



## Need and Importance of Library Automation and Networking in Public Libraries of Karachi, Pakistan

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**Abstract:** Libraries from centuries have been and are single most important pillar of societies to disseminate knowledge and to provide platform for interaction between communities. Libraries has serve people from every work of life regardless of their profession, culture, language, gender or age. Among all types of libraries PUBLIC LIBRARIES are the most important type; as these serve people either free of cost or by charging minimal token money

The present paper is showing the current status and challenges that the public libraries in Karachi are suffering. Libraries all over the world have already transformed themselves from delivering traditional library resources and services to the technology based resources and services. Public libraries are good media for transformation of information to the general public of the society. Unfortunately the public library system in Pakistan lacks the basic infrastructure to support ICT implementation and also it lags behind in terms of its accessibility to the common man. All Public libraries of Karachi are providing their services through manually. In the new information era librarians have to equip themselves with the existing and new information technology to enhance their status and also to achieve the basic objective for which the public libraries have been established. Automation of the public library is the urgent need of the time .Automation will give a paradigm shift to the entire public library working and building country wide community network. It will allow public libraries to retain best of material is digitally preserved along with traditional printing material. Networking between public libraries will allow them to share significant material on country wide basis it will also cut down on library staffs 'time spent in their day to day job routine.

**Keywords:** Library, Public libraries, Karachi, Automation, Library Automation, Networking

### Introduction

The library is the only centralized location where new and emerging information technologies can be combined with traditional knowledge resources in a user-focused, service-rich environment that support today's social and educational patterns of learning, teaching, and research. (Freeman,2005)

In the past, there was a system of recording and preserving human thoughts and ideas for future generations. This system or institution gradually came to be referred to by the term "library". The fundamental aim of libraries is to provide timely, accurate, pertinent, and reliable information for their users.( Ebiwolate ,2010)

There are different types of libraries such as public libraries, academic libraries, and special libraries. The essential functions of all libraries are the same, collection, preservation, and dissemination of knowledge. But the basic difference between public libraries and other types of libraries is in the concept that the former are open to all in the community. Public library is an integral part of the community.. It is a positive agent for change in the community. (Sudha, 2014). Public libraries played a very significant role in socio economic, cultural and spiritual development of communities in all over the world.

A public library is a library that is made to serve the public irrespective of its cast, gender and religion, to serve them intellectually and educate informally. Public library in every society carries its great importance. It acknowledges the society from its preserved intellectual heritage. Usually such types of libraries are established by public funds at Governmental level to fulfill the educational as well as other literary needs of a society. Public libraries are such democratic institution that serves the society regardless of any benefit. According to Kiminate,2012 A mission of a public library is to ensure continuous development of the community, to open an amazing world of knowledge ,information sources and rich cultural heritage. Thus, these are considered as those serving institutions that work by the public and for the development of public.

### *According to UNESCO Manifesto*

Public Library as "the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision making and cultural development of the individual and social groups".

This manifesto Proclaims UNESCO belief in the public library as living force for education, culture and information ,and as an essential agent for the fostering of peace and spiritual welfare through the minds of men and women.

The public library is the responsibility of local and national authorities. It is supported by specific legal legislation and financed by national and local government. Public libraries exist in many countries across the world and are often considered as an essential part of having and literate population. Public libraries are considered to be an important organization for community development.



### Statement of the Problem

Karachi has some oldest public libraries of Pakistan like Farer Hall library now called (city public library) Khaliq Dina Hall public library, but all the same the public library system as not as developed as it should have done.

Several libraries established under the local government authorities. But they present a very poor picture of library services and always being criticized by the readers. Special in this present age of information dissemination and advance technological developments which are in comparison with manual methods are easy to handle and easy to use, the public libraries in Karachi has shown no development or change in their system and services.

It seems that public libraries in Karachi has not adopt the new technology for their management. The reason may be that no standard available library Management system is develop to meet their needs. It is necessary to adopt new technology and proper planning to automate the all public libraries of Karachi...

