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A personal history of e-Librarianship in Sri Lanka : 2000-2004

Dr. Ruwan Gamage

Abstract

E-Librarianship can be recognized as provision of access to electronic information, making portals and Web interfaces, automating library housekeeping, and promotion of libraries using electronic media by libraries and library professionals. The paper is a recall of personal memoirs and published literature kept along in the author's personal archive. Through a very limited scope, the paper examines some aspects of e-librarianship practiced during the period – the time until a decade ago. This was the era that the e-librarianship was taking shape within the country.

It also records a few personnel engaged in e-services, while it may have omitted many. The objective was to pave the way for a detailed study, not based on personal accounts, but on hard facts. National level programmes conducted by the national libraries, archives and museums have not been considered here; the electronic Union catalogue maintained by the National Library being one such example.

It is concluded in this article, that Sri Lanka was a front runner in introducing e-services to library communities. Yet the development is skewed, only some library sectors and branches extended above the fold, while others still struggling with dreams of active engagement.

Keywords: *e-librarianship, e-library services, Sri Lanka-evolution of library profession*

To begin with, I'd like to relate a piece of past literature and a story. The literature is from the January 1996 issue of the Discover magazine (Guterl, 1996). It predicted that Internet may become a bit like walking down the city streets. You pass a few fancy stores, and a lot of stores, and then, at a corner of the street, you come to the Public Library. Yet it predicts that the digital version may prove better than the original in one other respect: you may be able to go there without having to walk past all the junk. Clearing this path is what librarians in the electronic age were doing all the time.

The second anecdote is personal. I was sitting in front of an interview panel who selects candidates for admission to the Masters in Library and Information Science (MLS) of the Faculty of Graduate Studies, University of Colombo in 1997-1998. One member of the panel asked why I applied for the course. I mentioned my plan, which was already graphically shown, printed on paper, and 3-4 copies dispersed on the table.

"One day"…I started explaining. "…I will be starting an `information theme park'. People will come there to read, to learn, or to enjoy. The place will be full of information sources. You can access this information on desktops, or while watching the TV. Freedom is important! What I will be doing is to help readers satisfy their own information needs".

After more than a decade of successfully facing that interview, I now think that this dream is a reality with *Information Commons* becoming an integral componentin some libraries.

Introduction

Definition for e-librarianship

Hlett (2002) describes e-librarianship as ICT oriented librarianship. Idiegbeyan-Ose and Esse equate this term to virtual librarianship. When considering the entire literature where the

term e-Librarianship has appeared, it is clear that an e-Librarian deals with electronic con and procedures (Atwater, 2012; Feldvari, 2012). For the purpose of this paper, the author provision of access to electronic information, making portals and Web interfaces, automa housekeeping, and promotion of libraries using electronic media as e-librarianship.

1.2 The scope of this paper

This paper takes the reader in a tour of Sri Lankan e-librarianship based on the e the author himself had during the period. It is expected to be a reasonable profile of e-librari the country. Yet, naturally there could be many conflicts with what is contained in others' mem especially in those who were personally engaged in many of the events and instances descri Therefore, to a greater extent, this paper should only be treated as a personal anecdote general history on e-librarianship.

The paper first describes the initiatives up to year 2000 as background information. The author moves to the main era considered; from 2000 to 2004 – the first four years of his caree librarian. The paper trails along the interests of the author while revealing the situation of e-Librari during the period.

People factor has been a prominent feature in e-librarianship in the country, as only a hand of professionals were engaged in a larger portion of activities as thought leaders. Therefore, nam of individuals and organizations have often been mentioned here for recording purposes. Yet ag due to the limited scope of this write up, some of those who were influential in taking the e-librarianshi forward in the country may not have been mentioned.

2. e-Services up to the year 2000 (Y2K)

2.1 The evolution of e-content, tools and procedures in Sri Lanka

Telephone, wire services, fax, and microfiche were the popular mediums of dat communication and storage in the yester era. In the Sri Lankan soil, the next revolution happened with the introduction of computers in late 1960s at the State Engineering Corporation, followed by the Department of Census (Induruwa, 1999b).

