library’s entire ProQuest collection." The platform should enable interoperability of The Times database with the New York Times and Wall Street Journal from ProQuest.

The ProQuest classic platform is an OpenURL target and source compliant with the San Antonio profile level 1 (SAP1).

Interface Tools

In the current ProQuest interface, Advanced Search supports searching in fields including author, document title, publication title, abstract, full text, abstract and any combination. Denoted document types include articles, advertisements, obituaries, and photos. Searches can be limited by individual dates and date ranges, as well as by document types. Further, users can sort results by relevance or date, and previous searches and their results are available for later viewing.

Images of articles are available in PDF format, and a "Page Map" image allows the user to view the article in its original page context.

Delivery options for the articles are varied. Users can print, e-mail, or save articles. There is also the option to send an article to a FedEx Kinko location and to cite the article in multiple formats, including APA and MLA.

Sources

JISC Academic Database Assessment Tool  Descriptions and comparative analysis of the metadata, platform, and interface features of ProQuest products as distributed in the United Kingdom.

Specifications
These will be posted as available.

Vendor specifications for the earlier product, ProQuest Historical Newspapers:

- **Format:** Abstract and Index, Full Text Image; **MARC Records:** NO | **COUNTER compliant:** YES | **ATHENS enabled:** YES; **Open URL enabled:** YES | **z39.50 enabled:** YES

This database is Internet-accessible via PC or Macintosh with Internet Explorer (versions up to 6) or Netscape (versions up to 7). Subscribers access the database via password or IP authentication.

Source

Comments: Delivery

**Q:** Will ProQuest provide or expose metadata for the contents of this collection for harvesting and indexing for preservation and discovery purposes? This could permit the content to be cross-searchable, for example, with Gale’s 19th Century British Newspaper collection.

**Q:** How will ProQuest archive the digital content of this collection? "Perpetual access" provisions in the license and the purchase of image and OCR files are no longer accepted by libraries as preservation solutions.

**Q:** Will Google make the Times content available in its News Archive Search, particularly since ProQuest microfilm is the source for much of the content in this Google archive?

TERMS

Price
For its Historical Newspapers database product ProQuest offers different pricing schemes, including perpetual licenses (with ongoing maintenance) and subscription models. More information on Times of India will be provided as it becomes available.

Other Terms
A single licensing agreement is used for all ProQuest databases. The lengthy agreement is fairly basic in its provisions, indicating: the products to be purchased or subscribed to, subscription start and end dates, price of products/subscriptions, authorized users (e.g., staff and students or patrons), type of access (e.g., on-site and/or remote access, simultaneous users, etc.), permitted uses (e.g., fair use, digital and print copies, e-
reserves, ILL, etc.), and conditions for termination. It also contains the standard contractual provisions for limited warranty and disclaimer of warranty, limitation of liability, and privacy.

Note that since copyright restrictions for original sources vary, ProQuest’s policy on outside use of the database (such as e-reserves) varies with the particular database. Their restrictions on loading MARC records into a shared catalog vary with the database as well.

As of 2009, ProQuest no longer offers a Permanent Archive Addendum to the licensing agreement. Provisions were available to offer data to customers on an as-requested basis.

USE CASES

In 2008 Alison Jones of Tufts University investigated the uses of newspapers in scholarly research, and cited a linguist’s experiment using the ProQuest Historical Newspapers product:

Another linguist conducted an experimental research study using the Infotrac Times Digital Archive and Proquest Historical Newspapers collection. Donald S. MacQueen searched on the integration of the word “million” versus “millions” into both British and American English using these two newspaper databases. He argues that despite some difficulties in developing a research methodology, the sheer magnitude of the number of words that can be searched makes these databases well worth using. One major difficulty MacQueen found was that the searching defaults are set up with historians in mind. “Historical Newspapers caters mainly to historians and other social scientists who are looking to find as many references as possible to a themes or keywords…” MacQueen explains “to maximize the number of hits for such users, the Proquest search engine automatically includes a plural look-up feature, conflating hits for the plural form of any singular word entered. This obviously presents an obstacle to linguists looking to distinguish inflected from bare forms.” [1] Despite these caveats, he concluded that these databases “offer invaluable information about language usage in American and British newspaper writing across a period that is not yet well covered by principled linguistic corpora”[2] and they offer great insight into understanding changing patterns of standard usage in English.


[2] Ibid., 141.

Source

Appendix I: International Coalition on Newspapers (ICON) Title Report: *The Times of India*

**The Times of India**

Publication history:

**Title:** The *Bombay times and journal of commerce*

**Alternate Title:** Bombay times

**Publication Dates:** Vol. 1, no. 1 (Nov. 3, 1838)-vol. 10, no. 310 (Dec. 31, 1859).

Merged with: Bombay standard and chronicle of Western India, to form: Bombay times and standard.

**Microfilm Editions:**

<table>
<thead>
<tr>
<th>Filmer</th>
<th>Filming Dates</th>
<th>Reels</th>
<th>OCLC No.</th>
<th>CRL Holds?</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Library Newspaper Library</td>
<td>1845-Aug. 1850; 1854-1859</td>
<td>42&quot;</td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

**Title:** The *Bombay times and standard*

**Imprint:** Bombay : Matthias Mull, [-1861]

**Publication Dates:** Began with Jan. 2, 1860 issue.; -new ser., v. 24, no. 117 (May 17, 1861).

**Frequency:** Daily (except Sunday)

Merged with: Bombay telegraph and courier, to form: Times of India (Bombay, India).

