CHAPTER: 6
MAJOR FINDINGS, SUGGESTIONS AND DIRECTIONS FOR FUTURE RESEARCH

6.1 Introduction

Information Technology (IT) is one of the fastest growing industries in the world. The pace of development in IT has been tremendous. In the recent years, significant changes have taken place in computer hardware and software. Graphic User Interface (GUI), sophisticated RDBMs packages and software development tools, artificial intelligence, open integrated systems leading to cooperative processing, internet technology are some of the features of the current computer technology.

Along with the development in computer hardware and software, the communications technology has also made tremendous progress. The satellite communications networks have changed the way in which people and organizations interact with one another. The popularity and universality of the internet is a prominent example in this regard. The space and time barriers no longer exist and, as a result, speed, which was earlier a critical parameter, will no longer be so. It is, therefore, natural that communications network has become a part of routine set up of any business organization.

Over the years, the communications infrastructure in the country has improved considerably. Owing to the competition amongst the various service providers, the quality and availability of good communications facilities has gone up.

Information Technology (IT) is spreading rapidly in our country. It is expected that India will become an IT superpower soon. Everyday a large number of advertisements appear in the newspapers for Information Technology professionals and also for persons in other professions who have a good knowledge of IT. A decision has been taken by many universities to introduce IT as a compulsory subject for all undergraduate students. It is thus essential for all students to be conversant with IT and its applications.

Information Technology is a rapidly advancing technology. In a university degree programme it is important to emphasize reasonably stable fundamental ideas on which this technology is built and evolves. The attempt of this exploration is to take this approach and not to emphasize routine operations of computers which is the approach taken in many
user-oriented libraries. This study tries to explain why certain devices/applications are
designed the way they are and how they work.

Information Technology is primarily concerned with acquisition, storage, processing and
organization of data. It is also concerned with widely disseminating organized and
processed data for use by people and organizations. In early days of IT, data mainly meant
numbers and text. This has changed now. Now data in all forms numbers, text, graphics,
audio and video-are processed by computers. Thus we need to understand how to acquire
all these types of data, as well as how to organize, store and process them.

Communications refers to the transfer of data from one computer to another.
Communications is a major technology that requires special expertise in both the network
and related hardware and software that controls it. The phrase computer communication
system covers everything from the transfer of data from PCs to a mainframe computer in
another country via satellite or vice versa.

It encompasses any combination of equipment (hardware) that facilitates the acquisition,
creation, modification, retrieval, storage and transmission of information using electronic
media. Thus, IT includes both computing and communications technology. Various aspects
of IT are hardware, software, connectivity, telecommunications, science and human-
computer interface.

The aim of present study was to study the use/status of ICT in private University libraries
at various level to know the availability of ICT resources/ infrastructures in Private
University libraries, to know availability of hardware, which type of online/ e-journals/e
magazines/e database subscribed; their budget and ICT resources; to know various areas of
application of ICT, to identify the quality of ICT based library and information services
provided by users of Private University libraries in Gujarat state.

For this, a questionnaire was constructed by the researcher with the help of her Guide and
the prepared questionnaires were sent to libraries of 19 Private University of Gujarat state
and information regarding the ICT in libraries was obtained.

The information collected from Private University libraries analyzed. Analysis was
tabulated in 38 tables. Findings extracted from this analysis are presented here.
6.2 Major Findings

Out of 20 private Universities in Universities have responded. The findings extracted from analysis are as under:

(1) Out of the 14 private Universities under study, one is Yoga University; one University is providing Management courses only. One university provides MBA (Petroleum) with Arts, Science Engg. & Technology. Only three universities provide Arts courses with other courses. Eight universities provide science courses with other courses. Only two universities provide Medical courses. While majority (10 out of 14) universities provide Engg. & Technology courses. Six universities provide Commerce courses with other courses. Hence, it can be said that, there is less interest in Arts courses while majority (10 out of 14) universities run Engineering and Technology courses. In this way, rush in Engineering and Technology is seen more.

(2) Out of total 14 private universities 7 universities have more than 10 years' experience (existence), 4 universities have five to 10 years experience, Remaining three universities have experience of one to five years. So it can be said that majority of private universities have experience of ten to fifteen years in teaching.

