CHAPTER – 2

REVIEW OF LITERATURE

2.0 Introduction

2.1 Application of ICT in Academic Libraries

2.2 Library Networks in India

2.3 Collection Development and Management in Academic Libraries

2.4 Electronic Information Resources in Libraries

2.5 Quality Services and Awareness in Academic Libraries

References
CHAPTER – 2

REVIEW OF LITERATURE

2.0 Introduction

The review of literature has certain objectives and it is intended to project profile of the subject under study. It also identifies key studies and the gaps and those gaps are to be considered to be filled by this research effort. A review of the related literature reveals the magnitude of the published literature on the study with reference to academic libraries in the context of present investigation. It is observed from the literature survey that there are several in-depth studies conducted on the specific aspects of academic libraries viz IT applications, Quality services and awareness, collection development of electronic information resources and some of the contemporary issues arising out of the changing media environment. The researcher has endeavored to go through some basic studies made in Western countries and Asian countries as well. In order to collect the relevant primary literature on the subject of study the following secondary resources have been used and scanned for the purpose. They are:

a) Library and Information Science Abstracts (LISA) (Online Version)

c) JCCC-Info net,

d) Emerald

e) Project Muse and others

An attempt has made in the following paragraphs to review the content of the relevant published literature on the selected topic (from 2000 onwards) and to
correlate them to the problem under study. In order to draw key inferences from the papers under review they are grouped into five facets as follows:

1. Application of Information Technology in Academic Libraries
2. Collection Development and Management in Academic Libraries
3. Electronic Information Resources in Libraries
4. Quality Services and its Awareness
5. Library Networks in India.

2.1 Application of ICT in Academic Libraries

The advancements of science and technology have made tremendous improvement and changed almost all walks of life. Especially, the word 'Information Communication Technology' has sensitized the global arena and been brought into practice changes in organizational, managerial, developmental and marketing sectors. The services rendered with the help of ICT are faster and more effective and termed as information technology enabled services (ITES). Moreover, it creates faith and confidence about the products and services of organizations and among their stakeholders.

The libraries since many centuries considered as storehouses of knowledge have been changing with the adoption of ICT. They are gradually moving to become virtual, and virtual access libraries with the growth of wireless network technologies would not be at a long future distance. Earlier the activities which were carried out manually in libraries with so much of physical, labour intensive and time consuming efforts now are being carried out smoothly with the help of
ICT with greater effectiveness and efficiency. However the ICT has only been facilitating and has transformed the repetitive and clerical task to be performed within less time. Library organization, administration and other technical processing tasks have become easy with the induction of ICT and lead to enhanced output.

Troll and Myers (2000) have investigated the lack of information in professional literature regarding maintenance of automated systems. Using data from Carnegie, Mellon University introduces a multi-layer statistical analysis of the daily work required to keep the technologies in academic libraries operational, placing this daily maintenance in the context of the additional responsibilities of technical staff. It presents a parallel assessment of customer satisfaction with the daily maintenance efforts because data about the work and about customer satisfaction are both crucial to understanding the scope of duties and staffing required to provide hi-tech library services, collections and equipment that will meet user expectations. It provides some examples of how these data are used to achieve the library's goals. These days' new information and communication technologies (ICT) are rapidly changing the information environment as well as society. Virtual universities are emerging and the growth in wireless and mobile services is only beginning. The next generation of academic library users will be very familiar with all the new technology, a fact that will affect their expectations, interests and needs towards the world around them, including library services. Pasamen (2000) states that it is important that the libraries experiment early
enough with the new technologies in order to be prepared to meet the expectations of future users.

The relationship between the collection development section and the information technology section in academic libraries is explained. Flower, (2000) perceived differences to be reconciled and cooperation and understanding may be achieved. He concludes that the role of the electronic resources coordinator can be a vital one in forming a central hub around which the activities of both departments may be focused and coordinated.

Cargo (2000) in his research discusses about ‘non-profit management,’ a new academic field, which can use online technology and Howard Gardner's theory of multiple intelligences to deliver an especially effective curriculum in academic institutions. Structural innovations and collaborations, technology and library resource centres working together can strengthen the impact of non-profit management education by ensuring quality and maximizing access. It is seen that science and technology affect the way people live, work, and play, as well as their health.

Drake (2001) gives an outline of new areas of science and technology which will make greater differences than developments in the past. The amount of information generated by these new areas will accelerate in the years ahead. He explores new areas and other trends affecting how people acquire and use information.

Barraket and Scott (2001) report the key findings of recent empirical research conducted at the Sydney University of Technology, commissioned by the
Department of Education, Training and Youth Affairs (DETYA) to investigate students' experience of the use of Information and Communication Technologies (ICT) in the university's learning programmes, in order to determine differences in reported experience of students from targeted equity groups and a control group. The implications of the research findings for university libraries are discussed. In his paper Jantz (2001) analyzes the implications of electronic book (e-book) technology on academic libraries. Although these are at a very early stage of e-book evolution, business models, standards and supporting technology are under development that will dramatically affect libraries and librarians. Librarians and administrators therefore must understand thoroughly these trends in order to apply effectively the resulting innovations within their institutions. Librarians must begin to design an imaginative, easily identifiable space in cyberspace as the centrality of the library as a physical phenomenon slowly fades.

Baron (2002) in his article explains about the contribution to a thematic issue devoted to helping the difficult library user. There are assumptions in academe, held by librarians, faculty and administration, regarding students' knowledge of technology. Many of these assumptions are unfounded and incorrect. Librarians are challenged to serve those individuals whom technology has left behind with the same respect as those technologically up to speed. Further, he discusses technology anxiety, technophobe myths, and a theory of technophobic learning.

In the growing scenario of IT application conducting an assessment has become part of most higher education institutions' efforts to prove accountability
by measuring efficiency and effectiveness. Briefly, efficiency is often measured by relating operational transactions with expected results within institutionally based financial, fiscal and other limits; effectiveness is often measured as the resultant quality of mission-critical products of the institution.

Assessment may include measures of outputs such as operational issues and outcomes such as performance quality issues are systematically reported by Dugan (2002). Further he in his paper narrates that the costs involved in the introduction of information technology (IT) to libraries. These cost factors are analyzed in terms of the three types of cost identifiable: one-time/extraordinary costs; initial costs; and recurring costs. The major components of a model designed to identify and quantify IT costs are summarized. The application of IT has both modernized and transformed libraries. As one of four identified infrastructures of a modern library, IT has increased the efficiencies and effectiveness of staff productivity and increased the accessibility and availability of information resources and related services for library users.

In their investigative report Laskowski and Ward (2002) explain the steps of building a functional, efficient, and user-friendly electronic reserve system. This requires the interaction of many different pieces of software and technology. Electronic reserves and electronic document delivery in general present many challenges to academic libraries trying to implement or improve on current services and to make their resources more accessible to their patrons. They examine many of the key technological issues in providing online course material and analyze possible methods for working with the technology’s inherent
advantages and disadvantages based on a pilot project at the University of Illinois’ Undergraduate Library. In the Indian context Veeranjaneyulu and Singh (2003) examine the impact of Information Technology (IT) on academic libraries. The authors feel that these computer applications have helped libraries in meeting the complex needs of library users and hence thereby a positive effect.