**Microfilm Editions:**

<table>
<thead>
<tr>
<th>Filmer</th>
<th>Filming Dates</th>
<th>Reels</th>
<th>OCLC No.</th>
<th>CRL Holds?</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterDocumentation Co.</td>
<td>Jan. 10, 1860-May 17, 1861 [gaps?]</td>
<td>3</td>
<td>12094634</td>
<td>All</td>
</tr>
<tr>
<td>British Library Newspaper Library</td>
<td>Jan. 1860-May 17, 1861</td>
<td>5&quot;</td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

1 All filmers and holdings are based on bibliographic catalogue information, except where noted. Where publisher or library catalogs do not provide sufficient detail, ICON attempts to extrapolate holding information from other library holdings, print sources, or other means. ICON is not responsible for any inaccuracy of information herein.


3 ibid.
**Title:** The times of India (Bombay, India)  
**Imprint:** Bombay : Bennett, Coleman & Co.,  
**Publication Dates:** Began with May 18, 1861 issue. Published simultaneously in Mumbai [Bombay], Delhi, Bangalore, Ahmedabad, Lucknow, and Patna.

**Microfilm Editions:**

<table>
<thead>
<tr>
<th>Filmer</th>
<th>Filming Dates</th>
<th>Reels</th>
<th>OCLC No.</th>
<th>CRL Holds?</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterDocumentation Co.</td>
<td>May 18-June 29, 1861</td>
<td>1</td>
<td>23465758</td>
<td>All</td>
</tr>
<tr>
<td>Microform Academic Publishers</td>
<td>July 1861-Dec 1889</td>
<td>92^5</td>
<td>29515130</td>
<td>Partial [Jul 1861-1873; 1878-Feb. 1879; 1883-Feb. 27, 1886]</td>
</tr>
</tbody>
</table>

---

5 Reel guide available at: [http://www.microform.co.uk/guides/R96360.pdf](http://www.microform.co.uk/guides/R96360.pdf)
6 From BL Catalogue – unclear if all holdings are filmed by BL.
| Center for Research Libraries (FNMP) | Aug. 1949-1966 | 103 | 29515110 | All |

**Other Editions**

**Title:** Times of India (New Delhi, India)  
**Imprint:** Delhi : [Times of India]  
**Notes:** "Printed and published from Delhi and Bombay."

**Microfilm Editions:**

<table>
<thead>
<tr>
<th>Filmer</th>
<th>Filming Dates</th>
<th>Reels</th>
<th>OCLC No.</th>
<th>CRL Holds?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennett, Coleman &amp; Co.</td>
<td>1950- present</td>
<td>?</td>
<td>All [1962-1989]</td>
<td></td>
</tr>
<tr>
<td>University of Wisconsin-Madison</td>
<td>June 1, 2001-Apr. 30, 2005</td>
<td></td>
<td>64281964</td>
<td>None</td>
</tr>
</tbody>
</table>

**Title:** The Times of India (Ahmadabad, India)  
**Imprint:** Ahmedabad : Published for the proprietors B. Coleman & Co., by A. Arora  
**Notes:** Published simultaneously in Bombay and New Delhi./ Description based on: Vol. 144, no. 1 (Jan. 1, 1981)

**Microfilm Editions:**

<table>
<thead>
<tr>
<th>Filmer</th>
<th>Filming Dates</th>
<th>Reels</th>
<th>OCLC No.</th>
<th>CRL Holds?</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Wisconsin-Madison</td>
<td>2001-2005</td>
<td>8</td>
<td>64281964</td>
<td>None</td>
</tr>
</tbody>
</table>

---

7 From Union List of South Asian Newspapers (see: [http://dsal.uchicago.edu/bibliographic/unionlist/unionlist.php](http://dsal.uchicago.edu/bibliographic/unionlist/unionlist.php))  
8 Holdings based on beginning and end dates from catalog record description. ([http://lccn.loc.gov/2010218118](http://lccn.loc.gov/2010218118))  
11 Holdings based on Columbia University catalog  
Title: The times of India (Bombay India : Overland weekly ed.).
Imprint: Bombay : Printed and published for the proprietors, Bennett, Coleman, by F. M. Coleman, Managing Proprietor
Notes: Description based on: Vol. 64, no. 1 (Jan. 7, 1899)./ Latest issue consulted: Vol. 67, no. 26 (Dec. 29, 1900).

Microfilm Editions:

<table>
<thead>
<tr>
<th>Filmer</th>
<th>Filming Dates</th>
<th>Reels</th>
<th>OCLC No.</th>
<th>CRL Holds?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvard College Library</td>
<td>Jan. 7, 1899-Dec. 29, 1900</td>
<td>4</td>
<td>237795374</td>
<td>None</td>
</tr>
</tbody>
</table>

Title: Times of India (Bombay, india: Weekly mail ed.)
Imprint: Bombay : printed and published for the proprietors, Bennett Coleman & Co., Ltd. by H.W. Smith
Notes: Description based on: Vol. 43, no. 1 (Jan. 4, 1930).

Microfilm Editions:

<table>
<thead>
<tr>
<th>Filmer</th>
<th>Filming Dates</th>
<th>Reels</th>
<th>OCLC No.</th>
<th>CRL Holds?</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Library</td>
<td>8 Nov. 1905-27 Jan. 1929</td>
<td>?</td>
<td>53916045</td>
<td>None</td>
</tr>
<tr>
<td>University of Washington</td>
<td>Jan. 4, 1930-Dec. 24, 1932</td>
<td>3</td>
<td>48367352</td>
<td>None</td>
</tr>
</tbody>
</table>
Foreign Broadcast Information Service Daily Reports, 1974-1996

Reviewer: Center for Research Libraries
April, 2010

CONTENT

Abstract

Foreign Broadcast Information Service Daily Reports, 1974-1996, released by Readex in 2007, is an electronic collection of the daily reports originally issued by FBIS in paper and microform. The reports include selected news bulletins and editorials, speeches, briefings, interviews, and policy papers gleaned from radio and television broadcasts and news services in approximately one hundred countries throughout the world. Collected and translated into English by the Central Intelligence Agency, the texts are largely from sources in regions of American strategic interest during the period. The FBIS Daily Reports have been a key source on American diplomacy and world opinion since they were first introduced in the early 1940s. As originally circulated in paper form the reports were a crucial tool of current awareness for generations of Foreign Service officers, foreign relations professionals and students of international affairs. They are now primary sources for historians of politics, communications and culture.

