CHAPTER-8

FINDINGS, SUGGESTIONS AND

CONCLUSIONS

Chapter-8 : Findings, Suggestions & Conclusions 483-499

8.1: Introduction

8.2: Findings

8.3: Suggestions

8.4: Conclusion
8.1: Introduction

Researcher has taken the grant-in-aid university libraries of Gujarat state for his research. Though there is a numerous universities in Gujarat; researcher have taken grant-in-aid universities only as he wish to give full satisfaction of his work with selecting such government granted universities. Researcher has select his subject in broad sense as "A Contribution of Information and Communication Technology ICT in the development of grant-in-aid university libraries of Gujarat: A study", so he has given a limitation to work out his research for grant-in-aid university library only. ICT has many developing aspects to contribute in such an academic libraries of grant-in-aid universities of Gujarat. Researcher has given waitage herewith to the major findings and suggestions which is purely related with the ICT tools and techniques.

The filled questionnaire received from the librarians of grant-in-aid university library, which is really fruitful for the researcher as all the librarians has filled the maximum questions and provide the information satisfactory as asked by the researcher.

Researcher has mentioned the views and findings from the chapter-7 in which researcher has analyzed the fact full information from the filled questionnaire provided by the qualified librarian/in charge librarian of the grant-in-aid universities of Gujarat.

8.2: Findings

The researcher has found the below mentioned points from the questionnaire responded (100%) by the eight grant-in-aid university libraries of Gujarat state.

1. Researcher has opt the grant-in-aid university libraries of Gujarat for research work; out of that eight university libraries; under mentioned three libraries are
famous with the other relevant name where as other five university libraries are famous with the name of university.

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<tr>
<th>Sr.</th>
<th>Name of the university</th>
<th>Name of Library</th>
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<tbody>
<tr>
<td>1</td>
<td>M.S. University-Vadodara</td>
<td>Hansa Mehta Library</td>
</tr>
<tr>
<td>2</td>
<td>S.P. University-V.V. Nagar</td>
<td>Bhaikaka Library</td>
</tr>
<tr>
<td>3</td>
<td>Hemchandracharya North Gujarat University-Patan</td>
<td>Patel Shivabhai Umedbhai Library</td>
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2. It is found from the general information that 100% university libraries have their own website and all the librarian has explore their library resources in the website of their university.

3. The working hours of all eight libraries are minimum of eight hours.

4. It is found from the questionnaire that 87.50% libraries have regular librarian with high qualification and vast experience of library profession. 12.50% libraries has in-charge librarian.

5. It is found that 50% libraries have computer professional staff where as 50% libraries have not recruited such kind of skilled staff.

6. In most of the libraries; the appointed staff structure is not as per the university library norms of UGC which is directly affected to the quality of work and developmental issues.

7. It is found that 100% libraries have adequate space in the library but no one has special or separate space for ICT tools.

8. It is found that 100% libraries have separate internet section which is a notable matter for all kinds of academic library.

9. Researcher has found that 100% libraries have budget according to the 11th five years plan funding by the UGC. All the libraries are spending amount after ICT resources but none of them has allotted special budget for ICT tools and
techniques. The figures of budget is not responded properly by the respondent so, researcher can not able to compare the relevant data.

10. It is found that 87.50% libraries has e-journals, 75% libraries has e-books and 100% libraries have various collections of DVDs and CDs. Also they have different hardware and software tools to maintain routine library activities which shows that there is a enough use of ICT in the libraries which increasing gradually as per the need of their users.

11. Researcher has found that only 12.50% libraries have digital institutional repositories in form of Ph.D. thesis, M.Phil. Dissertation and such other material.

12. It is found that only 12.50% libraries have made collection development policy for ICT tools.

13. Researcher has found that 100% university libraries have computerized their library with SOUL (Network Version) integrated library management software of UGC-INFLIBNET.

14. It is found that 62.50% libraries are using their permanent or professional staff for data entry work.

15. It is found that 100% university libraries are using barcode technology for circulation purpose.

16. It is found that only 37.50% libraries have trouble shooting person for various software used in libraries.

17. AMC (Annual Maintenance Contract) for hardware maintenance is being given by only 37.50% librarian.

18. Researcher has found that 100% libraries have UPS backup facility in case of power failure.

19. Researcher has found that 62.50% libraries has CCTV camera for security purpose.

20. It is found that only 37.5-% libraries have got financial support from the governmental funding agencies for library automation.
21. 87.50% libraries are satisfied and responded that library automation and implication of ICT is worth and benefited to their users. It may be 100% but 12.50% libraries have not responded the question.

