

# AUTOMATION IN PUBLIC LIBRARY

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**Abstract**— The current paper is a trial to gauge the present standing and challenges that the general public libraries within the state of geographical region is facing. Libraries world over area unit quick remodeling themselves from delivering the normal library services to the provision of technology based mostly operations and services. The tremendous advancements in info communication technologies and their adoption within the gift library system have detached new windows for the libraries and users alike. On one facet wherever there's a shift within the strategies of seeking the information; there's equally powerful media and manner of knowledge dissemination on the opposite hand. the general public Library System is the real data system as a result of solely this technique permits the common info seeker to use the resources at its finish. sadly the general public library system in geographical region lacks the fundamental infrastructure to support ICT implementation and conjointly it lags behind in terms of its accessibility to the soul in rural geographical region.

## I. INTRODUCTION

The history of library automation is old enough currently. It started in early fifties within the Untied States of America.594360-327025T00T.

The landmark was the initiation of brandy project by the Library of Congress. Through out Nineteen Sixties some experiments were carried out in Asian nation in this field however terribly slenderly. Through out late seventies there have been some achievements like production of National Union Catalogue of Scientific Serials by INSDOC, production of Union Catalogue of DRDO libraries of Western Region by the Institute of Armament Technology at Pune. Then came eighties and also the whole focus of the librarians shifted towards library automation. variety of seminars were organized on the library automation and still being done thus. We graduated from straight forward library operations to specialized functions as well as networking. Currently we tend to cite digital libraries and e-journals. we tend to have return an extended manner. however we tend to area unit a rustic wherever bullock cart and cars area unit seen on an Equivalent road thus interference the quick moving traffic and those bullock carts prohibitthe speed of the cars to its own speed. Tobeat this downside there area unit solely 2 ways

that. First, replace the bullock automotivet with a car, and second, bypass the bullock cart and leave it behind. The state of library automation in our university libraries is a lot of or less an equivalent. we've got the libraries like.

## II. WHAT'S LIBRARY AUTOMATION?

All routine works and services of the library will be machine-driven through library automation. Besides in some automation software package packages there area unit provisions for article compartmentalization, abstracting etc. primarily these followings works of library area unit automated:-

- on-line public access catalogue
- Circulation
- Acquisition
- Serial management
- Intranet
- Internet
- Digital Libraries.

## III. ACTORS ACCOUNTABLE FOR AUTOMATION IN EDUCATIONAL LIBRARIES:

There area unit many reasons which may be cited for this distinction. a number of them area unit :

- perspective and awareness of the management.
- perspective and awareness of the Users Specially college.
- Resources accessible
- Non-availability of appropriate software:
- Level and ability of employees
- Geographical locations

### 1)perspective and initiative of the management:

Attitude and initiative on the a part of the management has compete major role in library automation in Indian University Libraries. The management here includes each the university management and also the professional as a secretary of the management whose task is to hold out the choices taken by the chief bodies of the university, like Syndicate, council etc. If the professional had the initiative then he was ready to win over the authorities regarding this aborning would like. In a number of the cases, the initiative conjointly came from high and also the professional was forced (or

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bypassed) to try and do it. however the simplest mix was once the initiative of each the professional and University Authorities was synergized. If there was no initiative on each the ends than there was no progress.

## **2)perspective and Initiative of the Uses**

A library is also as sensible as its readers. If the readers area unit sensible and cognizant they will force the authorities to figure towards library automation. If the readers area unit experienced the event being happening within the info technology, they need influenced the employment of computers in library to a good extent. this is often a lot of true regarding college as they area unit the individuals WHO participate in deciding process. The great examples area unit the libraries of IITs and different higher engineering academic establishments.

## **3)Resources accessible**

The third vital issue is the resources accessible with the university libraries. The resources embody each monetary as well as human resources. In most of the schools, the librarians area unit given funds just for books and journals. Some libraries don't wish to or aren't allowed the funds received for books and journals to be used for the other purpose, despite the fact that the University Grants Commission (UGC) tips allow the employment of a definite share towards such activities (In VIII set up it had been 15 August 1945 and in IX set up 10%). Most of the libraries depend upon the funds provided by the UGC underneath Inlibnet project. The distribution of the money underneath this project wasn't done logically. Massive and tiny libraries were equated at par and as a result whereas some libraries remained fund starved some weren't ready to use the funds. Before distributing funds to libraries there ought to be a survey of the need and sure tips set down. Besides this there aren't any different monetary resources accessible with the university libraries. so as to save lots of the university libraries from going more down UGC should do one thing during this direction.