Collection Content

Much of the FBIS content originated from local broadcast stations, some of them “clandestine,” like the short wave radio operations of the Khmer Rouge Provisional Government in Cambodia during the period of Communist rule there, or from local news services like the Syrian Arab News Agency in Damascus. The collection also includes CIA transcripts of news reports filed through foreign bureaus of Western news agencies and broadcasters such as the BBC World Service and Agence France-Presse.

Each FBIS daily report or compilation provides excerpts and full texts, in English, of reports from several world regions. Each entry gives place, source and original language of the source, the date of the report, and, if broadcast, the time of day.

History

The Foreign Broadcast Information Service was, until recently, a program of the U.S. Central Intelligence Agency. FBIS has monitored, recorded, transcribed, and translated radio and television broadcasts and news service bulletins from hundreds of countries around the world. The systematic monitoring of foreign broadcasting for American intelligence purposes began in 1939. The Princeton Listening Center, established
by Princeton University, monitored and produced transcripts of Axis and Allied propaganda broadcasts, many of them transmitted by short-wave radio, as well as broadcasts from other places of strategic interest in Europe, from November 1939 through May 1941. In 1941 the Center’s functions were assumed by the U.S. Federal Communications Commission and moved to Washington DC to form the Foreign Broadcast Monitoring Service.

The FBIS Daily Reports continued and now augments compilations generated by earlier intelligence-gathering efforts. The BBC Monitoring Service, founded in 1939, issued its daily and weekly Digest of World Broadcasts and, later, Summary of World Broadcasts from several geographic regions: the U.S.S.R., Eastern Europe, Germany, Latin America and the Caribbean, the Far East, Middle East and Africa. These reports summarized foreign radio station transmissions from 1939 through 1997. (The reports are collected on microform in the ProQuest BBC Summary of World Broadcasts series.)

The BBC efforts in turn carried on the earlier practice of British government monitoring of the press in Crown colonies. The Review of the Foreign Press, 1939-1945, was produced by the Royal Institute of International Affairs, and extensive excerpts from the “Native Papers” in India were translated and published by British colonial government offices on the subcontinent.

Kalev Leetaru has done an in-depth study of the news sources included in the FBIS Daily Reports, and the BBC’s Summary of World Broadcasts. See Leetaru’s The Scope of FBIS and BBC Open Source Media Coverage, 1979-2008.

Distribution

The daily compilations were originally issued on a limited basis in paper form beginning in 1941 and, starting in the 1960s, in microform through the Library of Congress and later the National Technical Information Service. (Earlier FBIS compilations also were microfilmed and sold by the Library of Congress Photoduplication Service.) FBIS continued to publish its Daily Reports until late 1996, when they began to be issued in electronic format only and the printed reports were discontinued. Beginning in 1995 the electronic versions were licensed by the Department of Commerce’s National Technical Information Service for Web distribution through Dialog’s World News Connection, on a subscription basis. Under ProQuest ownership, the WNC continues to distribute reports provided by the CIA’s Open Source Center, the successor service to FBIS, although it is not clear how complete those electronic files are.

The Readex product begins in 1974, when the reports began to be published on microform, and continues through 1996, when the printed reports were discontinued. The product was produced by digitizing the microform editions of the paper reports. Many of these microform sets are available from the Center for Research Libraries.

At this time Readex’s FBIS Daily Reports 1974-1996 includes reports from the following regions: Africa (52 countries), Asia (27), Australia/Oceania (12), and the Middle East/Near East (20). To date the total number of pages included in the collection is close to 1.2 million. Reports on Latin America, Eastern Europe, Western Europe, Soviet Union and Central Eurasia are scheduled to be added to the collection in late 2008 and 2009.
This was a time of great political upheaval and major changes in international alignments. The collection covers the last years of the Cold War, turmoil in the Middle East, struggles for liberation in Africa, and the emergence of China and India as world powers. Since the original purpose of the reports was intelligence, to enable U.S. government agencies and military to monitor events and developments in countries of strategic interest to the US, the present series is particularly rich in materials from Southeast Asia, China, the Middle East, and key African nations like South Africa, Angola and Kenya.

The collection documents the explosion of televised news during this period. (In 1974 there were 9,616 stations operating in 126 countries, 2,170 of them in West Germany alone.) It was during this time that the advent of cable television and satellite television enabled broadcasters to reach international audiences and transcend state control.

While news reports, particularly broadcasts from zones of conflict and instability, are notoriously unreliable as fact, they afford unique insights on the views of the governments, opposition parties, and governments-in-exile that often controlled the media outlets in those parts of the world. The FBIS Daily Reports 1974-1996 is one of the few sources of these kinds of materials. The archives of television and radio stations, particularly clandestine operations, simply do not survive in most instances.

They are often lost or are not maintained in the first place, particularly in areas of chronic conflict, such as the West Bank and Afghanistan. Newspapers from these regions tend to survive in greater numbers, although the FBIS English-language translations are more useful to the many historians not conversant in the local vernacular. Moreover, as scholars and students grow more adept at using and citing broadcast media as sources in their research such records will become increasingly important.

The reports, however, are far from comprehensive. They are in fact highly selective, reflecting the ebbs and flows of U.S. interest in a given country or region. This makes it somewhat difficult to trace the development of particular lines of ideological argument or specific political trends.

