

Library Staffs Perception on Library Automation in University Libraries: A Comparative Study in Karnataka and Tamil Nadu

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Abstract - The present study deals with an opinion of university library staff on library automation in selected university libraries in Karnataka and Tamil Nadu. The study reveals that, staff education and qualification for library automation process and modules handling the library automation process is dealt. Explains the library staff's training they have undergone in handling library automation software and to know that necessary training requirement for handling the modules in library automation software as well as improving the overall performance of library computerised services. The study further explains housekeeping activities for create a library database in the university library automation process.

Keywords: Library Automation, Library Automation Software, University Library Staff, Information and Communication Technology, University Libraries

I. INTRODUCTION

Implementing information communication technology (ICT) in the library depends largely on library staff attitude toward it. The application of ICT has caused significant changes in libraries: automated cataloguing, circulation, information retrieval, electronic document delivery, and CD-ROM databases. For example according to Ostrow (1998), the advent of the Internet, digitization, and the ability to access library and research materials from remote locations created dramatic changes by the end of the twentieth century. Ramzan (2004) observes that expert systems, wireless networks, virtual collections, interactive Web interfaces, virtual reference services, and personal Web portals have brought changes since the start of the new millennium. There have been fast and significant changes in librarianship, where digital and electronic libraries complement, and in some cases replace traditional libraries.

II. LITERATURE REVIEW

Fishbein and Ajzen (1975) explore the role of attitude in their Theory of Reasoned Action (TRA), which looks at the relationship between attitudes and norms and their influence on behaviour. Others have considered how people are influenced by peer opinions on technology acceptance and innovation diffusion (Dillon and Morris, 1996). Attitudes affect behaviour and must be considered in managing staff, especially during change and innovation (Spacey, Guilding, and Murray, 2004).

Yaacob (1990) investigated the attitudes of librarians in government-supported special libraries in Malaysia and

examined the relationship between the librarians' attitudes toward IT and other variables.

Al-Zahrani (2000) investigated the perceptions of 147 library professional and paraprofessional staff concerning information technology innovations and training in university libraries in Saudi Arabia. He found a significant relationship among respondents' educational background, experience in using information technology, and their perceptions about IT.

III. OBJECTIVES OF THE STUDY

1. To know the education qualification of the library professional staff.
2. To know the Staffs training undergone in automation.
3. To know the proficiency skills in handling modules in library software.

IV. METHODOLOGY

A. Data Sample Selection

Three university libraries from Karnataka and three university libraries from Tamil Nadu are selected for the present study. Mysore University Library (1916), Bangalore University Library (1964) and Mangalore University Library (1980) from Karnataka are selected. As well as Madras University Library (1857), Annamalai University Library (1929) and Madurai Kamaraj University Library (1965) from Tamil Nadu are selected.

B. Data Sample Size

Seventy-five filled questionnaires were received from the library staff. The investigator also collected information by personal interview of university library staff as and when necessary.

C. Survey Method

Descriptive statistics were used for data analysis. The opinion of library staff regarding library software used for automation and also opinion on different issues pertaining to the library housekeeping operations were sought.

VI. DATA ANALYSIS AND INTERPRETATION

TABLE I EDUCATION QUALIFICATION OF THE UNIVERSITY LIBRARY STAFF

S. No.	Educational Qualification	University Libraries of Karnataka			University Libraries of Tamil Nadu			Total
		BUL	ManUL	MUL	AUL	MadUL	MKUL	
1	BLISc	-	-	1	-	1	-	2
2	BLISc/MLISc	-	-	2	-	-	-	2
3	MLISc	8	6	20	5	4	5	48
4	MA/MCoM/MSc/MLISc	-	5	1	1	-	-	7
5	MLISc/ M.Phil	-	-	2	2	2	1	7
6	MLISc/M.Phil/Ph.D.	1	2	4	-	1	1	9
	Total staff	30	13	9	8	8	7	75

(BUL-Bangalore University Library, ManUL-Mangalore University Library, MUL-Mysore University Library, MadUL -Madras University Library, AUL- Annamalai University Library, MKUL- Madurai Kamaraj University Library)

