

# CHAPTER ONE

## INTRODUCTION

### **1.1 Academic Libraries and the Web**

The World Wide Web (Web) made its first appearance in 1991 but only started to become popular in early 1993. It is increasingly becoming a resource of device for discovery of information of all types and formats, and may in time replace the traditional library as information provider. Furthermore, it has only existed for nine years as compared to academic libraries that have existed for a few hundred years. However, it has a profound effect on academic libraries (Morgan, 1994). Innumerable questions on the role and value of academic libraries in the decade of the Web have been asked. The major question for academic libraries is not whether they want to use the Web, but whether they will be bypassed in both providing and retrieving information--- and become marginal at their universities subsequently (Lesk, 1996).

The academic community has always been accustomed to academic libraries where one can access a wealth of stored information for the past few hundred years. Would the Web spell the end of academic libraries? There are scholars who are strongly against the Web as a library, based on the weaknesses and limitations of the Web. Their arguments include the following (Chen, 1998; Griffiths, 1998):

- a) The Web collection is not organised according to some standard
- b) It does not offer access to all information
- c) It lacks authority and quality control
- d) It is inadequately catalogued
- e) Web search interfaces and other tools are ineffective and simplistic.

If the Web cannot replace academic libraries, what is the Web exactly going to mean to academic libraries? Without doubt, there will be many changes in academic libraries as a result of the existence of the Web. Since years of establishing quality collections and reliable services created inertia, it is suggested that the attitudes of senior management, infrastructure, staff skills, appearances, and service practices in the academic libraries will be the first to change when embracing Web access (Flatten, 1998).

## **1.2 Statement of Problem**

In the process of change, more and more academic libraries have created Web sites on the Web. Although academic libraries have extensive experience in providing computer-based information services, a great deal of effort has been invested in transforming useful information and services into Web access. Improvements on the design and layout of the Web sites have been made progressively. Text-based pages have been replaced by those with hypermedia design. In addition, many Web sites offer enhanced opportunities for

communication, both in terms of interactivity, depth and breadth, and currency of the information resources available.

Also, dynamically created Web sites have brought academic libraries to compete for attention across an increasingly wide bandwidth. Since the users of these Web sites are primarily staff and students of institutions of higher learning, the libraries have to be careful to keep the content and design of their sites in line with their missions. Academic library Web sites are needed to support their college or university, primarily through supporting the three-fold mission of higher education---research, instruction, and service (Stover, 1997).

In this context, it is clear that the main function of an academic library Web site is to provide access to sophisticated research tools and full text databases for education purposes. The users are allowed to access the library's electronic resources across the network in a manner that is independent of location or time. Nonetheless, anyone who has visited a number of academic library Web sites would have experienced that some of the libraries are simply just "on the Internet." These Web sites are generally focused on providing general information about the library, its online catalogue, and links to selected resources available on the Internet.

Of course, some academic libraries have realised the feasibility and real potential of library Web servers by providing seamless access to electronic information. They have used Common Gateway Interface (CGI) scripts to provide Web browser access to its Online Public Access Catalogue (OPAC) and databases. Thus, it is not necessary to telnet to the OPAC to perform a search. Furthermore, these libraries have replicated certain services of the physical library into a networked environment by providing electronic forms on the Web pages which allow the direct submission of short reference inquiries, recommendations for collection development, requests for the placing of items on restricted loan, and interlibrary loan requests.

These efforts are centred on providing general reference services with no departmental documentation such as cataloguing policies and procedures/manuals. The operations and works of various departments of the academic library should be highlighted, as the distinction between technical services and public services is no longer clear in a networked environment (Harizan and Low, 1998).

Inherently, authors of academic library Web sites are mostly librarians themselves---only 20 percent are non-librarians (Evans, 1999). The academic librarianship as a progressive profession for the twenty-first century is required to prove its expertise in selecting, organising, disseminating, and

evaluating information resources through Web sites. They are expected to offer some exemplary models of Web sites.