Moreover, not all of the reports on a given country originate from its local media: some are from correspondents and bureaus of Western agencies, such as the Melbourne Overseas Service reporting from the Solomon Islands in the South Pacific, and Agence France-Presse from Algeria and Morocco.

It is disappointing too how much material is the official voice of regimes, and report largely ceremonial events such as interview and speeches. That said, while the speeches of important world leaders are often available in published form, the FBIS Daily Reports 1974-1996 include many speeches of ambassadors and government ministers that are not recorded elsewhere.

In general this is an outstanding and unique collection. In the future, it could be strengthened by adding supplementary FBIS publications, such as the Broadcasting Stations of the World series that FBIS published between from 1941 through 1974. This source lists the television stations, their geographic locations, frequency, range, and ownership. Assembling in a single collection the post-1996 reports, including those
compiled from the electronic media and the Web by the CIA’s Open Source Center, would also be a great service to historians.

**PROVIDER**

Readex, a division of NewsBank Inc.

**DELIVERY**

**Interface Tools**

The product reproduces the page images from the microform of the original daily reports. The user can search the full-texts, titles, and sources by word, or can focus searches by date and country using either a map or country list. Searches can be limited to particular types of sources (“article types”), such as interviews, newspaper articles, speeches, and summaries by FBIS staff, but unfortunately not to specific media (e.g., television broadcast, radio broadcast, press release, etc.).

One can also browse by events, through a useful but somewhat limited chronological listing of events. Events in the browse list include “1975 - Kurdish insurgency in Iraq;” “1996 - South Africa approves new constitution;” and “1993 - 1996 Early activities of Osama Bin Laden.”

Search results display in list form in chronological order, or ranked with the most relevant match first if preferred, with corresponding thumbnails for each item. Search results clearly indicate the sources found, enabling the user to choose between reports of various dates and from different types of sources, such as radio, newspaper, news service report.

Navigation through the documents is guided by a tree in a panel at left, which indicates where the chosen report appears in a particular published report or series. Thanks to Readex zoning of the text the user can arrive at the exact section of a report where the search term appears, and can then easily step back from the excerpt to view the entire page and entire multi-page daily report.

One can download each full daily report in PDF format, with a limit of 25 pages, but cannot save the documents. (Most of the daily reports are well over 25 pages in length.)

**Specifications**

*FBIS Daily Reports, 1974-1996* is internet-accessible via PC or Macintosh with Internet Explorer (versions up to 6) or Netscape (versions up to 7). Subscribers access the database via password or IP address authentication.
TERMS

Price

Pricing is scaled to the size of the university or library community. The collection can be purchased in its entirety or each section individually, with discounts (up to 20%) increasing with the number of sections purchased. The list price for the entire collection ranges from about $14,000 to about $120,084 exclusive of pre-publication discounts.

In addition to the purchase price Readex charges a modest annual access fee, to cover the cost of enhancements to the interface, training and (additional) content updates (“ETC”).

Publisher’s Terms

Readex has a standard, five-page licensing agreement for all of its databases, including *FBIS Daily Reports, 1974-1996*. The agreement describes the products to be purchased or subscribed to, duration of the subscription, and price. It defines authorized users (e.g., staff and students or patrons), type of access (e.g., on-site and/or remote access, simultaneous users, etc.), permitted uses (e.g., access, search, retrieval, downloading for temporary storage, limited printing, etc.), and copies (e-reserves, ILL, etc.). It also contains the standard contract provisions for limited warranty and disclaimer of warranty, limitation of liability, privacy, etc.

The agreement also provides “perpetual access” to the content of the database, contingent upon continued payment of access fees to NewsBank. In the event of Readex discontinuation of hosting of the product, NewsBank agrees to provide the purchasers the images and ASCII text database for the product “at cost.” Customers may also purchase “a magnetic tape load of the product” and the right to local hosting and access through the purchaser’s own search and retrieval software.
The Making of the Modern World

Reviewer: Center for Research Libraries
April, 2010

CONTENT

Abstract

The Making of the Modern World is a digital collection of primarily economic works written in Europe from 1450 to 1850. The materials included in the collection were digitized from a combined microform version of the Goldsmiths’ Library of Economic Literature at the University of London Library and the Kress Collection of Business and Economics at the Harvard Business School.

Collection Content

The collection features thousands of books, political pamphlets, serials, government publications and ephemera from 1450 to 1850. Most of the materials fall under the categories of theoretical and descriptive economics covering such topics as banking, finance, transportation and manufacturing. These works are written in 17 different European languages, with 30% of the content in non-English languages.

Making of the Modern World is a valuable resource for research in economic, political, and legal history. The collection holds an almost complete version of Adam Smith’s The Wealth of Nations, with over twenty editions spanning the period from 1776 to 1848 and translations into German, French, Italian and Spanish.

In full text searches the terms yielding the most hits--around thirty thousand results each--include trade, war and rent. The collection also would be a valuable resource for colonial research, as it contains works about many former colonies including those from the Americas, Africa, India and the East Indies.

PROVIDER

Gale Cengage

DELIVERY

Metadata

The metadata contains all of the basic categories one would normally expect including title, author, language and subject. The records also include a MARC record number, MOMW release date and a generated source citation for the researcher. MARC records themselves are available as a separate purchase.
Interface Tools

The design of the interface is plain and efficient. In addition to full text searches researchers can browse topics such as agriculture, population, slavery, and social conditions, or alphabetical author and title lists. Given the volume of material in the archive, most alphabetical listings contain hundreds of works. The materials would be easier to sift through with the addition of browse options by country, historical period, frequency of download and number of citations.

Researchers will find it simple to navigate through the linked table of contents and list of illustrations that accompanies each work. The collection displays one page of a work at a time in the form of an easy to resize and rotate jpeg image. A researcher may print up to 50 pages of each work at one time in pdf form.

