CHAPTER NO. IV

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ANALYSIS AND

INTERPRETATIONS

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IV <u>Analysis and Interpretations</u>

Use of Library Software and Automation:

To study the use of library software and automation in the Engg. College Libraries researcher has considered only the Engg. Colleges affiliated to Shivaji University, Kolhapur which covers Kolhapur, Sangli and Satara districts.

The detailed information about library software and automation of 12 Engg. Colleges is collected through Questionnaire, Interview and Observations. Through this method, it is made easy to see and observe the working capacity of the present library software and the present situations of library automation of each library.

The position of library automation of each Engineering College library shown in the tabular form and pie chart. Each table, pie chart and bar diagram shows the use of library software for the functioning of all library modules. The success of library automation is mostly depends upon the working of library software. It should be menu driven interactive and userfriendly.

The observation is made to indicate that, all 12 Engineering Colleges have adopted library automation. 10 Engineering College libraries have used Readymade software and 02 Engineering College libraries have used Inhouse Softaware. The observation is also made to show the maximum performance of ratio of performance / results) all operations of library modules i.e. Acquisition, Cataloguing, Circulation and Serial Control which further indicates the success of library automation of the individual library in each Engineering College.

Question No. 2.1 deals with the availability of specialized staff member for authorization i. e. System Analyst. Under this question two options were provided and librarians were asked to tick mark the appropriate option. The response to this question is tabulated below.

	Table No.	2.1	System	<u>Analvsis</u>
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Sr No.	Options	No. of College Libraries	Percentage
1.	Yes	12	100.00
2.	No	_	_
		Total = 12	100.00

It is observed from the above table that, all 12 (100 %) engineering colleges under study have appointed system analyst for library automation.

Further, it is interpreted that, for the success of Computerization of Engineering College Libraries, the appointment of System Analyst is very essential. All 12 colleges under study appointed System Analyst is positive Attitude towards library automation. Further it is concluded that, it is guidelines to other libraries.

Question No. 2.2 deals with automization process and asked to know the problems faced by library authority in whole process of automization work of library. The response to this question is tabulated below.

Sr. No.	Options	No. of College Libraries	Percentage
1.	Yes	07	58.33
2.	No	05	41.67
		Total = 12	100.00

Table No. 2.2 Problems faced in Automization

It is seen from the above table that 7 (58.33%) libraries are facing problems at the library automization and 5 (41.67%) libraries are not.

Further this question was asked to know the problems faced in automization of library, if answering yes, then specify the problem, where three options were provided i. e. hardware, software and humanware problems. The response to this question is tabulated below.

Table No. 2.2 A Types of Problems

Sr. No.	Problems related to	Respondents
1.	Hardware	1
2.	Software	6
3.	Humanware	5

It is observed from the above table that, there were six libraries said the problem is related to library software and one library said it is hardware problem. Further it is observed that, five libraries clearly mentioned about the problems related to humanware.

The data reveals that, for the library automation humanware and its intraction is very much essential for the success of the library automation.

Libraries should have regular in-house training programme for the library staff members, where it will help to make on the system comfortably to achieve the target below. Question No. 2.3 is again extension for earlier question and asked the areas of automation where work has been completed. Under this question five options were provided and librarians were asked to tick mark the appropriate option.

The response to this question is tabulated below.

Sr. No.	Automated Sections	Respondents
1.	Record of Books	12
2.	Record of Periodicals	5
3.	Record of Reports	4
4.	Record of any other document	2
5.	Record of Local Databases	3

Table No. 2.3 Automation is Sections

The table mentioned above has the multiple choice of results an they have opinioned more than one option. Further it is observed that 12 libraries have gone for the recording of all books data whereas 5 libraries said they created database for periodicals. 4 libraries are prepared record for reports. 2 libraries are prepared database for other documents and 3 libraries are created the local databases.

Further it is interpreted that all engineering college libraries have completed task of database creation of library materials which is essential for any library. Question No. 2.4 deals with manpower, professional training to the library personnel and asked to know the computer training given for database creation and automated house keeping activities.

Table No. 2.4 Computer Training given to Library Professionals

Sr. No.	No. of Trained Library Professionals	Respondents
1.	1-2	5
2.	3-4	3
3.	5-6	4
4.	6-8	•
5.	More than 8	•
6.	All Professionals	_

It is observed from the above table that, the computer training for database creation and automated house keeping activities operations are being given for 1-2 professional staff members reported by 5 libraries and 3-4, 5-6 professional staff members reported by 3 and 4 libraries respectively. Further it is seen that, the professional training which has been given quite useful to them to carryout the day to day library activities.