### Public libraries of Karachi: Historical background

Karachi city's development efforts were initiated in 1852; Karachi municipal committee was established for this purpose. Based on recommendations by the committee several buildings were built under the development and expansion plan which have attained historical status overtime these include but not limited to:

- Commissioner house
- Narayan Jagannath Vaidya High School
- Denso Hall
- Empress Market
- Bolton Market
- Merewether Tower
- Club House
- Khaliq Deena Hall
- Keamari and
- Frere Hall

Karachi in many ways has a very unique status in the province of Sindh for lot of varied reasons specially due to the fact that many historical buildings, magazine, press newspaper and government documents originated from here such as

First Sindh language newspaper  
sindhisudhar(1866)

First Sindh language press Sindh Madrasa-tul-Islam

First Science College D.J.Science College

First Gujarati newspapers Samachar(1856)

Bilingual weekly magazine

Sind official gazette (1858), and

First booklet "Price Current" published by the Chamber of commerce (1860)

Karachi city has the honor of being the birth place of one of the oldest library of north western India (Frere hall) under the constitution came into effect in 1851. The library is administrated by the Karachi Municipality. Dr. Azam Shaan Haider wrote about this ancient library of Karachi in his doctoral thesis "history of Karachi" with the reference of (CISR) file number95. The library was directed to be a Public library by the then Commissioner of Sindh and Governor of Bombay in July 5 1881. The governor of Bombay became the first supervisor of the library before the establishment of general library. The library is named after and dedicated to "Bartle Frere"; as he originally planned to setup libraries for common people and as a result General Library came into existence which was later on names as Frere Hall Library. Initially it was a one room library located inside the Gymkhana Building and it was known as Ladies Club. 1870 is the year when measures were taken to hand over the library to municipality. The municipality bought both the original building of library and museum of Karachi and shifted them to frere Hall (preset Jinnah Garden). Based on a request, library and museum were handed over to a separate committee in 1892 for the better improvement of both institutions.

Another historical public library named Native General Library was established in 1856. This library was also established based on personal interest by Bartle frere. The name of the Library was suggested as "Native General Library" because the library had most of its collection in eastern languages. Aid was granted by the European countries for the development of the library. Native General Library existed in an old building till 1905 but then in 1906 it was shifted in the house of Mr.Ghulam Mubeen Khalid Baber. Today the library is known as Khaliq Dena Hall Library and is located at M.A.Jinnah Road Karachi.

Other than above described libraries there are various other older public libraries established in various areas of Karachi such as:

Ghalib Library Nazimabad; established in 1969

Allam Iqbal Library near Islamia College Karachi; established in 1968

Mujahid Park Library near Stadium road Karachi; established in 1950

Liaquat Memorial Library near Stadium road Karachi; established in 1950

Library U.C. #11 in Korangi Karachi; established in 1968

Although libraries are established on Governmental and non-Governmental levels but municipality is



performing a very important role in this aspect. Municipality of Karachi on the basis of the importance of public libraries divided Karachi in 1987 in for zones.

The administration of the libraries based on zones was given to Zonal Municipal committees. KMC kept 5 libraries under its control; whereas 8 libraries in district south, 9 in district east, 4 in district west and 7 libraries were established in district central. In all there were total of 43 libraries established.

In July 1994 status of Karachi Municipal Corporation was retrieved and four zonal committees established were also dissolved under new act. All libraries in four zones were once again given under the control of central administration. As a result instead of giving back the previous status of directorate of libraries (est. July 1976) the libraries were given under the administration of directorates of social welfare, culture and sports. Head of this department was given the designation of director.

In 1997 once again district government was reclaimed and this time five districts including Malir were formed. Now all libraries are working under the supervision of the director.

In Karachi (Pakistan) before 2001 public libraries were running under the Metropolitan Corporation (KMC). KMC divided the public libraries into five zonal committees and these committees as centralized work run under the individual director. Director concern all the matters of public libraries as a reflector of community. The centralized meeting held for removing the bugs of public libraries network. All librarians meet at one place and discussed the facilities and problem of libraries. In 2000 the local Government planed and 2001 ordinance was approved by government of Pakistan and according to this ordinance libraries are working under CDGK.

In city District Government the public libraries are divided into 18 towns the UC Nazim heads the

Union Administration and responsible for facilitating the CDGK to plan execute municipal services as well as informing higher authorities about public concern and complaints.

In town system the budget has allocated in towns and the Town Municipal Officer (TMO) are the responsible of all action that has taken in town for the benefit of user, public Libraries are also in its one of the responsibility.

One important aspect kept while establishing libraries under KMC was that most of the libraries were named based on notable personalities. This was primarily done so readers not only remember those personalities but also to pay tribute to the services rendered by those personalities.

**Objective of the study:**

The following were the objective of this study:

1. To find out total public libraries currently exist in Karachi.
2. To Know total collections of libraries.
4. To ascertain the separate space provided for Different section of the libraries
5. To identify technical process used in the public libraries.
6. To know about computer peripheral used in the libraries
7. To Know services provided by the libraries.
8. To ascertain the use of computer for housekeeping operations.
9. To know the current status of automation in the public libraries of Karachi.
10. To highlight the advantages of automation and networking with respect to economy  
in expenditure Increased use of library resources and services.

