

Study of the Problems of Pre and Post Automation in College Libraries in Eastern Uttar Pradesh

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ABSTRACT

Automation has become an important part of today's libraries. Libraries are being automated to replace conventional libraries, which provide a number of issues, particularly for College Libraries in Eastern Uttar Pradesh. The primary concerns with automating libraries, according to the research, may be classified into two categories: pre-automation problems and post-automation problems. Other flaws highlighted were, among others, inadequate database architecture, a lack of information literacy instruction for patrons, and poor utilisation of online information resources. To deliver new services to its clients, libraries use a variety of strategies, including computerised operations such as acquisition, automation, and OPAC. This report presents some of the experiences and makes an attempt to survey and appraise the Pre and Post Automation Problems in College Libraries in Eastern Uttar Pradesh.

KEYWORDS: Automating, Information and Communication Technology (ICT), Online Public Access Catalog, CD-ROM services.

INTRODUCTION

People's ability to access and utilise information has become more useful in developing countries because to the widespread adoption of information and communication technology (ICT). Libraries have been compelled to alter their concentration from document collecting to information distribution as a result of increasing economic circumstances and technological innovation in affluent countries. Quality information supply relies heavily on the availability of automation, which necessitates pooling resources. Protocol search, standardisation of organisational materials and retrieval capabilities are all

included in this. The usage of ICT has helped both government and private organisations. Information has been organised and disseminated via libraries' use of information technology.

In the absence of conventional library services and situation-specific specification needs, libraries, according to Mohammed (2006), have automated their functional services. There is an upsurge in consumer demand for new books, according to Raiz (1992). Only ICT is capable of enhancing services to better satisfy the needs of the end-users. It is possible to automate library selection, cataloguing, circulation (charging and discharging), periodical control, and other manual processes

to assure effectiveness and efficiency while eliminating unsolved issues (Raiz, 1992).

Electronic databases and publications may be found in automated libraries. When it comes to dealing with the issues of the modern world, librarians will need to alter their conventional or manual library resources using technology. For regular duties like "cataloguing and categorising, serial management, collection management, budget, circulation management, reference index and abstract," librarians will be able to employ ICTs due to automation. This would help libraries provide better information services to their patrons. (Haliso, 2011)

REVIEW OF LITERATURE

Problems of Automating Libraries

Though delivery information is similar, public libraries in industrialised nations cannot always be compared to those in Ghana because of the widespread use of automation. Numerous scholars, including Mutala (2012), Rosenberg (2001), Chisenga and Rorissa (2001), have drawn attention to various injustices in the automation of public libraries. Academic libraries in Ghana that continue to rely on manual library operations continue to face operational challenges. As a result, the overwhelming majority of people are dissatisfied with the information provided by academic librarians. Additionally, the research reviews the literature on the several automation challenges that African libraries face. Four categories were established for these characteristics.

Pre-automation problem

According to Rajput and Gautam's (2010) research on special libraries, "financial constraints, inadequate managerial care, a lack of qualified staff, a reluctance to use computers, and a lack of space" all contribute to the problem. Ten countries in Anglophone Africa were studied by Chisenga (2004) and "inadequate budgets, a lack of ICT services, a lack of ICT approaches, users with minute skill levels," "a lack of competent ICT staff, a lack of guaranteed staff by institutional management, and a reluctance among staff to use ICT" were found. In the opinion of Nok (2006), academic libraries in Africa have suffered from chronic underfunding for many years now, both in terms of records and

money. There is a shortage of financing for automation because library employees do not sufficiently promote the need of using information and communication technology to authorities, according to Mutala (2012) and Youngman (1999).

Automation Problem

The difficulty with automation in libraries is the problems that always develop. Paper automation has additional problems, according to Nok (2006). In addition to acquiring and cataloguing online materials, he described the creation of databases, delivering instruction on information literacy to library patrons, and creating new skills for librarians. For example, "lack of funding, staff unwillingness to utilise ICTs, a lack of trained personnel, and irregular power supply" are only some of the obstacles libraries in Africa encounter while trying to automate. As a result of "institutional management's lack of commitment," "severe technical damage," and "user-unfriendly software," libraries confront a number of issues.