Aside from standard capabilities, the search engine has effective higher features as well. Researchers are able to search text within works with ease. In advanced search researchers can limit their results to works with illustrations such as cartoons, charts, maps and genealogical tables. A fuzzy search function allows researchers to expand their results to include older spellings of words. Finally, the interface includes a search history to allow researchers to return to their previous results. One tool that would improve the user experience would be the ability to make annotations within the collection’s interface.

TERMS

License terms are drafted for individual purchasers.

Mass Observation Online

Reviewer: Center for Research Libraries
April, 2010

CONTENT

Abstract

Mass Observation Online is a digital collection of unpublished reports on everyday life and culture assembled in Britain from 1937 to 1972. The collection was digitized from selected portions of the archives of Mass Observation, the organization that originally produced these materials, with some updated materials.
Originating from the diverse perspectives of an anthropologist, a poet, and a film-maker, the Mass Observation project proceeded to ambitiously expand its documentation of British society, particularly during its most active period of 1937-1955. An archive of the files opened at the University of Sussex in 1975. Portions of the archive were microfilmed in twelve parts by Adam Matthew beginning in 1994.

The digital archive and its initial update includes indexed diaries, surveys, studies, full text reports, interactive maps and photographs from the period. Over three thousand previously unpublished pages of materials are included. The bulk of the digital archive, however, consists of finding aids to the rest of the source materials.

There are two main forms of scanned documents. One is the empirical data and personal writings collected by the Mass Observation organization, the Topic Collections and the Day Surveys. Highlights include a collection from 1939 to 1942 of around five hundred indexed diaries and surveys centered on a specific theme, such as dancing, shopping and television. The second form is made up of File Reports and Publications: published and unpublished reports written on the basis of these primary sources, as well as 25 out-of-print books written by the Mass Observation organization. The digital archive also includes bibliographic summaries of data and documents from topic collections focused on dreams, radio listening, and reading habits spanning the period from 1937 to 1950. The publisher reports that the only overlap between the microfilm and the online version consists of the 6000 pages of published documents, out of 20,000 total scanned pages of material.

Mass Observation Online is a valuable resource for cultural research in history, anthropology, sociology, literature and gender studies, not just specific to British society. The collection would be an especially good resource for undergraduates because it includes contextual essays describing the significance of the materials and two essays written by graduate students recounting their experiences with the archive. As noted by a CRL member, "Its appeal is not restricted to historians of the United Kingdom. The aim of the Mass Observation Project was to examine how modern citizens engaged in their world, the UK being merely the empirical site of the investigation."

**PROVIDER**

Adam Matthew Digital

**DELIVERY**

**Metadata**

In addition to database metadata with subject indexing, MARC records are provided, similar to other Adam Matthew products.
Interface Tools

The design of the collection’s interface is attractive and easy to use. The main page includes links to contextual information, a search engine and help in using the collection. Other pages display their contents on manila folders with large icons.

The search engine gathers results across materials available in full text online and from finding aids for the microform or unpublished series. The chronology, bibliography, interactive maps and external links build a basic context for researchers around the materials collected in the archive.

TERMS

Adam Matthew is currently offering the initial digital archive and the first update. They expect that there will be two additional updates in 2011 and 2013, to be separately priced.

A general draft version of the “Adam Matthew Digital Online License Agreement” for Mass Observation can be downloaded for information purposes from http://www.amdigital.co.uk/Collections/Mass-Observation-Online/Mass-Observation-Online-License.pdf

EThOS – Electronic Theses Online Service

Reviewer: Amy Wood
Center for Research Libraries April, 2010

CONTENT

Abstract

EThOS – Electronic Theses Online Service, released by British Libraries in January 2009, is the primary vehicle to gain access to UK doctoral dissertations, with notable exceptions. An open access system centered on a hub to store and preserve both metadata and e-theses, EThOS’ stakeholders are users and a suppliers. For the user, EThOS provides a search and download facility, online help, means of ordering theses not yet digitized, and a mechanism for tracking orders. For the supplier, EThOS provides a system to harvest born digital theses, a system for handling embargoes, means of safeguarding authors’ rights, accounting and payment systems and a toolkit covering all aspects of EThOS and e-theses issues. It is an unprecedented step toward enabling researchers to access scholarly information unmediated and away from the expense of duplicating specialized collections.
Collection Content

EThOS, the British Library Electronic Theses Service, is now the primary means of access to UK doctoral theses, replacing the British Library document delivery service providing microfilm copies of theses. However, comparing the two is a bit like comparing the wooden spoon and the electric mixer as a kitchen tool. The latter does so much more, but there will always be some who find comfort in the former.

Among its stakeholders, EThOS recognizes researchers, theses authors, higher education institutions, the British Library and all interested in furthering knowledge and opportunity for open access to the intellectual product of scholars. This review will focus on the researcher and how EThOS works for them. I include comments based on practical experience over the past year helping researchers locate British theses. Also note that the Center for Research Libraries has contributed funds to accelerate the digitization of British theses on topics important to researchers at CRL libraries, including the Middle East and Islam.

History

EThOS went live in January 2009, after at least five years of development. The EThOS project began in 2005 in response to the collective interests of British libraries and other interested parties in making scholarly publications open access. EThOS project achievements were essentially to create a prototype of the current EThOS system. During the 18 months of that project, all technological, administrative, organizational, procedural and business aspects as well as copyright and authors’ rights issues were addressed. Beginning in 2007 the next phase expanded, enhanced and strengthened the prototype through discussions with stakeholders, outreach to the higher education community and evaluation of the prototype.

Coverage

The long-term goal of EThOS is open access to all British doctoral theses. The immediate aim is open access to theses from participating institutions. A year into the service, there are about 110 participating universities (list found at http://ethos.bl.uk/HEIList.do ) Some notable institutions not participating are Cambridge University, Oxford University and the University of Ulster. EThOS representatives continue with their work of extending the partnership to encourage additional participants.