In 1984, the Computer and Information Technology Council of Sri Lanka (CINTEC) was authorized for acting on policy related matters related to ICT use. Under the leadership of Professor V.K.Samaranayake, CINTEC worked on important issues such as handling legal issues, working with local languages, and taking ICT to the general public (Induruwa, 1999b). Under the sponsorship of CINTEC, The Department of Computer Science and Engineering, University of Moratuwa initiated the Sri Lanka Domain Registry in 1990, to register .lk domain names (Dias, 2004).

Internet based services started with email communication by some enthusiastic young professionals studying abroad (Adams, Amarasiri, Dias, & Induruwa, 1992). They got updates on Sri Lanka from news reports disseminated via SLnet, an electronic mailing list. These servers were mainly hosted overseas. It was further strengthened after introducing a dedicated network for Sri Lankan academics: the Lanka Experimental Academic and Research Network (LEARN) in January 1996. This network interconnected several Universities and other research institutions in the country. The first local email service; LEARNmail was initiated in 1990. Remote login and file transfer was possible from 1994. Around the same time the first ever Web server was installed at the University of Moratuwa.

In his 1999 article, Induruwa(1999b) describes the emergence of electronic newspapers in all three mediums (Sinala, Tamil and English). TradenetSL, a trade information service initiated by the Ministry of Internal and External Trade provided trade information to the business community and general public.

Mobile telephony was getting popular. Dial-up was the medium of connection to Internet, while ADSL was introduced in 2003. Only 11 SIMS had been sold per 100 persons of the population by 2004, with compared to 68 in 2009 (Brahmanage & Weerasekera, 2011).

All in all, it was an era of systematic development of information systems. At the same time, all these developments lead us to a fear regarding the Y2K issue (the millennium bug). Financial institutions especially had been heavily automated. World Bank assistance was provided to remedy the possible harmful situations that could arise ("The Sunday Times Business Section," 1999).

2.2 e-Librarianship in Sri Lanka; the first traces of evidence

One of the former leading librarians in Sri Lanka (Ceylon), Ms.Claudah Nethsinghe presenting a paper at a workshop on Information Retrieval Methods (Nethsingha, 1970) proposed that the libraries need to equip punch cards and flexowriters (some predecessors of present day computer systems, but more advanced than type-writers). Ms. Nethsinghe predicted that such systems would be helpful in controlling periodicals and articles in a more efficient way. In a 1982 user survey of the library of the Ceylon Institute of Scientific and Industrial Research (CISIR), respondents had stated their preference for computerized catalogues and electronic scanners (Warnasuriya, 1982). This reflects the higher order knowledge and exposure of library users and librarians even at the foundational phase with regard to e-services. Mr. N.U.Yapa, another pioneer in promoting e-services in the country, mentioned that there was an `anxiety' in libraries to use IT in libraries, and that not more than 2-3 libraries were using computers for library functions (Yapa, 1986). He was the librarian of the Natural Resources Energy & Science Authority of Sri Lanka (NARESA). Incidentally it is in the adjacent lot of CISIR. Under his leadership, the Sri Lanka Scientific and Technical Information Centre – SLSTIC (NARESA Library) obtained the national distributorship of the UNESCO mediated Micro CDS/ISIS software (Yapa, 2012). NARESA was initially the National Science Council, and subsequently renamed as the National Science Foundation –NSF - of Sri Lanka. CISIR was later renamed as the Industrial Technology Institute (ITI). Both these institutions are forerunners in developing e-librarianship and e-services in the country.

In a 1995 report, Ms. Nethsingha,mentions that the CISIR library had a minicomputer and a microcomputer since the latter part of 1980s. Its databases, by 1995, contained bibliographic data on 15000 books and 5000 articles (Nethsingha, 1995). In 1996, with SAREC funds, SLSTIC established a Local Area Network (LAN) with 15 workstations. It was then linked to the LEARN. These facilities allowed science libraries to communicate with SLSTIC by e-mail.A detailed account on initial library infrastructure has been recorded by Mses. Deepali Talagala and Premila Gamage (Talagala & Gamage, 2003).

