

Microforms: Hidden and forgotten sources of information

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ABSTRACT

With the growing interest in digital sources as a result of its increasing accessibility, information sources which are not in digital format are frowned upon by the reader. In a study among engineers, it was found that one of the major reason for the selection of an information source is its accessibility (Fidel, R. 2004). Microform collections in libraries represent valuable information sources. Only genuine researchers and librarians may be aware of the wealth of information contained in them. Nevertheless, the younger generation may not have the patience to actually seek out microforms as a source of information as it involves borrowing the microfilm or microfiche, bringing it to a machine reader, winding it in the case of microfilm and scrolling up and down in the case of microfiche. Studies, even as far back as the 60's, have shown that researchers can be more concerned with the accessibility of information sources rather than look out for quality information. Libraries have made tremendous attempts and changes to increase the visibility and usability of its collections in the wake of the changing needs of the users. This paper will discuss issues related to the use of microforms and the project initiated by the University of Malaya Library to make its microforms collection more visible and accessible.

Keywords: Microforms collection, Accessibility of information sources, Visibility of information sources, Library collection, Library initiatives

INTRODUCTION

An information source that is most accessible is believed to be the one which requires the least effort to access. In a study among engineers, it was found that one of the major reasons for the selection of an information source is its accessibility (Anderson, 2001). Other factors which contributed to the selection of information sources include : physically close to the source of information; known sources and which the researcher feels comfortable; different types of information in one place; source has enough information and detail thus saving time for the researcher; compatible format with other sources and available and accessible. Rosenberg's (1967) study reveals that ease of access and use implies: saving time, saving mental effort, convenience of use of format and physical proximity. The growth of online resources has distanced the researcher from the library, at least physically. With the growing interest in digital sources as a result of its increasing accessibility, information sources which are not in digital format are frowned upon by the reader. Microform technology can be seen as alien and outmoded technology. Librarians often have to justify why a certain information source is not online! Studies also show that a reason for choosing a particular source over others was sometimes its format and its compatibility with other information data used by the researcher (Fidel, 2004). Libraries now have to evaluate their collection and take steps to increase the visibility, usability and accessibility of their information sources to be compatible with the digital era formats.

This specially refers to the information sources in the library which are found in non-print and non-digital formats such as CD Rom, Audio Cassettes, Video Recordings, Microfilms, Microfiche, LP Players, etc.

OBJECTIVES

The objectives of this paper are to discuss:

- a) issues related to microforms collection,
- b) the initiative started by the University of Malaya Library to make its microform collection more visible and accessible.

MICROFORMS AS SOURCE OF INFORMATION

Microforms are compact, uniform, lightweight, versatile, clean and inexpensive information storing and handling media (Smith, 1978). It includes microfilm and microfiche. Both have reduced images of print or written matter which are not legible to read with the naked eye. They were at one time considered as the solution for saving stack space and the best form of preservation method for library materials. Microforms are known to last more than 500 years. Much gray literature not published elsewhere and which contains primary research materials are in microform format. Historical archives of newspapers from as far back as 1880's such as the Financial Times, The Economist and the Times have been preserved in microfilm format. If not for the existence of microfilms, the world today might have to bore through stacks of aging printed matter. Educational Resources in Education (ERIC) is the world's largest collection of education resources, consisting of journal articles, books, papers, reports and other materials indexed from 1966 to the present. ERIC documents are available in microfiche format. From 1966 to 2004, ERIC has indexed more than 470,000 documents on nearly 650,000 microfiche.

The Public Records Office (UK) has been preserving in microform formats, rare contents such as Parliamentary papers, Historical events, Chronicles, Governmental affairs, Court proceedings going back to the Middle Ages, 19th Century periodicals and the original manuscript of the Domes day Book. The British Library, one of the largest libraries in the world has microforms collection of over 4 million records. The Preservation Resources Department of OCLC has a state-of-the-art Micrographics Studio which has converted 69.5 million pages of old brittle books, newspapers, manuscripts, etc. into microforms (Sridhar 2002).

The University of Malaya Library has a rich collection of microforms not available elsewhere in the country and sometimes in the region. It dates back to the 17th Century and has records on the history of the country and Southeast Asia during and before the colonial times. It includes historical sources on the Straits Settlements, Federated Malay States, Politics and Government pre-independence, Records from the Colonial Office and Public Records Office in Great Britain. In addition to historical records, the collection also consists of ERIC documents from the beginning, newspapers both local and foreign such as Straits Times which was the preceding title of the present New Straits Times. The total microforms collection is 6,963 titles in microfilm format, 17,483 titles in microfiche and a whopping 665,904 ERIC titles in microfiche. The library is equipped with adequate microfilm readers, micro printer and a dark room to process microfilms. The library also

undertakes microprint tasks especially when it is needed for inter-library loan purposes. Staff responsible for microfilming and micro printing are properly trained and given the proper attire. The proper attire however was adopted much later when safety issues regarding occupational health hazards was made compulsory at the university.