**Methodology**

The methodology used for the present study is questionnaire based survey. In the investigation 30 public libraries identified in Karachi, all these libraries were providing services to their user through traditional manual system.

TABLE 1

SNO	CODE	NAME OF THE LIBRARY	TOWN	
1	1	AKHTER COLONY PUBLIC LIBARAY AKHTAR COLONY	JAMSHEED TOWN	1977
2	2	AL HUDA LIBARARY	LIAQAT ABAD TOWN	1978
3	3	ALAMA IQBAL LIBRARY (CLOSED)	JAMSHEED TOWN	1968
4	4	ALAMA SHABIR AHMAD USMANI LIBRARY	LIAQAT ABAD TOWN	1971
5	5	CENTRAL LIBRARY KORANGI	LANDHI	1968
6	6	CITY LIBRARY	DMC	1989





7	7	COL MUHAMMAD KHAN LIBRARY	GULBERG TOWN	2002
8	8	FAIZEE REHMEEN ART GALLERY LIBRARY	DMC	1991
9	9	FRERE HALL LIBRARY	DMC	1865
10	10	FATIMA JINNAH LIBRARY	LANDHI	1986
11	11	FRERE MARKET LIBRARY	SADDAR	
12	12	HASARATMOHANI LIBRARY	LIAQATABAD TOWN	1975
13	13	GULSHAN-E-IQBAL LIBRARY	GULSHAN	
14	14	IQRA LIBRARY	LANDHI	1984
15	15	JIGAR MURADABADI LIBRARY	N .NAZIAMABAD TOWN	1997
16	16	LIAQUAT MEMORIAL LIBRARY (PUBLIC REFERENCE LIBRARY)	1950 TRANSFERRED TO SINDH GOVT	
17	17	M.A.JINNAH LIBRARY	KORANGI	
18	18	M.M.ALI JOHAR LIBRARY	LANDHI	1981
19	19	MOLVI ABDUL HAQ LIBRARY	LANDHI	1983
20	20	MUFAKIR-E-ISLAM LIBRARY	KORANGI	
21	21	NASEERABADPUBLIC LIBRARY	GULBERG TOWN	1983
22	22	NAWABKHOWAJA MUHAMMAD SHAFI DALHVI LIBRARY	JAMSHEED TOWN	1999
23	23	NAZEER HUSSAIN LIBRARY	KORANGI	
24	24	NISHTER PARK LIBRARY	JAMSHEED TOWN	1988
25	25	PROF KARAR HUSSAIN LIBRARY	LIAUQAT ABAD TOWN	1977
26	26	SAHBAAKHTER LIBRARY(FROMER CHILDRENARY)	LIAQAT ABAD TOWN	1970
27	27	SHAH FAISAL SHAHEED LIBRARY	SHAH FAISAL TOWN	1990
28	28	SIR SYED AHMED KHAN LIBRARY	LANDHI	1982
29	29	TAIMURIA PUBLIC LIBRAR	NORTH NAZIAMBAD	1983
30	30	SHUDAYAY HAQ PARASAT PUBIC LIBRARY (CLOSED)	MALIRTOWN	closed

**Analysis and interpretation of the data:**

In this study, all the public libraries have been denoted by number from 1-30-

The collected data has been presented in tabular form with their step by step description

**Table 1 name of the libraries:**

Total thirty public libraries identified. Two libraries have permanently closed and twenty five libraries are running under the town Municipal Administration (NOW KMC) and three libraries are running under CDGK NOW (DMC) (City Library, Frère Hall library, Faizee Rehmeen art gallery Library) and one Liaquat memorial library working under the Sindh govt.

No of libraries	Closed	TMA(KMC)	CDGK(DMC)	Sind Govt
30	2	24	3	1

**Table 2: timing of the libraries:**

Almost all libraries open for 12 hours (morning and evening)

Morning	EVENING
9am to 3-00 pm	3-00pm -8.00pm

**Table 3: No of STAFF (Morning+Evening)**

Out of 30	Professional	Semi	Non Professional	Total
24	35	41	134	210
3	6	2	13	21
1	10	-	57	68
2 CLOSED				

Table shows the professional, non Professional and semi Professional staff .By analyzing the table it has been found that most of the libraries have insufficient no of professional staff.