According to a number of experts, many libraries lack the requisite skills to successfully execute the automation project. Library automation necessitates the replacement of accession numbers with barcodes when re-accessioning materials. During the automated operation, the library is placed at risk because of this.

There is a problem with the transmission of historical data, according to Adogbeji and Adomi (2005). There are also issues with borrowed and misplaced books, which limit the amount of books that can be handled in the allocated time even if the whole library is re-accessioned.

Post Automation Problem

As automation increases, so too do the problems that come with it. There are a number of issues, including "computerization that fails to live up to user expectations, a lack of funding for improvements and staff training, a lack of user awareness, software that is not user-friendly, a lack of standardisation and hardware incompatibility, and computerization that fails to live up to the organization's expectations," according to Jayaprakash and Balasubramani (2011).

Some of the post-automation issues identified by libraries according to Rajput and Gautam (2010). It is possible that employees' opinions toward automated libraries may be affected by a lack of or inadequate training of workers.

Refresher training may be necessary if employees forget what they were taught, such as programme functionality. Employees neglect their responsibilities. According to Gardner (1994), employing inexperienced and unskilled people leads in the employment of immigrants and the lack of funding by governments in developing nations makes it impossible for them to hire such workers. Additionally, management makes the error of focusing exclusively on revenue growth and ignoring maintenance. Libraries must receive adequate training to operate effectively with automated technologies.

Automated technology adoption in libraries is hampered by a shortage of qualified information technology personnel among library staff (Haliso, 2011). Due to their cultural background, academic librarians are hesitant to use automated methods, resulting in substandard job performance.

It has been suggested that librarians' views toward automated technologies may have an influence on whether or not they are abused (Obajemu 2006, Okiy 2005, Sani and Tiamiyu 2005). It is possible for librarians to be in a condition where they either attract or resent automated devices. Accepting automated technologies may result in increased librarian performance, but rejecting them may result in decreased librarian performance.

Obajemu (2006) emphasised the importance of having a positive attitude in this regard. According to Okiy (2005), insufficient security mechanisms to protect computers from physical theft and hackers, as well as a low proportion of computer education, have hampered library users' access to information and technology.

In addition, an unstable power supply makes library operations more difficult to run. Customers are unable to make use of the loan services while there is an outage. This complicates the procedure of sourcing and powering other light sources.

Several studies have shown that power disruptions have a substantial impact on automation because they prohibit automated machines from operating at their maximum capacity. African libraries report that power outages are preventing automated technology from working properly.

Autonomous tool usage is hindered by an unstable power supply, an unsatisfactory broadcast system, and a dearth of research and strategy advancements for automated tools and their associated equipment, according to Abifarin (1993).

According to Chisenga (2004) and Obajemu and Ibegwam (2006). It has been shown that a lack of updates is a significant element in the failure of library automation systems. As a consequence of unmet organisational obligations and uneven improvements to ICT tools, this issue continues (Tully, 2003). Library automation is on the decrease because of random failure, ageing equipment, incorrect preservation, inadequate mechanical maintenance, and insufficient personnel training.

The absence of financing and administrative support for automated instruments in certain libraries was cited by Okiy (2005).

Then there's the matter of accountability to think about. Numerous issues might arise as a consequence of carelessness throughout the data entering process. Books that are already on the shelf but have not been checked out are not allowed to be checked out by anybody. A scanner must be used to detect and insert objects that have not yet been put into the system, therefore personnel will be required to scan each book. Choosing the best library service model is another important consideration.

Automated libraries have not yet proliferated widely in the poor world, according to a study by Sturges (1990).

MATERIALS AND METHODS

It is a survey study design because information is a key component of higher education advancement and plays an important role in national progress. Proper

information utilisation is closely tied to the expansion of study, research, and teaching facilities, as well as the multidimensional development of higher education. The automation process and its application might be assessed in a variety of ways. The most essential approach is the survey method, which is appropriate for social sciences.

The research has used survey methodologies based on the questionnaires, observations and secondary sources and the communication with the users of various institutions via official and informal means. To analyse the position of library automation, a systematic questionnaire will be prepared and delivered to chosen college customers. After the data has been gathered, it will be analysed and shortlisted for further processing. The questionnaire will cover all questions that may be useful in determining the state of automation in college libraries, such as whether automation has begun, the pace of

automation work, and the services given based on automation. The libraries under investigation will be recognised by their efforts in the automation process or its different phases of automation, which have been chosen for investigation.