Added to this Wilson (2004) outlines the forces shaping the instruction landscape: changing users; information technology; social frameworks; educational change; and economic realities. She posited that libraries would find opportunities in the shifting landscape including: user-centeredness; using technology to transform; alliances and partnerships; experimentations; collaboratories; self-sufficiency; inclusiveness; and value-added librarians. Ramesha and others (2004) have conducted an evaluative study on the IT services and the user requirement and satisfaction in the six university libraries in Karnataka state. General view of the library users is that IT has brought about considerable improvements in the library services. However, half of the respondents expressed that they are not satisfied with the IT infrastructure at their libraries. This could also be attributed to the depleting budgets and lack of trained manpower in libraries. At reference desks across the nation, statistics in traditional reference service have been declining in most categories while requests for individual instruction and training in electronic research are showing a dramatic increase. Library technology has created a change in the activity at reference and information desks along with a need for more accurate recording and evaluation of desk statistics is reported in the work of Phillips (2005).
Fatoki (2005) in his paper seeks to consider the implications of this event on library services, with suggestions on the possible applications to academic libraries. A background study of information and communication technology status, past and present in Nigeria, was carried out, especially the impact of wireless technologies on the global scale and in the country. The GSM technologies’ acceptance and growth rate among the Nigerian populace has serious and great potentials for enhancing the communication and information technology-related services in libraries and information centers. However, information managers need to fully exploit the opportunities presented by this relatively new phenomenon with a view to providing improved products and services to the library users, especially in the academic sector. In his article Brindley (2006) gives a clear articulation to the challenges faced by libraries. Through the case study the author identifies seven themes as central to redefining the library in the twenty-first-century: know your users and keep close to them; re-think the physical spaces and create a desirable draw; integrate marketing into an organization; open up legacy print collections to digital channels, and through digitization, reduce legacy costs and continue to improve productivity in traditional activities; invest more in innovation and digital activities; and develop our people and ensure the right mix of skills.

Development in Information and Communication Technology (ICT), particularly in intranets, internet, hardware, multimedia and video conferencing have created a tremendous potential for multisite course and on-demand training to people’s work sites. Nagaraju et al. (2007) explain such major areas for
implementing e-learning as knowledge management for corporate, education and training for corporate individuals, performance support and collaborative working.

**Hayati and Jowkar (2008)** in their paper compare the effects of different features of electronic reference materials on the rate of their adoption. Results show that the most effective factors in adoption of electronic reference materials are the ability of electronic reference materials to facilitate information retrieval, shortening the time of searching and fair cost of resources. In addition, it seems that the most problematic factors, which slow down the adoption of electronic reference materials, stem from unfamiliarity of academic librarians and users with computers and searching of databases.

In another study **Lim (2008)** in his study examines the job satisfaction of library information technology workers in relation to demographic, socio-economic, and work-related variables, such as a sense of belonging, faith in wanting to belong, a feeling of acceptance, paying dues, job autonomy, broker's role, and promotion opportunities. A total of 443 mail surveys were sent to a sample of IT workers at 30 university member libraries of Association of Research Libraries in the United States. A total of 202 surveys were returned, resulting in a 45.6% response rate. This study provides some explanations as to why some IT workers are more satisfied with their jobs than others, thereby contributing to improving the quality of their profession.

**Edzan (2008)** in his paper looks at the formulation of the National Information Technology Agenda and the initial emergence of information literacy initiatives within Malaysian society. Efforts are being made by various entities to
create an information literate society in line with the government's aim of attaining Vision 2020 - the creation of a civil society whereby all citizens will be information literate and well-equipped as knowledge workers. While many academic libraries are increasingly providing e-book services, a barrier to the adoption of e-books, however, is their unsatisfactory design.

Ling, Lim and Chong (2009) in their paper report on a study that investigates the students' preferences for e-book designs, in an attempt to review what appeals to them in an ideal e-book. Comparison was made between three e-books in portable document format, all of which were non-fiction, but differed in contents and their styles of presentation. Based on the preliminary findings, some general guidelines were suggested for the improved design of e-books.

Today the use of information and communication technologies has become increasingly important in research libraries. In the electronic age survival of libraries without ICT is difficult. Sharma et al. (2009) in their study restrict only to research libraries of Haryana state having ICT based resources and services. They further illustrate the reflection of available IT infrastructure and e-resources with these libraries.

It is interesting to note that Ramzan and Singh (2009) find a low level of IT availability, especially the absence of computers, e-mail and internet in few libraries. Similarly, the libraries are far behind to achieve excellent IT levels. It is found that libraries need to be fully automated using standard library software/management systems. However, access to online resources through Higher Education Commission (HEC) is found extensive and comprehensive. The
data indicate the need to enhance libraries' IT expenditure. The findings can be utilized to evaluate the status of different IT tools and applications. The statistical data are very useful and authentic source for planning to improve the libraries' IT infrastructure, library automation and in reducing the gap in levels of IT application in different type of libraries.

This is the 3G technology era and in this era each and every day people want to experience new things with innovative thoughts and ideas (Chavan, et al., 2009). Now-a-days people like to perform their daily work with the help of electronic devices. So mobile phones have become the indispensable needs of the people. 3G technology adds the advantage of full-time connectivity, broad coverage, security, improved end user experience including ubiquity, reach ability, localization and personalization of other mobile wireless solutions. It complements other wireless technologies such as satellite technologies, Wi-Fi (Wireless Fidelity) or WLAN (Wireless Local Area Network), Bluetooth and wired technologies.

2.2 Library Networks in India

In the field of library science and traditional librarianship, India was not lagging much behind the advanced countries in the past. The country produced eminent library scientists and librarians whose contributions to the subject discipline were outstanding. Also, the spirit of library cooperation flourished and library resource sharing was practiced by several libraries in the form of inter-library loans, circulation of documentation lists, current awareness services, and so on. Even library networking was done in an informal mode in certain cities.
in the country. However, such efforts were mostly informal and limited in scale. The networking efforts in various countries got a boost with the tremendous and fast development in computer and communication technologies, which led to the implementation and successful operation of national and international computer-communication networks. These networks were commonly used for business and commercial applications, but the libraries were quick to start efforts to make use of these networks for linking libraries for resource sharing among them.

India has seven local library networks and a national library network (INFLIBNET) exclusively meant for academic libraries. However, these networks are in differing stages of development. Most are at a preliminary stage although the earliest efforts in this area took place in 1989. Mishra (2001) presents the results of a survey on factors affecting the development of local library networks. Participating libraries in four networks were administered a structured questionnaire. The study reveals that organisational factors such as planning, governance, funding communication and delivery, and administration are related to one another. Moreover, many factors are highly dependent on each other. Therefore, the library networks should try to raise the levels of awareness among participating libraries to develop the local library networks successfully.