It is suggested that, for library staff members regular computer training need to be organized continuously.

Question No. 2.5 deals with the training given by the agencies and asked to know which are the corporate body provided professional training.

The response to this question is tabulated below.

Table No. 2.5 Computer Training given by the Agencies

Sr. No.	Name of the Agencies	Respondents
1.	INFLIBNET	1
2.	NISSAT	
3.	NISCAIR	-
4.	IASLIC with NISSAT	
5.	ILA with NISSAT	-
6.	Online Training	-
7.	Any Other	11

It is seen from the above table that, the INFLIBNET has provided professional training for one library, whereas the such training reported by other than the agencies, i. e. any other 11 libraries.

In some of the library automation the in-house training is given by the agencies is most effective.

The next part of the study related to software selection for the library automation.

The next question no. 3 deals with selection of software by the libraries. Under this question there were two options provided and librarians were asked to tick mark appropriate option.

The response to this question is tabulated below.

Table No. 3 Types of Library Software

Sr. No.	Type of Library Software	No. of Colleges	Percentage
1.	Readymade	10	83.33
2.	In-house	2	16.67
	Total	12	100.00

It is observed from the above table that, 12 (100 %) engineering college libraries are using software for its automation. Out of the total responses 10 (83.33 %) libraries use readymade library software whereas 2 (16.67 %) said they use in-house library software.

The next question 3.1 is the extension of the earlier question and asked if they have selected readymade software for library automization. They requested to give the name of the such softwares. Under this question there were 21 options provided and librarians were asked to provide the information, which has been tabulated below.

Sr. No.	Name of the Software	Respondents
1.	AIW	-
2.	Archives	-
3.	CAIRS-LMS	-
4.	CDS/ISIS	-
5.	CLIS	-
6.	Granthalaya	-
7.	LIBMAN	-
8.	Library Catalogue	-
9.	LIBRA	-
10.	LIBSYS	-
11.	Librarian	-
12.	Library Manager	-
13.	Libris	-
14.	Microlinux	-
15.	OASIS	-
16.	Sci-mate	-
17.	SLIM	02
18.	SOUL	01
19.	TULIPS	-
20.	WILSYS	-
21.	Any Other	09

Table No. 3.1 Readymade Software Selection

It is seen from the above table that, out of 21 softwares listed above 2 libraries reported they use SLIM software and 1 library said they are using SOUL software. Further it is observed that, 9 libraries reported under study are using other library software which have not been listed in the above table.

The data reveals that, though 9 libraries said they are using other software for library automization did not mention the names of the library softwares.

Question No. 3.2 deals with the satisfaction towards the said softwares and asked to know whether they are satisfied with the present software or not.

The response to this question is tabulated below.

Sr. No.	Options	No. of college Libraries	Percentage
1.	Yes	09	75.00
2.	No	03	25.00
		Total = 12	100.00

Table No. 3.2 Satisfaction of the Software

It is seen from the above table that, out of 12 libraries, 9 (75%) libraries reported that, they are satisfied with the present library software which is capable to carry out the library automation make satisfactorily, whereas 3 libraries opinioned their unsatisfaction towards such readymade software, which is serious problem to complete the library automation.

It is suggested that, library should adopt certain guidelines for library softwares which will lead to complete its automization.

Question No. 3.3 is related to kinds of operating systems used for the library automation which is very important. Under this question 6 options were provided. The response to this is tabulated below.

Sr. No.	Type of Operating System	Respondents	Percentage
1.	MS-DOS	01	8.33
2.	UNIX	_	_
3.	LINUX		_
4.	WINDOWS	10	83.34
-5.	Novell Netware	1	8.33
6.	Any Other	_	_
<u></u>	Total	12	100.00

Table No. 3.3 Operating System provided

It is seen from the above table that, 10 (83.34%) are using Windows based operating system whereas 1 each (8.33%) of the libraries reported as MS-DOS and Novell Netware for the library automation.

It is suggested that, library should adopt Linux Operating System for Computerization, which is free from virus.

This part of the study deals with hardware for library computerization. For the success of library automation appropriate hardware is very important and asked to know the types of hardware provided for the library automation. Under this question 18 options were provided and librarians were asked to tick mark the appropriate option.

The response to this is tabulated below.