The study is based on survey method. A sample survey has been done among the college libraries. Two questionnaires have been constructed, one for college librarians and one for users, faculty research scholars and the UG and PG students. Questionnaire was distributed to 860 users (Faculty 160, PG students 220 and UG students 480). No research scholar has been added because of close of research programmes since 2010. After the questionnaires received and responded the data collected, have been analysed and interpreted and presented in the form of tables and figures.

RESULTS AND DISCUSSION

Table 1: Respondents Statement

Category	Number questionnaire distributed	Number questionnaire responded	Percentage questionnaire responded
Faculty	160	120 (Six each college)	75%
P.G. Students	220	200 (Ten each College)	90%
U.G. Students	480	440	91.67%
	860	760	88.37%
d.f.	2		
Chi-square	2.24		
P value	0.048*		

The above table 1 shows that 75% faculty, 90% P.G. Students and 91.67% U.G. Students responded, out of the questionnaire sent to users for respond. It was a sample survey. We

took 6 faculties from all disciplines (2 from Arts, 2 from Commerce and 2 from Science faculty). But in case of students, covered them without any difference.

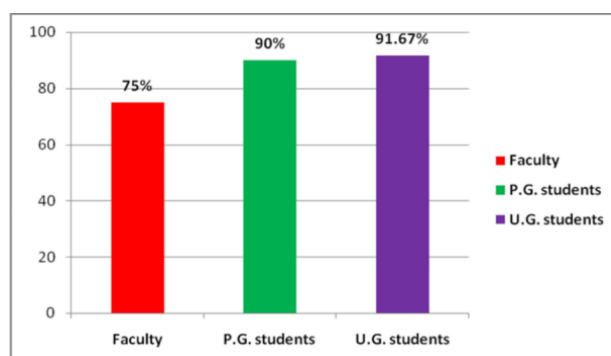


Figure 1: Respondents who responded

The respondents who responded to questionnaire were: Faculty 75%, P.G. students 90% and U.G. students 91.67%. The highest

percentage of UG students was due to personal approach to students.

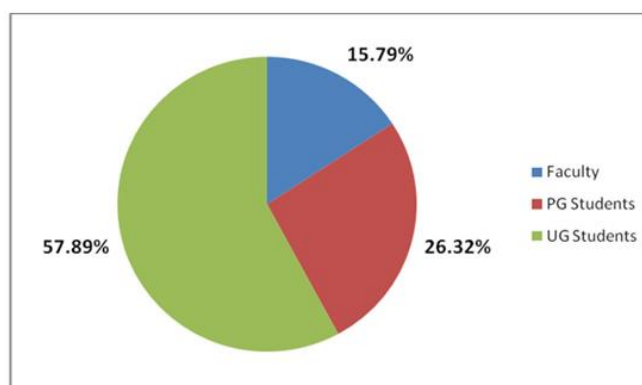


Figure 2: Respondents position: Individually

The respondents position out of the total respondents individually was Faculty 15.79%, PG students 26.32% and UG students 57.89%,

which is satisfactory ratio.

Problems in pre-automation

Table 2: Significance of pre-automation problems

Pre-automation problems	No. of Libraries with problem				
	Low (%)	Average (%)	High (%)	Very High (%)	Total
Paucity of funds	13(72.2)	4(22.2)	1(5.6)	0(0.0)	100%
Lack of administrative support	12(66.6)	3(16.6)	2(11.2)	1(5.6)	100%
Lack of trained staff	7(38.8)	4(22.3)	4(22.2)	3(16.7)	100%
Lack of fund for recurring expenditure	11(61.1)	4(22.2)	2(11.2)	1(5.5)	100%
Hesitancy in learning computer	6(33.4)	5(27.7)	3(16.6)	4(22.3)	100%
Lack of space	14(77.7)	4(22.3)	0(0.0)	0(0.0)	100%
d.f.	15				
Chi-square	19.59				
P value	0.009				

Among the 20 libraries that had pre-automation issues, 18 (or 90 percent) reported significant difficulties, as seen in Table 2. It has been shown that the majority of the 14 (77.7 %) and 13 (72.22 %) libraries had minimal challenges during pre-automation such as lack of space and insufficient funding. Pre-automation difficulties, as defined by Table 2, include issues experienced prior to the

implementation of computerization in the library. As can be seen in Table 2, 14 libraries (or 77% of all libraries) had space issues prior to automation. Seven libraries (38.8%) lack skilled employees, while six libraries (33.4%) have patrons who are reluctant to learn how to use a computer. Of the 20 libraries surveyed, 72.2% are experiencing financial difficulties.