By this time academic libraries were having access to the WWW through LEARN. Some other institutions had obtained access to the Web through other service providers.

2.3 The author's involvement

2.3.1 Linking the history to the theme

My librarianship career started in 2000 and had a pause in 2004 till I completed my doctoral research. Presenting a little background of myself will help the reader to weave the pieces together.

I joined *Vidusara* Science Magazine as a freelance writer in 1988. Science journalists are the first to sense the incoming trends in technology. I remember *Vidusara* publishing in 1989 one of the first ever magazine cover stories in Sinhala on the World Wide Web (WWW). It dreamed about people reading the daily paper via the computer terminal early morning, sipping the first cup of tea. That was a picture hard to imagine at that time.

Even when I completed the basic undergraduate education in the Faculty of Science - University of Colombo in 1997, we didn't have have much experience on computer technology, let alone the WWW. Windows 98 was yet to come, and Windows 95 was two years old. But even at that time, e-librarianship was happening in Sri Lankan libraries as mentioned previously.

It was on Ms. DeepaliTalagala's valuable advice that I selected Librarianship as my path. On the success of the interview, mentioned in the first paragraph, I joined the Master of Library and Information Science (MLS) programme offered by the Faculty of Graduate Studies, University of Colombo two years before the start of the 21st century. Ms.Sumana Jayasuriya was the course coordinator. Mses. Wathmanel Seneviratne, Pradeepa Wijetunge, Geetha Yapa and Ms. Yapa were teaching IT aspects of librarianship.

I started working at the University of Moratuwa Library (UML) in April 2000.

3. The period between 2000-2004

When I joined the UML, I was entrusted with managing IT related functions at the library as it was the requirement of the hour. This was a busy period at the UML, working with the newly purchased library automation software. Ms. Ruvini Kodikara, the librarian was driving the library workforce towards the `e' direction with great enthusiasm. Ms. Nayana Wijayasundara had already engaged in establishing the e-activities in the UOM library. The library had a growing interest on the new trends in disseminating information using the electronic medium.

3.1 Library Web sites

I witnessed new Sri Lankan companies inculcating an interest on the Web medium. Even there were individuals - non-librarians - maintaining magnificent sites for example, `Ceylon Coins' a pictorial database of ancient coins of Ceylon[1] (Gamage, 2001; Gamage, 2002). However, libraries were not providing full-fledged e-services and e-content at the start of the century.

As described before, University of Moratuwa was a pioneer in introducing Internet facilities to Sri Lanka (Induruwa, 1999a, 1999b). That made UOM library liable for a higher responsibility in introducing Web based services to the community.When the author assumed duties heobserved that the Web site of UoM library was comprised of a few static pages (Fig. 1). With a description about the library, its staff, a few pictures, and a library guide was available online. Yet, it had the first University library Online Public Access Catalogue (OPAC) in Sri Lanka. It was a database of entries from a section of the library collection. Mr. Rasika Amarasiri, a Visiting Lecturer attached to the Department of Computer Science and Engineering, UOM (and played the multiple roles of Web Master of UOM, Hostmaster of .lk domain, and a Systems Engineer) had designed the page. When the status of Web development at that time is considered, it was a commendable effort. It was evident that first library Web sites and applications appearing in all University library Web sites were developed by Computer Science (or related) departments in the above Universities. It was slowly but steadily that the University libraries were getting the authorship of content related to libraries.

One of the first things I did was to redesign the library Web site to make it more beneficial. To do this, I studied similar sites in USA and Asia (Gamage, 2001a). USA was selected to get the most advanced design principles to date. Selection of Asia was to learn if cultural identities are maintained in the Web sites in the region. As a result of this study, I came up with some new additions to the Web site, such as a photographic tour, a gateway to auto-updating information on technology trends, and an email alert service (Gamage, 2001).

