## **Technology Impact in Theological Libraries: A Myth or Reality?**

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#### **ABSTRACT**

Advent of computers and developments in information communication technologies have changed the face of libraries. A significant change is seen the way information is generated, accessed, stored, and used. However, the theological libraries have a long way to go. Automation in theological libraries is still at a formative stage. The status of automation in theological libraries and the constraints for automating them have been explained. The theological libraries studied are form the Goa and coastal Karnataka.

Keywords: Theological libraries, automation, internet

### 1. INTRODUCTION

Two major inventions that changed human life on earth are the invention of printing machine and the introduction of computers. Today, computers are used in every walk of human life. There is tremendous impact of computers in the libraries. Automation of libraries has become a common feature. Library automation was initially implemented in some major libraries of the country. Now it has become common to academic libraries and a good number of academic institutions, universities, and even majority of colleges across India are automated. However, the theological libraries are at a very preliminary stage of automation. Theological libraries will have to take up the challenges created by the technology, if they have to make a mark in this 21st century.

### 2. WHAT IS LIBRARY AUTOMATION?

Automation is the process of using technology, usually electronic, to produce goods and services. Library automation is the use of computers for the management of libraries. Computers and information communication technologies are now used to carry out various tasks in the library which were earlier carried out manually. Routine functions in a library like acquisition of documents, accessioning, cataloguing, circulation, etc., are all now carried out with the help of computers and various library management softwares (available free of cost or commercial ones). The library database containing the bibliographic index is stored in the server.

The users can access the library database online over either the intranet or the internet. If a full fledge software, an integrated library management software is used, the entire library routines including the charging and discharging can also be done using the software. The automation of libraries in India is still in a slow pace and it is mainly centered among special and academic libraries. Other set of libraries like the public libraries are only gradually getting automated. The case of theological libraries will be interesting to investigate as they do not come under the categories mentioned above.

## 2.1 Advantages of Automation

There are many advantages of automation in libraries:

- Improvement in the quality, speed, and effectiveness of library functioning
- Relieving of professional staff from routine work
- Libraries can reach wider users (e.g. union catalogues)
- Facilitation of resource sharing through networking
- Efficient management of resources
- More and better utilisation of resources
- Preservation of manuscripts, incunabula and other rare documents through digitisation

Received on 18 April 2011 485

 Digitisation makes the rare documents available to scholars and researchers

## 3. WHAT IS A THEOLOGICAL LIBRARY?

Theological library can be defined in simple words as a special library having collection of resources related to the religious, philosophical, and spiritual traditions. Wealth of material on philosophy, comparative religion and mythology, theosophy, mysticism, etc., is found in these libraries. It encourages the study of ancient and modern religions and philosophy. Theological library preserve the current documentation as well as the historical material. These libraries play a significant role in theological education.

## 4. METHODOLOGY

A research study was conducted to find out the progress of automation amongst theological libraries. The geographical area of the study is limited to Goa and coastal Karnataka. All the 55 libraries were personally visited to collect the data. Structured questionnaire was used to collect necessary data. Personal interviews were also conducted to collect additional information. The number of theological libraries and their places are shown in Table 1.

Table 1. Place and religion tabulation

Place	ce Religion						Total
		Hindu	Christian	Muslim	Sikh	Jain	
Goa	(No.)	5	7	4	1	0	17
	(%)	29.41	41.18	23.53	5.88	0.00	00.00
Karnataka	(No.)	13	3	19	0	3	38
	(%)	34.21	7.89	50.00	0.00	7.89	100.00
Total	(No.)	18	10	23	1	3	55
	(%)	32.73	18.18	41.82	1.82	5.45	100.00

## 4.1 Availability of Computers

The first step in the process of automation is acquisition of computers. The data collected from the theological libraries show a clear picture that the process of automation has just been initiated. Table 2 and Table 3 show that out of the 55 theological libraries under the study 24 (43.64 %) do not have computers at all. Fifteen

Table 2. Number of computers used in the library (religionwise)

Religion	Number No	of 1	computers 2-5	used in 6-10	the library above 10	Total
Hindu	12	4	2	0	0	18
Christian	1	1	5	2	1	10
Islam	8	9	5	1	0	23
Sikh	1	0	0	0	0	1
Jain	2	1	0	0	0	3
Total	24	15	12	3	1	55

libraries have one computer. In almost all these cases the computer is not used for library-related routine works but for other administrative activities. One can even add these 15 libraries and it altogether makes 31 libraries which is 56.36 per cent of the total sample. This clearly indicates the slow process of automation of theological libraries.