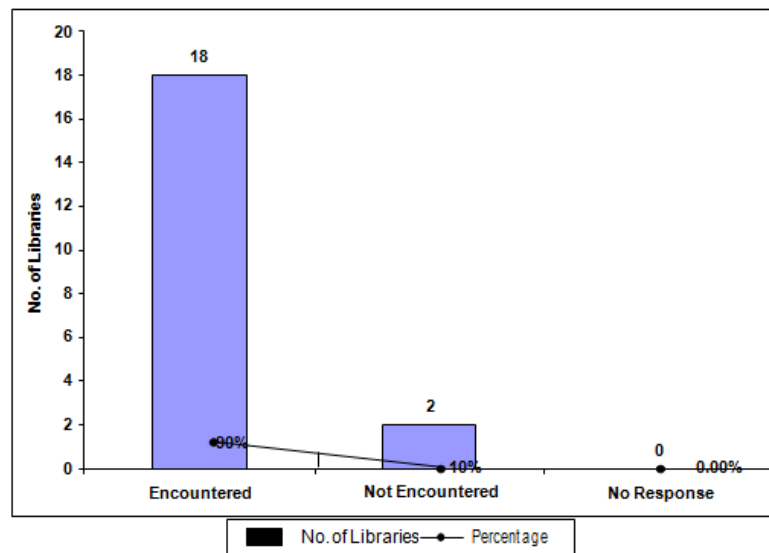


Figure 3: Pre-automation problems

As a result, 4 (22.3 percent) and 3 (16.6 percent) of the libraries reported significant levels of reluctance in learning computers and staff shortages, respectively.

The above figure 5 shows that 12% libraries have less administrative support, while only 5.6% libraries have adequate administrative support.

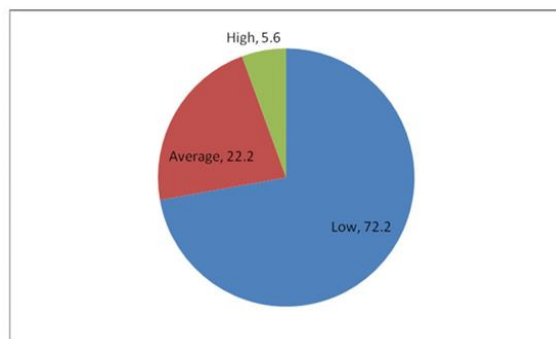


Figure 4: Paucity of funds

The above figure 4 shows the status of paucity of funds, 72.2% libraries are facing more financial problems while only 5.6% libraries have adequate funds.

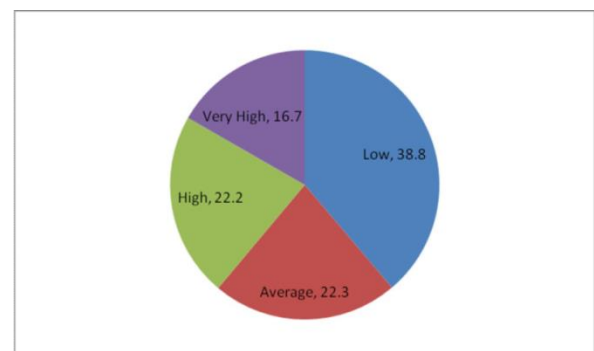


Figure 6: Lack of trained staff

The above figure 6 shows that 7% libraries have more problem of trained staff, while 16.7% libraries have adequate trained staff.