Another terribly significant issue, is also a lot of serious than the monetary one, is the dearth of trained force. several of our humanities colleges haven't based mostly their curricula on the automation demand of the university libraries. a number of them area unit even eaching now a days what was designed thirty or forty years back though that has become all obsolete.

Not several library colleges manufacture a willdidate WHO can instantly go the Automation Department of a University Library and might severally work with none more coaching. The bifurcation of the humanities

colleges from libraries area unit maybe the one of the most vital reasons for that. As a result our profession became the sole profession wherever apply went so much ahead of the teaching. within the country individuals area unit talking regarding digital libraries {and we tend to} and that we}b- OPACs and we area unit teaching elementary of computers in our library colleges. this is often the sole profession wherever obtaining skilled|knowledgeable|an expert} degree doesn't need any professional coaching. are you able to imagine a doctor while not hospital coaching or Associate in Nursinging engineer while not a coaching in trade.

## **4)Non-availability of appropriate software package**

Non-availability of appropriate software package has conjointly compete a very important role. Although there area unit variety of software package accessible for library management however most of them area unit non commonplace. the most reason behind is that the majority of the software package are developed while not the assistance of a certified professional. As result there have been a stream of non-standard software package. Some of these soft ware"s are developed by massive companies like CMC however haven't been tried terribly self-made. The software package developed by establishments (for example DESIDOC, INSDOC etc.) might not be self-made as they were lacking in selling and once sales service. The professional is confused as he's not in a very position to come to a decision what to pick.

## **5) Level of ability of library employees**

The level of ability of library employees conjointly compete a important role. In our country there aren't any commonplace for level of subordinate employees to be recruited in educational libraries. There academic and skilled qualification vary from state to state. In some of the cases the library assistants area unit recruited with twelfth pass and a six months certificate in humanities whereas in Central establishments like IITs and Central Universities it's minimum graduation and degree in humanities.

The establishments having higher staff went so much ahead (though there area unit exceptions to that). The higher qualified employees was higher headed towards progressive thinking that might move the items quick. This time emphasizes the need of a uniform qualification policy for the achievement of employees in educational establishments.

## 6) Geographical Location

Geographical location of an establishment conjointly compete a really vital role. The establishments close to a underground town were benefited by the handiness of the resources. They were having higher approach to hardware and software package market and conjointly the force for knowledge entry. They were having approach to higher coaching facilities. Hyderabad is a ideal which may be cited.

## IV. Gift standing of Library Automation in University Libraries:

The real boost in library automation came from the institution of the INFLIBNET Centre. Before Inflibnet scattered efforts were being created in tutorial libraries specially in the establishments of special characters like IITs, IIMs etc. INFLIBNET evidenced a real catalyst. Inflibnet started with scratch. At that point there was no money help accessible to the University Libraries for automation. For the primary time it had been established that automation was the necessity of hour. The finances were allotted for the primary time. The standards were established concerning the info capturing. The format was finalized and therefore the Karvan started. joined estimate now a days concerning a hundred and twenty university libraries have been victimisation computers in their activities. A number of the University libraries are even establishing digital libraries not solely of already accessible digital resources however are digitizing their own literature. Concerning fifty university libraries have their websites.

The following are the areas wherever laptop are being employed now a days.

- on-line public access catalogue
- Circulation
- Acquisition
- Serial management
- computer network
- web
- CD services

### 1) on-line Public Access Catalogue (OPACs)

The problem being sweet-faced by the users in locating the document was the 1st to be targeted in the library automation. As a result the work 1st started during this direction. There was one a lot of reason for this and that was the provision of CDS/ ISIS computer code that had the power of catalogue solely. it had

been in distinction of the special libraries wherever the work 1st started on providing data services like CDsearch. Even these days this space of automation has a lot of activity than any alternative space. It has currently graduated to Web-OPAC (web primarily based on-line public access catalogues) wherever university libraries have created their databases accessible on their websites. This has eliminated the would like of installation of search computer code on the user's terminal. One potential that remains unutilized is that the use of search information for analysis purpose because the search history will give terribly helpful tools for the librarians to formulate their assortment development plans.