Way back in 1985, NISSAT and DSIR started planning for setting up of metropolitan library networks in India to expedite the resource sharing among S & T libraries in order to avoid duplication of acquisition and minimization of cost. Accordingly, a survey was conducted and metropolitan city networks like Calcutta Library Network (CALIBNET), Delhi Library Network (DELNET -
now Developing Library Network), Bombay Library Network (BONET), Pune Library Network (PUNENET) were established under NISSAT programme. The main objectives of these library networks were to prepare a union catalogue of periodicals, promote inter-library loan, facilitate document delivery services, create centralized database etc (Singh, 2002). Further Singh focuses on the impact of ICTs, the internet, and the web on the life and work of people and mentions new services available through the convergence of computer and communication technologies. He has discussed ‘digital determinism’ in general and India’s growing “digital divide” in particular, brief outline on the library and information infrastructure, superstructure, and digitization initiatives is provided. The paper concludes with the observation that only a suitable national policy for library and information systems can contain the emerging ‘digital divide’ in India. Otherwise, networked information and library networks will have no meaning for the 47-79% Indians who are totally illiterate. The same view is supplemented by Martin (2002).

Fahmi (2002) gives a review of the Indonesian Digital Library Network which is a distributed collection of digital library networks, digital library servers, full local contents, metadata, and people, all engaged in developing Indonesia as a knowledge-based society. Besides the general issues of digital libraries such as publishing, quality control, authentication, networking, and information retrieval, Indonesia also faces other issues - namely, the digital divide - in designing and implementing the Indonesian DLN Network. He describes the basic design of the network that enables it to handle the typical problems encountered in a developing
country's digital library network, such as internet accessibility, bandwidth capacity, and network delays. Also described are the experiences in implementing the Network, which currently has 14 successfully connected partners and more than 15 partners in the process of developing their digital library servers.

Giordano (2002) in his article concerns information and communications technology (ICT) developments in Italian libraries with special reference to library networks and digital co-operation initiatives. Italy has in recent years been heavily committed towards modernizing public services and to updating its economic infrastructure and education system to cope with emerging challenges. He also sketches a context in which specific questions are set, and provides a brief overview of the recent history of the use of ICT in Italian libraries.

The Penang Library Network (PLN) is a network of private and public higher education libraries formed with the aim of bringing Penang’s citizens to the forefront of uniform access to a knowledge warehouse through the use of information and communication technologies. Idrus (2003) presents PLN’s aspirations to change the paradigm of education (information) delivery from a teacher-centered to a radical student-centered, technology-enabled approach. It also describes the plan for the PLN Digital Library project that is undertaken as a step to achieving the PLN aims, together with some of the current and future needs, as well as the challenges that may be encountered.

In his report Potts (2003) presents a pen picture about the community reach of the People’s Network (30,000 terminals in over 4,000 public libraries) provides a powerful delivery mechanism for e-initiatives. Public libraries have an
opportunity to utilize the network beyond the standard provision of public internet access. The People’s Network is already viewed as a ‘ready made’ outlet by many providers or co-coordinators of electronic content. This article examines how the challenge of channeling content to all libraries in England through a single interface and across a diverse set of library networks is being approached by the People’s Network team.

After some considerations concerning technology-based distance training developments for librarians, the experience of the Latin American Council of Social Sciences is described where the internet is used to deliver training to librarians, editors and webmasters of their member institutes in Latin America and the Caribbean. Choosing a virtual campus platform, building multinational teams for teaching and learning, working on the design of course content and preparing full-text bibliography, managing the course and evaluating its results have been the main challenges for this experience, which is described to help library networks in developing regions, think about the internet as a possible platform for training staff located in institutions with access to the internet (Babini, 2004). As one of the most important components of a nation’s basic facilities, the networking of the library plays a vital role in terms of promoting the sharing of access to information. Although the traditional methods of literature indexing and accessing will continue to exist and develop, library networking will become the new model and the direction for the development of the library. Through the discussion of the current situation of information sharing in the Chinese library, the author analyzes the factors that affect information sharing and proposes
establishing a cooperative networking center for regional libraries in one region by linking together dispersed information and assembling an open, shared repository of information resources, which will promote literature resources sharing throughout society (Rumei, 2004).

Discussion is done on the status of information and communication technologies usage in Indian libraries with special reference to special libraries and the efforts made by various institutions to propagate e-information products and services. Gulati (2004) highlights the consortia efforts in India like JCCC Consortium, INDEST Consortium, CSIR E-journal Consortia, and UGC INFONET. He further discusses digitization efforts in India at NISCAIR, New Delhi, IIITM, Kerala, C-DAC Pune, and the Digital Library of India. In addition he incorporates details on major information systems in India (such as NISSAT) and major library networks in India (such as INFLIBNET, DELNET, CALIBNET etc.). His paper concludes with challenges for library and information science professionals and an overview of initiatives taken by Government of India. Looking back at knowledge gained from four years of operating a new academic library, one can understand that technology is constantly evolving, creating numerous challenges. Such challenges include maintaining and enhancing existing systems and services, as well as introducing new systems and services. Associated with all such activities are a myriad challenges such as technology, funding, security, and overall resource management. The findings serve to remind practitioners and administrators of the varied, complex, and expensive nature of maintaining a comprehensive information technology environment. Several
concrete examples offer ideas that may aid with topics such as facility design planning and major project management (Vaughan, 2005).

Ani, Esin and Edem (2005) in their study aim to investigate the extent of adoption of information and communication technology (ICT) in university libraries in Nigeria. Postal survey was the instrument used for data collection. Almost 60 per cent of the university librarians out of the 29 university libraries surveyed completed their questionnaires. The results of the survey show that only six university libraries are fully computerized, nine are about to be computerized; seven of the surveyed libraries have installed local area networks, five have online public access catalogue and only four libraries provide internet service. The major obstacles that influence effective adoption of ICT in university libraries are inadequate funds and the poor state of electricity in Nigeria. The federal government should increase the present level of funding of Nigerian Universities to improve the library development fund, which is the major source of funding available to university libraries. The poor state of electricity in Nigeria should also be improved by the federal government for sustainable adoption of ICT by university libraries.

The paper proposes that computer networking of university libraries is feasible and recommends the development of the Nigerian university libraries network and academic libraries network. During the past six years, the University of Utah libraries have developed an extensive international presence through digital resource sharing. Services include instruction, electronic document delivery, shared catalogs, and full-text databases. Arlitsch (2005) describes the
process of establishing, extending, and improving these services through international cooperation and collaboration. The benefit to the smaller library with limited funding is dramatic and the impact on the larger library providing the service is minimal.

Garthwait and Richardson (2005) provide anecdotal information about one consortium's experience implementing the LibQUAL+™ Survey. It provides a description of the survey and a narrative of the keystone library network's experience, and includes other information from published literature regarding the survey's implementation in other libraries and library consortia when relevant. Implementing a library service quality survey as a consortium has benefits, but also provides challenges. Consortium-wide planning, training, coordination, survey promotion, and intra-consortium communication are important. Practical implications -consortia considering performing a library assessment will want to consider the challenges and considerations mentioned.

