

# Challenges of using Information and Communication Technologies (ICTs) in university libraries and special libraries in Sri Lanka

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## Abstract

*The main objective of this study was to find out the key challenges when using Information and Communication Technologies (ICTs) in University Libraries (UL) and Special Libraries (SL) in Sri Lanka. Twenty nine (29) Main & Faculty UL and thirty eight (38) SL were selected out of 36 and 76 libraries respectively. Random sampling technique was used to select the sample. A questionnaire was used to collect primary data. Out of the total, 22 UL and 28 SL responded. According to the analysis of data it was found that a majority of the UL (79.55%) were challenged with insufficient fund allocations to purchase necessary ICT equipment, while a majority of the SL (73.21%) faced a challenge of a lack of an island-wide distribution network. Next, 78.41% of the UL were also challenged with a lack of an island-wide distribution network and 66.07% of the SL were constantly challenged with delays in purchasing computers and other ICT equipment. Laws and regulations for purchasing and maintaining ICT tools in the UL (77.27%) and SL (65.18%) were also identified as major challenges. Provision of sufficient fund allocations for ICT, the need to inculcate skills and knowledge regarding ICT activities for administrative staff, conducting in-service and outdoor high quality training programmes for library staff, are some of the recommendations suggested hereby to overcome above challenges in UL and SL in Sri Lanka.*

**Keywords:** *ICT, ICT Challenges, University Libraries, Special Libraries, Sri Lanka.*

## 1.0 Introduction

Information and Communication Technology (ICT) is a combination of Information Technologies (IT) and Communication Technologies (CT) (Tusubira & Kyeyune, 2001). ICT applications are rapidly changing all over the world (Khan *et.al.*, 2011). As a result, ICT has transformed library operations, resources, services, users and staff globally. It plays a prominent role in order to keep library processes and functions viable and active. There are many advantages of using ICT in the libraries. Especially, it saves work and storage spaces and reduces paper bulk. Remote accessing is also enabled through the networked systems and helps to save the time of staff as well as user.

On the other hand, there are many challenges when using ICT enabling activities in the libraries. Insufficient funding, lack of ICT knowledge, change of software and hardware from time to time, insufficient bandwidth, copyright and intellectual property rights are the common problems that libraries were facing globally. Hence, this study discovered a number of major challenges faced by UL and SL in Sri Lanka in 2012.

According to a literary survey, a small number of core researches have been carried out in 2001 (Hettiarachchi) and 2005 (Wijayasundara). As a result, it has been observed that no one carried out the research regarding ICT challenges during the period 2006 to 2012. Therefore, this research have been carried out in 2012 to fill the gap between the above years. These findings also may be significant for current LIS researchers in order to identify ICT challenges then and now comparatively and continually.

## **2.0 A brief Literature Review**

Limited core researches have been carried out on challenges of ICT use in UL and SL in Sri Lanka. Hettiarachchi (2001) in his comparative study on “the use of Information Technology in University Libraries and Special Libraries of Sri Lanka” discloses that the UL and SL were challenged with insufficient fund allocations, lack of support from administrative departments and insufficient bandwidth etc. Wijayasundara (2005) also identified several ICT challenges under the technological, managerial, infrastructure, human, political and social factors.

## **3.0 Research Design**

Thirty six (36) UL with main and faculty libraries other than departmental & Postgraduate Institute libraries and 78 SL libraries (*National Library Manual*, 1994) were selected as the population for this study. Simple random sampling method was used to select 29 and 38 UL and SL respectively. A Close-ended structured Questionnaire was used for the data collection technique. The Questionnaire was directed to 29 UL and 38 SL *via* the post. Only 22 (75%) UL and 28 SL (73%) responded to the questionnaire. Qualitative data was converted into quantitative data using a fixed value for each numbered question. The Microsoft Excel spreadsheet-2007 version was used to analyze the collected data.

## **4.0 Results**

Key findings of the study are discussed below.

### **4.1 Insufficient funds allocations to ICT**

Highest number, 80% of the UL librarians highlighted that allocated funds for ICT work was not sufficient. 62% of the SL also confirmed the above challenge.

#### **4.2 Constant delays when purchasing Computers and other related instruments in parent organization**

ICT equipment is most important for ICT activities in the library. But 75% of the UL and 66% of the SL opine that the purchasing of computers and other related instruments, were constantly delayed. It was noticed that there was no proper support from the Parent organization for such transaction. This drawback directly affects library efficiency and effectiveness. Hettiarachchi (2001) has also identified the above factor as a major challenge.

#### **4.3 Laws and regulations for purchasing and maintaining ICT tools in the parent organization**

77% of the UL and 65% of the SL were greatly hampered by the laws and regulations which prevailed when purchasing and maintaining ICT tools. Most of the administrators delay in providing the requirements of libraries. Such delays badly affect the libraries in conducting their services effectively and smoothly.

#### **4.4 Lack of an island-wide distribution network**

A High percentage of the UL (78%) noted delays in the island-wide distribution network than SL (73%). This challenge was the biggest factor which affected SL.

#### **4.5 Lack of skilled manpower**

According to the analysis of the data, both UL and SL have indicated the lack of skilled manpower with ICT as well as in other library skills.

#### **4.6 Inadequate proper training programs**

Technology is changing and updating day by day. Therefore, regular training for working staff is required for efficient services. But, it was clearly observed that, highest percentages of UL (77%) and SL (65%) lag behind due to inadequacy in proper ICT training programs in Sri Lanka.

#### **4.7 Delays in repairing Instruments**

It was clearly observed that 73% of the UL and 65% of the SL have recognized the long delays in repairing ICT equipment by the administrators of the parent organization as a serious drawback to their work.

#### **4.8 Lack of plans to use IT tools within the library**

Only 64% of the SL recognized that they do not have a properly designed plan to use ICT tools within the library other than UL (16%).

#### **4.9 Lack of Database Management Systems (DBMS) in Sinhala**

Only 40% of the SL and 19% of the UL mentioned that they do not have DBMS in Sinhala. But it was not a challenge to a majority both libraries.

#### **4.10 The system conventional positions**

There is a need for library science qualified as well as computer science qualified personnel so that libraries could render better services to its users. Hence, libraries also should take action to create new position such as System analyst, System administrator *etc.* According to findings of this study, lower percentages UL (39%) and SL (20%) have identified the above mentioned factor as a challenge. But, the majority of both UL and SL libraries have already created such conventional positions in their libraries.

#### **5.0 Conclusions and Recommendations**

University and Special Libraries are marching towards the ICT-dominant environment. But, the above challenges have been observed, as obstacles in the Library and Information Science Services in the 21<sup>st</sup> century. Especially, insufficient fund allocations, laws and regulations, lack of an island wide distribution network, delays for repairs of equipment are common challenges faced by University as well as Special Libraries of Sri Lanka. Special Libraries are lagging behind the database management systems (DBMS) in Sinhala. But, majorities of the University Libraries have currently moved to such an effective Open-source Library Management System (LMS) like Koha. Both libraries had professional staff enriched with library science and computer science skills and educational background.

Provision of sufficient fund allocations for ICT, inculcating skills and knowledge regarding the ICT activities for administrative staff, conducting in-service and outdoor high quality training programmes for library staff, acquiring open source software for library management activities, generating of proper plans to use ICT tools within the library and changing pessimistic attitudes of library staff are the recommendations suggested hereby to overcome the above challenges in University and Special libraries of Sri Lanka.

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