### 2) Circulation

Circulation is one in all the most activities of a university library or any library per say. In university libraries, however, the numbers of books issued and returned are over in special libraries. Therefore, subsequent space that was obsessed was the circulation. In a number of the libraries the quantity of books issued/returned could also be over one thousand per day. we tend to at IIT Roorkee (formerly University of Roorkee) have expertise of issue 1500 books in six operating hours. typically there wont to be a queue of over one hundred students, since the free hours for all students wont to be the same, before machine driven circulation started. Use of barcodes had created the life terribly easy thanks to value-added accuracy and speed. Besides rushing up the issue/return, printing reports, causing reminders additionally become terribly simple. Circulation information additionally provides a awfully necessary insight into the book use pattern. Librarians ought to strive to use this information for analysis and development purpose.

### 3) Acquisition

Use of computers in acquisition remains a coffee priority space. Not several libraries are victimization computers in acquisition. One reason could also be the endlessly reducing allow purchase of books. However this space desires to be reinforced. Mechanization at the stage will facilitate not solely so as process however can also be a awfully effective tool in budget management. You will portion funds to completely different departments supported a collection formula, will send department heads concerning non availability of funds, will management over

ordering and additionally utilize the info entered at this stage for technical process and OPAC.

#### **4) Serial management**

Idiosyncrasies concerned in serial management affects the utilization of computers in serial management and therefore the world isn't all right portrayed at automation situation. an extra reason is that the quality of serial management modules accessible in most of the library Management Softwares. The procedures developed by these therefore software's are so cumbersome that typically it's easier to use traditional technique instead of automation. However, this space gives terribly sensible stage for use of computers as it will facilitate chase the missing problems terribly expeditiously and provide the current awareness services and even the SDI services besides budget management.

#### **5) Computer Network**

Making the data accessible on computer network is additionally growing quality because it eliminates the necessity of putting in the computer code on the users' terminals. Users will access the catalogue through computer network or they'll notice the standing of the books issued to them through internet access. CD resources and alternative digital resources will be accessed on computer network. the sweetness is that one needn't be informed with the computer code because the internet links are accessible through the online page. Growing installation of field wide networks is additionally taking part in a positive role during this direction.

#### **6) Web**

Use of web for tutorial functions is additionally increasing day by day. A lot of and a lot of libraries are put their resources on web. web is that the medium each to access and disperse data. web has emerged as a awfully huge virtual library that has data on much each subject and in each media might or not it's text, audio or video. Libraries ought to use this facility to the most effective of their capability. they ought to give links to similar variety of libraries through websites. One excellent use are often planning of e-gates wherever user can have access to the electronic resources through a common user interface. I would like to mention that variety of free e- journals are accessible on the net. The outstanding among library and data Science are „D-Lib Magazine“, problems in science and Technology Libraries”, “Cybermetrics” etc.

#### **7) Digital Libraries:**

Digital library has recently become the bunk for librarians. within the last year most of the seminars and the conferences had „digital libraries“ as their theme. Digital libraries are often of 2 sorts i.e. digital libraries of the digital text accessible within the market like e-journals, CD databases, e-books, computer code etc. or it are often developed from the written text accessible within the library. If a library takes a choice to develop a digital library of its assortment specially theses, dissertations and recent journals, it will solve the matter of area and preservation each. However the call concerning making such call is taken to be terribly rigorously because it can prove a terribly pricey venture each in terms of cash and personnel.

#### **8) PROSPECTS**

Having talked concerning the issues and areas of applications allow us to mention future prospects. I will positively say that the items are dynamical for the sensible. Currently University authorities are realizing that there's no thanks to escape library automation. They're finding varied ways in which to finance their library automation comes. Librarians also are realizing that they'll not stay indifferent to the modification, otherwise they're going to be tagged obsolete. One space of concern is that the arts graduates being made by our library colleges it's shocking that UGC is giving responsibility of refresher courses of library science to the library science faculty and to not the libraries World Health Organization are established themselves as advanced libraries and uses the technology way ahead than the library science colleges. Existing workers is obtaining eliminate the concern of mechanization.

They are returning forward to be told and build themselves appropriate to face the challenges of the new millennium. Standardization is increasing and therefore the higher softwares are accessible.

#### **9) would like of Library Automation**

It helps to ease and contour repetitive tasks like acquisition, assortment development, storage, administration, preservation of information resources, and communication in the library among workers and users. It therefore will increase the productivity of the workers in terms of efforts, time, and services.

#### **10) edges of Library Automation**

Public library is machine-driven by coming up with, designing, and implementation. Following are some very important edges of library automation

- It provides economical access to varied information resources.
- It reduces the quantity of time and efforts to

accumulate material, take inventory, and manage the information resources.