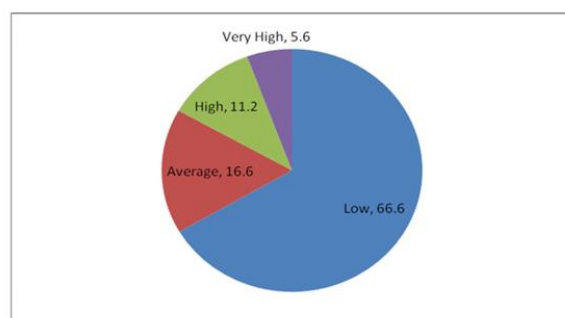


Figure 5: Lack of administrative support

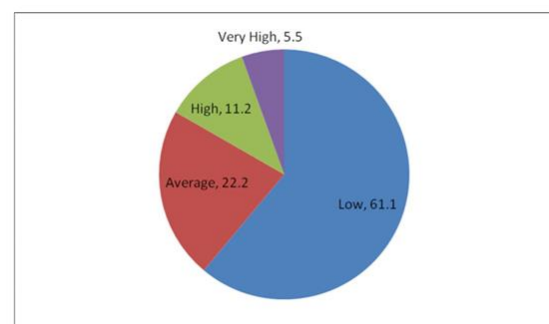


Figure 7: Lack of funds for recurring expenditure

The above figure 7 shows that 51.1% libraries have lowest funds for recurring expenditure while only 11.2% libraries have adequate funds for recurring expenditures

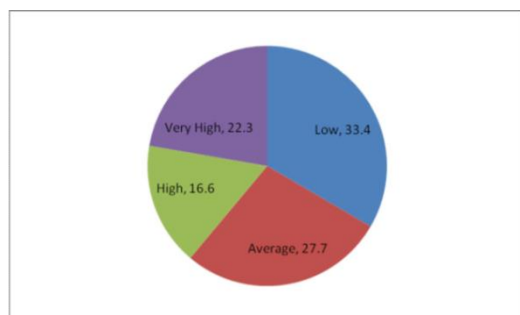


Figure 8: Hesitancy in learning computer

The above figure 8 shows the hesitancy of learning computers. In 33.4% libraries there has been hesitancy of learning computer is more, while in 4% libraries it is not much.

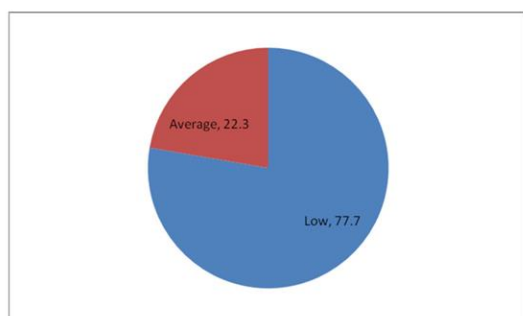


Figure 9: Lack of space

The above figure 9 shows that 77.7% libraries are facing space problem, while 22.3% libraries are not facing this problem much for the present.

Post automation problems

There are many post automation problems faced by the college libraries in purvanchal Uttar Pradesh. Majority of the libraries (70%) have encountered these problems, while only 20% libraries have not encountered such problems.

So far prospects of automation is concerned, 17 (85%) libraries observed the right future automation, while 15% libraries are not of opinion of best users services though automation.

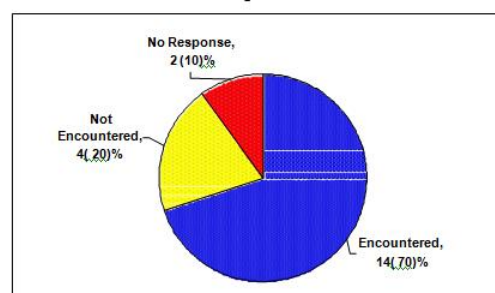


Figure 10: Post-automation problems

Table 3: Significance of post-automation problems

Post-automation problems	No. of Libraries with problem				
	Low (%)	Average (%)	High (%)	Very High (%)	Total
Paucity of funds for improvement	7(50)	4(28.57)	3(21.43)	0(0.0)	100%
Lack of attitude of authority for automation	11(78.57)	3(21.43)	0(0.0)	0(0.0)	100%
Computerization below expectation of users and organization	10(71.43)	2(14.29)	1(7.14)	1(7.14)	100%
Serious technical problems encountered	2(14.29)	1(7.14)	7(50)	4(28.57)	100%
Paucity of funds for staff training	10(71.43)	2(14.29)	1(7.14)	1(7.14)	100%
Software is not user friendly	10(71.43)	4(28.57)	0(0.0)	0(0.0)	100%
Lack of awareness among users	8(57.14)	3(21.43)	2(14.29)	1(7.14)	100%
Off standardization and incompatibility of hardware	7(50.0)	2(14.29)	5(35.71)	0(0.0)	100%
d.f.	21				
Chi-square	43.43				
P value	0.004				