22. It is found that 100% libraries are satisfied with their library automation work and aid that it saves the time and money also.

23. Researcher has found that 62.50% university librarians have digitized their library.

24. It is found that 25% libraries have planned to digitize their library from professional person outside from the university and 37.50% have planned the same with the help of their own library staff.

25. It is found that 50% libraries have Ph.D. Thesis and Dissertation in digital form and most of the libraries has given the priority to Ph.D. thesis and dissertation for digitization.

26. Researcher has found that 50% staff of university library is familiar with digitization which shows the awareness in such library and their librarian.

27. Only 25% libraries are using special software for digitization of library holdings.

28. It is found that 50% libraries are following the rules of copyright act of retrieving, storing and dissemination of digital material.

29. It is very unaware matter that only 12.50% libraries have special provision of separate budget and individual section for e-resources.

30. Researcher has found that 100% university libraries are using various external devices like pen drive, hard disk, CD/DVD etc.

31. Researcher has found that 100% university libraries have their own server for integrated library management software. Only 12.50% libraries have separate server for digital services.

32. Researcher has found the opinion from all the libraries that CD, DVD and pen drive is a easy and cost effective external storage device for the university library users.

33. It is found that 100% libraries have their separate internet section.
34. Researcher has found that each library has laptop and LCD projector for learning and teaching purpose.

35. It is found that 100% libraries are subscribing various e-resources and provide it on the internet through IP bases or through other networks.

36. 50% libraries are preserving their e-resources in pdf format.

37. It is very poor matter that only 37.50% libraries are following the rules of licensing agreements.

38. Researcher has found that, each university library has internet user in large numbers and accessing the internet through internet room of university library, at their home, hostel cafe are etc. which shows the good awareness in the users for using e-resources from various places.

39. It is found that 75% university library are member of UGC-INFONET.

40. It is found that 50% libraries are member of DELNET. 87.50% libraries have not membership of library consortia other than UGC-INFONET.

41. Researcher has found that only 12.50% university libraries are providing indexing and abstracting service.

42. 100% libraries have provided the OPAC facility for online searching of library holdings. 87.50% libraries are facilitating e-journals.

43. In 87.50% libraries, ICT services are used for research work where as in 75% libraries, it is used for study, email and other learning purpose.

44. It is found that 100% universities are using "google" for searching the various information from the world of internet where as 75% users are using "yahoo".

45. 100% university libraries have their own networking facility.

46. It is found that 62.50% university libraries are connected with the internet.

47. Only 12.50% libraries has made FTP server for accessing various e-material hosting in the server of university premises.

48. Researcher has found that only 12.50% libraries are using EDUSAT channel.
49. It is found that 12.50% libraries have 85% to 100% satisfaction ratio for using ICT tools, 37.50% libraries have a ratio of 55% to 70% and 25% libraries have satisfaction ratio of 70% to 85% for using ICT tools in the library.

50. It is found that 75% users are in favor to increase the ICT applications in the library.

51. Researcher has found that 50% users of university libraries are expert to use the ICT enabled facilities in the library.

52. It is found that there is not a 100% skilled man power in 100% university library. There is a need of such skilled manpower in the university library to facilitate the ICT enable services.

53. It is found that 87.50% university libraries have improved their image with the implication of ICT in their libraries.

54. In 87.50% libraries, the organizational support is given for the implementation of ICT in the library.

55. Researcher has found that 75% library has needed skilled man power, 50% needed trouble shooting person and average 25% libraries needed back up facility, data entry perfection etc. to maintain the ICT enable library in proper way.

56. It is found that 87.50% university library staff is ready to accept all the developmental changes which is used by the ICT tools.

57. Only 12.50% libraries have adequate staff to handle ICT based services in their library.

58. It is found that a 75% user wants more facility using ICT tools in the university library.

59. Researcher has found that 87.50% libraries have made their action plan to modernize the library as a whole.
8.2: Suggestions

Researcher has analyzed the entire questionnaire and studied it carefully to find out such useful suggestions from the answers received from the respondents. The suggestions mentioned below can be more develop the ICT enable sources and services in the existing university library as well such kind of academic library in future also. Researcher has also mentioned the suggestions received from the experts of library profession through personal meet and telephonic talk.

1. It is suggested that each university library should increase the library timings from 8 to 12 hours. It is also suggested that it should also be opened during the reading hours of the library.

2. It is suggested that in each library, 100% staff should be on regular basis. The librarian should also in permanent position instead of in-charge librarian.

3. 100% libraries should appoint the computer skilled professional staff to maintain such ICT tools and techniques in the library.

