Chapter : One

Introduction
INTRODUCTION

The most important feature of modern times influencing development, International competition, etc. is that the rate of growth of information and knowledge is faster than ever before and is still accelerating, The world Famous futurist, Alvin Toffler calls twenty first century as, space age, computer age, information age and electronic era. Blaise Cronin describes the future society as Information Society and predicts about the Emergence of Information workers. These developments are the impact of the phenomenon known as Information Explosion.

Library is a service Institution. The services are aimed at meeting Consumer’s needs. The needs varies with the category of consumers. Most of the University library professionals are faces with the aspect of librarianship and Information Science, between speedy Information retrieval and the leisurely pace of the most of the Consumers Information gathering habits. Most of the library and Information Science professional are still content with their passive work roles expected by the Academic Community, and do not seek major innovation, except the traditional concern for housing men and materials. Services are not aggressively offered as the sales managers do.
1.1 Consumer’s Effectivity

The world is passing through a very fast Technological era, with a wide range of innovations revolutionizing the entire gamut of human activities. It is necessary to avail of this technological Explosion for raising the productivity and efficiency of the various sectors of our economy and generally for improving the quality of consumers lives. Consumers Effectivity undoubtedly constitutes the base for the building a prosperous and progressive library, and putting in place suitable infrastructure facilities is a pre-requisite for realizing this goal. In the field of education, such facilities includes libraries as a basic and essential component.

Now-a-days consumers Effectivity depends critically on acquiring the know-how for using a modern library to the best advantage. The quantitative expansion of libraries and the increased numbers of consumers are heartening but the qualitative aspect has not given proper attention, leading to a decline in the standard of library services. One of the basic problems faced by university libraries in Uttar Pradesh is the shortage of space, since most of the buildings came up many years ago and secondly the extension proposals did not materialize expeditiously to make their resources available to the library users despite of the fact that
The annual intake of books has tripled, the staff strength in most universities continues to be the same as in last decade.

1.2 Information Technology

Information technology is the broad term used to describe the many ways in which modern technology, usually in the form of computers, may be used today in university libraries. It relates to a wide variety of possible operations and tasks these machines perform, such as receiving, manipulating, and reproducing information and data, with a speed and accuracy only dreamed about a few years ago. Computers are now compact and very powerful. They are versatile, flexible and reliable, yet portable enough to be used just as effectively in the libraries as in other organization. The practical reality is that consumers continue to need libraries and librarians must meet these needs with resources and technologies that are now available.

1.3 Statement Of Problem

There are twenty eight state University Libraries in Uttar Pradesh. The challenge before the state university libraries is to make their resources available. The flow of information and the use of information sources by
the consumers in the state University libraries in India are different from
what may now exist in advanced countries like U.K. & USA. In addition,
if the state university libraries want to build a high image with consumer’s
favour, they should have to know their characteristics, background and
their information needs and information uses.

It has been observed that Information Technology if applied to and
adopted by the state university libraries can help them in living up to the
expectations and needs of the consumers. The problem proposed is
studied under the present research project “Consumer’s Effectivity in
Changing Information Technological Scenario at the Libraries of State
Universities in Uttar Pradesh.”

The concept of Consumers effectivity and Impact of Information
Technology is studied under Management Science. The librarians of State
University may need to know information seeking behaviour of
information consumers and effective use of information due to impact of
information technology.
1.4 Nature

This present study is essentially exploratory in nature. This may prompt many further studies of the problem. Therefore, the results computed from field data should not be construed to be absolutely conclusive. It is observed during the field survey that state university libraries in Uttar Pradesh are not well equipped with new information technology. However, it is observed that, these university libraries were interested in applying various Communication channels and new Information technology to fulfill Consumers needs.

1.5 Importance

The importance of present study is to (I) identify (ii) analyze and (iii) tracing the feasibility of application of information technology in university libraries and see the impact on consumers. This study will add to the body of knowledge concerning international librarianship and the use of information by the state university libraries. It is hoped that this study will encourage further research in this field to conduct other studies about "consumers Effectivity". In addition, the finding of this study can be used for comparative studies, and the research finding of this study can also be used as guide for other similar studies.
1.6 Need