President Bush's fiscal 2007 budget proposes an 80 percent funding cut for the environmental protection agency's library network. The resource provides access to tens of thousands of electronic and paper documents that are unavailable elsewhere. To cut $2 million from the current $2.5 million library budget, the agency plans to eliminate many library buildings and reference assistants, said EPA officials, who are developing a cost-savings plan. The EPA will digitize some collections and make them available online, while other works will be available via interlibrary loans from EPA libraries that are not shut down. Although the proposed cuts to the library program are severe, the president's
overall budget requests a significant increase in the EPA's funds for research on nano-technology, air pollution and secure drinking water systems. Bush cited the initiatives as part of his innovation agenda (Sternstein, 2006).

Fitzgerald (2006) in his paper aims to provide a historical overview of VICNET at the State Library of Victoria (www.slv.vic.gov.au), to introduce VICNET's conceptual development and to explore some of its impact and achievements. He looks at some of the published papers on VICNET and draws on the experiences of implementing and maintaining information and communication technology projects and services outlined in those papers. He draws on the experience and opinions of the author as a senior manager within VICNET. VICNET recognized that the online-networked environment required development in parallel of access, content and skills. Its internet service provider and web design and hosting activities underpin VICNET's remarkable growth. He highlights the general methodology for carrying out a feasibility study for establishing the library network.

Singh (2006) opines that there is a general consensus and a favorable environment for establishing a network of Libraries at local, regional and national levels. The Library Network could provide a solution for the problems of accessing library materials. Once the feasibility study is carried out, the establishment of the library network will not be difficult.

Bennett (2007) describes the tools and strategies that were employed by C/W MARS to successfully develop and implement the Digital Treasures or digital repository. He outlines the planning and subsequent technical issues that
Chaper – 2: Review of Literature

arise when implementing a digitization project on the scale of the large, multi-type, automated library network. Workflow solutions addressed include synchronous online metadata record submissions from multiple library sources and the delivery of collection-level use statistics to participating library administrators. The importance of standards-based descriptive metadata and the role of project collaboration are also discussed. From the time of its initial planning, the Digital Treasures repository was fully implemented in six months. The discernable and statistically quantified online discovery and access of actual digital objects greatly assisted libraries unsure of their own staffing costs/benefits to join the repository.

Discussing the possible trained aggregators and discuss their importance for libraries in the digital era, Moghaddam and Moballeghi (2007) review of literature on aggregators was carried out. It focuses mainly on the various aggregators and outlines their advantages and disadvantages for libraries. Libraries have been working with publishers and aggregators for many years; however, the issues related to aggregators are not well documented. Aggregators have been helping libraries to facilitate their services to users but they have some disadvantages for libraries such as the lack of library influence in selecting individual titles; the lack of control over the contents of aggregator packages; and the confusion of library users when accessing different packages.

Explaining the view of current trends and library needs for a developing society, Ramesh Babu and Asok Kumar (2007) explain that it is necessary that the Government should establish a network of integrated library system, both
urban and rural areas to pool the library resources for the dissemination of information to the masses, so as to bring nearer the goal of socialistic pattern of society in the state.

In developing countries most libraries, including academic libraries face financial and resource constraints in building up adequate collections of information sources and therefore are not able to fully satisfy the information needs of the various categories of users. In this context, the main task of a librarian is to adjust the input resources to the desired output by adopting various alternatives for taking effective decisions and providing services to users. One strategy is resource sharing in a networking system. This has been practiced since the 1930s in developed countries. In recent years libraries in India have focused on interlibrary loan. Shared cataloguing, online references, shared circulation and online, due to the high cost of serials, academic library networks in a consortia mode offer subscriptions to more journals to the participating libraries at a relatively lower cost. Sivaraj, Esmail and Kanakaraj (2008) discuss three models of networking and network design for engineering college libraries in Tamil Nadu (TECLIBNET).

Patra and Tripathy (2008) examine the use of network-based library and information services by Management Institute Libraries in Orissa. They highlight the various aspects such as staffing, collection, electronic resources and library automation and present the utilities of Information and Communication Technology (ICT) which helps user to access, analyse, create, exchange and use data. The same view was supplemented with Rokade and Rajyalakshmi (2008).
Libraries, particularly technical college libraries have to re-examine their traditional functioning adopted for years and now identify new solutions to their problems to achieve better results and later better services to the students / learners. They should attempt to come together to share their resources and services by using IT gadgets, so as to facilitate users with easy access to information at low cost and in short time. It is possible only through networking says Bahcalapur et al. (2009). Network is essential partner in this exercise as it facilitates access to vast information and services. Further they give a proposal network model plan for the engineering college libraries affiliated to VTU.

2.3 Collection Development and Management in Academic Libraries

Electronic technologies and collection development are two of the top concerns in library and information services today. In a recent analysis of the literature, four major trends in library and information science were identified: increases in end-user access to computer-based information resources; library use of networks and telecommunications; dependency on CD-ROM-based information sources; and emphasis on collection management activities.

Clearly, collection management is a fundamental concern. Demas puts the matter into perspective this way: “Electronic publishing has profound implications for collection development,” which is defined as the intentional and systematic building of the set of information resources to which the library provides access. While the principles of collection development, which were developed in the world of print publications, do not change radically with new publishing technologies, methods of decision making and specific selection guidelines must
Chapter - 2: Review of Literature

be adjusted significantly to incorporate new publishing formats. Although most of the current literature cited below refers to academic or research libraries, much of the content applies to all types of libraries. Chadwell (2000) describes the challenges in providing access to offline electronic resources. He warrants a separate collection development policy focusing on these materials. This policy will provide guidelines for the selection and acquisition of offline electronic resources as well as the provision of access. In his book, Lee (2002), focuses on two areas of growing interest and concern to collection developers: the electronic journal and the electronic book. Further, the author outlines some of the issues that surround electronic resources, which differentiate them from print publications.

Okiy (2004) discusses in his paper a training programme organized for non-professional and professional staff of the Delta State University Library, Abraka. Coming about twelve years after the University Library opened, it was obviously overdue as these categories of staff had started to display some shortfalls in the performance of their duties. These areas of shortfalls were identified and addressed through relevant paper presentations and demonstrations by competent professional librarians in the library. The areas are: circulation duties, shelving and shelf-reading, collection development, reference and reserved book services, filing and card maintenance, cataloguing and classification, special collection services, computerization activities and library administration. The problems encountered in the course of the training include the limited ICT skills of most of the staff being trained. This slowed down the pace of the training. The
computers recommendations were made to encourage and improve similar training programmes in future. With reference to India, Singh (2004) describes the impact of IT on collection management in libraries and also on the librarians’ role, factors affecting collection management in libraries and emphasizes the need for change in collection management policy. Further, he discusses the usefulness of subject gateways and compares pricing structures of different electronic resources. Discussing about the impact of electronic publishing on library collection Kumbar and Hadagali (2005) differentiate between traditional and electronic collection development. Further, the authors highlight on collection development policy and selection criteria for off-line e-resources, websites and web resources. Also they discuss pricing issues, models and challenges before library professionals.

Sinha and Tucker (2005) seeks to describe how Lied Library has responded to a rapid increase in the number of new academic programs and degrees at UNLV, resulting from new strategic initiatives and tremendous growth of the university’s student population during the past four years. The authors focus on the role of the Collection Development department in the university’s approval process for new academic programs and the role of subject librarians in assessing how well the libraries’ collection meets the demands of new programs proposed by faculty.