(3) Regarding area of university library, three university libraries have more than 800 sq. meters area. Two Libraries has 600 sq meter. Four libraries have four hundred to 500 sq. meter areas. Four libraries have 100 to 300 sq. meters' area while remaining one library has less area for accommodation. Library is heart of any academic institute. So sufficient space should be provided to library so that students can come and read their reading material.

(4) Out of the 14 Librarians librarian (1) has not responded. (2) Librarian is Ph.D. (1) Librarian is following Ph.D. (Running), 4 Librarians have passed M.Phil. The remaining librarians have qualified with Masters Degree in library Science among one librarian is gold medalist (Kadi). So it can be said that majority of librarians are with post-graduate degree in library science.

(5) Out of the total 14 universities under study, 2 librarians have not responded. One librarian has experience up to five years; one librarian has experience of 5 – 10 ten years. Five librarians have experience of 10 to 15 years and remaining five
librarians have experience of more than fifteen years. So it can be said that majority of librarians are well experienced in private universities.

(6) Out of 14 Universities, 3 Universities have no librarian. CHARUSAT, Changa has only one librarian and one peon. Kadi Sarva Vishwavidyalaya has 1 Librarian only. The remaining University are fullflushed with staff.

(7) Library Timings of private universities are almost same with minor change except Parul University, Baroda which remains open for 12 hours. On Saturdays also timings are almost same in all private university libraries except Anant National University, Ahmedabad which remains closed on 1st and 3rd Saturdays. All libraries under consideration remain closed on Sundays.

(8) Membership of students in private university libraries varies from 1000 to 6000+ except Parul University library which possess 7000+ member students while Lakulish Yoga University Library has only 199 member students. Membership of teaching staff also varies from 130 to 350 in private university libraries except Parul University, Baroda which possesses 2000+ teaching staff. Membership of libraries of teaching staff is less in Anant National University, Ahmedabad (40), Lakulish Yoga University (12) and Kadi Sarva Vishwa Vidyalaya, Gandhinagar (39)

Membership of Ph.D scholars in libraries also varies from 20 to 90 except Lakulish Yoga University, Rai University Ahmedabad, R. K. University Rajkot and Dhirubhai Ambani Institutue of Information and Commu. Technology, Ahmedabad which possess limited five Ph.D. scholars. Charusat University, Changa has not responded in terms of library membership. GLS University, Ahmedabad possesses 90 Ph.D. Scholars.

(9) Most of the private university libraries issue 2 to 5 books for 14 days to students, 1 to 15 books for 50 to 180 days to teaching staff, 1 to 15 books for 30 to 180 days to admin. Staff and 2 to 15 books for 21 to 45 days to Ph.D. scholars.
Lakulish Yoga University library does not limit in days to teaching staff, admin. Staff and Ph.D. scholars.
Nirma University, Ahmedabad has not responded regarding issuing of books.
Charusat University, Changa and Parul University, Baroda issue bounded periodicals and current periodicals to their readers.
GLS University, Ahmedabad, Kadi Sarva Vishwavidyalaya Gandhinagar issue only bound periodicals to readers.

Rai Universtity, Ahmedabad issues current periodicals to their readers.

(10) Most of the private university libraries use computerized system for issuing reading materials to their users, except Anant National University Ahmedabad, Lakulish Yoga University, Ahmedabad and GLS University, Ahmedabad which use Register and card system the latter university also uses computerized system already with traditional register and card system.

(11) Majority of the private university libraries have one reading room facility available with average 50 to 100 seats except Lakulish Yoga University library which accommodators only 25 seats. Ahmedabad University Navrangpura and Rai University Ahmedabad accommodate 500 to 600 seats. Parul University Baroda and Nirma University Ahmedabad accommodate 350 and 560 seats respectively.

(12) Out of the 14 private university libraries only Nirma University library runs on UGC Grant and from allocation from Trust. Kadi Sarva Vishvavidyalaya, Gandhinagar and PDP University Gandhinagar run on University Grant. Rest eleven university libraries adhere on allocation from Trust.