Table No. 4 Hardware Installed for the Library Automation

Sr. No.	Haredware Items	Respondents
1.	Main Frame Computer	1
2.	Personal Computer	2
3.	Nodes	2
4.	Pentium	1
5.	Pentium II	1
6.	OPAC Terminals	10
7.	Computer with CD-ROM Drive	11
8.	Barcode Scanner, Barcode Generator	5
9.	Mini Computer	-
10.	Server	12
11.	PC-486 DX2	1
12.	Pentium mmx	-
13.	Pentium III	4
14.	Pentium IV	12
15.	Laptop	4
16.	Gist Card	-
17.	UPS	10
18.	Printers	11

The above table exhibits that, 12 libraries said they have server, Pentium IV. 11 libraries have printers and Computer CD-ROM Drive. 10 libraries said they have UPS and OPAC terminals, whereas rest of the other type of hardware reported by libraries under study presented in the above table. As most of the engineering college libraries are subscribing eresources and joining for resource sharing like INDEST. They should acquire appropriate and latest type of hardware which will suit the functions comfortably.

Question No. 5 is related to In-house library activities. Under this question 16 options for the operations of Acquisition Module were provided and asked to tick mark the appropriate option. The response to this is tabulated below.

Sr. No.	Operations of Acquisition Module	Respondents
1.	Suggestion through mail for new books	3
2.	Duplicate Search	11
3.	Print of purchase Orders	9
4.	Query letters to vendors	6
5.	Print of reminder letters	8
6.	Print letters of order cancellation	8
7.	Subjectwise list of orders	7
8.	Fund account reports	7
9.	Updated vendor file	8
10.	Accessioning	12
11.	List of current additions	12
12.	Print accession list	12
13.	Notification of users	9
14.	Print letters for adjustment of advances	6
15.	Print letters to bank for foreign exchange drafts	6
16.	Vendor performance reports	6

Table No. 5.1 Operations of Acquisition Module

It is seen from the above table that, 12 libraries are doing each activity, as accessioning, list of current additions and printing of accession list, 11

libraries said that, they have duplicate search for books available in the library. 9 each libraries said, they print out the purchase orders and notifications of users. Rest of the operations are mentioned in the above table.

It is suggested that, library should select software, which will perform all in house keeping activities most efficiently.

Question No. 5.2 deals with the performance of Cataloguing Module. Under this question 10 options were provided. The response to this question is tabulated below.

Sr.	Operations of Cataloguing Module	Respondents	Percentage
No.			
1.	Preparing Local Catalogues	7	58.33
2.	Classification of Documents	5	41.67
3.	Verification of Records	7	58.33
4.	Generation of Indexes and Cross Ref.	5	41.67
5.	Printing Catalogue Cards	7	58.33
6.	Generation of Added entries	6	50.00
7.	Contribution of Bibliographic Control	3	25.00
8.	Generation of Barcode	6	50.00
9.	Generation of Spine Labels	7	58.33
10.	Generation of Book Cards	5	41.67

Table No. 5.2 Operations of Cataloguing Module

It is seen from the above table that, 7 (58.33%) libraries are doing each activity, as preparing local catalogues, verification of records, printing catalogue cards and generation of spine labels. 6(50%) libraries said that, they have generating added entries and barcode, 5(41.67%) each libraries said that, they classify the documents, generating the indexes and cross references and also book cards. Remaining 3(25%) libraries contributing the bibliographic control.

The next question No. 5.3 is related with the Performance of Circulation Module. Under this question, 14 options were provided. The response to this is tabulated below.

Sr. No.	Operations of Circulation Module	Respondents	Percentage
1.	Registration of Membership	12	100.00
2.	Charging and Discharging	10	83.33
3.	Renewals and Reservations	11	91.67
4.	Time Records	11	91.67
5.	Overdue Items	10	83.33
6.	Fine Record	10	83.33
7.	Book record	10	83.33
8.	Overnight Record	6	50.00
9.	Loan of Materials other than books	6	50.00
10.	Inter-library loans	3	25.00
11.	Query facility on borrowers	6	50.00
12.	Options for use of barcode scanner	8	66.67
13.	Generation of Circulation Statistics	12	100.00
14.	Reporting Capabilities	8	66.67

Table No. 5.3 Operations of Circulation Module

It is seen from the above table that, 12 (100 %) libraries are doing each activity, like registration of membership and generation of circulation statistics. 11 (91.67 %) libraries said that, they are doing renewals and reservations, time records and 10 (83.33 %) each libraries reported that, they are doing charging and discharging, overdue items, fine records and book records. Rest of the operations are mentioned in the above table.

Inter-library loans, query facility on borrowers, overnight record, loan materials other than books services did not receive more attention from the respondents.

Question No. 5.4 deals with the performance of Serial Control. Under this question 11 options were provided and the librarians were asked to tick mark the appropriate option. The response to this question is tabulated below.