A good Web site filters and structures the information so that the user is not overwhelmed (Stover and Zink, 1996). Anyone who uses academic library Web sites for serious research could benefit substantially from its well-designed and organised information. Moreover, users accessing a well-arranged and logically structured library Web site with relevant links that work will be positively rewarded and stimulated in future use (Clausen, 1999).

It is understood that the content and design of academic library Web sites for the interest of users are of great importance. A search through the literature has shown that at present, studies of academic library Web sites are either exclusively quantitative analyses or qualitative methods. There is lack of a mixed-method approach for academic library Web sites evaluation and integration of the results. Furthermore, none of the evaluation methods survey academic library Web sites in Malaysia.

The present evaluation paradigm is developed and designed against the background of general evaluation criteria of Web sites. These criteria are accuracy, authority, currency, relevancy, and stability of information. Since there is a lack of effort to examine the quality of information, a number of general criteria such as author's qualifications, objectivity, and coverage

should be further used in evaluating information content provided by academic libraries Web sites.

Malaysia is a computer-literate and Internet-savvy country. In general, the academic community in the country has pioneered the establishment and use of the Internet. Additionally, Malaysian universities have been the leading institutions in the country in creating Web sites. As a result of these developments, academic libraries have been in a more privileged position to set up Web sites than other types of libraries. Their presence on the Web implies the desire of academic libraries in Malaysia to provide better and more services to their users. Although much of the resources have been committed to create and maintain academic library Web sites, there has been so little effort in evaluating the sites.

### **1.3 Significance of Study**

There is a relevant measurement that adopts a mixed-method approach to critically evaluate academic library Web sites against criteria selected from the literature. The use of mixed-method evaluation, which combines quantitative and qualitative techniques is a more comprehensive and believable set of understandings about Web sites compared to single method evaluation.

This study brings attention to the content and design of academic library Web sites in Malaysia. Hence, it provides a perspective of academic library Web sites in Malaysia. It is expected that the examination of the sites will stimulate continuous improvement of Web site development in line with the advances in information technology and the emergence of good, reliable information sources.

It is relatively easy to create a Web site since there are many handbooks and articles for good hypermedia development. Similarly, the number of articles on evaluation of Internet Web sites is increasing at an astonishing rate. Nonetheless, there are very few studies dealing with the evaluation of academic library Web sites specifically. This study aims to develop an evaluation model that could serve as a guide to existing and potential creators of academic library Web sites. The creators of academic library Web sites should then have a better understanding on planning and formulating Web sites in order to take a leading position in Web site development.

#### **1.4 Research Questions**

There is a wide range of possible evaluations of the Web sites that can be undertaken. However, this study aims to answer the following main questions:

- a) To what extent do the content and design of academic library Web sites in Malaysia meet the expectations as virtual expressions of the quality levels of academic libraries?
- b) To what extent do the content and design of academic library Web sites in Malaysia meet the perceptions and expectations of information professionals and library users towards a useful Web site?
- c) Are the content and design of academic library Web sites in Malaysia effective enough to draw the attention of potential users?
- d) What information content does the academic library Web sites in Malaysia display most effectively?
- e) Do the trends in the design and content of academic library Web sites in Malaysia follow the trends of academic library Web sites in developed countries?

### **1.5 Scope of Study**

For this study, a total of twelve library Web sites of public and private institutions of higher learning in Malaysia are selected for evaluation (see Table 1-1). Institutions of higher learning which have not created library Web sites, are not included in this study.

The study is a survey of academic library Web sites in Malaysia. It is not an attempt to investigate a particular Web site. Also, the study will not go beyond



the content and design of the Web site in studying the academic library Web sites.

Since the technology of the World Wide Web is not static, the possibilities for presenting new information can happen at any time. Therefore, the analyses of the content and design of the Web sites studied are based on the status of those sites at the time the survey is carried out.