The level of educated library staff seems to be higher in MUL, Karnataka with mostly all of them holding a master degree, a MLISc. The statistics show that MUL encourages the employability of an educationally sophisticated staff which can collaborate, cooperate and contribute to the development of the library as a whole. The staffs in MUL are productive educationally as educated staffs means a higher level of effectiveness. Form the Table, it can be

inferred that the total number of staff holding a MLISc degree with a number of 48 in total, is higher than any other degree held, stating that this is the major qualification needed. However, the total number of staff in all the 6 universities is only a meagre number of 75, once more calling for the review to increase the effective number of qualified library staff for betterment.

TABLE II UNDERGO TRAINING FOR LIBRARY AUTOMATION

S. No.	Training in Library Automation	University Libraries of Karnataka						University Libraries of Tamil Nadu					
		BUL		ManUL		MUL		AUL		MadUL		MKUL	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	Deputy Librarians	-	-	2	-	1	-	-	-	-	-	-	-
2	Assistant Librarian (s)	6	-	5	-	9	-	-	-	-	-	-	-
3	Library Assistants	3	-	3	3	2	-	4	-	4	2	6	-
4	Assistant professor cum programmer	-	-	-	-	-	-	-	-	-	-	-	-
5	Technical Assistants	-	-	-	-	-	-	1	3	-	-	1	-
6	Assistant Technical Officers	-	-	-	-	-	-	-	-	2	-	-	-
7	Library project assistants	-	-	-	-	15	3	-	-	-	-	-	-
	Total	9 (100)	0 (0)	10 (76.92)	3 (23.07)	27 (90)	3 (10)	5 (62.5)	3 (37.5)	6 (75)	2 (25)	7 (100)	0 (0)

Note: figures in the parentheses are in percentage

The above table projects the number of library staff who attended and underwent the required training for the systematic functioning of Library Automation. The number of staff for the training rests as 3 Deputy Librarians, 20 Assistant Librarians and 6 Library Assistants and 18 Library Project Assistants in Karnataka while in Tamil Nadu, only 10 Assistant Librarians and 2 Technical Assistants attended the training. In contrast to Karnataka, Tamil Nadu should find ways to motivate its staff to attend and benefit from training sessions in almost all the divisions of its staff. The organisational and self-motivation and interest of the staff play an important role in the success of the programmed training sessions. The total number of positive staffs seems to be at its highest in BUL 9(100), ManUL 10(76.92) and MUL 27(90). Among Tamil Nadu university libraries, MKUL staff 7(100), AUL (62.5) and MadUL have 6(75).

A. Acquisition Module

Below table depicts the level of proficiency skills acquired by library staff in handling library automation. From the above table, it can be inferred that BUL staff the majority 5(55.55) have acquired a high level of proficiency skills, followed by 2(22.22) are moderately and 1(11.11) are low proficient staff. In ManUL staff, the majority 4(30.76) are very less, followed by 3(23.07) have highly proficient, 3(23.07) moderately and 1(7.69) is very low proficient staff. The majority 14(46.66) of MUL staff have acquired a moderate level of proficiency skills, followed by 10(33.33) of staff have got high-level proficiency skills. Also, it can be seen that the majority 5(62.5) of AUL staff have acquired high-level proficiency skills, followed by 2(25) have very high-level proficiency, 1(12.5) moderately proficient staff.

Also, the table shows that MadUL staff, the majority 5(62.5) have acquired high -level of proficiency skills, followed by 2(25) have very-high-level proficient and 1(12.5) moderately proficient staff. Cent percent of staff from MKUL have opined that they have acquired very-high level proficiency skills in handling acquisition model.