Sr.	Operations of Serial Control	Respondents	Percentage
No.			
1.	Subscription/ordering for new journals	7	58.33
2.	Sending reminders	6	50.00
3.	Receiving the new journals	7	58.33
4.	Preparation of list of received piodical	7	58.33
5.	Preparation of list of cancelled periodi.	7	58.33
6.	Preparation of list of holdings	6	50.00
7.	Preparation of list of holdings with	5	41.67
	their status		
8.	Keeping track of amount of subscripti.	5	41.67
9.	Budget estimation for the next year	6	50.00
10.	Re-ordering of Serials	6	50.00
11.	Documentation services as SDI and	4	33.33
	CAS		

Table No. 5.4 Operations of Serial Control

It is seen from the above table that, 7(58.33%) libraries doing each activity, as subscribing/ordering for new journals, receiving the new journals, preparation of list of received periodicals, preparation of list of cancelled periodicals. 6(50%) libraries said that, they have sending reminders, preparing the list of holdings, doing budget estimation for the

next year and re-ordering of serials. Rest of the operations were mentioned in the above table.

The question No. 5.5 is related with the performance of additional operations. Under this question 16 options were provided and the librarians were asked to tick mark the appropriate option. The response to this is tabulated below.

Sr. No.	Operations of Additional Modules	Respondents
1.	OPAC (On-line Public Access Catalogue)	11
2.	Administrative Operations Module	8
3.	User-friendly menu-driven and interactive	6
4.	Reports generation and MIS	9
5.	Security	9
6.	Display and Card printing facility	• 4
7.	Web OPAC	5
8.	Data Conversion facility	3
9.	Barcode facility	9
10.	Option to enter bibliographic data	2
11.	Reference services	4
12.	Stock Verification	10
13.	Budget Formulation	10
14.	Report Generation	12
15.	Back Up files	12
16.	Any Other	-

Table No. 5.5 Additional Operations

It is seen from the above table that, 12 libraries each one maintaining back up files and generating reports. 11 libraries each providing OPAC facility to the users which is highly important to find out the library materials immediately. 10 libraries each said that, they have doing stock verification and budget formulation. 9 libraries each opinioned about Report generation and MIS, Security and Barcode facility. The barcode for all the library materials and user barcodes for members of the library is very essential. Rest of the operations were mentioned in the above table.

Question No. 6 deals with the E-databases. Under this question four options were provided and the librarians were asked to choose the appropriate option. The response to this question is tabulated below.

Sr. No.	Documents in e-form	Respondents	Percentage
1.	CD-ROM Databases	10	83.33
2.	Reference Sources in CD-ROM	10	83.33
3.	Electronic Journals	10	83.33
4.	Any Other	4	33.33

Table No. 6.1 Acquisition of e-documents

It is seen from the above table that. 10 (83.33 %) libraries each acquire the CD-ROM Databases, reference sources in CD-ROM and ejournals whereas 4(33.33 %) libraries each said that, hey acquire the other documents. In the modern Information Age, the acquiring of edocuments is very necessary. Question No. 6.2 deals with the membership of INDEST Consortium. Under this question 20 options were provided and the librarians were asked to tick mark the appropriate option. The response to this is tabulated below.

Table No. 6.2Types of On-line Journals subscribed throughINDEST consortium

Sr.	Types of On-line Journals	Respondents	Percentage
No.			
1.	ABI / INFORM Complete	-	-
2.	ACM Digital Library	1	8.33
3.	ASCE Journals	2	16.67
4.	ASME Journals + AMR	5	41.67
5.	Capitaline	-	-
6.	COMPENDEX	-	-
7.	COMPENDEX & INSPEC	-	-
8.	Euromonitor (GMID)	-	-
9.	IEL Online (single access)	5	41.67
10.	IEL Online (5 sim. Access)	-	· -
11.	IEL Online (15 sim. Access)	-	-
12.	Indian Standards (single access)	-	-
13.	Indian Standards (5 sim. Access)	-	-
14.	JET	-	-
15.	Math Sci Net	-	-
16.	Nature	1	8.33
17.	Proquest Science Journals	-	•
18.	Science Direct Option 1	-	-
19.	Science Direct Option 2	1	8.33
20.	Springer's Link	2	16.67

It is seen from the above table that, 5(41.67%) libraries each have the membership of ASME Journals + AMR and IEL Online (single access).

2 (16.67 %) libraries each said that, they have subscribing the ASCE journals and Springer's Link. 1 (8.33 %) library each subscribing the ACM Digital Library, Nature and Science Direct Option 2.