The above table 3 shows the observation of post automation problems. 50% libraries faced financial problems for improvement after automation. The majority of libraries are facing negative attitude of authorities for staff training while in most of the colleges all staff have good number. Seven libraries are facing technical (maintained) problems which have standard software used though some libraries have standard software, has become less user friendly (71.43%). The important problem (57.14) is lack of awareness among users, for which user orientation programme should be started 50% libraries have less important configuration in hardware. Most of the hardware have been shifted from college office to libraries which have no standardization and create problems at every step while using software.

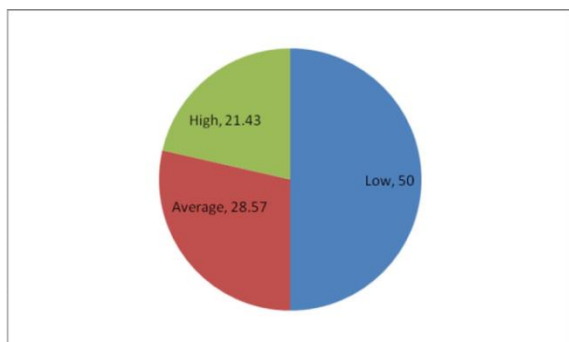


Figure 11: Paucity of funds

The above figure 11 shows the position of libraries about availability of adequate funds. 21.43% libraries are facing acute funds problems, while 50% libraries have less financial problems, only 4 libraries have average funds, which meets the expenditures on average.

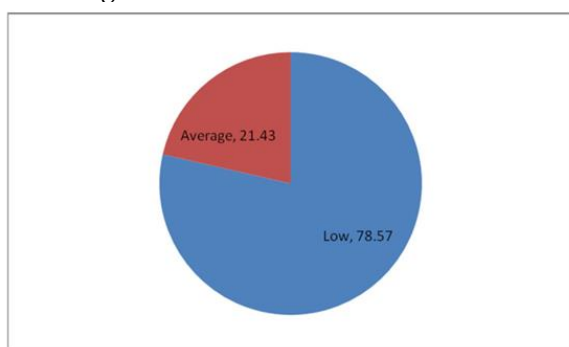


Figure 12: Lack of attitude of authorities for automation

The above figure 12 shows that 78.57% libraries have more attitude of authorities about automation, while in 21.43% libraries, authorities have no encouraging attitude.

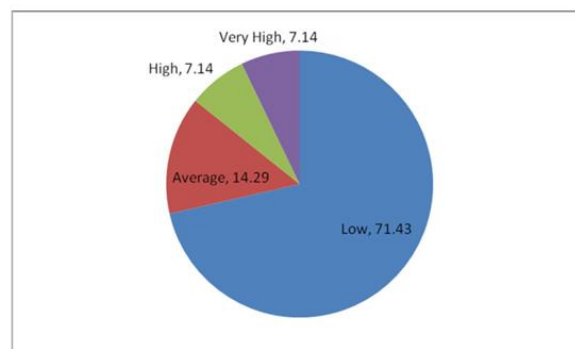


Figure 13: Computerization below/expectations

The above figure 13 shows that the highest percentage (71.43%) has been below expectations only 7.14% high, which needs more attention.

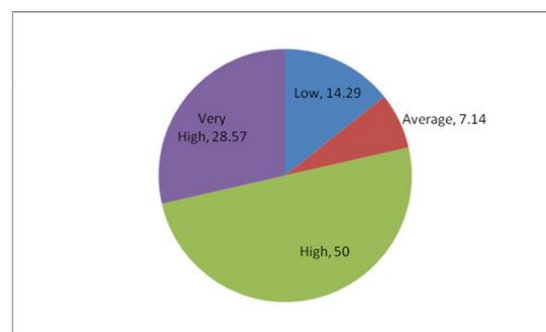


Figure 14: Technical Problems

The above figure 14 shows that technical problems are 50% high and 14.29%, which need more training to library staff.