Database Content

The EThOS database contains about 250,000 records from the British Library catalog and participants. Just over 30,000 of those titles were available as of April, 2010, for immediate download. The database is not a comprehensive list of British doctoral theses. Older theses that were not cataloged in the participants online catalog and new born digital theses are two categories most likely to be underrepresented. Without retrospective cataloging projects, or other sources for information, the EThOS database will likely always be short on recording older theses. New, born-digital theses have, in some cases, not been harvested because work is continuing on harvesting tools and procedures.

The database is also not limited to records from institutions participating in EThOS. The database contains about 15,000 records for University of Cambridge theses, 117 of which are available for immediate download.
There are more than 20,500 records for the University of Oxford, six of which are available for immediate download, and almost 2,000 records for the University of Ulster, 112 of which are ready for immediate download. Nonparticipant records for theses not available for immediate download have the message: “This thesis is not available via the EThOS service. Please contact the institution’s library directly if you wish to view the thesis.”

It would be extremely helpful to have a link in the nonparticipant records directly to the of the awarding institution's web page that provides information about accessing local theses.

Keeping a database clean and using fields is no trivial task and EThOS does have an automated process of identifying duplicate records and de-duping. In weekly searching the database for our patrons over the past year, I have found only two or so instances of duplicate records.

Perhaps keeping the number of required record fields to a minimum helps focus on keeping the database clean. EThOS has four required fields—Author, title, year, awarding institution, although it accommodates many more fields if available in the harvested record— including language, advisor, and sponsor of digitization. This is fine for anyone searching the database using content in the required fields, but searchers looking for records of dissertations in a particular language or for a particular advisor, are likely to come up short if the metadata is not available.

**Toolkit**

The toolkit, accessible from the EThOS web site, contains a wealth of information about copyright and legal issues, procedural and administrative information, technological information, and the EThOS business model. The main audience for the toolkit seems to be librarians and administrators at current or future participating institutions, or even those at non-UK institutions that just want to learn about many of the day to day issues involved in working with an open access system. However, the information is also extremely valuable for anyone doing more than casual, one time searching of the database.

**Helpdesk and Speculative Request services**

Two of the finest features of EThOS are the Helpdesk and the Speculative Request service. In either case, an automated response of receipt of one’s email is immediately sent and answers to the questions are returned within a few days. You don’t have to be a registered user to access either service, you simply have to provide an email.

The Speculative Request Service is for help finding or identifying a particular title of interest. It is linked from the search box of the catalog interface. A form guides the user to input necessary data about the inquiry. Responses returned have been a record I.D. number to help us find the correct record in the database; information that we needed to contact a participating library or that the title could not be verified as a thesis.

A link to the Helpdesk service is found under Help in the navigation bar above the catalog search box. Because this service uses standard email communication it allows for a broader range of questions. We have submitted
questions about duplicate records, an order that seemed to get lost in the system (only one of several hundred with which CRL has assisted patrons), confusion with the content of a record, or to report bad diacritics.

**PROVIDER**

The British Library website: [http://www.bl.uk/](http://www.bl.uk/)

EThOS web site [http://ethos.bl.uk/](http://ethos.bl.uk/)

**DELIVERY**

**Delivery Times**

Twelve percent of the theses listed in the EThOS database are available immediately for download. When theses are available immediately for download, it takes only a few minutes to do so. When researchers must request the digitization, it usually takes 30 days. When the service went live, it was overwhelmed by the number of requests for digitization and the fulfillment time was 90 days, but within six months or so, that time was brought down to 30 days. The thirty days covers making the request to the participating institution, having the dissertation pulled from shelves or storage, shipped to EThOS and digitized.

In the past year, only one of our patrons has had an order get lost. In the end, the thesis was missing from the participating library, which was probably the reason the order got off track. EThOS staff response was to say they were looking into a better system for tracking orders to avoid letting orders fall through the cracks in the future.

**Technical Platform**

In order to access or download a thesis, a researcher must create a personal account by agreeing to EThOS terms and conditions of use and supplying an email, name, address, and other optional information.

Theses are delivered direct to researcher’s desktop in a zip file. When retrodigitizing paper theses, EThOS service creates PDFs requiring Adobe Acrobat to view. According to documentation in the toolkit, it is envisioned that greater numbers of future theses will be supplied in their original form and other software may be required.

A little over a year into the live service, a little more than 30,000 theses were ready for download. An additional 15,000-25,000 titles are expected to be digitized over the course of each subsequent year. Theses available immediately for download are identified by the icon in the search results and the individual record.

After identifying the thesis of interest and logging in, a user has no fewer than 11 clicks from catalog record to download if it is a single file. Perhaps the high number of clicks is meant to discourage abuse of the system.
Most retrodigitized theses are single pdf’s. Born digital theses will have the same number of files as were created and deposited by the author at the awarding university. This may mean that abstract, table of contents and each chapter are separate files. Each part has a corresponding check box to choose to download. With one file, the system will indicate file size and expected download time. With multiple files, the system will indicate the total size and download time of all selected files.

### Interface Tools

Searching the database is straightforward for anyone used to searching an online catalog or database. There doesn't seem to be a limit on the number of records one can retrieve. The only major problem identified is searching for titles or authors with diacritics or special characters. Even when original records in the local library's catalog had the diacritics recorded correctly, the EThOS catalog does not. Researchers cannot retrieve a record either using the diacritics or omitting them. One must simply access the record using enough keywords without diacritics. This can be a problem if the author's name as well as the title have diacritics.

A lesser problem for most researchers looking for a known title is knowing what vocabulary or codes were used in some fields for an advanced search. For example, a researcher will find records for titles in German by searching in the language field for the language code ger rather than German. Searching using a code rather than a term isn't something the average researcher would think to do, and no specific guidance can be found in the FAQs or catalog help pages.