TABLE III PROFICIENCY SKILLS IN HANDLING THE FOLLOWING LIBRARY AUTOMATION

State	S. No.	University	Acquisition	Technical	Circulation	Serial control	OPAC	Stock verification	
University libraries of Karnataka	1	BUL	1	1(11.11)	1(11.11)	0(0)	0(0)	0(0)	
			2	0(0)	0(0)	0(0)	1(11.11)	0(0)	1(11.11)
			3	2(22.22)	4(44.44)	2(22.22)	4(44.44)	2(22.22)	5(55.55)
			4	5(55.55)	1(11.11)	3(33.33)	4(44.44)	4(44.44)	2(22.22)
			5	1(11.11)	3(33.33)	4(44.44)	0(0)	3(33.33)	1(11.11)
			Total	9(100)	9(100)	9(100)	9(100)	9(100)	9(100)
	2	ManUL	1	4(30.76)	0(0)	0(0)	1(7.69)	0(0)	6(46.15)
			2	1(7.69)	0(0)	0(0)	2(15.38)	0(0)	1(7.69)
			3	3(23.07)	4(30.76)	2(15.38)	3(23.07)	0(0)	3(23.07)
			4	3(23.07)	4(30.76)	2(15.38)	2(15.38)	3(23.07)	2(15.38)
			5	2(15.38)	5(38.46)	9(69.23)	5(38.46)	10(76.92)	1(7.69)
			Total	13(100)	13(100)	13(100)	13(100)	13(100)	13(100)
	3	MUL	1	1(3.33)	1(3.33)	1(3.33)	1(3.33)	0(0)	8(26.66)
			2	0(0)	0(0)	0(0)	6(20)	0(0)	3(10)
			3	14(46.66)	11(36.66)	10(33.33)	13(43.33)	7(23.33)	6(20)
			4	10(33.33)	10(33.33)	12(40)	8(26.66)	13(43.33)	9(30)
			5	5(16.66)	8(26.66)	8(26.66)	2(6.66)	10(33.33)	4(13.33)
			Total	30(100)	30(100)	30(100)	30(100)	30(100)	30(100)
University libraries of Tamil Nadu	4	AUL	1	0(0)	0(0)	0(0)	1(12.5)	0(0)	0(0)
			2	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
			3	1(12.5)	0(0)	3(37.5)	5(62.5)	1(12.5)	0(0)
			4	5(62.5)	3(37.5)	2(25)	1(12.5)	3(37.5)	4(50)
			5	2(25)	5(62.5)	3(37.5)	1(12.5)	4(50)	4(50)
			Total	8(100)	8(100)	8(100)	8(100)	8(100)	8(100)
	5	MadUL	1	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
			2	0(0)	0(0)	0(0)	0(0)	0(0)	1(12.5)
			3	1(12.5)	1(12.5)	1(12.5)	0(0)	0(0)	1(12.5)
			4	5(62.5)	5(62.5)	5(62.5)	7(87.5)	5(62.5)	5(62.5)
			5	2(25)	2(25)	2(25)	1(12.5)	3(37.5)	1(12.5)
			Total	8(100)	8(100)	8(100)	8(100)	8(100)	8(100)
	6	MKUL	1	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
			2	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
			3	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
			4	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
			5	7(100)	7(100)	7(100)	7(100)	7(100)	7(100)
			Total	7(100)	7(100)	7(100)	7(100)	7(100)	7(100)

(5-Very high, 4-High, 3- Moderate, 2-Low, 1-Very low)
 Note: figures in the parentheses are in percentage

Finally, compared to all sample university libraries staff proficiency in acquisition module, MKUL staff has acquired very-high-level proficiency skills, BUL, MadUL and AUL

staff have acquired high-level proficiency skills, MUL staff is moderately proficient and ManUL staff are very low proficient in handling the acquisition model.

