Scholarly Communication in Indian University Libraries

Services are the heart of any kind of library. Web based library services is a trend. Libraries are taking full advantages of internet and web facilities. They are remarkable changing their mode of provision of services. Users also very happy by getting the library services through web. They can save their time and harassment from not getting the information. The western countries have gone far miles than developing and underdeveloped countries. This paper discusses the background of web based services, basic advantages, future and challenges*****

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ABSTRACT

Scholarly Communication is an inclusive process that represents all forms of dissemination of research output which is passed from author to readers through publishers, universities and libraries. This paper considers a range of definitions for a modern library from the perspective of scholarly communication. It then elaborates the salient features of scholarly communication, issues, challenges and opportunities involved in creating and maintaining a digital library in Indian Universities.

Key words: Scholarly Communication, Digital Libraries, Issues, Challenges and Opportunities.

INTRODUCTION

In this age of information revolution, scholarly communication assumes profound professional significance since it provides research knowledge to various persons and agencies involved in sustaining the national development. The dissemination of scholarly knowledge is the need of the hour in a developing country like India. The universities, research and development organizations have established modern libraries with a view to transfer the knowledge and create a suitable climate for development. The system of scholarly communication is responsible for the dissemination of research findings and recommendations. It is undergoing revolutionary transformation in the new millennium. In this paper, the relationship between scholarly communication and Indian universities is primarily examined with a special emphasis on key factors such as relevance of scholarly communication, impact of new technologies, intermediaries of scholarly communication, issues of scholarly communication, new models of scholarly communication and challenges and opportunities of scholarly communication.

CONCEPT OF SCHOLARLY COMMUNICATION

The term 'scholarly communication' is widely used in the field of library and information science. Scholarly communication has a wide scope since it includes all forms of communications based on research and developmental endeavours. The Library Services, University College, London defines scholarly communication as the method and route by which academic information is passed from author to readers via various intermediaries such as libraries and publishers.

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Rowlands and Huntington (2004) observe: "Although the term 'scholarly communication' is often used in the literature, there is no single agreed-upon definition. In some cases, the scope of scholarly communication is narrowly defined to include exclusively the peer-reviewed literature published upon completion of research by the community of intellectuals."

Harnad(1999) states : Others broaden the scope of scholarly communication to include all forms of communication between researchers. " creating new knowledge is not enough; even to serve as an open-ended investment, knowledge must be communicated, ultimately to the next generation, but in the first instance to one's fellow-researchers, to one's peers, so they can apply, test, and build upon it ".

Lyman (1997) says: "The term scholarly communication became popular with the growth of information technology. Scholarly communication was invented to frame both print publication and digital communication within a single functional scheme".

The definition offered by the Bernard Becker Medical Library is widely accepted as a comprehensive definition on scholarly communication. It reads: "Scholarly communication is the creation, transformation, dissemination and preservation of knowledge related to teaching, research and scholarly endeavours. Among the many scholarly communication issues include author rights, the economics of scholarly resources, new modes of publishing including open access, institutional repositories, rights and access to federally funded research and preservation of intellectual assets".

Scholarly communication primarily consists of the research findings which benefit the society regardless of time and space. Scholars use a variety of means to disseminate research results, including both formal and less formal methods. The major modes for scholarly communication are journals and monographs which are published by both commercial and non-government organizations.

NATURE OF SCHOLARLY COMMUNICATION

The advent of new communication technologies broadened the scope of scholarly communication which provides ready access to information resources for the research community and general publics all over the world. Researchers, gatekeepers, publishers, libraries and users are the major stakeholders of scholarly communication in the modern society. Researchers create scholarly knowledge by virtue of their inventions and discoveries. Gatekeepers like editors, publishers, manuscript and grant viewers and conference organizers screen and filter information and pass it on to others. The publishers bring out the scholarly knowledge in different forms and enrich the process of learning through copy editing, production, distribution, marketing, sales and allied activities. The libraries collect, manage and preserve scholarly publications. The users' community includes policy makers, administrators, scientists, technocrats, researchers, students and the general publics. The users also translate the research knowledge into policies, plans, programmes, products and other forms. There are a number of players in the process of scholarly communication which includes production, dissemination, consumption and utilization of intellectual resources.

Roosendaal, Geurts, Van de Sompel and other scholars have examined the five basic functional requirements of scholarly communication namely– registration which establishes ownership priority over a particular discovery or advance, certification which establishes the validity of a registered scholarly claim traditionally through peer review and editorial processes, documentation which preserves the scholarly record over a period of time and recognition which provides formal recognition for the authors who generate scholarship.