By 5th April 2001 the original Web site was moved to the library server, and was enclosed in a new sub domain lib.mrt.ac.lk to reinforce the identity. By 29th October 2001 the new Web site was available online.

A desk survey in the Internet Archive (www.internetarchive.org) helped me in retrieving the archival copies of the first Sri Lankan University library Web sites (Table 1).

Table 1.URLs of archival copies of the early University library Web sites.

University	Library Web site address[2]	Date of the first archival copy available[3]	Last modified date on the first archived Web site/page
Open University of Sri Lanka	www.ou.ac.lk /library/index.html	1997-07-28	1996-11-08
University of Colombo	www.cmb.ac.lk /about/library.htm	1998-01-13	1997-10-01
University of Moratuwa	www.mrt.ac.lk/lib/	1999-02-09	1998-12-02
University of Peradeniya	www.pdn.ac.lk /services/library.html	2000-03-03	1998-02-05[4]
University of Sri Jayawardenepura	www.sjp.ac.lk/ support.htm[5]	2000-09-02	1999-12-13 University of
Ruhuna	www.ruh.ac.lk /Uni/library/libmain.html	2001-02-16	NA
University of Kelaniya	www.kln.ac.lk/Lib Info_Page.html	2001-06-30	1998-02-01[6]

3.1.1 Sri Lanka Science & Technology Information Network (SLSTINET)

The National Science Council of Ceylon - NSC (currently National Science Foundation - NSF) set up the Sri Lanka Scientific and Technical Information Centre (SLSTIC) in 1977. By the end of1997 there were 120 member libraries. This, although not necessarily a Web based network had pioneered Web presence of information from science and technology institutions in the country.

Having institutional Web sites was still (2000-2004) not a priority. Yet, the NSF offered a service to host other Web sites in their own Web server. The first archival copy of the NSF Web site (www.nsf.ac.lk) at the Internet Archive is the one taken on 19th June 2000. It shows the following eighteen (18) Web sites hosted at the NSF servers ("SLSTINET membership," 2000).

Centre for Industrial Technology Information Service (CITIS) , Coconut Research Institute - (CRI), Council for Agricultural Research Policy (CARP), Industrial Technology Institute (ITI), Institute of Chemistry (IChem), Institute of Fundamental Studies (IFS) , Institute of Indigenous Medicine (IIM), Medical Research Institute (MRI) , National Aquatic Resources Agency (NARA), National Building Research Organization (NBRO), National Institute of Education (NIE), Rubber Research Institute (RRI), State Engineering Corporation (SEC), Sri Lanka Standards Institute (SLSI) , Sugarcane Research Institute (SRI), Tea Research Institute (TRI) , Veterinary Research Institute (VRI), and the Water Resources Board (WRB).

These were not necessarily library web sites, but some of these institutions displayed information from their libraries. In addition to these, another nineteen (19) member institutions of SLSTINET had their own Web sites hosted elsewhere.

3.2 Library Automation

Library automation was a topic discussed in the Sri Lankan library circles since the introduction of first ever mini-computers to the country. In Universities, the process began with the decisions taken at the Seminar on Library Management held on 2nd May 1987, followed by a proposal submitted to the Inter University Committee of Librarians (IUCL), University Grants Commission (UGC) by the Librarian, University of Peradeniya. As a result, one computer each was given to all Universities by the UGC. The libraries began computerizing their catalogues using CDS/ISIS, a

software package developed and distributed free of charge by UNESCO (Jayasuriya, 2014).

CDS/ISIS was heavily used up to year 2000. However, it was not an integrated automation software (ILS). Mr. Upali Yapa created *Purna* (general libraries) and *Taxila* (school libraries) automation software, which were combinations of databases created with CDS/ISIS. By 2005 there had been 85 libraries using *Purna* (Yapa, 2005). Both Purna and Taxilaa[6] were such that the books and membership data were connected with the linking facility available in CDS/ISIS.

ITI was looking for a Y2K ready solution to automate their library. They solicited a software designed by Messers. Informatics (Pvt.) Ltd. from year 2000 (Talagala & Gamage, 2001). Open University of Sri Lanka (OUSL) was using Alice for Windows, a commercial software, for automating their library since 2002.