ISSUES AND CHALLENGES OF MICROFORMS

Microforms collection in libraries has now become just another statistics in the library inventory. Their usage has nearly come to a standstill except for a few researchers and their research assistants who always use the same familiar titles. Even the new breed of librarian or library school students are not aware of its existence. Some have not seen one in their entire life! It is time libraries decide if they want to increase the visibility and usability of these collections, or let it remain hidden in the basement of libraries and eventually be forgotten and die a natural death. Obviously, the traditional approach of expecting users to enquire about them or look for them is insufficient to increase its usage. Although genuine researchers are aware of the wealth of information contained in these collections, the major challenge of microforms collection is user resistance. Gerstenfeld (1980), reports that researchers at times can be more concerned with the accessibility of information sources rather than look out for quality information. However, Fidel (2004), argues that the quality of the information source also plays a vital role in the selection of information source. Quality means the reader or researcher has found the needed information which could be the only reliable and accurate source and which gives the latest updates. Most of the microforms collections are unique titles not available in other formats. It is time for libraries to examine their policies and procedures and adopt new ways and strategies to increase the usage of microforms collection.

Libraries with microforms collection also have to acquire and maintain micrographics facilities which includes: Microform Reader, Micro Printer to print hardcopies of microforms, Carrel rooms or special rooms to view microforms, Appropriate equipment to maintain environmental conditions such as 24 hours air conditioning, humidifier, Storage facilities which include acid free and fire resisting storing units. For any library user to use microforms, there should first be a request for a title, receive the title required together with the key to the special room where the microform reader machine is housed, fix the microform and start viewing the document. In case, print copies of pages are needed, it has to be another request to the library and a wait ranging from a few hours to a few days before the microprint can be ready. The sheer effort of accessing and using the microforms could be one of the reasons for user resistance to access this format of information source. In this era of web facilities, accessing microforms seem to be a mundane and outdated information seeking source. Microforms technology is looked upon as obsolete and dead. Literature show trends towards the death of microforms and the extinct of paper and the replacement of electronic medium. Other user studies also make it clear that locating any source in a library presents high levels of frustration and users can have a particularly difficult time locating non-traditional collections such as microforms, maps, government documents, periodicals, etc. (Cheney, 2010). As such, libraries must make the visibility and accessibility of the microforms collection simple and user friendly.

Libraries have made tremendous attempts and changes in the wake of the changing needs of the users. Cheney (2010) has made a few suggestions for libraries to ensure users can locate and use microforms. Libraries must:

- Be willing to recognize the “intrinsic advantages of micro formats and apply them strategically
- Make it simpler to access and use microforms collections by simplifying call numbers and the arrangement of the collection
- Reposition microforms collections in digital formats
- Redefine the location and nature of collection in web sites
- Upgrade and maintain microforms viewing/scanning equipment
- Provide more detailed content indexing at the title/piece level
- Develop innovation approaches solutions and ensure they do not become disjointed and disconnected.

Many libraries have begun digital conversion projects which involve microforms. The United States Newspaper Program (USNP) has funded large scale microfilming projects in each U.S. state. In 2005, the Library of Congress began the National Digital Newspaper Program (NDNP) which later included nine states. Their digitized newspapers are available on their institutional websites at <http://www.loc.gov/ndnp/listawardees.html>. The future plan of NDNP is to digitize papers published between 1836 and 1922 (Costello, 2008). The Canada Institute for Historical Micro reproductions has provided access to 350 years of early Canadian printed publications. It was reported that rare and fragile publications, which had formerly been virtually inaccessible, are now preserved as a national collection and it serves over 100,000 users each year (Albert, 2003). Companies such as Cengage Learning have produced the Gale Digital Collections of rare printed matter which were at one time available in microfilms. It has digitized documents spanning hundreds of years pertaining to culture, business, politics, war, religions and government. This collection, though expensive, makes it possible the viewing of previously impossible-to-access documents. The prevalence of microfilm to digital conversion technology has increased the number of projects using microfilm libraries such as the Louisiana State University Libraries and other Louisiana libraries which have embarked on microfilmed newspaper digitization (Costello, 2008).