B. Technical Section

From the above table, it can be inferred that the majority 4(44.44) of BUL staff have acquired a moderate level of proficiency skills, followed by 3(33.33) high level proficiency, and 1(11.11) of least proficient staff. In ManUL staff, the majority 5(38.46) have acquired very high-level of proficiency skills, followed by 4(30.76) of highly proficient, 4(30.76) of moderate proficient staff. The majority 11(36.66) of MUL staff have acquired a moderate level of proficiency skills, followed by 10(33.33) of highly proficient, 8(26.66) of very high proficient and 1(3.33) of least proficient staff. The table also shows that among Tamil Nadu university libraries, in AUL, the majority 5(62.5) have acquired proficiency of core skills, followed by 3(37.5) of highly proficient. In MadUL, the majority 5(62.5) have acquired moderate highly proficiency skills, followed by (25) of highly proficient, and (12.5) percent of least proficient staff. From MKUL staff acquired very-high-level proficiency skills in handling technical section. Compare to all university libraries in the technical module, on an average MUL staff is moderately proficient, ManUL staff are very-high proficient, BUL staff are moderately proficient, MadUL staff are highly proficient, AUL staff are very highly proficient and MKUL have acquired very high-level proficiency skills in handling Technical section.

C. Circulation Module

The above table inferred that the majority 4(44.44) of BUL staff have acquired a very high level of proficiency skills, followed by 3(33.33) of high, 2(22.22) of moderate proficient staff. In ManUL staff, the majority 9(69.23) staff have acquired a very-high-level of proficiency skills, followed by 2(15.38) of highly proficient, 2(15.38) of moderate proficient staff. The majority 12(40) of MUL staff have acquired highly proficiency skills, followed by 10(33.33) of moderately proficient, 8(26.66) of very-high proficient and 1(3.33) of least proficient staff. Also, it can be seen that In AUL staff, commonly 3(37.5) staff have acquired proficiency of core skills, as well as 3(37.5) of moderately proficient and 2(25) of staff have highly proficient skills. In the the majority 5(62.5) of MadUL staff have acquired highly proficiency skills, followed by 2(25) of very high proficient, and 1(12.5) percent of least proficient staff. From MKUL staff acquired very high-level proficiency skills in handling circulation section. Compare to all university libraries in circulation module, on an average MUL staff are moderately proficient, ManUL staff are very high proficient, BUL staff are high level proficient, MadUL staff are highly proficient, AUL staff are very highly proficient and MKUL have acquired very high-level proficiency skills in handling circulation model.

D. Serial Control

The table depicts that the majority 4(44.44) of BUL staff have acquired highly as well as moderately proficiency skills respectively and 1(11.11) percent of least proficient staff. In ManUL the majority 5(38.46) staff have acquired

very high level of proficiency skills, followed by 3(23.07) of moderately proficient, 2(15.38) each have very high proficiency and low proficient respectively and the majority 13(43.33) of MUL staff have acquired moderate level of proficiency skills, followed by 8(26.66) of highly proficient skills. The table also shows that in AUL, the majority 5(62.5) of staff have acquired moderately proficiency skills followed by 1(12.5) of each staff have very high, high and low proficient respectively. In MadUL, the majority 7(87.5) of staff have acquired high proficiency skills, and 1(12.5) of very-high proficient staff. In MKUL, staff acquired very high-level proficiency skills in handling serial control section. Compare to all university libraries in serial control module, on an average MUL staff is moderately proficient, ManUL staff are very-high proficient, BUL staff are very-high and moderately proficient, MadUL staff are high proficient, AUL staff are moderately proficient and MKUL have acquired very high-level proficiency skills in handling serial control model.

E. Online Public Access Catalogue

From the above table, it can be inferred that the majority 4(44.44) of BUL staff have acquired high proficiency skills, followed by 3(33.33) of proficient to the core, 2(22.22) of moderately proficient staff. In ManUL, the majority 10(76.92) staff have acquired a very high-level of proficiency skills, followed by 3(23.07) of high proficient staff. The majority 13(43.33) of MUL staff have acquired high level of proficiency skills, followed by 10(33.33) of very high proficient, 7(23.33) of moderate proficient staff. Also, table shows that In AUL, the majority 4(50) staff have acquired proficiency of core skills, followed by 3(37.5) of high proficient and 1(12.5) of moderately proficient. In MadUL, the majority 5(62.5) staff have acquired high proficiency skills, followed by 3(37.5) of high proficient staff. From MKUL, staff acquired very high level proficiency skills in handling OPAC. Compare to all university libraries in OPAC, on average MUL staffs are highly proficient, ManUL staff is very highly proficient, BUL staff are high-level proficient, MadUL staff are high proficient, AUL staff are very high proficient and MKUL staff have acquired very high-level proficiency skills in handling OPAC.