The study may respond to the ‘consumers awareness and Effectivity’ of the University libraries. It is essential that University libraries should project a positive and dynamic image through use Information technology. University libraries should ensure better services and relations with each of the library community and promote its use. The libraries being a Service-oriented organization, the Consumers need must be match with the perception of users for effective results. Libraries must be highly regarded and seen to be integral to the aim of university of which they are the key part. Consumers-Oriented Information is characterized by the belief that library user can be motivated to use any product if they exposed their products or services. Most of university librarians now recognized that ‘customers’ must be made aware of the range of available products and services and must further be made to feel that such offerings are worthwhile.¹

1.7 Objectives

The objectives of this study are

i. To understand the attitudes of university librarians towards information consumers;

ii. To define the role of Information Technology for improvement of library and information services.

iii. To develop awareness among the university libraries those consumers’ relations provides a clear understanding of users relations.

iv. To suggest suitable guidelines to improve consumers relations and marketing of information in State University Libraries.

1.8 Scope

No study has been done for the state university libraries in respect of Consumers Effectivity and Impact of Information Technology. The scope of present research work is confined to state university libraries in Uttar Pradesh funded by State Government. In all 577 samples were collected from library users and 150 samples were collected from library staff from nine State University Libraries Viz. R.M.L. Avadh University, University of Lucknow, Lucknow, Gorakhpur University, M.G. Kashi Vidhyapeeth, Varanasi, Sampurnanad Sanskrit Visvavidyalaya, Varanasi, SSM
1.9 Review Of Related Studies

1.9.1 User Education

Kumbar (1998) reveals that user education is mainly concerned with providing guidance and instruction to the user in the proper use of library collections, individually or collectively; mentions the difference between user education, orientation and initiation, and emphasizes the need for user education in the libraries; Provides objectives and methods of user education. Though many institutions, universities and associations in India have organized seminars and conferences on the topic in the necessary infrastructure and innovation of suitable library instruction methods to suit the Indian conditions they are yet to be developed. Therefore it is the duty of the profession to develop such teaching aids, which are suitable to meet the Indian requirements. It has become more urgent due to the heavy use of advanced technologies in libraries and information centers.

Fidzani (1998) reported a result of questionnaire survey to determine the use of library resources by users (graduate) at Botswana University. Empirical data was collected from 144 of 223 users registered for 1996-97
academic year. Results indicated that guidance in the use of library resources and services is necessary to help students to meet some of their information requirements. The Concludes that user training is needed to enable users to make maximum use of the library. The author may be contacted by electronic mail at fidzanib@noka.ub.bw.

Lwehabura (1999) emphasizes the importance of user education in the libraries of academic institutions and the need for comprehensive and systematic user education programmes in African universities and at the roles of the university administration and teaching and library staff in making these programmes effective. Offers proposal for developing a user education programme stressing the need for it to be an integrated component of the university curriculum.

Lohia (1999) stressed on a number of methodologies for the optimum use & promotions of library services, which benefits the library users in great extents. Suggestions for users attention and attraction through: oral presentations, demonstrations diskettes, promotional film or video, leaflet or brochure, promotional mailing, bulletin board, newsletter, news release, displays, public services announcement on radio/T.V., computer Network, Internet etc.
Tiefel (1995) examines the place of library user training in the future of libraries. To counter the popular belief that libraries would be more effective by concentrating their resources elsewhere argues that, to put library users training in perspective requires a look at its past and the status of programmes in term of contents, impact, and limitations.

Barrett (1995) reviews the types of user training techniques commonly used in academic libraries and notes the various factors that contribute to the success or otherwise of user training strategies, including: the importance of planning; and the involvement of academic teaching staff. Direct instruction methods, includes tours of the library; lectures and demonstrations; and audiovisual technologies. Some direct teaching methods include practice sessions; workbooks; computer-assisted instruction; and one to one instructions. Concludes with methods of indirect and mixed technique instruction. Discusses ways of deciding which methods to the use.

Chandler (1994) analyzes how user centered approach to system design addresses the representational and strategic issues that arise when developing a particular artificial intelligence based system, the Science
Education Advisor (SCIED). SCIED is case based hypertext browsing system designed to collect and dispense ideas and advice user centered approach.

Bergman (1992) reports on a questionnaire survey of 125 randomly selected special libraries conducted by the library instruction round table research committee of the ALA in 1988 to determine the purpose and character of library instruction in US Libraries. Findings shows that: the most significant purpose of instruction is to encourage more effective use of the library; that most libraries conducted some sort of individual instruction; that enabling people to refine and articulate information needs is the most important conceptual aspect of library instruction; and that interest is high for exchanging library instruction materials.