4. If 100% universities will appoint the adequate staff in the library; librarian can able to provide more satisfaction to their user with providing various kinds of physical and digital facilities.

5. Academic libraries are moving towards digitization and using more and more ICT enabled tools and techniques, so it is suggested that there should be separate space for ICT tools to explore the resources for global use.

6. Each library should make a separate and special budget for ICT resources. There are many funding agencies in India who provides special grant to the university library for computerization and for the development of the library using ICT. University libraries have to apply for that and took benefit of it to modernize their library more and more.

7. E-journals, e-books, library database, usage information, video lectures etc. should be available in the library and accessible from university campus as well such kind of
material should be available globally providing username and password to the individual user of university library.

8. 100% libraries have various institutional repositories like thesis, dissertation, lecture notes etc. in physical form but only 12.50% libraries have in digital form. So, it is suggested that in the age of ICT; 100% libraries have such kind of institutional repositories in digital form.

9. Each university library should design the collection development policy of ICT tools for future development.

10. Though 100% university libraries is computerized, serial control module is not being used by most of the libraries which is essential and it should be used by each library for better satisfaction of their users.

11. It is suggested that 100% libraries have to use their professional staff for data entry work instead of 62.50% libraries.

12. Barcode technology should not be used only for circulation; it should be used for stock verification, creating identity card and security purpose too.

13. It is suggested that there must be a person in the university or in the library for trouble shooting of library software.

14. AMC (Annual Maintenance Contract) for hardware is basic need and it should be given by every library to such computer professional person or firm.

15. 100% libraries are using UPS for taking back up in case of power failure. It is suggested that the use of Solar Power will be very cost effective for fulfill such kind of requirement.

16. Every library should prepare budget for repair and maintenance of ICT tools used in the library.

17. It is suggested that 100% libraries should CCTV camera for security purpose.

18. 100% libraries should get financial support for library automation from various funding agencies. Librarians have to take initiative to avail the grant from funding agencies for ICT enable tools and techniques and resources for their library users.
19. Library automation is very cost effective and also saves the time of user. So, whenever possible, the effort should be done by the librarian to convert the physical activity into digital form for global access.

20. 100% libraries should be digitized instead of only 37.50% libraries. It should be digitized their reading material with the own library professional for better usage of library resources.

21. It is suggested that every library should digitized the Ph.D. Thesis, M.Phil. Dissertation, lecture notes, rare books and other important material which should be available and searchable with proper managed software or ICT devices.

22. Every library should have at least one or two professional staff who have a sound knowledge of computer for handling e-resources, e-materials and routine library activities related with ICT tools.

23. Every library should have special software for digitized the library holdings and its retrieval also.

24. 100% libraries should follow the copyright rules for any kind of storing, retrieving and disseminating of digital reading material.

25. Every academic library should make a provision of separate e-resources or digital section and they have to prepare a special budget for various e-resources.

26. External device for data transmission are very useful for data handling and data transfer as well. It is very useful for storage also. So, every ICT enable library should have external devices as per their need.

27. The library should have individual server who are using CCTV camera in library. Also they should have server for video lectures and other learning material for storing and dissemination for maximum utilization.

28. The strength of students is in good enough number in the university; so it is suggested that every library should provide at least 4 computer system for OPAC purpose to save the time of user.