F. Stock Verification

The table demonstrates that majority 5(55.55) of BUL staff have acquired a moderate level of proficiency skills, followed by 2(22.22) of high proficient, 1(11.11) of low proficiency staff. In ManUL, the majority 6(46.15) of staff have acquired very low of proficiency skills, 3(23.07) of moderately proficient, 2(15.38) of high proficient staff. The majority 9(30) of MUL staff have acquired high-level of proficiency skills, followed by 8(26.66) have very low proficiency, 6(20) of moderate proficiency, 4(13.33) of very high and 3(10) of low proficient staff. The table also shows that In AUL, the majority 4(50) of AUL staff has acquired proficiency of core skills and 4(50) of high proficient. In MadUL, the majority 5(62.5) of MadUL staff have acquired

high proficiency skills, followed by 1(12.5) of each staff have high and low proficiency skills respectively. In MKUL staff opined that they have acquired very high-level proficiency skills in handling stock verification. Compared to all university libraries in stock verification Module, on an

average MUL staff are very high proficient, ManUL staff are very low proficient, BUL staff are moderately proficient, MadUL staff are high proficient, AUL staff are very high proficient, MKUL staff have acquired very high-level proficiency skills in handling stock verification.

TABLE IV HOUSEKEEPING ACTIVITIES TO FOLLOW FOR CREATING LIBRARY DATABASE

State	S. No.	University	Response	Housekeeping activities		
				Input from Accession Register for Retrospective Conversion	Direct input from books and other documents	Copy Catalogue from other library catalogue using Z39.50 Protocol
University libraries of Karnataka	1	BUL	1	0(0)	0(0)	0(0)
			2	2(22.22)	0(0)	2(22.22)
			3	4(44.44)	6(66.66)	5(55.55)
			4	3(33.33)	1(1.11)	1(11.11)
			5	0(0)	2(22.22)	1(11.11)
			Total	9(100)	9(100)	9(100)
	2	ManUL	1	1(7.69)	1(7.69)	3(23.06)
			2	0(0)	0(0)	1(7.69)
			3	7(53.84)	4(30.76)	5(38.46)
			4	5(38.46)	3(23.07)	3(23.07)
			5	0(0)	5(38.46)	1(7.69)
			Total	13(100)	13(100)	13(100)
	3	MUL	1	4(13.33)	0(0)	0(0)
			2	2(6.66)	1(1.33)	2(6.66)
			3	6(35.29)	6(20)	15(50)
			4	17(56.66)	16(53.33)	11(36.66)
			5	1(3.33)	7(23.33)	2(6.66)
			Total	30(100)	30(100)	30(100)
University libraries of Tamil Nadu	4	AUL	1	0(0)	0(0)	2(25)
			2	0(0)	0(0)	1(12.5)
			3	1(12.5)	3(37.5)	2(25)
			4	5(62.5)	3(37.5)	2(25)
			5	2(25)	2(25)	1(12.5)
			Total	8(100)	8(100)	8(100)
	5	MadUL	1	0(0)	0(0)	2(25)
			2	0(0)	1(12.5)	1(12.5)
			3	3(37.5)	0(0)	0(0)
			4	4(50)	4(50)	2(25)
			5	1(12.5)	3(37.5)	3(37.5)
			Total	8(100)	8(100)	8(100)
	6	MKUL	1	0(0)	0(0)	0(0)
			2	0(0)	0(0)	0(0)
			3	0(0)	0(0)	0(0)
			4	0(0)	0(0)	0(0)
			5	7(100)	7(100)	7(100)
			Total	7(100)	7(100)	7(100)

(5=Very Large, 4= Large, 3=Moderate, 2=Little, 1=Very Little) Note: figures in the parentheses are in percentage