Singh (1991) describes user education, its need in libraries and information centers. Traces the beginnings of the user education in general as well as in India. Takes into account the various terms, which have been accepted. Discusses the various developments that have taken place in the field of user education, particularly in the context of computerized information retrieval. Also describes the Indian scenerio this context. although literature on User education are available, there is hardly any
literature on User education is experiences in user education for computerized information retrieval in India.

Shibukawa (1978) mentioned, there is increasing evidence that fewer and fewer library users in colleges and universities are really availing to cope with the complexity of bibliographic systems in modern academic libraries. Emphasizes the importance of practical library user education and briefly reviews studies of user education in the USA.

Ping and Ping (1990) mentioned recently user education in academic libraries in China has rapidly developed with support and encouragement from the Chinese government. Provides a brief view of Chinese higher education and methods of developing bibliographic instruction in Chinese academic libraries. Also discussed are issues related to: cooperation between instructor and librarians, development of teaching materials, and some barriers which may prevent growth in future user education programmes, as well as comments concerning solutions to these barriers.

Luke (1989) stressed that microforms present unique problems for the user. They are difficult to access through traditional bibliographic means and require special equipment. Concludes that the best way to ensure that
users get the most benefit form microforms collections is for libraries to provide them with comprehensive training in using the medium.

Frank (1988) describes the educational system at the Technical University of Budapest and focuses on the development of user education. Observations on the subject of the efficiency of user education include: its dependence on the motivation of the users; the expectations of teachers and the nature of special fields; and the quality of bibliographic citations and references in Hungarian and foreign dissertations.

Green (1989) reveals that in response to a need for a high level of familiarity with the major sources of information in engineering disciplines and increased use of library materials for project work in new degree courses, lecture programmes were developed for the 4 engineering departments in the Edward Boyle Library of Leeds University concentrating on serials literature. These programmes are discussed in the context of the whole user education programme.

Agrawal (1984) discusses the scope of user education and the value, methodology and assessment of user education programmes. Describes international and Indian developments in user education. Proposes the
formation of a national policy on user education and a national agency to administer its programmes.

Khandwala (1983) reports that to suit the requirements of readers-students at different levels and teaching staff, the S.N.D.T Women’s University (Bombay) library arranges different user education programmes with 3 basic goals: orientation to the library, bibliographic instruction and creating general awareness and appreciation of books. The programmes include basic level and detailed orientation, special invitation programmes, formal courses, informal guidance and library exhibitions and projects. Full staff participation is achieved and user education programmes are arranged in four languages. The practical/demonstration methods are used most frequently to increase user involvement. To improve teaching skills, work is distributed among small staff teams. The subject of interest and its bibliographic structure, user awareness, teaching/evaluation methods, library resources, teaching skills of library staff and suitability of the chosen programmes all affect the quality of the user education programme.

Gunjal and Asundi (1984) explain the concept ‘user education’ and its significance in library work. Discusses the various components of user
education, which included the user, information, objectives, techniques, and programmes. Examines programmes and documents to train users and refers to the norms given in UNISIST Manual and the manual of the UK Library Association (LA). Specifies the importance of user education in information work particularly with the availability of sophisticated tools such as microprocessors and minicomputers.

1.9.2 Impact of Information Technology

Information - its creation, storage, retrieval and dissemination - is central to the functioning of large research oriented state university. It is the university library that has performed this particular function. Innovations in technology are affecting the methods of collecting, storing, communicating and displaying information. If the university library is to discharge its function effectively and efficient service to its users it must adopt the modern techniques of information handling by taking resource to the application of new 'Information Technology' and some of the basic issues involved in the application of modern information technologies in state university libraries in Uttar Pradesh. The challenges that libraries have to face in this regard have also been indicated. Some of these could be:-
The conversion of the catalogues, which are in the card form in most of the state university libraries in Uttar Pradesh,

2. Strengthening and providing for the growth of traditional library collections and services, while attempting to develop its capacity to provide access to information resources available elsewhere, both in traditional and electronic forms.

**Legge (1998)** reveals the prospects for the greater use of library users education the Internet and World Web, and alternative ways in which the sharing of resources could take place in this new environment. Suggests that most of the problems encountered in past efforts at users caution resources sharing could be overcome if the resources were Web based.