THE INITIATIVE AT UNIVERSITY OF MALAYA LIBRARY TO MAKE MICROFORMS MORE VISIBLE AND ACCESSIBLE

The microforms collection and division are located right at the back and in the basement of the main library building. The microform titles are catalogued individually which means users can view the titles in OPAC and enquire at the reference desk to locate the needed microform titles. There are titles which are on standing order and not catalogued individually such as ERIC documents, Public Records Office Documents, etc. In such cases, it would be logical to conclude that users do not use them because they are not even aware the library has these titles. Moreover, it has become the norm for users to rely on web tools to find and retrieve digital content. Libraries have become more of study hall where students come to use the online facilities or bring their laptops into the library and use the plug points whilst enjoying the wireless campus environment. Given this scenario, even print materials have been pushed aside for online information. Microforms collection is facing a more bleak future. In October 2009, the library initiated a project to make the microforms collection more visible and accessible. The objectives of the project are:

- (a) to initiate and set up a database and transfer the records of microforms collection, title by title into the database;
- (b) to place this database into a server which can be accessed online.

In this way, users will be aware of it and being in digital format, the usage of the collection might improve. Since the library has a huge collection of microform titles, a decision was made to start off with the ERIC titles and a special collection pertaining to Indonesia, all of which are in microfiche format. The library has been acquiring ERIC documents since its inception in the 1960's, thus explaining the holdings of 665,904 titles. Purchasing the title was through a standing order directly with ERIC and the only bibliographic record in OPAC was an open entry record under the title "ERIC Documents". The Indonesian collection too only had an open entry bibliographic entry.

The ERIC microfiche has been stored in cabinets which had shown signs of deterioration and rusting over the years. Each microfiche represented a unique record. Some of the microfiches did not have an individual envelope. A few of them were placed together in one envelope which resulted in them sticking to each other as a result of poor preservation methods. Initially, ERIC documents came with individual envelopes which are of acid-free material thus auto preserving the microfiches. Subsequent years, the envelopes had to be purchased separately. The Indonesian titles were kept in a cardboard box with no preservation tools. However, since it is a relatively new collection, there was no damage whatsoever. In tandem with the given situation, the project had to tackle the preservation issues before the titles can be input into the database. In the report by Pauziaah (2010), the preservation tasks carried out include:

- Transferring microfiche from the spoilt or non-acid free envelopes into the newly acquired acid free envelopes
- Labeling the envelopes according the title of the document
- Arranging them in containers and storing them in the renovated room which has 24x7 air condition.

The database especially set up for transferring the data records of the microfiche titles was with the help of the Automation Division in the library. The database is named *Microfiches@UMLIB* [See Figure 1]. The URL to access this database is at <http://spcats.umlib.um.edu.my>. As this is the first of its kind among the number of digital projects in the library, the database and server interface was modified and upgraded several times until the library was satisfied with its speed and presentation. Initially, input of bibliographic records was only at title level. As the staff became more confident and experienced, the input was expanded until the subject level. If the record had full text access, a link was set up to enable users to link on the full text from the database [Figure 2]. However, the preservation tasks slowed down the rate of input into the database. This database is searchable using author, title and subject heading keywords.

Microfiches@UMLIB was promoted to the library users by way of brochures, library news both print and online and the library portal. There are plans to promote this database during information skills sessions with the students and academic staff. Since this project only took off in September 2010, data on the usage has not been captured.

This database is searchable using the Author, Title and Subject keywords.

Figure 1 : Microfiches@UMLIB is the in-house developed database for the documents available in microfiche

Figure 2: If the document has access to full text, the link will be shown

THE FUTURE

At the Pennsylvania State University, batch loading bibliographic records into the catalog has been carried out to provide access to microform collections (Mugridge, 2009). Their advice to the others who want to embark on this kind of project is that batch loading projects require collaboration across many library units, including collection development, acquisitions, cataloging, systems and public services. Within a span of a year, the University of Malaya library could only input a total of 49,897 microfiche documents. Although it is a good start, this rate is considered not sufficient to input the entire microforms collection online database. This project has to be reviewed and experiences from other libraries would have to be studied to speed up the project.

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Keywords: information systems, information systems security, Security practices, Technological measures, Organizational measures, Countermeasures, framework, libraries

INTRODUCTION

Information systems (IS) are often used to support operations, work, management and services in organisations. IS security is viewed as the need to protect one or more aspects of IS elements such as hardware, software, physical environment, data and people. Thus, a sound IS security practice depends upon effective information security solutions, which encompasses the technical and the non-technical safeguards to minimise vulnerabilities associated with a variety of threats (Westby and Allen, 2007; Jarrons, et al., 2008, and Gupta and Sherman, 2009). This answers why many organisations have invested millions in securing their IT-infrastructure in various forms of physical, personnel and administrative defenses to reduce the frequency and severity of computer security-related losses (Gutman and Rotack, 1995).

In the current library environment, IS are widely used to provide digitally delivered services and collections to local and remote patrons. Connecting a library to the outside world via the internet has changed the risks associated and the controls used to secure the IS. Therefore, it is vital to be worried about IS security because much of the value of a library's main business or services is concentrated in the value of its information systems. As