(13) Regarding traditional resources Anant National University, Kadi Sara Vishwavidyalaa, INDUS University and C.U.Shah University have Rs.1 - 5 lakhs budget allocation. R. K. University, Rajkot and Charusat University, Changa have budget allocation of 6 - 10 lakhs. Ahmedabad University and GLS University have allocation of 16-20 lakhs. Ahmedabad University, and Parul University, Vaghodia, PDU University Gandhinagar and Nirma University, Ahmedabad have budget allocation of 21-25 lakhs. Only Dhirubhai Ambani University, Gandhinagar has budget allocation of more than 25 lakhs. Lakulish Yoga University and Rai University have no specification of budget allocation.

Regarding ICT resources Ahmedabad University, Anant National University, Charusat university, Changa, INDUS University and C.U.Shah university have budget allocation of Rs.1-5 lakhs. GLS University and R.K. University, Rajkot have budget allocation of Rs.6-10 lakhs. Parul University, Vaghodia (Vadodara), Nirma University, Ahmedabad and Dhirubhai University have budget allocation of
Rs. 21-25 lakhs. Only PDP University has budget allocation of more than Rs.25 lakhs.

Regarding other resources Ahmedabad University, Anant National University, Parul University Vadodara INDUS university, PDP University, Nirma University and C.U.Shah University have budget allocation of Rs.1 to 5 lakhs. R. K. University, Rajkot and Dhirubhai Ambani University have budget allocation of Rs.6-10 lakhs. The other universities have not specified.

While comparing the reading material of private university libraries it is seen that Nirma University Ahmedabad stands first in all type of reading material. R. K. University, Rajkot is second in collection of books. Dhirubhai Ambani University, Gandhinagar, Ahmedabad University, Ahmedabad and Parul University, Vadodara have equal no. of books. INDUS University, C.U.Shah University, Wadhwan, GLS University and Rai University have equal no of books. (25000 to 27000+). Rest private University libraries have 2525 to 8800 +books.

Regarding Journals and magazines Nirma University stands first with 664 magazines and journals, 12592 bound volumes and 2565 project reports. Only five University libraries have reference sources varying from 60 to 325. Parul University, Vadodara stands first with reference to Thesis and Dissertations (325).

Only two private University libraries have research papers.

Only one university library has Govt. publications and others News- papers.

GLS University has maximum 7199+ e-books. Nirma University and Dhirubhai Ambani Institute have equal (5000+) e-books And Indus university stands third with 3057 e-books. PDP University has 2010 e-books. Rest Universities library have 100 to 200 e-books.

Dhirubhai Ambani Institute stands first with reference to e-journals. (5000+). PDP University has 3724 e-journals. Nirma University has maximum (12.991) e-magazines.

Nine university libraries have e-Databases.

C.U.Shah University and Dhrubhai Ambani Institute have maximum CD/DVD (4500 and 3500+ respectively). Parul University has 2913+ CD/DVD. Indus
University and PDP University have 1400 to 1500 CD/DVD. Rest university libraries have 600 to 800 CD/DVD.

Only four university librarians have Audio-Video cassette. One university has e-articles, e-projects and e-thesis. Two university libraries have video. Two university libraries have other e-resources like e-link and newspapers.

While comparing Table 16 it is outstanding that out of 14 private university libraries majority (seven) university libraries subscribe DELNET. Three libraries subscribe ELSEVIER, 5 libraries subscribe FBSCO, Six libraries subscribes IEEE, Three subscribe J-Gate, 2 Libraries subscribe BENOTHEM, 5 libraries subscribe NPTEL.

Rai University is linked with E-link which is open access. INDUS University also subscribes NDL (National Digital library by NHR)

All University libraries provide circulation service and reservation of book except Ahmedabad University and Lakulish Yoga University.

Book bank services are provided by seven university libraries. Current content service is provided by six university libraries. Abstracting services is provided by only three university libraries. SDI service is provided by seven university libraries. Orientation programmes to users is provided by nine university libraries. Display of new arrival is provided by all university libraries except Ahmedabad University. Inter University Loan is provided by eight university libraries. Bibliography is only provided by Nirma University. Newspaper clipping is provided by eight university libraries. Indexing service is provided by three university libraries. CAS service is provided by ten university libraries. INDUS University provides service of printing. Nirma University and R. K. University library, Rajkot provide all traditional services to their users.