One quibble I have, as a librarian helping researchers find British theses, with the interface is the inability to provide a web link directly to a record or a set of records. It would be helpful to send a researcher an email with a direct link to a catalog record. Now all we can do is send a link to the catalog web interface and instruct the research to search for the EThOS bib number or other ID number or the title or a particular keyword.

### TERMS

#### Cost

The goal of the EThOS business model is open access for the researcher at the time of use. There is no charge to access a born digital theses or a paper based one that has already been digitized. There is a cost for the digitization of paper based theses. While that cost is most often covered by the awarding institution, there are times when the first researcher to request access must pay for the digitization. Designed as a cost recovery system, the cost of digitization is either £40 to digitize a bound thesis and return it undamaged to the institution or £26 to digitize a thesis supplied as loose-leaf or that can be disbound and discarded after digitization. There are also options for ordering a paper or microform copy. These are considered value added service and are charged to every patron requesting them regardless of whether the dissertation is available digitally or not.

The EThOS business model, which is the foundation for transactions, aims to strike a balance between providing a free service to users and enabling higher education institutions of any size to participate.
The four participation options are:

1. **Open Access Sponsor** – Institutions contribute a specified amount of money in advance.

2. **Associate Member Level 1 (Open Access)** – institutions pay retrospectively for theses digitized on request.

3. **Associate Member Level 2** – first researcher to order the thesis is charged for the digitization.

4. **Associate Member Level 3** – EThOS routes the researcher to the institution for supply.

(More detail can be found at [http://ethostoolkit.cranfield.ac.uk/tiki-index.php?page_ref_id=50](http://ethostoolkit.cranfield.ac.uk/tiki-index.php?page_ref_id=50))

---

**Terms and Conditions of Use**

One of the most significant aspects of EThOS is its terms and conditions of use. Access to theses is designed for and limited to individuals. Patrons cannot access theses without registering with the service. Once they register, they must agree to terms of use each time a thesis is ordered, whether accessed immediately or those for which the digitization needs to be requested. Once the thesis is added to the order basket, the researcher can access the thesis an unlimited number of times without agreeing to the terms of use again. It is assumed that the agreement at the time of ordering continues to apply.

Terms include a copyright statement, liability statement and access agreement. Among other points, researchers agree not to make copies of theses for any reason other than their own use. Therefore making a copy, electronic or otherwise, for a friend or colleague is not acceptable. By extension, theses are not to be downloaded by library staff, stored, cataloged and made accessible locally to patrons in any library or research institution.

**Sources**

EThOS Web site [http://ethos.bl.uk/](http://ethos.bl.uk/)

EThOS Toolkit [http://ethostoolkit.cranfield.ac.uk](http://ethostoolkit.cranfield.ac.uk)

Presentations and key articles: [http://www.ethos.ac.uk/003_Resources.html](http://www.ethos.ac.uk/003_Resources.html)


ProQuest LLC

Reviewers: Marie Waltz & Carolyn Ciesla
The Center for Research Libraries
April, 2010

PRODUCTS

ProQuest LLC provides a variety of services and over 450 individual products to the scholarly community. Scholarly content made available through several Web based electronic platforms includes ProQuest Historical Newspapers (a digital collection of the back runs of U.S. newspapers including The New York Times and Wall Street Journal); American Periodicals Series Online; and its ABI/INFORM online business databases. Libraries constitute ProQuest’s primary market.


COMPANY HISTORY

ProQuest LLC began as University Microfilm International (UMI), founded by Eugene B. Power in 1938 in Ann Arbor Michigan. Power began the business with the idea of using microform technology to serve the low-demand publishing requirements of the scholarly community. One of UMI’s first areas for content acquisition was doctoral dissertations, which it began microfilming in 1939, publishing the abstracts in Microfilm Abstracts, an annual catalog of the dissertations available for sale from UMI.

In 1951 the UMI initiative gained considerable momentum when the Association of Research Libraries (ARL) voted to approve publication of doctoral dissertations on microfilm and to endorse distribution of those dissertations through UMI. ARL libraries then agreed to discontinue the practice of interlibrary loan of paper copies of dissertations that were available through UMI.

UMI and Xerox

In 1962 UMI was sold to the Xerox Corporation for $8 million. Eugene Power continued to run the company as a subsidiary of Xerox until he retired in June 1970. Xerox introduced some changes, creating a designated sales force and expanding the sale of reprints of publications from the company’s microfilmed collections. In 1971 UMI changed its name to Xerox University Microfilms and in 1976 reverted to University Microfilms International.

UMI and Bell & Howell

In 1985 UMI was sold to Bell & Howell. In 1999 the name was changed to Bell & Howell Information and Learning. In 2001 Bell and Howell created the ProQuest Company out of two of its business units, Bell & Howell Information and Learning and Bell & Howell Publishing Services. In June 2001, “PQE”
began trading on the New York Stock Exchange when Bell & Howell sold a minority of shares to the public.

**National Archive Publishing Company**

In 2005, ProQuest divested of some of its assets to the National Archive Publishing Company (NAPC), a corporation formed by former members of ProQuest management. Under a long-term contract with ProQuest, NAPC serves as a producer and supplier of microfilm and digital content for ProQuest. Under the agreement NAPC stored ProQuest microform masters and fulfills microfilm requests for content retained by ProQuest such as dissertations, newspapers and research archives.

**ProQuest LLC and Cambridge Information Group (CIG)**

ProQuest's difficulties as an independent public company began in 2006, when its 2005 financial information was determined to have been incorrectly stated by the Securities and Exchange Commission. Independent auditors determined that ProQuest had "certain deficiencies in internal controls." At that time it was found that “there was no evidence of undue pressure from corporate management to attain certain results, but that one individual was responsible.”