Stoller (2006) analyses the annual ARL statistics for collection development expenditures between 1994 and 2004. His study focus on the ten largest public, ten largest private, ten smallest public and ten smallest private
academic ARL libraries. Libraries have largely responded to the revolutionary changes of the last decade very conservatively, retaining their commitment to monographic acquisitions and to their paper collections even as they have built new electronic libraries. The paper recommends that Southern Illinois University Carbondale and, potentially, other academic libraries develop books-on-demand programs because most of the books in the present study are high-quality, inexpensive, new and easy to obtain; ILL titles represent research needs of university community; multiple library patrons will benefit; equity will be added to the library’s collection; and ILL titles are likely to circulate again. In his paper Feldmann (2006) overviews the literature and key topics surrounding the role of subject librarianship in the evolving environment of academic libraries. Subject librarians are looked at in the context of the broad trends affecting librarianship and in the context of the traditional roles they have held in collection development, instruction, and reference.

In their study Susan and Vignau (2006), discuss the topic of collection development in a digital environment. Developing digital collections is a logical consequence of inserting information technologies in organizations. Further, the authors propose a cycle to create a digital collection. The description of the creation process is supplemented with an analysis of the term collection development starting from the user’s focus. Kumbar and Hadagali (2007) discuss collection development in a changed environment in academic libraries. Further, the authors throw light on formulating collection development policy, budgets, selection procedures, evaluation criteria for electronic information
resources and license agreements including problems and prospects. The authors conclude that “though electronic publishing has many advantages, but, at the same time, one has to realize that this can be used as complementary technology and not as replacement technology.

Howard (2007) feels that collection development activities in academic, public and special libraries are characterized by a diversity of approaches and methods. Further the author provides a brief summary of some of the practical approaches to collection building in a variety of library and information center settings.

Clark and Jobe (2007) in their study examine the holdings and usage for books reviewed in Choice, books designated by Choice as Outstanding Academic Titles, and the general collections of the Colorado Alliance of Research Libraries. Smith (2008) describes the process of determining a fund allocation process that would further collection development goals by reflecting the university curriculum and support, towards different programs. The author describes the process and steps that led to the decision to use a percentage based allocation formula, and the results of its implementation.

Kumbar and Hadagali (2007) made an attempt to discuss about collection development in a changed environment in academic libraries. It touches upon formulating collection development policy, budget, selection procedures, evaluation criteria for electronic information resources and license agreements including problems and prospects. Further, the authors conclude that “the electronic publishing has certain advantages, selection procedures, evaluation
criteria for electronic information resources and license agreements including problems and prospects. Further, the authors conclude that “the electronic publishing has certain advantages, which should be used to complement to the traditional one not as a replacement to the traditional one.

Sharma et al. (2008) determine the strength and weakness of the collection of the engineering college libraries and provide the necessary guidelines for improvement to the collection to make it more users responsive, live and dynamic.

The study made to investigate and examine the acquisition practices in the Nigerian University libraries, results show that acquisition of books in Nigerian University libraries is done mostly through purchase. The study shows that payments made to book vendors in Nigeria are taxed by Nigerian universities Ajidahun, (2008). Many academic libraries rely on Choice: Current reviews for academic libraries when making collection development decisions. Jobe and Clark (2008) in their study examine holdings and use for books reviewed in Choice, books designated by Choice as Outstanding Academic Titles, and the general collections for two groups of libraries.

Arthur and others (2009) explain that libraries continue to struggle with the transition to an online environment. In this session, the presenters discussed periodical cuts and the transition to online-only subscriptions at three large academic libraries. Their journey included identifying potential titles, balancing consortia arrangements, considering available online archives, analyzing statistics, time and budget constraints, as well as binding, available space and patron
demands. The motivation for reducing print will vary from one library to another. However, most libraries will share some or all of the factors to be considered when making the necessary changes. Proper planning can help take the sting out of print reductions.

**Nazim (2009)** defines digital library and its content. He discusses various functions of content management with special reference to digital library. Selection and acquisition, indexing, storage, retrieval, maintenance and intellectual rights are some of the key functions of content management. Issues regarding authority, surrogate, creation, formats, intellectual property rights and cost of acquisition and maintenance of digital content are highlighted.

**Imre (2009)** reports on the findings of a survey on collection development and circulation practices of LP records in U.S. academic libraries conducted in September of 2007. Areas of special interest included the size of LP collections, identification of barriers to access, collection development practices, and digitization activities. The survey found that libraries have large LP collections; many libraries have large uncataloged collections, limited resources to manage these sound collections, and are faced with storage problems. Academic libraries increasingly complement print-based reference collections with digitally-based reference for financial and educational reasons. However, library collection policies have sometimes lagged behind the technology curve. Too often, reference collection management practices have reflected a responsive attitude rather than a responsible, strategic stance. Many costs are associated with this service, and
intellectual and psychological considerations make these resources a complex set of issues (Farmer, 2009).

The author examines the life cycle of digital reference sources by focusing on subscription databases: assessment, selection, acquisition, web presentation and maintenance, archiving and preservation, and de-selection. It offers factors to consider because academic librarians must make decisions about these increasingly dynamic collections. In his survey Flatley and Prock (2009) examined how libraries are managing their e-collections. The authors looked at how collection development decisions are made; the role of librarians, administrators, faculty, students, and consortia; and what criteria are being used.

Korgbo (2009) explains that academic librarians in Sierra Leone are preoccupied with the problems of collection development amidst rising student enrolments, new curricula and decreasing budgets. Especially disheartening has been the growing need for information and the implications of the information technology revolution in academia. While such developments are of great concern there has been increasing awareness among these librarians about grey literature collection in their libraries.

Mallaiah and Gowda (2009) examine the usefulness of collection development in a university library. Different activities are involved in developing need-based, up to date, and balanced collection to meet the document and information needs of the users. It is appropriate to know whether the existing collection of the library resources are adequate for readers to meet the information requirements in their academic, teaching, research, and publication work.
2.4 Electronic Information Resources in Libraries

The last few years have seen a number of changes in the higher education sector which have exerted pressure upon the traditional role of the academic library:

- Rapid growth in student numbers. This is not mirrored by a relative increase in the number of Library and Information Services (LIS) staff.
- Growth in non-traditional students, for example mature students and part-time students who have different needs and expectations from the eighteen year old school leaver.
- Inflation in the cost of printed materials.
- Growing numbers of academic publications.
- Falling library budgets as a percentage of the total institutional budget.
- Changes in teaching and learning methods, towards a greater emphasis on student centered learning.
- Technological developments.

This latter change, the increase in the amount of electronic information sources available, has been significant within LIS. It is costly, results in a demand for information skills training for both staff and students and is causing a radical transformation within LIS, involving a shift from an original emphasis upon holding material towards the importance of being a gateway to networked information, providing access rather than holdings.
Wu and Liu (2001) discuss the internet-based e-content management. Further, they explain the technologies, the criteria and the issues and concerns in content repository, content contribution, workflow, automation services, and lifecycle of automation services for controlling and managing content and processes.