All the private university libraries under study use DDC for classification of books.

All the university libraries under study uses OPAC code for cataloguing.

All the university libraries under study are fully computerized except Lakulish Yoga University and Rai University which are partly computerized.

Seven out of 14 university libraries under study use SOUL software in library automation. Ahmadabad University, PDP University and Dhirubhai Ambani Institute use KOHA software. Anant National University uses Excel, Kadi Sarva
Vishvavidyalaya uses Manual, and Rai University uses New General Library software while Nirma university library uses D'space software in library automation.

(22) All the university libraries under study have Barcode except Anant National University. RFID is available in 5 universities, virus defenses in 2 Universities, Biometric in one university, Firewalls in 4 universities, security monitor in one university, and Back files in 10 universities.

(23) Out of the 14 University libraries under study, six university libraries use SOUL software four use KOHA software while Anant National University, Kadi Sarva University and Rai University use Exel, personal and New General Library software respectively.

Out of 14 University libraries, two University use DOS, nine universities use WINDOWS and three university use LINUX operating system.

Out of 14 Universities, thirteen universities use MS-word and two universities use word-perfect processing system. Thirteen universities use MS Excel as spread sheet software.

Out of fourteen universities, give universities use Adobe page maker and three universities Vantura as DTP software only five universities have answered that they use Photoshop as Multimedia software.

Thirteen university libraries use Power Point and in addition two university libraries use Corel Draw as Graphic software.

Lakulish Yoga University, Ahmedabad did not respond against any question.

(24) While asking to respondents whether their library used open source (Digital) repository or Institutional repository software nine (64.29%) respondents responded in favor of "Yes" while 2 (14.29%) respondents denied. Three (21.40%) respondents did not answer or did not know.

(25) Seven out of 14 university libraries have D'space as open source repository. R. K. universities; Rajkot has E-prints while Anant National University and C. U. Shah University have any other software for open source repository.

(26) While asking whether your library has independent library network, out of 14 university libraries under study 7 (50%) respondents "yes". Two university libraries said "No" while 5 (35.7%) respondents did not answer.
While examining library Network membership seven universities are connected with INFLIBNET, three with INTRANET five with DELNET, two with ADINET, Anant National University is connected with any other Network, while Kadi Sarva Vishwavidyalaya is connected with British Library.

While asking whether they had internet in library, out of 14 university libraries thirteen (92.88%) said in favour of "Yes" while only one (7.12%) university denied.

While asking whether Wi-Fi facility available in the library, 13 (92.88%) out of 14 university libraries said "yes" while one (7.12%) university library said "No".

Eleven out of 14 university libraries under study have BSNL Internet services available, two have Reliance and two have TATA Internet service available.

While asking that does the library have its own website/Homepage/Blog eleven out of fourteen (78.57%) private university libraries said "Yes" while 3 (21.43%) university said "No".

Out of total 14 university libraries under study, six have their own website, thirteen have OPAC, twelve have link to E-library, ten have documentation, nine have self-help services, ten provide Notice board Information service, seven do not provide any and Ahmedabad University provides content service to their users.

While examining availability of ICT, all private University libraries have computer and are all connected to Internet.

Only 10 University libraries have C.D. Drive, Server, 7 University Libraries have modem; three University Libraries have Audio-Video Cassettes. 5 private libraries have CD/DVD Floppies, 7 Universities have Photo copier, 12 University libraries have printers, 9 universities have scanner, 11 universities have Telephone.

Only one university has Fax machine, TV/LCD/LED and Laptop.

11 university libraries have CCTV camera and 8 university libraries have RFID and 7 university libraries have Wi-Fi Router and 3 University Libraries have speakers/Headphones.

It is noted that, C. U. Shah University is prosperous with A. V. Cassettes. Parul University INDUS University and Dhirubhai Ambani Institute have sufficient number of CD/DVD/Floppies and CD Drive.

Parul University have 29 computers, and PDP University have 25 computers. Rest have 2 to 15 computers.
Lakulish Yoga University has not responded to any questions.

(34) Eleven out of 14 university libraries provide Data processing, twelve have Acquisition by ICT, thirteen have circulation, ten have cataloguing, ten have serial control, twelve have OPAC and eleven university libraries have communication and Management activity by ICT.