### **1.6 Limitation of Study**

This study is limited to the use of qualitative and quantitative methods which are combined to increase the validity and reliability of data. A robot computer programme method dealing with link statistics, Hypertext Markup Language (HTML) file and graphics sizes, and meta-elements that could possibly be relevant to evaluate academic library Web sites in Malaysia is not included.

The questionnaire survey is limited to the investigation of the perceptions of respondents who are assumed to make the most “visits” to the academic library Web sites in Malaysia. Furthermore, other potential groups, such as Library and Information Science (LIS) students, LIS alumni, LIS educators, and non-users are not included.

TABLE 1-1: PUBLIC AND PRIVATE INSTITUTIONS OF HIGHER LEARNING LIBRARY WEB SITES IN MALAYSIA AND THEIR UNIFORM RESOURCE LOCATORS USED IN THE STUDY

<b>Universities in Malaysia</b>	<b>Main Libraries</b>	<b>Library URLs</b>
Universiti Malaya (UM)	UM Library	<a href="http://www.umlib.um.edu.my">http://www.umlib.um.edu.my</a>
Universiti Islam Antarabangsa (UIA)	International Islamic University Malaysia Library	<a href="http://lib.iiu.edu.my">http://lib.iiu.edu.my</a>
Universiti Kebangsaan Malaysia (UKM)	Perpustakaan Tun Sri Lanang UKM	<a href="http://www.library.ukm.my">http://www.library.ukm.my</a>
Universiti Putra Malaysia (UPM)	Universiti Putra Malaysia Library	<a href="http://lib.upm.edu.my">http://lib.upm.edu.my</a>
Universiti Sains Malaysia (USM)	USM Library	<a href="http://www.lib.usm.my">http://www.lib.usm.my</a>
Universiti Teknologi Malaysia (UTM)	Perpustakaan Sultanah Zanariah Universiti Teknologi Malaysia	<a href="http://www.psz.utm.my">http://www.psz.utm.my</a>
Universiti Utara Malaysia (UUM)	UUM Sultanah Bahiyah Library	<a href="http://www.lib.uum.edu.my">http://www.lib.uum.edu.my</a>
Universiti Malaysia Sabah (UMS)	Perpustakaan Universiti Malaysia Sabah	<a href="http://www.ums.edu.my/library">http://www.ums.edu.my/library</a>
Multimedia University (MMU)	Multimedia University Library	<a href="http://library.unitele.edu.my">http://library.unitele.edu.my</a>
University Teknologi MARA (UiTM)	Perpustakaan Tun Abdul Razak	<a href="http://www.itm.edu.my/acactr/ptar">http://www.itm.edu.my/acactr/ptar</a>
Universiti Malaysia Sarawak (UNIMAS)	Centre for Academic Information Services Universiti Malaysia Sarawak	<a href="http://www.unimas.my/html/cais.html">http://www.unimas.my/html/cais.html</a>
Universiti Tun Abdul Razak (UNITAR)	UNITAR Virtual Library	<a href="http://vlib.unitarklj1.edu.my">http://vlib.unitarklj1.edu.my</a>

Collecting data for the questionnaire survey using the electronic mail (email) survey incurs an additional limitation. It is beyond the researcher's control as some respondents do not complete the questionnaires, or if the data provided are not consistent.

Factor analysis is used in this study to reduce the list of criteria to a more manageable manner. Although this statistical technique is well suited for managing the list of criteria and the statistical technique used to construct the factor matrix are quite mathematical, the interpretation of the results, including the naming of factors, has strong elements of qualitative judgement (Johannsen, 1996). Thus certain interpretation of the factors may be problematic.

### **1.7 Structure of Study**

This study is divided into five chapters. This first chapter is the introduction. The second describes in detail the literature review. Chapter three describes the methodologies employed for data collection and data analysis. Chapter four presents the data analyses and findings. The final chapter provides a discussion and conclusions derived from the analyses of the data.