Journals and monographs constitute the core of the formal scholarly communication systems which primarily includes a variety of indexing and abstracting services. The library resources, personal contacts, exchange of personal

communication, sharing of reprints and pre-prints, international exchange programmes, conferences, workshops and so on also constitute the multi-media of scholarly communication.

According to Cronin (2003) "The scholarly communication system is highly diverse, consisting as it does of many species characterized by often markedly different behaviors and drawing upon a bewildering array of (information) resources-and, in turn, a rich array of institutional arrangements for the management of those resources".

The Internet and the World Wide Web have become advanced tools of scholarly communication which facilitate easy access to the users especially in the print and electronic forms in modern libraries. The users can also get complete information on a subject of their choice on round the clock basis from the electronic archives which are not constrained by page limits of print journals. The university library is a place for scholars and students to congregate and share information, experience and expertise on a variety of subjects.

Scholarly communication is transformed as a result of revolutionary technological developments in general and a number of external drivers which range from economic to political in particular. The electronic journals have also been expanding rapidly in this age of information explosion. The traditional print publishers are also providing the electronic versions to the community of users. Scholarly communication has brought about the multi-faceted progress of the mankind all over the world. Intellectual property has become a commercial commodity for which institutions and users pay heavily. The rising costs and decreasing purchase power have impacted scholarly communication. The new forms of scholarly communication have brought up a number of issues relating to their consumption all over the world. These include the role and implementation of peer review, stability, pricing, index/abstract coverage, authenticity and version control. It remains to be seen as to whether these issues will sustain in future despite the growth and the diversity of new modes of scholarly communication.

INTERMEDIARIES OF SCHOLARLY COMMUNICATION

The scholarly communication basically has certain stakeholders namely, authors, publishers, libraries, and universities. The authors create the intellectual resources on the basis of research and developmental endeavors. They are required to identify the needs of the users' community and communicate as effectively as possible. In the present times the authors have begun publishing their research results directly on-line, completely bypassing the traditional publishing channels. The users can make use of the research results in the day to day situation without any standard editorial process and delay. It has become a possibility to maintain easy-to-use, attractive and less expensive scholarly communication networks and services all over the world. The publishers are responsible for filtering of works, compiling and correcting texts of scholarly communication. The libraries provide meaningful linkage between the authors and users. The universities undertake teaching, research, publication and extension activities in the modern society. They also maintain library and information services for the benefit of the teachers, researchers, students and general publics. They also serve as the bridge between the knowledge workers and knowledge users.

IMPACT OF NEW COMMUNICATION TECHNOLOGIES

Scholarly communication has become highly user-friendly mainly because of the revolutionary changes in the field of communication science and technology. Digital libraries have come into existence over a period of time. Digital library involves an extraordinary range of applications – from digital collaboratories to collections of electronic journals, software agents, e-mail, electronic resources, personal information collections and the entire Internet. New technologies have enhanced the scholars' abilities to report, review and distribute research results. They also facilitate easy access to and

navigation of rich multimedia formats and the integration of text, sound, graphics and video. The indexing services and other reference tools are also converted into digital format. There is tremendous growth in informal scholarly communication such as discussion list, e-mail services and digital archives. The searching has also shifted from the realm of the specialist to that of the end user.   The scholarly communication technology applications are highly helpful since they facilitate adoption of innovation, transfer of technology, implementation of projects and other people-friendly activities.

Scholarly communication has a legacy of about 300 years and served variety of purposes. According to Cronin (2003), "The statistics that librarians generate on costs, cancellations and so forth are a surface manifestation of deep changes taking place in the scholarly communication eco –system.   Scholarly communications is transformed as a result of several technological changes and developments which have also facilitated the development of a wide range of new scholarly communication models. The Internet now provides a distribution channel with the power to reduce publication time and to expand traditional print formats by supporting multi-media options and threaded discourse.

Lynch(1993) states: "The possibilities of developing distributed network –based multimedia that combine images, sounds, texts, computer programmes and other objects is transformational in nature. The new models have affected the dissemination of scholarly communication. The informal communication amongst the researchers is being transformed rapidly by the new information and communication technologies. The on-line scholarly communities have also created a huge archive of scholarly communication which has become part of the public record of scholarly knowledge and out put. The scholarly community has been blessed with a new affordable model for disseminating and preserving results, that synthesizes digital technology and the ongoing needs of scholars.

The new models facilitate earliest exchange of scholarly communication through electronic version which facilitates rapid network access to authors' texts and timely consumption of scholarly knowledge. The institutional repositories are subjected to quality control system because they are structured and organized according to professional standards. The new models have also posed series of challenges to the researchers who are expected to publish frequently in the journals which have high impact factor.