But a religion-wise analysis shows certain distinct features. Out of the 10 libraries attached to Christian institutions only one doesn't have any computer. It was revealed that, 80 per cent of the libraries attached to Christian institutions have more than two computers. The libraries of these institutes were found more organised than the others.

Table 3. Mean number of computers in the library (based on religion of the library)

Religion	Mean	N	Std. deviation
Hindu	0.44	18	0.70
Christian	4.6	10	4.45
Islam	1.48	23	2.19
Sikh	0	1	
Jain	0.33	3	0.58
Total	1.62	55	2.77

The Christian institution libraries have 5 computers on an average where as it is just above 1 for Islamic libraries. Number of computers in Hindu libraries is very less. This shows that automation processes in the libraries attached to Christian institutes are much better as compared the libraries of other religions. In the same way the libraries in the state of Goa were showing little extra pace in automation process. The reason being that the sample from Goa contained more Christian Institute libraries. The average number of computers available with the theological libraries in the two states under the study is provided in the Table 4.

Table 4. Mean number of computers in the library (based on place of the library)

Place	Mean	N	Std. deviation	
Goa	2.29	17	3.74	
Karnataka	1.32	38	2.21	
Total	1.62	55	2.77	

Another interesting fact was revealed during the analysis of the data about the availability of computers against the age of the library. It was expected that the libraries existing for a many years and with huge collections will tend to go for automation processes. But it was found that the young libraries below the age of 10 years had more number of computers. The data is provided in Table 5.

It shows that the availability of electronic equipments for automation is prominent with younger libraries. The trend does not go hand in hand with the age of the library. There are many reasons for this. The people who maintain the old libraries tend to be conventional and don't expect the modern equipments to invade into their sane ambience of theology education. Feeding a huge backlog of records into the computer also may be discouraging these libraries to go for automation. Out of the 17 libraries which are below ten years 14 are managed by Islamic institutions. They are all set up in the recent past and have been organised in a manner that suits automation.

Table 5. Mean number of computers in the library (based on age of the library)

Age	Mean	N	Std. deviation
Below 10 years	2.12	17	2.78
Below 50 years	1.86	21	3.48
Below 100 years	1.67	3	0.58
Below 200 years	0.6	10	1.58
Above 200 years	0.75	4	1.5
Total	1.62	55	2.77

An analysis of this fact against the total number of documents in the collection is show in the Fig. 1. It shows a gradual increase in the number of computers as the number of documents grows in the collection.

From the above analysis it can be generalised that the acquisition of electronic equipments for automation is very slow in the theological libraries in Goa and coastal Karnataka. The process of automation has been influenced by the age of the libraries, the religion or institutes which manage it, and the size of the collection.

## 4.2 Use of Integrated Library Management Software

Another major ingredient in the automation process of a library is the acquisition of the library management software. There are many proprietary library management software available along with some open source software like the Koha and Newgenlib. Some libraries, especially academic libraries, tend to use some customised made software which the students of those institutions develop as part of their projects. These software are also working well. The acquisition of library management software was analysed and the data is shown in Table 6.

Table 6. Use of library management software

Name of	Religion					
software used	Hindu	Christian	Muslim	Sikh	Jain	
EBLIS	0	2	0	0	0	2
Excel	0	0	2	0	0	2
Fox pro	1	1	0	0	0	2
Foxbase	1	0	0	0	0	1
L.M.S	0	1	0	0	0	1
Lib Manager	1	0	0	0	0	1
Nirmal	0	1	0	0	0	1
PMB	1	0	0	0	0	1
Word	0	1	3	0	0	4
Custom made	1	1	2	0	0	4
No software used	13	3	16	1	3	36
Total	18	10	23	1	3	55

It was found that only a handful of libraries are using an integrated library management software. Some of them have created databases of the documents in Excel and Foxpro. As many as 36 libraries were not using any software in the library for creating a catalogue. It was found that 4 libraries have created a list of documents in MS Word. Some have used Excel also, Less use of library management software is due to the fact that majority of these libraries are not run by professionals. Where professionals are working, they have tried to create some sort of an index for the collection of the library. The existing staff is not trained to use computers. These findings lead us to the conclusion that the automation process is in a very slow pace in the theological libraries. They have just started using computers.