It is suggested that, all engineering college libraries should be ε member of the INDEST Consortium for acquiring the e-journals. It is highly important for the academic and research purpose.

Question No. 6.3 deals with AICTE funds getting for INDEST Consortium. The two options were provided and the librarians were asked to tick mark the appropriate option. The response to this is tabulated below.

Ta	able	No.	6.3	AICTE	funds gettin	g for IN	IDEST	Consortium
-				and the second se		and the second se		

Sr. No.	Options	No. of College Libraries	Percentage
1.	Yes	03	25.00
2.	No	09	75.00
		Total = 12	100.00

It is seen from the above table that, 3 (25 %) libraries have getting the fund from AICTE for the INDEST Consortium whereas 9 (75 %)libraries have not. It is highly essential for subscribing the On-line journals for the library users. Question no. 7 deals with the Digital Library. Under this question three options were provided. The response to this question is tabulated below.

Table No. 7 Digital library

Sr. No.	Digital Library	Respondents	Percentage
1.	Creation of Digital Library	6	50.00
2.	Digitized print materials	1	8.33
3.	Technical requirements for the imaging process	4	33.33

It is seen from the above table that, 60% histories each said that, they have created the Digital Library and 1(8.33%) library said that, they have digitized the print materials into digital form. 4(33.33%) libraries each have the technical things which are required for the digital imaging process such as hardware and display technologies.

Question No. 8 deals with the Library Services. Under this question, the library services are catagorized into three different types such as, Manual, Mechanized and computerized. For the manual library services twelve options were provided and the librarians were asked to tick mark the appropriate option.

Table No. 8.1 Library services (Manual)

Sr. No.	Manual Library Services	Respondents	Percentage
1.	Reference Services	12	100.00
2.	Lending Services	11	91.67
3.	CAS / SDI	11	91.67
4.	Indexing Services	4	33.33
5.	Abstracting Services	1	8.33
6.	Bibliographic Services	-	-
7.	ILL Services	8	66.67
8.	Reprographic Services	10	83.33
9.	Press Clippings Services	. 8	66.67
10.	Translation Services	-	
11.	Consultancy Services	2	16.67
12.	Orientation of Users	6	50.00

It is seen from the above table that, 12 (100 %) libraries each are providing reference services manually. 11 (91.67 %) libraries each are providing lending services and CAS / SDI services manually. 10 (83.33 %)libraries each said that, they have providing the reprographic services manually and 8 (66.67 %) libraries each said that, they have providing ILL service and press clipping services manually to the users. Rest of the services are mentioned in the above table.

Further it is found that, nobody providing the bibliographic services and translation services, though both are essential for the ready reference. So. it is suggested that, all engineering college libraries should provide the bibliographic services and translation services to the library users. Question No. 8.2 deals with the Mechanized Library Services. Under this question four options were provided and the librarians were asked to tick mark the appropriate option. The response to this is tabulated below.

Sr. No.	Mechanized Library Services	Respondents	Percentage
1.	Photocopying	10	83.33
2.	Microfilming	-	-
3.	Microfilm Reader	2	16.67
4.	Audio-Video Services	9	75.00
5.	Any Other	-	-

Table No. 8.2 Library Services (Mechanized)

It is seen from the above table that, 10 (83.33%) libraries each said that, they have providing the mechanized photocopying. 9(75%) libraries each are providing the Audio-Video Services. 2(16.67%) libraries each said that, they have providing Microfilm Reading service to the users.

Question no. 8.3 deals with the computerized Library Services. Under this question seven options were provided and the librarians were asked to tick mark the appropriate option. The response to this question is tabulated below.

Ta	ble	No.	8.3	Library	services	(Compu	terized)

Sr. No.	Computerized Library Services	Respondents	Percentage
1.	Lending Services	10	83.33
2.	CAS / SDI	3	25.00
3.	E-Mail	7	58.33
4.	Automated Translating	-	-
5.	Hypertext/Hypermedia	-	~
6.	CD-ROM Search	3	25.00
7.	Technical Communications (DTP)	1	8.33

It is seen from the above table that, 10 (83.33%) libraries each said that, they have providing computerized lending services. 7(58.33%) libraries $_{\circ}$ each are providing the e-mail services through computer. 3 (25%) libraries each said that, they have proving CAS / SDI and CD-ROM Search through computer system. 1 (8.33%) library providing the technical communications service to the library users.

Further it is suggested that, all engineering college libraries should provide the all library services through computer only for saving the time of the library users and increasing the efficiency of library work.