Anne et al (1999) comment : "The scholarly community has sufficient expertise and incentive to collaborate on the design of a new model for scholarly communication that takes advantage of networking technology and extends the traditional benefits of print journals. Such a model, while facilitating the exchange of findings and the preservation of the scholarly record, must also support peer review and authentication, support new models of presentation incorporating network technology, permit "threaded" online discourse, adapt to varying criteria among disciplines, assure the security of data, reduce production time and expense, include automated indexing, and provide multiple search options".

ISSUES OF SCHOLARLY COMMUNICATION

Scholarly communication has become a debatable subject of our times since it is known for certain advantages and disadvantages. The subject of scholarly communication is rooted in certain inter-related problems and issues. The key issues of scholarly communication include serial prices, professional organizations, institutional repositories, legislation, authors' rights, open access and so on. According to the latest statistics furnished by the Association of Research Libraries (2006) the serial unit cost had risen by 180% and serial expenditure by 321%. The serial expenditures have increased at a steady rate which has made scholarly communication more accessible and convenient to the user community. The Scholarly Publishing and Academic Resource Coalition, Alliance for Taxpayer Access, Information Access Alliance and other professional organizations have

emerged in Europe and elsewhere to provide economically affordable access to scholarly communication. The digital repository is responsible for preserving and making scholarly communication accessible to the community of users. Issues in copy right and open access are among the most hotly contested issues in scholarly communication. Federal Research Public Digital Millennium Copyright Act (1998), Copyright Term Extension Act (1998), TEACH Act (2002), Access Act (2006), Orphan Works Act (2006)etc were enacted to maintain a balance of power between copyright holders and users. The copyright gives an owner certain privileges such as – right to reproduce, right to prepare derivative works, right to distribute, right to display publicly and right to perform publicly. The open access has resulted in the freely availability of scholarly communication to the users on the public Internet.

SCHOLARLY COMMUNICATION AND INDIAN UNIVERSITY LIBRARIES

The universities of India can be classified into central universities, sate universities, deemed universities, private universities, agricultural universities, national institutes of importance and open universities. These universities are responsible for providing qualified and skilled professionals to the corporate houses, industries, government institutions and non-government organizations. These universities are required to make higher education accessible to a large section of the population and sustain national development.

According to the latest statistics, there are 273 university level institutions in India, including 52 deemed universities, 40 agricultural universities, 162 traditional universities, 33 technical universities, 18 medical universities, 3 information technology universities, 6 law universities and 13 open universities. Quite a few institutions in India have taken the initiative of creating their own institutional repository.

The University Grants Commission provides financial assistance and professional guidance for the advancement of higher education in the country. India has emerged as the research superpower of the Third World Nations since the Indian researchers have contributed about 50% of the research articles. The UGC has also set up the Info-net Digital Library Consortium which is the national information and library network responsible for providing the benefit of access to scholarly communication to the academic community in India.

CHALLENGES AND OPPORTUNITIES

Empirical research reveals that scholarly communication is at crossroads and that many have suggested innovative solutions on their own to the wide variety of technical challenges of scholarly communication. The absence of significantly new prototype for exchanging and preserving scholarly communication is also taken note of by the experts. The contemporary universities and other organised centers of learning have the necessary critical mass of participants from varied disciplines. The institutions of advanced learning have provided adequate representatives on present editorial boards which are established by the print and electronic journals.

There is also a growing diversity of user communities for scholarly communication. Scholarly communication should not be confined to the creamy layer of the society but should also cater to the need of the new consumers like policy makers, bureaucrats, industrialists, businessmen, researchers, activists and the general publics. Lavis et al (2001) rightly suggest: "Researchers (and research funders) should create more opportunities for interaction with the potential users of their research. They should consider such activities as part of the 'real' world of research, not a superfluous adds –on."

CONCLUSION

The increasing cost of the scholarly communication is making it harder for libraries in Indian universities which have to cater to the information needs of their faculty, research scholars and students. The issue of open access remains as a challenge to the organizers of

modern libraries. The changing nature of research patterns also poses serious challenge to the creators, disseminators and users of scholarly communication. Large consortia of purchasing institutions also represent considerable consumer bargaining power that affects the flow of scholarly communications. There is an urgent need for system-wide solutions and the development of a united strategy in which researcher, publishers, librarians and users are guided by a clear agenda founded on comprehensive and impartial data on the scholarly communication system in Indian libraries and information centres.

ACKNOWLEDGEMENT

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