**Sambasivan (1999)** discusses the problems faced by reference librarians when global Information Technology is undergoing so vast and speedy a transition. Looks at the shifts in emphasis, nature and approach in the questions now posed by library users who are aware of the resources available on CD-ROM and the Internet.

**Kumar (1994)** mentioned the various facets of library automation. He considers the benign and malignant effects of Information Technology (IT)
and examines in detail the likely impact of IT on Indian society and the preparations India has to make to reap the maximum benefits form it.

Rhodes and Chelin (2000) report results of a questionnaire survey, carried out during 1998, to investigate the use of the World Wide Web for user education in 68 UK University libraries. Almost three-quarters of the libraries surveyed make use of the Web for this purpose. The Web is used as a supplement to existing user education, in order to support independent users centered learning and to reach part-time and distance learners. Just 10% of user education are delivered solely via the Web, but libraries indicated that use would grow in the future. It was found that greater use is made of the Web for information skills training than for library induction. The author suggested a number of reasons why more use is not being made of the Web for user education and proposes future developments in this area. He mentioned that web based instruction is unlikely to replace traditional methods completely, but it can be used to supplement and extend existing provisions. The authors may be contacted by electronic mail at Rhodes_Helen@hotmail.com and Jacqueline.Chelin@uwe.ac.uk.
Schmidmaier (1991) defines the role and function of library user education in the specific applications of online user education; CD-ROM user education; and corporate assisted instruction.

Fjallbrant (1990) examines some of the effects of Information Technology as applied to user education at several levels: orientation for new library users; for undergraduate students and courses for academic staff. Particular emphasis is given to library catalogues, bibliographic databases, videotext, optical information storage, electronic publishing and electronic mail.

Collins (1989) describes the methodology and outcomes of an experiment to examine the difficulties novice users encountered when searching the ERIC database on CD-ROM at the South Australian College of Advanced Education Library.

Studer (1986) presenting a paper at Annual Meeting of the Bibliographic Instruction Section of the Association of College and Research Libraries of the ALA during its annual conference in Chicago 9 July 1985. Reveals that it should be easier today to obtain money form the University administration for the purpose of user education because of the widely
held belief that computerization of campuses is desirable. Reasons for
cumbersome of an on-line catalogue should also be explained to campus
community. In the transition, 'gradualism' is the preferred approach with
the card catalogue fully maintained and users free to use public terminals.
Describes prerequisites for the introduction of an on-line system.
Emphasizes that in user education both library staff and users must be
educated about the system.

Nakhimoff (1986) report of a Council of Polytechnic Librarians (COPOL)
seminar on information technology and user education held in London, UK
on 25 March 1986. Paper covered: microcomputers and user education; a
technology update; computer-aided learning and interactive video.

1.10 Hypothesis

i. Information Technology has been largely effected the consumer’s
information seeking behaviour.

ii. Systematic use of Information Technology / Electronic Media,
greatly improves the university library services;

iii. Marketing of information promote the use of information in state
university libraries.
v. There is a need to provide in-house training facilities for the staff in modern information handling & techniques;

v. There is need to develop the capacity of the university libraries to deal with large quantities of information in variety of new forms;

vi. There is need to convince the authorities to make investments to add electronic dimension to state university libraries to keep pace with new information technology and the changing needs of users.

1.11 Methodology

As per the objectives, the hypothesis, the nature and scope of this study, explained in the preceding paragraphs, the present study is concerned primarily with collecting details of factual information on ‘Consumers Effectivity due to new Information Technology with special reference to State University Libraries of Uttar Pradesh. Thrust has been to investigate the Impact of Information Technology and Computer in State university libraries. For this purpose review of literature was done to find out the contribution in this subject. Therefore, to collect the required factual data following techniques have been used. To collect data on (i) the existing situation and practices in university libraries and the future planning with regard to the Information Technology (ii) to know ‘users effectiveness’ due to induction of new information Technology. The
Users Survey was divided into section and sub-sections, which contained variables describing the nature of library, their users community, the library activities, their financial resources, their collection, years of establishment use of information technology by them (ii) which contained variables describing the kinds of library services offered, whether manually or with the help of taken form computers. The data has been collected from 577 library users of various disciplines which form 80% of response to the questionnaire circulated, and 150 library staff of different university libraries which form 85% of response to the questionnaire circulated, and through personal visits and personal interviews from the university librarians and specific library users has been analyzed and interpreted.

1. Library Survey
2. Users Survey.

The data and information thus collected has been examined with special reference to impact of information technology, consumers relation and their information seeking behaviour.