Subsequently, Mr. Nimal Hettiarachchi from University of Ruhuna customized a New Zealand based Koha Open Source ILS to accommodate Sinhala script. It was named as Koha-si. It was the legacy font *Kaputa* working with the system. By the time Koha could accommodate Unicode fonts, Sinhala Unicode (SU) and Tamil Unicode (TU) also had been developed. Therefore, Koha-si could be used with the direct installation of Koha[7].

University of Moratuwa, as with many other libraries in Sri Lanka had already maintained a CDS/ISIS based electronic catalogue. This command based standalone catalogue was available for users to search library resources. One computer terminal had been reserved for this function in the library. Users could refer a printed guide, or get assistance from the library staff to extract information. Bibliographic records for nearly a half of the collection had been created by library staff. The catalogue terminal had to be manually updated each time the back office had entered new data.

By the year 2000, UML was heading for automating a wide range of functions from acquisition to circulation. The library and the University technical evaluation committee had already selected the LibSys integrated library management system from India, from among several other competitors. One of the reasons for selecting this software was that it was already successfully running at the British Council (Sri Lanka) Library.

The UML was closed for one week when the consultant from India was here for installing the system. During this time, each staff member was consulted for drawing the workflow of functions in the library. The system seemed to be facilitating many equivalent functions in the manual system. When it was not, decisions were taken to change the procedures and formalities. There were few instances that the consultant had to contact the Indian office for customization of the software. Finally, staff members were trained. The integrated Online Public Access Catalogue (OPAC) was operational by April 2001. The fully functional UML automation system was inaugurated on 16th November 2001.

The author could identify some of the user friendly services and functionalities offered by the new system (Gamage, 2003). It had solved the following issues faced by the library staff and the reader community.

1. Change of life styles of users demanded easy and remote access to the catalogue.
2. Remote access to library holdings was becoming a determining factor in selecting part time courses in competitive Universities.
3. Sending staff recommendations and ordering those recommended material did not work smoothly.
4. New additions to the system were unknown. They had been hidden in the catalogue.
5. Updates were not immediately appearing in the catalogue.
6. Tedious paper work was a barrier which was preventing efficient work at the library.

7. Journals stock was hidden. The journals filing system (Kardex) was available for library staff only.

When the project was being made available, all professional staff members of the library had got used to provision of e-library activities.

3.3 Digital libraries

Mr. Yapa became the supervisor of my Master degree dissertation, which was submitted in 2001. It was titled `Digital library of statistical information for science and technology personnel in Sri Lanka'. What it discussed was the inclination of scientists towards using a digital library (DL). I concluded that Sri Lankan Scientists are ready to accept (and use) digital libraries. Since many senior scientists in my research population, who were the registered science and technology personnel (STP) at the NSF, had been trained overseas where the facilities were already there. They welcomed any move towards digitisation of knowledge (Gamage, 2001).

Other than this, there were no specific attempts in creating digital libraries during the period concerned. Yet, the term was freely used for any e-content provided through library (or other) Web sites. WWW gateways were also considered a similar service. Gateway to internet Information Sources (GAINS) and the University of Moratuwa Research Docs were such services provided by the UML.

The term digital library was also used for commercial e-journals databases. For example, the content offered by the Association of Computer Machinery (ACM)[8] was named as ACM Digital Library. Taken within the DL domain or not, e-journals databases are also worth considering here.

3.4 e-Journals databases

As reported by Lucy Tedd and Andrew Large (Tedd and Large, 2005), University of Moratuwa Library Web site displayed links to free online journals relevant to the disciplines available at the University for the benefit of its membership[9]. In 2002, Sri Lanka (among several other developing countries) had the opportunity to use commercial online journals databases through the Programme for the Enhancement of Research Information (PERI) of the International Network for the Availability of Scientific Publications (INASP). Mr. N.T.S.A. Senadeera, the librarian of University of Peradeniya was the country coordinator of INASP, succeeded by Ms. Sumana Jayasuriya - Librarian, University of Colombo. They coordinated with all institutions and made sure that all Universities and research institutions in the country would get free access to selected databases. INASP was funding the initiative but the librarians of the receiving institutions had to train staff and students of their respective institutions.