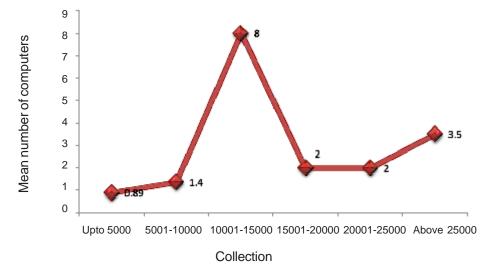


Figure 1. Mean number of computers in the library (based on size of the collection).

## 4.3 Use of Internet

The internet and the world wide web is considered to be the road to information. The amount of free and authentic information it carries and the ease of access makes it a favorite place to search information. Every one now tends to search information on the internet, even though the results carry a lot of unwanted information. Resources related to theology, religion, and philosophy are also available on the web. There are many theological journals available free of cost on the internet as part of the open access. Many free encyclopedias, dictionaries, and directories are also available. Internet connection in the library also attracts the user community to the library.

The connection to the internet is also an essential ingredient in the automation process. It acts as a medium of communication. The data regarding the internet connections in theological libraries was collected and tabulated. The resultant analysis is shown as Table 7.

Table 7. Availability of internet connectivity (religion-wise)

Availability internet connectivity		Hindu	Re Christian	ligion Muslim	Sikh	Jain	Total
Available	(No.) (%)	4 22.22	7 70.00	8 34.78	0 0.00	0 0.00	19 34.55
Not available	` ,	14 77.78	3 30.00	15 65.22	1 100.00	3 100.00	36 65.45
Total	(No.) (%)		10 100.00	23 100.00	1 100.00	3 100.00	55 100.00

The empirical data on the availability of internet connectivity shows that only 19 libraries have internet connectivity. It is found that 70 per cent of the theological libraries attached to the Christian institutions are connected to internet. The availability of internet connection was analysed against the age of the library to find whether it is a characteristic of the new generation libraries. The data is provided as Table 8.

than 50 year old. From this, it can be inferred that the connection to the internet is a newly established feature of the libraries.

# 5. CONSTRAINTS IN AUTOMATION OF THEOLOGICAL LIBRARIES

Following are the reasons for the slow pace of automation in theological libraries:

- Theological libraries are small in their set up
- They do not have financial resources to buy necessary hardware and software for automation
- They are not under pressure to improve their services
- They do not have trained staff to handle automation
- With their limited resources, they can neither hire trained staff nor send the existing staff for training
- Lack of uninterrupted power supply
- Major part of their collection is in print form

## 6. CONCLUSIONS

Libraries today do not function within their four walls. They are opening facilities for worldwide accessibility. Along with the changing technology, users' expectations are rising. Theological libraries, if they want to prove their existence in this modern age, will have to adapt to the developments in technology. The first step is to go for automation. These libraries have a great treasure in the form of manuscripts on paper, palm leaf, cloth, leather, or metal. However, good care is taken, time and environment has its impact on them. If these valuable resources are digitised, these can be made available for the scholars and researcher forever.

Table 8. Availability of internet connectivity (age-wise)

Availability of		Age of library (years)					
internet conn	nternet connectivity Below 10		Below 50	Below 100	Below 200	Above 200	
Available	(No.)	8	8	2	1	0	19
	(%)	47.06	38.10	66.67	10.00	0.00	34.55
Not available	(No.)	9	13	1	9	4	36
	(%)	52.94	61.90	33.33	90.00	100.00	65.45
Total	(No.) (%)	17 100	21 100	3 100	10 100	4 100	55 100

The analysis shows that majority of the theological libraries where the connection to the internet is maintained belong to the new generation libraries. As many as 8 (47.06 %) libraries out of the 19 in which there is internet connectivity are less than 10 years old. The rest of the libraries having internet connection are less

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