A description of the methodology used to collect the data, and the statistical techniques used for the analysis are presented below: For the purpose of this study, following methods have been used.
A thorough literature search was conducted to examine the findings of the earlier relevant studies and to establish a theoretical framework for this study.

II. Both methods have been used to collect information ‘Manual’ as well as ‘Electronic’ form through CD-ROM & use of LISA Search.

III. Secondary sources of data were used to collect information for present study by historical methods.

IV. Field visits to some of state university libraries in Uttar Pradesh to know the prevailing conditions;

V. Dispatch of questionnaires to collect data from other State University libraries in Uttar Pradesh

a. General information about library services, staff and operations

b. Present status of consumers relation (CR) and

c. Use of Information Technology.

The questionnaire in this study have been used as main instruments, because 'a questionnaire is the principal means used to learn about what is happening in 'our' libraries and how people are responding to them’"^{2}

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12 Summary of Chapters

The whole thesis is divided into eight chapters, numbered as Chapter-1 to 7. The chapters are further divided into sections and sub-sections, numbered using decimal fraction notation. The content of the chapters are summarized as follows:

Chapter-1 is an introduction of this research study. After giving general background, it introduces ‘Consumers Relation’ and ‘Information Technology’; explains the problem being studies; pronounces the importance, need, objectives, and overview of related study and research strategy of the present study. It has been explained that the study finally confines to the findings of the two filed survey of 9 state university libraries located in Uttar Pradesh and 150 library professionals of these university libraries.

Chapter-2 described the ‘University Libraries An Introduction; its objectives; functions, importance of university libraries; and historical developments. Presently there are 28 State University Libraries in U.P. In the state of Utter Pradesh there were initially three Universities. Among these two were Central Universities, namely, the Aligarh Muslim University and the Banaras Hindu University, and other one was State
University, namely Allahabad University. In 1950-51 there were only six Universities and 40-degree colleges providing higher education in the state.

Chapter-3 explains the meaning of ‘Information Technology; its origin and historical development; importance of I.T. for university library. It has been described that the scope of modern Information Technology relations is sufficiently broad for the university library. In university library IT has been, form the beginning, a way of providing speedy library services to its consumers. It continues to receive emphasis; otherwise the library would quickly lose its effectiveness. A wide variety of advantages can be derived by the appropriate use of Information Technology. The advantage of Information Technology can refer to anything useful produced with the assistance of technology, which allows completing more tasks with greater accuracy and better quality in less time and for lower costs. It could be higher productivity, better quality or it might be less tangible like ensuring consumers to have a better image of the library, improved response time or improving staff morale and motivation. In certain nature of jobs, hours of manual work are possible for completion within minutes through Information Technology.
Chapter-4 this chapter explains the concept of marketing of information. It has been described that though ‘marketing’ is a business term, it has found a befitting term ’information marketing’ in university libraries. The university library products and services equally fit into marketable commodities, as any other commodity being marketed by any business enterprise. It is observed if the concept of information marketing is properly understood, adopted and practiced, it may prepare university libraries, to provide much better information products and services to give maximum satisfaction to the users.

Chapter-5 describes the ‘consumers care and Effectivity’, concept of consumers, The ‘Potential User’ The ‘Expected User’ The ‘Actual User’ ‘Beneficiary’ Information Consumer, needs of consumers, consumers-focus approach, consumers profiles, consumers groups, consumers-oriented services, quality of library services, and consumers care and libraries. Till recently consumers care was considered as a synonym to after sale service. But in the recent past it has grown in dimension and today got the status of a library services tool to assure operational efficiency and ‘consumers satisfaction’ by ensuring that products and services reach the consumers on the right time in right quantities and specifications.
Chapter-6 is based on the evaluation of data collected after surveying the 9 State University Libraries of Uttar Pradesh. The data was collected from 577 library users and 150 library professionals out of 100 questionnaires to each university. The observations drawn after data was analyzed and interpreted have been given in this Chapter.

Chapter-7: is containing a summary of ‘Observation & discussion.’ In order to test the formulated hypothesis the findings present the analytical study of the data reported in the previous chapter has been discussed in this chapter in the light of the relevant theoretical models, the researches. The finding reveals that the most of the hypothesis of the present study have happen as well as found not to be defended.

Chapter-8 is containing ‘Recommendations & Conclusion’ formulated during the course of present study.