In early May of 2007 the ProQuest Company’s stock was removed from listing and trading on the New York Stock Exchange because of the company’s failure to file its 2005 annual report, Form 10-K, and certain of its fiscal 2006 Form 10-Q filings. As a result of the accounting irregularities, several shareholder lawsuits had been filed against ProQuest in 2006.

In June 2007 ProQuest changed its name to Voyager Learning Company and its ticker symbol from PQE to VLCY. Voyager re-located corporate operations to Dallas and has since concentrated on K-12 products. Prior to the name change, in Dec 2006, the unit of ProQuest then called ProQuest Information and Learning, which included UMI, was sold to the Cambridge Information Group (CIG). Alan Aldworth, ProQuest Company's chairman and CEO, said, "This pending transaction . . . will significantly improve ProQuest Company's capital structure." CIG merged ProQuest with CSA, a scientific database provider and named the new company ProQuest LLC.

The Cambridge Information Group (CIG) is a private, family owned company that has been in existence since 1971. It was founded by Robert N. Snyder and Philip E. Hixon. Philip Hixon has since retired, but Robert N. Snyder continues as the Chairman of CIG. The three original operating companies owned by CIG were CSA, Disclosure Incorporated (sold in 1987 to VNU, a Dutch publishing conglomerate), and National Standards Association (sold in 1993 to Information Handling Services, Inc.).

In addition to ProQuest LLC, CIG currently owns the publishing company Bowker; Navtech, a supplier of flight operations information and aeronautical charts to the airline industry; GWDI, a company that provides communication and data management to the aeronautics market; Sotheby’s Institute of Art, which offers postgraduate degrees and undergraduate study abroad programs in art scholarship,
connoisseurship and art business; and Bach to Rock (B2R), a chain of music schools designed for students from pre-school through adulthood. CIG also holds equity in Jin Yun Wan Xiang, a chain of “retail establishments located in historic sites in and around Beijing that sell gifts inspired by cultural icons” and MetaMetrics, a company that develops products and services that focus on improving teaching and learning in grades K-12.

In 2009 ProQuest acquired National Archive Publishing Company (NAPC) microfilm assets in the areas of newspapers, collections (such as groups of books, manuscripts and historical documents) and dissertations.

**DELIVERY & ARCHIVING**

**ProQuest Database and Database Center**
ProQuest's Database Center system houses all ProQuest information products. This includes the PQDT database of graduate works. The amount of content currently held within the ProQuest database system is over 125 billion digital pages.

The ProQuest Data Center is located in Ann Arbor Michigan. In 2000 ProQuest LLC migrated to a Red Hat Enterprise Linux environment. All of the company’s online database products were combined into one Oracle database back end. This system utilizes 295 HP ProLiant BL35p blade servers powered by AMD Dual-Core Opteron processors. If there is a need for more capacity, it can be quickly supported by adding additional HP ProLiant servers. The system uses one third the number of processors and half the memory of the systems they replaced in 2000.

**The New Data Center**
ProQuest is building a new data center on the lower level of its Eisenhower Parkway office in Ann Arbor, Michigan. It will be used for computer equipment and preproduction housing and testing of new products. The new data center is projected to cost $6.5 million. ProQuest was planning to hire an additional 303 employees in 2009 to staff the facility.

With the new building, ProQuest received a $10 million state tax credit from the Michigan Economic Development Corporation, the State of Michigan's economic development agency. Additionally they expect to receive a $1.2 million property tax abatement from the city of Ann Arbor.

**Archiving Arrangements**
Microfilm continues to be a strong part of UMI’s preservation program. All graduate works are archived on two copies of microform. UMI creates both a master negative and a print negative of each work. The master negative is not used and is held for archival purposes; the print negative is used to generate print and digital copies. Each microform is stored in a separate vault. These vaults are climate and humidity controlled according to the industry standard and meets all Library of Congress qualifications. The microform created follows the ANSI/AIIM specifications that UMI helped establish.
as an industry standard. Even “born digital” graduate works are archived on microfilm. All page-based material (e.g. material that can be printed out as either 8.5 x 11 or A4 paper formats) is captured using a state of the art Electron Beam camera, which converts born digital graduate works into microform.

In addition to microform, two digital backup copies are created. Dissertations are converted to TIFF images and wrapped in a PDF. These files are then stored in online electronic vaults housed within ProQuest facilities in Ann Arbor. The online copy is available in mirrored storage: multiple copies are stored on two or more drives in a RAID-5 (redundant arrays of inexpensive disks) system located in Ann Arbor. The second back up copy is kept on a Spinning Disk system located in Sterling, VA. Spinning disk systems are often used as an inexpensive, long-term storage solution. They are designed for fast writes and rewrites of data, and are a good choice for archiving purposes. In addition to ProQuest’s other storage solutions, a back up tape is kept at an undisclosed location in the Ann Arbor area.

One real world demonstration of ProQuest’s ability to recover from a disaster was during the Great Northeastern Power Blackout of 2003. Around 4:00 PM on August 14, 2003 the largest power outage ever to hit the U.S. cut the power to the Ann Arbor area. Power was not fully restored to the area until the evening of the following day. According to Austin McLean, Director of Scholarly Communication and Dissertation Publishing, ProQuest LLC’s systems were temporarily shut down. However, ProQuest had backup generators and once they were turned on, service was restored to customers worldwide. Other than a temporary halt in service, there was no evident loss or damage to the system.

A preservation policy is available on the ProQuest Web site. ProQuest has designated a group of staff members to be responsible for digital preservation management, and asserts a commitment to migrating content as necessary. This commitment was evidenced by their migration to a Linux-based system when it became necessary.

Sources


JISC Academic Database Assessment Tool
Screenshot: *Dissertations* Field Guide