Gyeszly (2001) is of the opinion that the escalating price of the rapidly growing electronic journals, databases, indexes and books, along with traditionally published print subscriptions and monographs, will soon force library administrators and collection development officers to choose between electronic or print products in the new millennium. The increasing costs of the dual format subscriptions or indexes are unfeasible, and, perhaps, even unnecessary from the user’s point of view in the disciplines of political science and economics. He concludes that after the pricing information and statistics for both electronic and printed resources were produced, the author had a clear answer to the electronic and paper dilemma. It is the feeling of Thappa and others (2002) that electronic resources have become very popular because of the advantages, like:

❖ Fast and easy access;
❖ Data updated online; and
❖ Less turnaround time, etc.

Evaluating e-books, Subba Rao (2003) discusses the genesis of e-books. The author lists various types of e-books with their characteristics and the major players in the market. He concludes that e-books are rapidly becoming a viable
alternative, and provide growing advantages over the traditional medium. In his work Butler (2003) enumerates that the copyright is a serious matter that carries implications for organizing the Internet from the viewpoints of both owners and publishers of a work to the work’s users. The author, discusses several stands within the dilemma of the internet and copyright laws, like fair use, public domain, the digital millennium copyright act, technology education and copyright harmonization act, etc. The explosion of information services and resources whether appropriate to the user’s need or not needs attention. There is also a need to organize the information resources available on the internet so that the users/scientists could find information for their research work (Karimi and Srivastava, 2003).

Analyzing the present collection development procedures Varalakshmi (2004) highlights the fact that the collection management in the contemporary Indian University Library System has become complex owing to the diversity of formats and content of information resources. The situation warrants for redefining the existing collection development policies, and developing alternative means to provide best information to the user from the global resource basis in real time. She suggests that the INFLIBNET (UGC, India) can take a lead and prepare a model set of collection development policies that serve as guidelines to the individual libraries.

Evaluating the electronic sources of information, Sampath Kumar and Biradar (2004) studied analytically with particular reference to web based sources. Further, they explain the www search engines as a strategy for effective
information retrieval. Evaluating the electronic journals, **Kaushik and Relan (2004)** discuss the growth, features and limitations of electronic journals associated with the services. Hence the number of e-journals is increasing day by day. This is an indication that the user community has learnt to accept e-publications.

**Johnson (2004)** says that electronic versions have made serial collection management even more complex. The majority of publishers are charging separately for the print and electronic versions, and charging a higher price for both bundled together. In order to make the decision about what format to purchase, librarians need to know what format the users prefer. To determine these preferences, library personally can use several methods, such as user surveys, usage reports and educated guessing.

**Maharana and others (2004)** have pointed out the policies and practices of development and management of electronic resources in the research and development libraries of Kolkata city. The authors examined the various criteria for selection and evaluation of electronic resources. Further, some feasible recommendations have been put forth for the development of a balanced collection of electronic resources and its effective management. **Kar and Bhat (2005)** state that the management of electronic resources is an ongoing process for most libraries, which make them hybrid or digital. In order to manage access to the full range of resources available to the users, the Energy Resources Information (TERI) library has put a lot of work into the areas of website management, acquisition and cataloguing of electronic resources, authentication,
metadata and resource discovery. Strategies employed in order to manage resources have been made with a minimum of cost in mind by using the existing staff resources and expertise.

Explaining the transition from print media to electronic media, Vinitha and others (2005) highlight the necessity of preserving the digital form, strategies related to preservation technologies and provide guidelines for digital preservations. The purchase and management of e-journals through consortia and the various consortium efforts taken in India with special reference to INDEST consortia have also been explained. Thamaraiselvi and Kaliammal (2005) explain the issues in archiving and preserving the back issues of e-journals, the initiatives taken in archiving them and the role of e-journal agents in purchasing and managing electronic journals.

Prakash and others (2005) explain that subject gateways, portals, search engines and library OPACs are important methods of providing current and reliable information in a variety of disciplines and research areas. Further, the authors highlight the importance of portal service to the Indian academic community in the light of the UGC-Info net e-journals consortium. Choukhande and Dange (2006), in their paper, emphasize the preservation, digitization and dissemination of information in digitized or electronic form to the end user. The authors highlight the key issues of copyrights faced during the work.

Babak (2006) in his paper narrates that recent advances in information and communication technology has left impression on libraries and one of its results is establishment of digital libraries, information resources of digital libraries like the
resources of traditional libraries needs development and up-dating. In this survey methods of development of electronic information resources in digital libraries of Tehran city have been studied and its aim is awareness of application of any of these methods in the studied libraries. Survey method is used in this research. Results show that: almost 92.5 percent of the studied libraries scan resources; 85 percent supply resources in electronic format; 69.5 percent produce resources and finally 77 percent use resource sharing method for development of their electronic information resources.

Sujatha and Mudhol (2006) report the results of a study which aimed to: identify useful databases in fisheries science and aquaculture; study potentially useful databases to users in fisheries and aquaculture; and provide information on the identified databases to the users of fisheries and aquaculture. The methodology employed in this study included a review of databases and websites available on fisheries, aquaculture and allied fields in electronic media such as CD-ROM databases, web sites and electronic periodicals. A review of literature helped to determine the fisheries and aquaculture electronic information sources and details of its accessibility. The selected databases identified by the study are reported and briefly described. The databases are classified according to fisheries science and aquaculture.

Ameen and Haider (2007), in their paper, explore some major challenges in the area of collection management faced by university libraries in Pakistan. The challenges regarding collection management in the university libraries in Pakistan are: handling the hybrid character of collection, service to users, training of
collection management staff, collection evaluation, resource sharing and preservation.

Saha and others (2007) deal with various aspects related to the digital preservation. Preservation problem is complicated by the rapid obsolescence of the hardware and software required for it. Further, the technological ignorance of library personnel and users is one of the major obstacles in the way of development of digital libraries and its effective preservation. While Rani and Geetha (2007), discussing the use of e-journals, state that e-books have created a new source of information for the users. Their features attract the users to seek information from these media. The open access publishing has enhanced the availability of information by breaking down financial barriers. It is this technology which has made tremendous impact on libraries.

Nerisa (2008) gives a brief overview of electronic information resources and services offered by The J.D Rockefeller Research Library at Egerton University and the marketing of these resources. The paper examines various reasons for marketing electronic information resources, with emphasis on the various, and illustrates marketing strategies used by J.D Rockefeller Research library towards effective utilization of the available resources in supporting research, teaching and learning. These strategies include use of posters, notices, brochures, telephone calls, Current Awareness Services (CAS), workshops and seminars, and decentralization of services, among others. It concludes with a discussion of cost effective use of these strategies in research and teaching.
Pertti (2008) explores how the use of electronic information resources has influenced scholars' opinion of their work, and how this is connected to their publication productivity. The data consist of a nationwide web-based survey of the end-users of FinELib, the Finnish Electronic Library, at all universities in Finland. Scholars feel that the use of electronic literature has improved their work considerably in several ways. This influence can be differentiated into two dimensions. The first one is improved accessibility and availability of literature, and the second one is more directly related to the content and quality of scholarly work. The perceived improved access is positively associated with the number of international publications produced, among doctoral students in particular. The more direct influence of e-resource use on the content of scholarly work is, however, not associated with publication productivity. The results seem to imply that investments in academic digital libraries are beneficial for the researchers and the universities.