- It eases budget administration and record keeping.
- It introduces library users to world data.
- It permits the library users to search its assortment from outside the library walls.
- It motivates the users to solve issues, produce information than simply consume it, and get equipped with data retrieval skills.
- It improves cataloging and circulation.

### 11) *Library Management computer code (LMS)*

It permits the library workers to manage information resources, inventory, circulation, and cataloging expeditiously. Library Management computer code permits users to go looking and access a desired information resources on-line. Public Library Blogs. Here are some exceptional library blogs to grasp

- Bloomsburg library ([www.bloomsburgpl.org](http://www.bloomsburgpl.org))
- Coudersport library ([www.coudersportlibrary.org](http://www.coudersportlibrary.org))
- Galeton library ([www.galetonpubliclibrary.org](http://www.galetonpubliclibrary.org))
- Digital Libraries and Repositories

The two terms are completely different within the following means

#### **NECESSITIES FOR LIBRARY AUTOMATION:**

The basic necessities for any library automation are computer hardware, personnel and finance. These four basic parts are mentioned below.

### 1) **computer code**

The success of library automation principally depends upon the character of the computer code used for the aim. The different varieties of accessible library computer code are of following sorts.

- a) In house development computer code or bespoke
- b) computer code packages developed by business agencies, organizations and establishments.
- c) Cooperative Ventures.

### 2) **Hardware**

Hardware is that the next necessary components of library automation programme variety of merchandise and makers are accessible for this purpose. The hardware configuration in the main depends upon the computer code. There are 2 varieties of PCs are accessible within the market like.

- (i) The branded PCs from acknowledged corporations like horsepower, Compaq, IBM etc.
- (ii) The assembled computer by business corporations personnel.

For running any programme together with library automation programme, trained personnel are needed. therefore the library professionals ought to be trained properly with requisite laptop information for creating the automation programme in. Some computer code package makers are giving onsite coaching to the workers at the installation.

## V. **BLESSINGS OF LIBRARY AUTOMATION**

### 1) **Improved client Service**

Automation of the library helps take a number of the work off of librarians and alternative employees members within the areas of acquisitions, cataloging and circulation, that successively permits them to higher serve their patrons. This time beyond regulation will result in a lot of programs being expedited in the library and create library employees on the market to answer reference queries and facilitate people who having hassle researching or finding the proper info.

### 2) **Cataloging enhancements**

Automated cataloging standards, like Brandy (Machine legible Cataloging), yield faster cataloging of library things.

Not solely will this enable the bibliothec longer to dedicate to rising client service, however it additionally makes the sharing of materials from location to location a lot of easier and far cheaper.

### 3) **Easier Access**

Not solely will automation of library materials create it easier to realize books, pass away additionally makes it easier to access journals and a few books on-line from a data processor or elsewhere. The automation of library collections additionally permits the library to be a lot of versatile once it involves any will increase in demand.

### 4) **Collections**

Automation of the library permits for associate degree improvement within the selection, quantity and quality of materials that square measure on the market within the library's assortment. It will additionally facilitate create removing previous, non current and digressive books and materials from the gathering, that helps keep the library's assortment a lot of efficient and easier to seek out the proper item.

### 5) **Lasting Effects**

Automation is additionally a method of making ready the gathering to become property with the ever-

increasing shift to a technology-based society, in terms of knowledge dissemination, paired with the ever-decreasing quantity of funding for libraries. Automation can facilitate libraries WHO begin to struggle and square measure forced to get off employees. change to an automatic system permits libraries to feature on options once they become on the market in the future, instead of getting to try to to a complete overhaul of their collections and cataloging strategies.

## VI. ISSUES FOR AUTOMATION

There square measure several inherent issues related to library automation programme. the issues is summarized as below.

- Initial investment for automation programme is extremely high.
- Library employees has to endure intensive coaching on automation.
- The professionals square measure at first psychologically derived.
- Alternative departments of the organizations ought to be systematic for victorious running of the programme.
- Retrospective conversion of information for giant libraries.
- Revenant expenditures wants to be bear absolutely approved by the authority.
- Regular update of the software package package.