**Table 4: Holdings of the libraries**

S.NO	CODE	BOOKS	NEWSPAPERS	MAGZINE	NON BOOK
1	1	500	7	12	
	2	3200	12	12	
3	3	CLOSED	-	-	
4	4	27000	13	17	42 cassettes
5	5	24000	17	29	
6	6	12000	16	20	9800
7	7	2500	8	12	
8	8	4600	7	7	
9	9	50000	7	10	
10	10	1250	7	10	
11	11	23000	7	15	
12	12	5500	9	21	
13	13	3600	7	17	
14	14	2300	10	15	
15	15	7000	13	29	
16	16	171172	29	36	
17	17	3300	10	14	
18	18	3041	7	16	
19	19	3246	7	16	
20	20	10156	7	16	
21	21	35000	9	9	
22	22	2200	9	9	
23	23	10166	9	12	
24	24	1000	8	8	
25	25	27000	10	23	
26	26	11107	10	17	
27	27	4400	8	7	
28	28	6500	15	12	
29	29	3100	17	10	
30	30	CLOSED	-	-	

Table 4 shows the holdings of books ,periodicals and newspapers in figure

**Table 5: Separate space provided for the different section of the libraries**

LIBRAR	ACQ	CIR	READING ROOM	REFER	PERIOD ICAL	TECH	CHILD	COMP	CSS/RESEARCH RAREBOOK
28	19	16	28	3	3	28	3	1	2



**Table 5** shows that separate space provided by the different section of the library by analyzing the table it has been found that all twenty eight libraries have reading room section only three libraries Jigger Moradabad Library ,Nawab Kwaja Muhammad Shafi Delhvi library and Shah Faisal Shaheed library have a separate male and female reading room .Liquate memorial library and Taimuria library HAS CSS/RARE BOOK SECTION.

**TABLE 6: Technical processing**

NO OF LIB	CLASSIFICATION SCHEME	CAT CODE	RESULT
28	DDC	AACR-2	99%

Table 6 revealed that all the libraries use DDC SCHEME to classify the books of the library. No one use any other classification scheme to managing the library. And all the lib has made the catalogue of books according to AACR-2 code.

**Table 7: Services provided by the library**

NO OF LIBRARIES	BORR	REF	SDI	CAS	ONLINE	PHOTO COPYING	NEWS PAPER	RAREBOOK	BIBLIOGRAPHIC
28	27	28	28	NONE	NONE	NONE	27	2	28 ON REQUEST

Table 7 indicates the various services provides by the library to their users. Only liquat Memorial library do not allow borrowing facility to their user because it's a reference Memorial Library. All other libraries are providing Borrowing, Reference, SDI services .Liquat memorial library and Tamuria Public Library has rare book record and facilitate their user.

**Table 8: Computer peripheral**

NO OF LIBRARIES	COMPUTERS	SCANNER and BAR C ODE	CAMERAS FOR DIGITIZATION	PRINTER
28	6 (Pt.IV)	-	1	3

Table 8 shows that availability of computer peripheral in the libraries. Most of the libraries have no equipment .but central library Korangi has four computers and one camera for digitization and one printer,Faizee Rehmeen Art Gallery library and city library has one computer . .

**Table 9: Status of automation**

NO OF LIBRARIES	INITIAL STAGE	COMPLETED	PARTIAL
28	1(code 6)	-	-

Only city library use computer for various their house keeping operation in the library. Most of the libraries are using manual system.

**Key Findings:**

There are lack of libraries according to the population of the city/town.

The existing libraries are not providing better Modern services.

Lack of coordination of the libraries.

Allocated budget is not enough to public libraries and funds are not properly utilized

Lack of professional and trained staff in public libraries.

Lack of interest of Local Government for public service department.

Lack of computers and internet facilities in libraries.

**Importance of library automation and networking in public libraries of Karachi:**

Modern age is the age of computerization, but tradition manual working system exist in libraries specially public libraries of Pakistan. "In the series o development of library world is acclimatized to computer environment in daily routine as well as information storage and retrieval .Automation to a greater extent can reduce pressure of library workload. ( Rajput & Gautam,2010)

Currently, libraries find themselves confronted with a second computerization wave. The first wave took place during the seventies and turned manual back-room activities, such as acquiring, distribution and cataloguing, into computer-controlled





activities. We must realize that all traditional library activities are being affected by this innovation: the character of all library tasks is about to change as a consequence of technological developments.

Presently all Govt. Public libraries working under Directorate of Libraries are having more or less same collection of books in different languages. These books are old and rare which are not easily available elsewhere and difficult to find if needed. Also data of books available in all libraries is not available at one point. Communication between libraries is also very rare. Hence, chances of duplication of books are more. Due to these barriers, libraries are lacking in giving services to it therefore Automation of public libraries is Necessary to this new age of information society.,

Word 'Automation' has been derived from a Greek word 'Automate' which means something which has the power of spontaneous motion or self-movement (Webster's Third New International Dictionary of English Language, 1966). The term 'Automation' was first introduced by D.S. Harder in 1936, who was then with the General Motor Company in the United States. He used the term automation to mean automatic handling of parts between progressive production processes.