Receipt of country wide access to selected online journals databases was a reason to celebrate! Suddenly librarians were considered more important than ever. Some librarians mastered search techniques and differences and features in individual databases. The library Web sites also had to be frequently updated with links to resources. Primitive aggregation of subject collections was also evident in some library Web sites. UOM Library extended user education programmes to educate users both on the library OPAC, and the electronic journals. The library reached faculty at their respective academic departments to train faculty members to use e-journals. Training users on retrieving information from databases and the OPAC is continued up to now, as many users are still not proficient to use search facilities beyond the simple search of Google. As a direct impact, librarians could cite up-to-date scholarly content in writing their research papers.

Although e-journals use didn't escalate on the inception, it slowly and gradually became the mainstream information source in academic libraries[10].

3.5 Education and Networking

Students of the Department of Library Science, University of Kelaniya, National Library and Information Sciences (NILIS), University of Colombo, and the Sri L... Association (SLLA) were teaching IT related components in their regular courses. The ... associations, SLLA and the University Librarians Association of Sri Lanka (ULA), w... conducting continuous professional development programs with regard to e-librarianship ... conducting the most e-ready course during that time: the Course on Library Automat... (Yapa, 2003). In addition, interested parties with trained professionals such as the NSF, IC... also conducted training. These activities were making librarians e-ready, as well as st... bondages with increased networking among like-minded people.

This increased networking resulted in commencing the very first email discussi... among librarians in the country. Sri Lanka Library Friends e-group was started in 2003[11]. ... started talking with each other in the virtual medium, putting on notices, expressing ideas and s... information (Gamage, 2010)[12].

4. Conclusion

Since the day I faced the interview – 1997/98 – the services of electronic librarianship ha... grown in leaps and bounds. The era under consideration (2000-2004) was a period of establishm... E-readiness of librarians have grown into a stage where e-librarianship is no longer a valid term ... losing its boundaries being integrated into the regular librarianship. E-services are part and parc... a contemporary librarian. However, as per the period in focus, only academic and research libra... were embracing the new technologies. Public, government and school libraries on the other ha... were mostly just admiring the services they could provide, mainly because of inadequate infrastructu... and expertise. After a decade of rapid growth of technology and attitudes, some University and special libraries have advanced further in the direction of e-services, dreaming on Information Commons. Others still lag behind! A problem is prevailing somewhere!! Are we not on the best track in education and training? If not, is it because we are not having the correct mindset for moving forward? Else, is it because the policies and practices are not in the best interest of public and professionals?

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Footnotes

1 http://coins.lakdiva.org/cat/

2 These addresses had been changed subsequently as sub-domains of the main Univer

3 The date the library site is first appearing at http://internetarchive.org

4 Last updated date appears only from the 2001-11-10 archival copy.

5 Information about the library had been included under support services. No separate library by this time. The first archival copy of the first library Web site (http://ww library.html) was available from 2002-02-26.

6 No content by this time. Only some links were available.

7 Development of Sinhala and Tamil Unicode was another important milestone for providing content and services to the Sri Lankan library membership.

8 *www.acm.org*

9 Lucy visited Sri Lanka in 2003-2004, and met the UML staff to discuss the e-services that offering. In their book on Digital Libraries, Lucy and Andrew have spared a complete section e-services offered by UML.

10 Since PERI programme was ceasing its funding by 2004-2005, libraries started subscribing to ejo using their own funds.

11 At a later stage, this evolved into a voluntary articles sharing platform, making it the de facto do delivery (DD) mechanism. In addition, librarians started asking about the availability of publica in other libraries for inter library loan (ILL).

12 The predecessor to this egroup was a new Additions List developed by Ms.Thushari Senevirath the University of Moratuwa Library the first of its kind in Sri Lanka. The group too is still bei operated.