Natarajan et al. (2009) identify the availability of e-resources in Annamalai University library in Tamil Nadu and determine their usage, performance, degree of user's satisfaction, and factors involved in the access of e-resources. The results of the study show that out of 750 respondents, 510 respondents (68.00 %) were using e-resources. The frequently used e-resources were e-mail and discussion groups (37.47 %), e-journals, e-newspapers (12.40 %), etc.

The current trend is 'e' with everything says Rao et al. (2009); e-commerce, e-science and e-learning. The world is embarking on a new age, an
age of e-learning. Electronic education is rapidly becoming a fixture in higher education. E-learning encompasses concepts such as 'virtual universities' and networked and online learning. It is almost two decades now that various schemes and programmes have been launched both at government and non-governmental levels to develop ICT skills in teachers.

Sami and Iffat (2009) discuss the use of electronic information services introduced in research libraries. They further analyse whether the awareness about the services and the background of the users have any impact on the use of electronic information services.

2.5 Quality Services and Awareness in Academic Libraries

The academic library has been described as the ‘heart’ of the learning community, providing a place for students and faculty to do their research and advance their knowledge. The librarians and library staff provide numerous services to these users, addressing their diverse needs, characteristics, and interests. By providing quality services and satisfaction to users, academic and research librarians can distinguish their services through friendly, helpful, and knowledgeable advice and the best technological resources available. Because academic library users have varying needs and expectations, it is the responsibility of the library staff to know these needs and expectations and strive to meet them. In this regard, Millson-Martula and Menon maintain that one of the elements of quality service is when users’ personal needs and expectations are incorporated into the development of programs and services of libraries. Whether this will lead
to greater usage of library facilities is, however, unclear given the options available to the users.

Thapisa and Gamini (1999) report in a study conducted to determine the perceptions of the clients of the University of Botswana Library as they relate to quality service, and how far the University Library has succeeded in delivering quality services. The introduction stresses the role of the library in the environment and the importance of marketing thinking in the management practice of libraries. The main characteristics of library services as well as the importance and the definition of the perceived quality of services are dealt with. This report reveals the current situation concerning research into service quality in libraries, and focuses on the structure of importance and the level of the service quality components in the library at the Faculty of Economics and Business at the University of Maribor, Slovenia. They discuss the reasons for the project and its goals, analyze the results and submit proposals for the improvement of the overall service quality in libraries (Snoj and Petermanec, 2001).

Maharana and Panda (2001) emphasize that the current situation necessitates the academic libraries to reengineer their traditional tools and work processes in order to make them more productive and effective. Business Process Re-engineering (BPR) has successfully been experimented in the business world for the revitalization of the organization. The proper planning and implementation of BPR in the core processes of the library would eliminate duplication and unnecessary steps, which add no value to library processes, improve user satisfaction, minimize cost and deliver quality services. The practical aspects of
planning BPR from the perspective of academic libraries are discussed. The case studies highlighted the experiences with BPR as part of a strategic change in the management of academic libraries.

Novak (2002) explain that from the global environment to the local, information and communication technologies are changing our lives and changing the way libraries do business. No longer are libraries an arcane world of their own. Every major trend impacting on today’s society is impacting on libraries. Today’s environment is one of paradox: there is decentralization within globalism, fragmentation within mass culture, and customization within mass manufacturing. Boundaries are breaking down: between disciplines, among industries, and between suppliers and customers. Dominant functions and processes in the information age are increasingly organized around networks, and this enables virtual services to come together in partnerships and alliances. Process has become as important as product as the knowledge era increases emphasis on abstraction; it is an age dominated by ideas, concepts and experience - and services are a form of process. All of these factors combine to create a new market for library services with a new style of client. The result is a demand, in a sense in which libraries have never before experienced the word, for high quality services that are quick, convenient and reliable. Historically only the last of these terms characterized libraries’ interactions with their clients. As the information centre of people’s lives shifts to their home or work environments, instead of remaining directly with libraries, there is a challenge to produce integrated customer designed services based on fluid, flexible processes. Integrated services
require an integrated infrastructure, and nothing short of a systemic view will create the services capable of meeting the evolving needs of clients in the knowledge age.

The quality of services offered in an academic library has been investigated over a period of time. Attribute level service quality, importance, satisfaction and post-visit intentions have been measured twice during a period of six months. Banwet and Datta (2002) in their study indicate that the service quality has fallen during the six-month period in the case of most attributes while the attribute importance levels have not changed significantly during the same period. The temporal effect of service quality on post-visit intentions has been examined in a causal path framework. The results indicate that service quality and resulting satisfaction levels during the intervening period modify the effect of service performance and satisfaction on future post-visit intentions. Therefore the reference department of the 21st century has to provide services, which are constantly being shaped by the changes in the information environment and the expectation of patrons of the fast-paced era. The presence of a visionary and dynamic leader to direct and influence the behaviors and activities of the staff that must provide the reference service is an important component in the delivery of quality services.

Osa (2003) focuses on the competencies that the leader must possess in order to get the job done well and influence and direct the employees’ abilities towards the achievement of the department’s predetermined goals. Some of the core competencies considered are valuable.
Chapter – 2: Review of Literature

In academic libraries, the best values begin by making judgments about the quality of services and the processes that underpin their delivery to local people. The inspections and value-added work identified much that was good about libraries and much that needed to improve. Subsequently, the research report ‘Building better libraries’ aroused national interest and offered a number of challenges to the profession on its present and future position in relation to changing national, regional and local contexts. Performance measurement and social impact have emerged as major factors in the Audit Commission’s work on improvement in public services, and the paper focuses on the need to engage with the impact and outcomes of library services rather than its procedures, processes, aims and policies (Curtis and Dean, 2004).

In the rapidly changing information environment, libraries have to demonstrate that their services have relevance, value, and impact for stakeholders and customers. To deliver effective and high quality services, libraries have to assess their performance from the customer point of view. Moving to an assessment framework will be more successful if staff and leaders understand what is involved in organizational change. Amos and Phipps (2004) in their paper describe the new paradigm of building a culture of assessment, and place it in the framework of organizational culture change, utilizing a learning organization and system thinking approach.

Dickinson (2004) considers why it is that budget holders in UK industry are still not convinced that spending money on quality information and knowledge management is a sound investment, capable of yielding increased revenues and
reduced costs. The information professional is faced with the twin challenges of demonstrating the value of the company information service, and securing high quality information services with very limited resources. The challenge for the information provider includes: providing high quality, reliable data; making that data available through relevant, user friendly interfaces; delivering new value added services; helping to provide information about the return to be gained by investing in such services; and making such services available in a cost effective manner. The study conducted by Kyle (2005) finds that publicly supported libraries should satisfy the demands of the general reader for everything that is in print, including foreign material, and in doing so should give greater consideration to the geographical and temporal convenience of the reader in the case of both reference and loan material; that all demands on the interlibrary loan system should be met where possible from the stock of publicly supported libraries: that special libraries should give priority to the demands of their special clients but that they should consider increasing services to outsiders on a fee basis. He suggests that it would be possible, when assessing the different categories of library, to have slightly varying criteria in mind and each librarian would be able to gauge the quality of his services by reference to explicit particular ends.