However, the modern usage of the word "automation" is not in vogue in the above sense.

McGraw-Hill Encyclopedia of Science and Technology (1982) defines automation as "a coined word having no precise, generally accepted technical meaning but widely used to imply the concept,, development "or use of highly automatic machinery or control system."www.lisbdnet.com

### Library Automation

"Library Automation is the use of automatic and semiautomatic data processing machines to perform such traditional library activities as acquisitions, cataloguing, circulation although these activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries; library automation may thus be distinguished from related fields such as information retrieval fields, automatic indexing and abstracting and automatic textual analysis." In short Library Automation means the use of computers to perform the different routines, repetitive and clerical jobs involved in the functions and services of the libraries.

### Advantages of Library Automation:

Acquisition, accessioning, classification,, cataloguing, circulation, serial control, information storage and retrieval, indexing etc. Can be mechanized by using library software. A machine readable record can be used by many users for

various purposes at many numbers of times. For example, a record created for acquisition section can be used for other purposes like accessioning, circulation etc. This saves the time of library staff.

Library automation relieves the library staff of repetitive work and save the time of the library professionals in routine housekeeping operations.

- To bring accuracy and speed of work.
- To bring economy and provide prompt library services.
- To increase efficiency of technical processing over a manual system.
- To do financial savings due to automation. To improve library and information services for end users.
- To improve the efficiency of library administration and management.

### Networking:

Business dictionary defines Networking as "In the world of computers, networking is the practice of linking two or more computing devices together for the purpose of sharing data. Networks are built with a mix of computer hardware and computer software". Library Networking: The National Commission on Libraries and Information Science (NCLIS) in its National Programme Document (1975) defines a network as: "two or more libraries and/or other organizations engaged in a common pattern of information exchange, through communications, for some functional purpose. A network usually consists of a formal arrangement whereby materials, information and services provided by a variety of libraries and other organizations are available to all potential users. Libraries may be in different jurisdictions but they agree to serve one another on the same basis as each serves its own constituents. Computer and telecommunications may be among the tools used for facilitating communication among them.

### Advantages of Networking of Public Libraries:

All public libraries will be connected through network.

1. Networking will help in Cooperative Collection Development.
2. Development of Union Catalogue, bibliography, and database of all libraries at one place will be possible.
3. Meets Specialized User Demands.
4. Breaks Financial Constraint.
5. Reduces Unnecessary Duplication of Work.
6. Library networking of all Maharashtra public
7. Libraries will break the barriers of distance, time and the physical movement



- of library resources. Hardware Resources Sharing: Various hardware
8. Resources like computer, printer, scanner etc. Can be procured by a networking group for the benefit of all the libraries of the network. Networking is also needed to connect personal computer with the mainframe or super computer for problem solving. Software Sharing: Individual library is not able
  9. To procure expensive library software. Hence, all participants' libraries can procure the software in group which will reduce the cost of software or one library can procure the software and all other libraries will shared the same by networking as server and client machine. Document Delivery Service.
  10. Data of all public libraries can be placed on internet by creating internet website.
  11. With the Internet website facility, access to various types of information viz industry, agriculture, information technology, and so on can be searched and the same information may be send through e-mail, or social networking sites also. People will be connected to mainstream and global access to information would be possible. With the introduction of ICT, the public libraries may act as community center.

#### CONCLUSION:

With the introduction of automation, data of all libraries of Karachi will be handled with ease, accuracy, great speed, high rate and better quality. It will save cost, time and labor of library staff and

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will avoid duplication of work. All libraries will be connected through networking, hence collection will be shared. It will also help to adopt the suitable strategies for improving collection building. Union catalogue and cooperative bibliographic services will be introduced. Automation will give a paradigm shift to the entire public library working and building countrywide community network.

#### Recommendations:

After the study about the public libraries of Karachi following are the recommendation for consideration in the betterment of public libraries of Karachi.

It should be recommended that the budget of the public libraries should be increase, so that the necessary infrastructure for automation and networking may be developed.

It should be well established and fulfilled the requirement of the community according to the needs.

Govt. Planner should be analyzed the importance of public libraries and without the bisect attitude try to develop it.

To provide basic training program should be adopted according to the need of library functions and services.

To provide basic training of computer related technology and automation to overall professional staff of library to enhance library activities.

The Govt. after some particular time should announce the skills enhancement program there are different kinds of training methods like refresher courses, seminars, workshop, etc.