29. There should be at least 10 computer system in each university for access various digital collection.
30. The e-resources should be provided through university library web site with all the usage details for maximum utilization. Orientation program must be done by the librarian for their users for maximum utilization of such kind of e-resources.
31. 100% libraries should preserve such useful e-material which is not subscribed perpetual by the university library.
32. 100% libraries should follow the rules of license agreement as per the need of e-resource providers.
33. UGC-INFONET is providing free membership to each 12(b) 2f (As per the UGC Norms) university library. So, each and every library should have membership of UGC-INFONET program which provides the large number of e-resources to the university libraries.
34. There should be a membership of other library consortia like EDUSAT, NISCAIR, INDEST, DELNET etc. with the membership of UGC-INFONET.
35. Very few libraries are providing indexing and abstracting services, which should be provided by the 100% university libraries.
36. It is suggested that 100% university libraries should have Wi-Fi connectivity through which resource sharing should be maximum.
37. It is suggested that utilization of various ICT services should be used 100% by the users for learning and teaching purpose.
38. Every library should have LAN with their independent library network.
39. It is suggested that 100% library network should connected with the internet for providing web OPAC and other online facilities.
40. It is suggested that 100% university libraries should have FTP server platform for dissemination of digital information to their users.
41. It is suggested that 100% libraries should have satellite education channel like EDUSAT.
42. It is suggested that 100% university libraries should have a provision of cyber security software for the users who are using internet.
43. To satisfy and increase the user's satisfaction ratio, every library should provide more and more ICT enable tools and techniques.
44. As, the user is satisfied with the automation of library, it is suggested that every librarian should provide fully automated library and other internal functions to give the 100% satisfaction to their users.
45. Librarian should be well aware of ICT trouble shooting activities and solve the problems faced by the users at his level best efforts with the use of some ICT professional person.
46. The effort of librarian should be high for the development of his library with the use of latest ICT application.
47. Librarians have to organize various orientation program for 100% utilization of ICT enabled library resources.
48. Every university library should have trained man power for handling ICT enable activities in the library.
49. Every university library should organize the programs for ICT development skills for their staff as well as student. They have to depute their staff at other university libraries for further development of their library using latest technology.
50. It is suggested by the researcher that every library should appoint highly qualified and computer skilled professional staff in their library which can solve the basic problems arises with the use of ICT tools and techniques.
51. Each librarian has to know the latest updates in ICT which can be implemented in their library for further development.
52. It is strongly suggested that there must be adequate staff in each library to establish and maintain the ICT enable library for continuous development of library as well it's professionals.
53. The higher authority of each university library should motivate to develop their university library with providing more financial assistance and infrastructure.
54. It is suggested that now in the age of ICT era, 100% university libraries should recruited the library professionals with the basic degree of computer science.
55. It is suggested that each university library has made special provision to upgrade the skills of their staff to provide more ICT enable facilities to their users.

Apart from above suggestions derived from the responded questionnaire, researcher has thought some innovate suggestions through which any university library can do better, are mentioned as under:

- Library must procure latest computing equipments and other related ICT facilities with the requirement of modern users as well as be compatible with online/offline resources that library subscribe.
- With the change of technology, the ICT tools and techniques, which exist in the library, should be updated.
- Be aware of international/national intellectual property laws and regulations.
- Be adaptable to change in technology and medium of storage of information.
- Integrate all resources and try to provide any discovery tool to facilitate a single search user experience that users don't have to navigate different screens for searching same type of information.
- Use of mobile phones are extremely raising in the youth for searching and acquiring pin pointed information from the web so, it is suggested to introduce mobile applications for mobile devices, including service information, catalogue access and other services for the new generation users which provide all the information of particular university library.
- Initiate the "Call the librarian" service for precise and timely understanding the user's query and solve it in time with tele calling. There should be a special email address of librarian should be created to solve the query of users.
- Provide the e-resources to the doorstep of users through which they can access easily with his internet/intranet devices.
- Measure the satisfaction through regular feedback mechanisms about library resources and services delivery and work for improvement based upon users' feedback.
• Convert gradually from print version of core books to electronic version and carefully design and sign license agreement with the publisher for unlimited and perpetual multiple usage depending upon the library requirements and user numbers.

• Provide the option for training 'on demand' for individual users.

• Follow the user-friendly approach and inculcate the same among top to bottom staff of library.

• Make use of open source software and open access resources to the extent possible ways with the ICT tools available in the library.

• Understand users' research requirements and keep providing them with regular updates on new resources added in their research area on individual basis with the use of latest ICT techniques.

• Develop a dynamic library website and keep it updated regularly by adding more and more resources to it and simultaneously inform the users about the new additions.

• Keep searching for free online resources and give their links at your website and inform the users about their availability and usage through mailers and putting on notice boards etc.

• Help the faculty members in developing new tools integrating library online/offline resources that can make learning more enjoyable and more interactive.

• Develop digital library of internal knowledge or say institutional repository generated by users for which university holds the copyright or seek permission of users for transferring copyrights for use by current generation as well as future generation also.

• Expose library staff to cross-functional domains and keep rotating their job responsibilities so that no work left un-attended in absence of any particular staff.

• Be a part of the staff; don't treat them as just subordinates. Team work is the key to success of any operation or development.

• Make use of innovative practices in delivering library services to the end users.

• Provide remote access of maximum services to both faculty and students.
• Engage proactively with university faculties and departments to understand users' requirements.
• Keep in touch with other university librarians and share the knowledge and resources.
• Develop, protect and promote library rare and special collection among users.
• Motivate the users to visit library, to use library, to suggest their suggestions and try to provide as possible as many physical and ICT enabled resources as per their convenient time.
• Evaluate the contribution of ICT in the development of university libraries and develop the library more and more with solving the difficulties and promoting the innovative ideas with the use ICT.