(35) While asking about availability of ICT-based services to private University libraries Inter University loan is given by 11 universities out of total 14 universities.
Online reservation service is given by 11 universities.
OPAC service is given by 12 Universities. Two universities provide E-database. E-books service is given 11 universities. E-Journals are provided by 11 universities. E-mail Alert service is provided by 11 universities. Current content is provided by 9 Universities only Nirma University provided Indexing and Abstracting service.
CAS is provided by 10 universities. SDI is provided by only seven universities. 8 Universities provide Document Delivery service and CD ROM searching. On line searching is provided by all 13 private University libraries.
Online Networking is provided by 10 Universities.
Only nine private University libraries have Photocopier, Scanner.
11 University libraries provide Document printing service.
9 University libraries provide online Information service.
8 University libraries provide Newspaper clipping Scanning service.
In fact only few private University libraries like Nirma University. Provide all ICT based services to their users.
Lakulish Yoga University did not respond to any question.

(37) While asking about facilities by ICT than the traditional one, 13 out of in university agree that it is faster, eight agree that it is error free, eleven agree that it is cost effective, 13 agree that it saves time, consistent and gives satisfaction to users.

(38) While asking about problems experienced by private University Libraries majority of University had no problems.
Only few universities indicated that they had problem like lack of planning, lack of Management support (One University), Lack of trained ICT staff (two Universities) Lack of willingness of staff (one university), Lack of consultancy service for ICT (two universities), Lack of less expensive standard software (two universities)
Inadequate Hardware (One university), Lack of Training facility (four universities),
Taken more time for Retro-conversation & RFID/Bar-coding (two universities),
Lack of Awareness/ Hesitation in Users ICT (four universities), Low priority to ICT
(three universities), Lack of control over library staff (two Universities), Lack of
motivation (three universities), Vacant post of Library and staff (four universities) and
frequently change in ICT (Five universities)
C.U. Shah University and Anant National University indicated more problems in
implementation of ICT (nine problems). Kadi Sarva Vishwavidyalaya has indicated
11 problems.
Lakulish Yoga University indicated that it was lack of planning in implementation
of ICT to users.
While asking response regarding statement : user prefer to search electronic
research before they do a manual print-version 6 university libraries were strongly
agree 7 were agree, one did not know. Regarding statement user require orientation
to make the maximum use of ICT based, 8 university libraries were strongly agreed,
5 were agree, one did not know.
While asking response regarding statement ICT based Information Services have
positive effect thus improve the image of library, 9 university libraries were strongly agreed, 4 were agreeing, one did not know.
While asking response regarding statement staff is require to undergo training in
ICT periodically to make optimum use of ICT, 8 university libraries were strongly
agree, 5 agree, one did not know.

6.3 **Suggestions**
1. Private Universities should provide sufficient area for library so that users can go
   and read material easily.
2. Ph.D. degree must the qualification for librarian, so that qualified librarians can
   manage the libraries in better manner.
3. Experience of librarian is a pre-requisite, because experienced librarians can give
   their share, their experience in managing the libraries with better way.
4. Libraries should remain open for more hours, so that users can take benefit of
   library.
5. Libraries should provide more books for more time period so that, users can read the reading material more deeply.
6. Library should be computerized so that they can use modern method instead of traditional method.
7. Libraries should accommodate more seats for reading to their users so that more students can seat and read their reading material.
8. Libraries should be financed from all sources, so that libraries can purchase more ICT appliances.
9. Libraries should purchase more books and other reading material so that users can read more books for bringing up their knowledge.
10. This is era of information Technology. So libraries should provide more e-sources for their users.
11. Libraries should provide online journals/magazines/e-database for their users.
12. Libraries should provide all traditional services to their users.
13. Libraries should use latest and more practiced code for classification and cataloging.
14. Libraries should use latest software for their users.
15. Libraries should take all pre-cautions for protection of their reading material.
16. Maximum use of software should be there in libraries so that users can take its benefit.
17. Libraries should use more open source repository.
18. Libraries should subscribe with more sources so that their users can use if widely.
19. Libraries should be connected with internet so that their users can use it to get information from other sources.
20. Libraries should provide Wi-Fi facility to their users.
21. Libraries should subscribe with more providers for their internal services.
22. Libraries should provide more information services to their users.
23. Libraries should purchase and provide more ICT appliances to their users.
24. All ICT services should be provided to their users.
25. Libraries should provide all housekeeping activities by ICT to their users.
26. Libraries should provide more ICT based services to their users.
27. ICT services have improvised over traditional practices, so base of ICT should be increased for their users.
28. Libraries and their management should try to minimize their problems in utilizing ICT sources.
29. Comparison of ICT over traditional system shows superiority of ICT over traditional system. So libraries should use more ICT in their day to day working.