### FINDINGS:

- It was seen that solely ten.53% (2) Engineering faculty libraries were totally machine-controlled, whereas 36.84 nada (7) were partly machine-controlled, and 52.63 nada (10) weren't machine-controlled.
- In nineteen engineering faculty libraries, it absolutely was found that fifty seven.89 nada (11) of librarians had Master degree in library .wherever as forty two.11 % (8) had Post graduate credential in laptop Application with M.Lib.Isc
- It shows that out of nineteen faculty libraries solely five.26 nada (01) has highest no. of reading materials and fifteen.78% (03) has lowest no. of reading materials.
- Majority of the Engineering faculty libraries have Server System , Client/computer work station CD/CDR Drives.77.78%(7) have DVD/DVDR Drives ,Barcode Reader Printers.66.67%(6) have UPS.33.33% have Barcode Printer & scanner. Only 22.22 % ( 2) have matrix Printer
- The machine-controlled libraries were found to be victimization Software"s that were on the market in native Market and were hardly "Standard".
- 2 in style modules viz; Circulation & Cataloguing were in use altogether the libraries that were machine-

controlled.

- All (100%) the libraries were taking recourse to Internet services for access to INDEST syndicate and few sixty six.67 % ( 6) were victimization it for E-Mail browsing.
- All (100%) of the libraries were victimization LAN mode of affiliation. wherever MAN & WAN weren't use in anyplace.
- All (100%) machine-controlled libraries weren't having grant from any national network.
- It shows that out of nine establishments solely one has membership of INFLIBNET
- It is seen that majority of the Engineering faculty libraries (66.67%) provide On-line services, net search and electronic information service search.
- It shows that all libraries visaged Pre automation issues of lack of area also as less interest of authority to upgrade IT ability of employees. On the opposite hand, in an exceedingly few libraries, lack of interest of employees in learning IT applications is that the downside
- It is found that all libraries feel that automation has inflated productivity in terms of labor output and data retrieval and helped in extending library services. The libraries have, however, divided opinions regarding the opposite prospects of automation like economy in expenditure, increased the status of the library and inflated user satisfaction.

## VII. SUGGESTION:

- There is a want to computerize all the remaining (52.63%) libraries in future for providing higher and economical services to readers.
- Vacant post of technical employees wants to be stuffed up and new posts ought to be created as per demand.
- processed systems square measure dynamic instead of static. thus it's necessary in designing for automation, that hardware and software package be selected that is sufficiently versatile to meet each the current and future wants. The hardware chosen should have the capability to handle growth of the system for a minimum of 3 to 5 years. The software package chosen should even be versatile enough to accommodate additions and/ or changes to the system as want arises (Johnson,1989).
- bibliothec ought to conduct a survey of totally different machine-controlled libraries to exchange experiences before choosing software package for his or her library.
- alternative of the library software package should be rigorously thought of with stress on the ability to

meet specific library wants

- bibliothec ought to value every module before choice of library software package, through receiving a demo of the software package.

- Vendors ought to be scrutinized before choice and will be created to sign associate degree agreement on the regular coupling and maintenance of the software package purchased from them.

- There is the want for coaching and preparation of librarians in the use of info technology. Information acquisition is additionally essential for all librarians WHO are going to be living and dealing within the twenty first century.

- laptop coaching ought to be provided and created obligatory for all the library employees. This mode of coaching programme can facilitate the employees to observe and assimilate a lot of. At the same time, it'll additionally enable them to appear when day -to-day work.

- IT primarily based LIS education at B.L.I.S.C & M.L.I.S.C. Level is should.

- stress ought to be on shopping for normal library management s/w like LIBSYS, ALICE, SOUL etc. as they're found to be a lot of satisfactory. Additionally this software package permits information entry in normal kind like CCF, MARC etc.

- User education program on rising library technologies could be introduced to the library people particularly freshmen.

- User education ought to be provided to create the user aware of the library assortment also because these services. User ought to even be given coaching in order that he will handle the processed system severally.

Systematic utilization and categorization of this budget according to the wants of the library is additionally important.

- Librarians ought to win over directors at the upper level, within the importance of the employment of computers, to develop level of awareness at the administrators' level enough to encourage them to use the pc in libraries and to win over officers that automation can improve the effectiveness {of info|of data|of knowledge} services and access to information that they have for higher cognitive process.

## IX. CONCLUSION

Now daily Library Automation has become the thrill word in library profession and has become a clean necessity for any libraries. an automatic library will give higher library services to their users and will maintain the library a lot of

properly that a manual library can't do. The record keeping activities and numerous report generation becomes terribly straightforward in an automatic library system. however the success of any library automation programme depends upon its correct designing and execution. Therefore library professionals ought to take right initiatives in right direction.

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