**Conclusion:**

Information and communication Technology holds the key to the success of modernizing information services in University Libraries. Not only does ICT introduce new ways of information handling, it also brings about change in the very structure of information and its communication. Concepts like universal bibliography, accessibility to and availability of documents, irrespective of location, highly personalized services matching user needs/interests with document databases, full text searches, storage and retrieval with speed and accuracy, mobile technology, use of social networking sites in library etc. have all been accomplished to a great extent. Application of ICTs are many but mainly it is used converting the existing paper-print records into the digital format doing entire process of storage, dissemination, retrieval, etc. with the use of ICT enable tools and techniques available through various vendors, software producer and available also from internet and open source as free.

ICT influenced on every sphere of academic library activity e.g. the form of the library, collection development strategies, library building and consortia. ICT have changed the academic library in a profound way. In academic libraries, ICTs present an opportunity to provide value-added information services and access to a wide variety of digital-based
information resources to their clients. Further, libraries are also using modern ICTs to automate their core functions, implement efficient and effective library cooperation and resource sharing networks, implement management information systems, develop institutional repositories of digital local content, and digital libraries; and initiate ICT-based capacity building programmes for library staff and information literacy programmes for library users.

A library is a heart of the university. A glance at any university library who gives the best and innovative ICT enable services can differentiate a good university from all other in the crowd. For a rich university library, benchmark about its collection and services efficiency can be if library is the first choice of a user who is in search of any sort of information. Serving user's interests should be the prime motto and mission of any library.

University libraries must have a clear focus on and commitment to the provisions of high quality information resources and excellence in the service delivery mechanism and methods in its physical and virtual spaces along with scope for continuous innovation and improvement with changing nature and requirements of users. Library strategy must be designed in tune with clearly defined vision, mission, goals and guiding principles of library, which are derived to match and serve the vision, mission and goals of university. In the age of ICT, each university library should adopt the maximum tools and techniques of ICT to pop up with the users' attitude and their need of information. As ICT plays the vital role in this age to acquire the required information for every group of user, it is suggested by the researchers that if anybody wants to grow as a whole whether it is institutionally or personally, please use ICT, ICT and ICT. There is no alternative of ICT for development in the current scenario of ICT.
Future Benefit:

As, we all are know that ICT is a part of life in the humankind. Starting from early morning to late night, a person of every age of group is engaged with the various kinds of ICT tools and techniques whether it is a tool of entertainment, business or education. Present research work can be helpful definitely for any kind of further research related with the ICT topic as present research has emphasized all about ICT starting from its basic definition, it's different usage, overview of ICT and how it can be benefited in the society with the explanation of contributionary role of ICT in university library.

ICT enable library can develop not only university library but such kind of library can helpful to the society also. In the future trends, library have to play the all round role. It would provide a space to businesspersons, doctors, entrepreneurs for meeting. There would be a discussion room with relevant reference material and online sources for the relevant person of institution or organization. It would be a space for entertainment rather watching T.V. or cable in which people can get entertainment with the use of their interested book, CD/DVD, online information, music, etc. Library will provide the platform to interact the people with the use of social media. It explore the resources, information, and learning materials to the all, not only academicians. The library would be the real temple where every one can enter to get something with their own interest and can get the global information with their fingertips within fraction of time with the use of ICT only. In addition, all above can possible only where a qualified, ICT skilled and dedicated librarian and other professionals of library is there to take such kind of initiative to develop the library with the extreme and innovative use of ICT. Librarians should keep update themselves as ICT is continuously changing tools and techniques.

If we wish to grow personally, professionally, academically, economically, socially or grow politically; whatever the filed; success is ours. We just use ICT, grow more and more, and let grow the surroundings of us. If we grow, our nation will also grow. So, let us contribute our selves in the nation with providing the more ICT enable tools and techniques in our library, in our profession.
APPENDICES

SELECT BIBLIOGRAPHY:

Books:


502


Journals/Magazines/Seminar-Conference Proceedings/Bulletin/Project Work:


WEBLIOGRAPHY:

3. http://www.hmlibrary.ac.in/


34. http://it-history.net/fifth_generation.html, accessed on 05-02-2013


39. http://planningcommission.nic.in/plans/planrel/fiveyr/11th/11_v1/11th_vol_1
42. http://www.answers.com/topic/communication#ixzz2MZPxkqp, accessed on 17-09-12
45. http://www.gswan.gov.in
49. http://www.investopedia.com/terms/g/grant-in-aid.asp#ixzz2DavIcoXU
64. http://www.wordreference.com/definition/library