In their research study Omona and Odongo (2006) assess the application of information and communication technologies (ICT) in health information access and dissemination in Uganda. The project focused not only on information obtainable through libraries for research, teaching, learning and practice, but also on ICT applications concerned with the administration and planning of health
services in Uganda. A thematic analysis highlighted the current state of ICT applications, the extent of applications, the roles played and problems faced. The paper further explores areas where it is used most, cost of accessing information, user profile, ICT literacy, quality of services and telemedicine in the country. It concludes that a number of challenges must be addressed if the full benefit of the use and application of ICT in health information access and dissemination is to be realized in Uganda, and draws the attention of all the stakeholders in the health sector to the need to support and promote ICT as the most effective tool for health information access and dissemination. In the study conducted by Ferguson (2006) there is marginal change of University of Hong Kong Libraries from print collection to electronic collection. He gives the description of the University of Hong Kong Libraries collection, and opines that the change to electronic collection has been successful. It has brought new problems involved with keeping up with the technological issues. Both students and faculty are pleased with the new collection. This change can make a large number of resources available to users at a reasonable price. There are, however, new jobs to do and new skills to learn.

In another similar study Boadi (2006) takes a comparative look at the funding pattern of library and information services in Africa, particularly academic libraries, over the past two decades. Further he observes that the national governments, the main financial providers, are usually held liable for the continuing inadequacy of the financial support and are, therefore, seen as having ignored their financial responsibility toward libraries. This financial neglect
negatively impacts the quality of services provided by the university libraries and, consequently, the quality of teaching and research programs at the universities served by them.

Wilding (2007) in her document analyzes the service issues, costs, and political issues that face the KC libraries if and when they consider consolidation or more extensive collaborative arrangements than they now have in place. Librarian readers will find many issues that will face them if they attempt consolidation or more extensive collaboration. The localism that is the basis of so much in public library tradition is examined as a weakness and strength. Analyzing the development and implementation of the quality assurance system and its continuous review process at the Pao Yue-kong Library of the Hong Kong Polytechnic University Chim (2007) aims to share with readers the experience gained in developing and implementing the system. He describes the benchmarking and departmental assessment exercises conducted periodically to recruit further inputs to the quality circle for continuous improvement. The study finds that setting up of a quality assurance system is a good starting point for quality library service, but successful provision of quality services hinges on the implementation. Management’s commitment to service excellence and willingness to respond to user feedback are critical. Other critical success factors noted are the establishment of a formalized quality assurance system, cultivation of staff commitment, understanding and educating customers, and developing and sharing best practices among the library staff.
Identifying the best practices in order to improve the quality of services in Portuguese academic libraries Melo, Pires and Taverira (2008) describe an ongoing project to assess the performance of library services, resulting from a partnership of six Portuguese higher education libraries. The study has three main steps: (1) selection of criteria to be evaluated and selection of their corresponding performance indicators; (2) data collection and analysis; and (3) identification of best practices. The selection of the criteria to be evaluated is based on a mixed model combining the Common Assessment Framework and the Balanced Scorecard.

Das and Karn (2008) examine the marketing of library and information services in the global era. It discusses about the marketing concept of today's library and information centers covering various topics such as management of libraries and commitment to customer's satisfaction. It also defines marketing and its current approach to library and information services at the global level. It also describes customer/user's topic such as customers' priorities, customers' expectations, individuality responsiveness, relationships, quality of services, professional skills and competencies and value added services. The 5 Ps of marketing mix, i.e. product, pricing, place, promotion and person (staff) have been discussed. The marketing should aim at effective library and information services. The "service trinity", i.e. users (customers), the staff (service provider) and information resources and system should be taken care of from the view of these services. In the modern age, the library and information services (LIS) are customer (user) oriented. Therefore, users' priorities, expectations and needs
should be taken into account. The services should be value added according to the current requirement of the users. It is concluded that the modern libraries are information markets and the library users are consumers of information. The ultimate objective of the marketing of library and information services should be the dissemination of the right information to the right customer (user) at the right time.

In their interesting investigation Mondal (2008) discusses the reading habit of the students of class seven and eight. This study is based on real life survey of 205 pupils carried out at Burdwan town. It shows the hobby, spending hours on text and non text book in a day and their popular topic in Magazine and newspaper.

Walimbe (2009) explains how to develop good library collection and provide quality service to the users. The methods to know information needs of users and selection criteria of information sources are mentioned. The article gives variety of sources which cater to the information needs of users as well as those which are freely accessible to users. Library services include user awareness, current awareness, reference, selective dissemination of information, internet facility, etc.

Balasubramani and Kamatchi (2009) identify the skill attainment in locating, selecting, organizing and interpreting the information in the way in which it could be most effectively extracted and used by B.Ed., class pupils. To improve the development of user's skill, sufficient training should be made available. To attain the same, the user's skill before and after training among
Tripathi and Jeevan (2009) present distance learning libraries services and suggest introducing new ones to enhance quality of services to distance learners. It includes a review of literature on quality assurance in open and distance education in general and student support services in particular. It studies and compares the current practices followed by libraries at open universities, which have proved trailblazers in distance education. A sincere attempt is made to propose an action plan for distance learning libraries for improving their library services.

Marozzi (2009) narrates that universities play a central role within society and provides high quality services to students. It is a careful evaluation of university services. This evaluation is complex because it involves many partial aspects and can be assessed through composite indicators. In this paper, he proposes a simple method for reducing the number of partial aspects underlying composite indicators. A practical application to data from a sample survey conducted on the last year students of the University of Padova is discussed. This survey considered the quality of many services, lecture rooms, library services, and computer classrooms, reading rooms in libraries, study rooms, structure of exams, student socialization, reached skills and so forth. The method has been compared with principal component analysis. The results show that our method is worthy of consideration as it is markedly simpler to be applied than the other dimension reduction methods and requires milder assumptions.
Jange and Hurija (2009) explain that the SERVQUAL scale was developed based on a marketing perspective with the support of the Marketing Science Institute with a purpose to provide an instrument for measuring service quality that would apply across a broad range of services with minor modifications in the scale. SERVQUAL provides a foundation for a growing body of research that pertains to the creation of quality among service industries. The study evaluates the applicability of alternative measures of service quality in a developing economy based on the analysis of data gathered from users and library staff. The research study aims to go deeper into the realm of Quality Assessment and Use Techniques with a sincere effort to assess the performance of management libraries in rendering their quality services to the users’ both from librarians and users perceptions. The quality dimensions viz., Reliability, Responsiveness, Assurance, Access, Communication Tangibles, Empathy and Security have been applied to management institute libraries and the results indicated that the service quality dimensions of reliability, responsiveness, assurance, access, communication and tangibles are found to be average satisfactory based on the scale techniques.
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