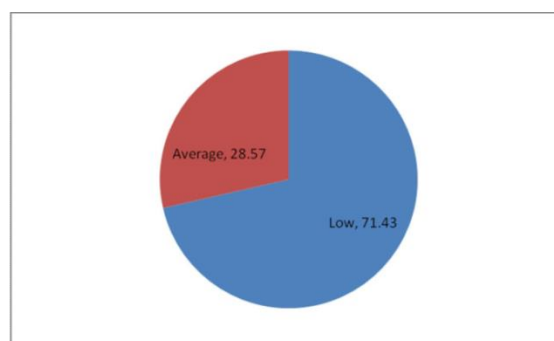


Figure 15: Software not user friendly

The above figure 15 shows that software used in college libraries have been used at low average due to their unsuitability.

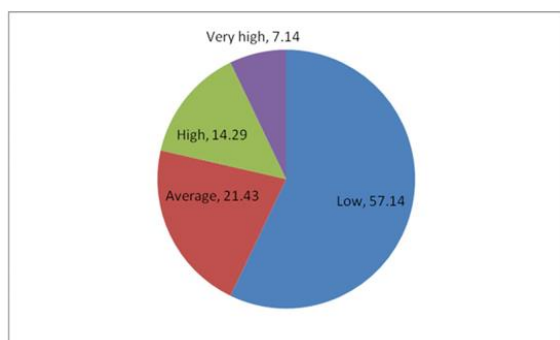


Figure 16: Lack of awareness among users

The above figure 16 shows that there 57.14% lack of awareness among users while 14.29% is high and 7.14% very high, which needs more user awareness programmes.

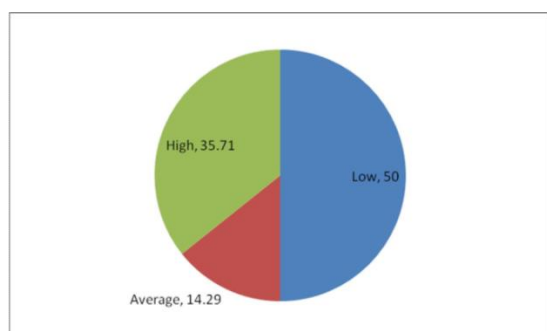


Figure 17: Standardization and incompatibility of hardware

In this process of the above investigations, the libraries of twenty Colleges Libraries were identified for the study. All Colleges are Govt. aided colleges. The data collected from 20 colleges have initiated, developed or processed automation in their libraries.

FINDINGS

About 80% libraries are facing pre-automation problems because of disinterest among authorities, librarians and staff.

The study reveals that pre-automation problems have been the lack of space (77.77%) and paucity of funds (72.2%) in libraries and (38.8%) lack of trained staff. (Table 2)

The other problem was noted that the library staff was hesitating in learning computers (22.3%). (Table 2)

It was found that few problems encountered of post automation of college libraries, i.e. lack of funds to continue automation (28.7%) lack of attitude of authorities (78.57%) libraries, technical problems (14.29%) libraries, unsuitable software (71.43%) libraries, incompatibility of hardware (50%) libraries, which were considered as serious problems. (Table 3)

CONCLUSION

Automation require many prerequisites like (i) proper planning (ii) proper building (iii) sufficient computer system (iv) Standard software (v) Trained staff (vi) Sufficient budget (vii) Minimum time to be allotted. From the study it has been found that 75% of the colleges have adopted as under process of the automation. The degree college libraries functioning in same urban and rural areas have not developed to automation process. There are many resources behind it: (1) lack of pressure of the users. (2) Non - Cooperators of the management. (3) Lack of awareness about automation among the users. (4) Lack of resources required for automation. (5) Lack of unskilled human resources in libraries. Even than few colleges have started automation work and rest are planning to start automation. It is due to government policies of online information and distribution of laptop and tablets to students in U.P. degree colleges of Uttar Pradesh.

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