6.4 Suggestions for Further Research

ICT is a modern as well as an essential topic as it is worked in each and every fold of life. The researcher has explored on use of ICT in Private Universities of Gujarat State. The subject topic is so wide that further research work can be explored on other aspects of ICT. Following are some research topics on which future researchers can explore:

1. Use of ICT in Government and Grant-in-aid University libraries of Gujarat State.
2. Comparison of use of ICT in Grant-in-aid, University libraries and self financed university libraries.
3. Comparison of use of ICT in university libraries of Gujarat state and any Other state
4. Need of further Budget allocation and Increase in ICT.
5. How Expansion of ICT use can be made?
6. Satisfaction of users in terms of ICT use.
7. Users study in terms of ICT use.

6.5 Conclusion

In this way, the research was aimed at to study the use/status of ICT in Private University libraries. It can be concluded that use of ICT in private university libraries is satisfactory in spite of limited allocation of ICT in libraries. In fact, advent of ICT in university libraries has passed two decades, but still some university libraries adhere on traditional manual methods in their day to day work due to less emphasis of the management on ICT. Anyhow, it is a collective issue and all the concern persons should think over on it so that libraries can further march forward step to step with the world. It is now right time to think over the subject again when horizon of ICT is reaching to sky.
6.6 Testing of Objective

1. To study the Use/status of Information and Communication Technology (ICT) in Private University Libraries at various level/section

Out of the 14 private Universities under study, one is Yoga University; one University is providing Management courses only. One university provides MBA (Petroleum) with Arts, Science Engg. & Technology. Only three universities provide Arts courses with other courses. Eight universities provide science courses with other courses. Only two universities provide Medical courses. While majority (10 out of 14) universities provide Engg. & Technology courses.

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Regarding area of university library, three university libraries have more than 800 sq. meters area. Two Libraries has 600 sq meters. Four libraries have four hundred to 500 sq. meter areas. Four libraries have 100 to 300 sq. meters' area while remaining one library has less area for accommodation. Library is heart of any academic institute. So sufficient space should be provided to library so that students can come and read their reading material.

2. To know the availability of Information and Communication Technology resources/infrastructures in the Private University libraries.

Majority of the private university libraries have one reading room facility available with average 50 to 100 seats except Lakulish Yoga University library which accommodators only 25 seats. Ahmedabad University Navrangpura and Rai University Ahmedabad accommodate 500 to 600 seats. Parul University Baroda and Nirma University Ahmedabad accommodate 350 and 560 seats respectively.
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Regarding Journals and magazines Nirma University stands first with 664 magazines and journals, 12592 bound volumes and 2565 project reports.

Only five University libraries have reference sources varying from 60 to 325.

Parul University, Vadodara stands first with reference to Thesis and Dissertations (325).

Only two private University libraries have research papers.

Only one university library has Govt. publications and others News- papers.

3. To know about hardware and software available and used in the Private University libraries in the Gujarat State.

Seven out of 14 university libraries under study use SOUL software in library automation. Ahmedabad University, PDP University and Dhirubhai Ambani Institute use KOHA software. Anant National University uses Excel, Kadi Sarva Vishvavidyalaya uses Manual, Rai University uses New General Library software while Nirma university library uses D’space software in library automation.

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Thirteen university libraries use Power Point and in addition two university libraries use Corel Draw as Graphic software. Lakulish Yoga University, Ahmedabad did not respond against any question.

4. To know about which type of Online/E-Journals/E-Magazines/E-Databases Subscribed or available in the Private University libraries.