G. Input from Accession Register for Retrospective Conversion

The above table exhibit mode of housekeeping activities used in creating library database. It can be inferred that BUL staff respond, the majority 4(44.44) are following the said module moderately, only 2(22.22) are low using this activity to create library database. ManUL staff, the majority 7(53.84) of staff are following this module moderately and 1(7.69) are not using the said module in creating library database. MUL staff, the majority 17(56.66) are using this module usually and 4(13.33) of the staffs response vested towards non-usage of the said module. In AUL staff, the majority 5(62.5) are using this module frequently and only 1(12.5) responses have concentrated at moderate usage. MadUL staff, whereas MadUL staff, the majority 4(50) have agreed this module is being used usually in creating a database. MKUL staffs, cent percent of the response is vested in the very high usage of the said module in creation of library database. Finally it can be concluded that this mode is moderately used in the creation of date base in sample university libraries.

H. Direct Input from Books and Other Documents

The table inferred that BUL staff respond, the majority of 6(66.66) staff revealed that moderately, only 2(22.22) are using high to do this activity to create library database. ManUL staff, the majority 5(38.46) of staffs are following this mode moderately, 4(30.76) are using moderately and 1(7.69) are very low using the said mode in creating library database. MUL staff, the majority 16(53.33) using this mode high and 4(13.33) of the staff response vested towards non usage of the said mode. AUL staff, majority 3(37.5) each are using this mode moderately and high respectively. Whereas MadUL staff, the majority 4(50) have agreed this module is being used high, 3(37.5) very high and 1(12.5) are low in creating database. MKUL staffs, cent percent of the response is vested on the very high usage of the said module in the creation of library database. Finally, it can be concluded that this mode is moderately and high used in creation of date base in sample university libraries.

I. Copy Catalogue from Other Library Catalogues Using Z39.50 Protocol

It can be inferred that BUL staff respond, the majority 5(55.55) following the said mode moderately, only 2(22.22) have using low this activity to create library database. ManUL staff, the majority 5(38.46) of staff are following this module moderately, 3(23.07) have high and 3(23.06) are using very low in the said mode in creating library database. MUL staff, the majority 15(50) are using this module moderately and 11(36.66) of the staffs response vested towards highly and 2(6.66) are low of the said mode. The table also shows that AUL staff, 2(25) each are using this module moderately and high respectively. Only 2(25) responses have concentrated at very low usage. Whereas MadUL staff, the majority 3(37.5) have agreed this mode is being used very highly and 2(25) are highly in creating the database. MKUL staffs, cent percent of the response is

vested in the very high usage of the said module in the creation of library database. Finally, it can be concluded that this mode is moderately and highly used in the creation of date base in sample university libraries.

VII. FINDINGS

From the above study, to the major findings are MUL has maximum number of staff in the Library as well as MUL staff's has a maximum numbers of Ph.D. qualified staff and no one in AUL. MUL staff has undergone training maximum in Karnataka and low in AUL from Tamil Nadu. Direct input from books and other documents and copy Catalogue from other library catalogues using Z39.50 Protocol of the housekeeping activities are using more from all sample university libraries. Some suggestions are drawn. Those are, mainly need to recruit necessary staff in all university libraries among Karnataka and Tamil Nadu. There is sample university library staffs need to have staff training to improve overall computerised services. MUL in Karnataka and MKUL in university libraries of Tamil Nadu staff have a very-high-level of proficiency skills to handle all modules in library automation.

VIII. CONCLUSION

This study provides information on library staff opinion on library automation among university libraries of Karnataka and Tamil Nadu. The main purpose of the study is to get the staff opinion on library automation and library computerised services to their library users. Also found that age factor influences on library automation in the university libraries. Professional skill improvement provides the best services to their users. Training brings about knowledge in the use of Information and communication technology which ultimately lead to a positive attitude toward the tools. It is therefore suggested that libraries that are yet to be automated in India, should have a rethink. Training is the first step, which will reduce the element of fear when implementation of ICT begins.

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