While comparing the reading material of private university libraries it is seen that Nirma University Ahmedabad stands first in all type of reading material. R. K. University, Rajkot is second in collection of books. Dhirubhai Ambani University, Gandhinagar, Ahmedabad University, Ahmedabad and Parul University, Vadodara have equal no. of books. INDUS University, C.U.Shah University, Wadhwan, GLS University and Rai University have equal no of books. (25000 to 27000+). Rest private University libraries have 2525 to 8800+ books.

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5. To know about those Private University libraries what is the actual budget spent in Rs. for ICT Resources in last/present year.

Out of the 14 private university libraries only Nirma University library runs on UGC Grant and from allocation from Trust. Kadi Sarva Vishvavidyalaya, Gandhinagar and PDP University Gandhinagar run on University Grant. Rest eleven university libraries adhere on allocation from Trust.

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Regarding other resources Ahmedabad University, Anant National University, Parul University Vadodara, INDUS University, PDP University, Nirma University and C.U.Shah University have budget allocation of Rs.1 to 5 lakhs. R. K. University, Rajkot and
Dhirubhai Ambani University have budget allocation of Rs.6-10 lakhs. The other universities have not specified.

6. To know various areas of application of information and communication technology in the Private University libraries. i.e. Housing Keeping Jobs, OPAC, CAS, SDI, Online Searching, CD-ROM Search, Internet search etc

Out of total 14 university libraries under study, six have their own website, thirteen have OPAC, twelve have link to E-library, ten have documentation, nine have self-help services, ten provide Notice board Information service, seven do not provide any and Ahmedabad University provides content service to their users.

While examining availability of ICT, all private University libraries have computer and are all connected to Internet.

Only 10 University libraries have C.D. Drive, Server, 7 University Libraries have modem; three University Libraries have Audio-Video Cassettes. 5 private libraries have CD/DVD Floppies, 7 Universities have Photo copier, 12 University libraries have printers, 9 universities have scanner, 11 universities have Telephone.

Only one university has Fax machine, TV/LCD/LED and Laptop.

11 university libraries have CCTV camera and 8 university libraries have RFID and 7 university libraries have Wi-Fi Router and 3 University Libraries have speakers/Headphones.

It is noted that, C. U. Shah University is prosperous with A. V. Cassettes. Parul University INDUS University and Dhirubhai Ambani Institute have sufficient number of CD/DVD/Floppies and CD Drive.

Parul University has 29 computers, and PDP University have 25 computers. Rest has 2 to 15 computers. Lakulish Yoga University has not responded to any questions.

Eleven out of 14 university libraries provide Data processing, twelve have Acquisition by ICT, thirteen have circulation, ten have cataloguing, ten have serial control, twelve have OPAC and eleven university, libraries have communication and Management activity by ICT

7. To identify the quality of ICT based library and information services provided to the users by Private University libraries in Gujarat State
Only few universities indicated that they had problem like lack of planning, lack of Management support (One University), Lack of trained ICT staff (two Universities) Lack of willingness of staff (one university), Lack of consultancy service for ICT (two universities), Lack of less expensive standard software (two universities) Inadequate Hardware (One university), Lack of Training facility (four universities), Taken more time for Retro-conversation & RFID/Bar-codind (two universities), Lack of Awareness/ Hesitation in Users ICT (four universities), Low priority to ICT (three universities), Lack of control over library staff (two Universities), Lack of motivation (three universities),Vacant post of Library and staff (four universities) and frequently change in ICT (Five universities)

C.U. Shah University and Anant National University indicated more problems in implementation of ICT (nine problems). Kadi Sarva Vishwavidyalaya has indicated 11 problems.

Lakulish Yoga University indicated that it was lack of planning in implementation of ICT to users.

While asking response regarding statement : user prefer to search electronic research before they do a manual print-version 6 university libraries were strongly agree 7 were agree, one did not know. Regarding statement user require orientation to make the maximum use of ICT based, 8 university libraries were strongly agreed, 5 were agree, one did not know.

While asking response regarding statement ICT based Information Services have positive effect thus improve the image of library, 9 university libraries were strongly agreed, 4 were agreeing, one did not know.

While asking response regarding statement staff is require to undergo training in ICT periodically to make optimum use of ICT, 8 university libraries were strongly agree, 5 agree, one did not know.