

MEETING INFORMATION NEEDS OF THE GROWING UNIVERSITY POPULATION IN THE 21st CENTURY: CASE OF SOKOINE NATIONAL AGRICULTURAL LIBRARY

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Abstract

Most Tanzanian universities are expanding in terms of students and staff as well as increased subject areas in the curriculum. However, few trained information specialists, inadequate information infrastructures and funds characterize most libraries in the country. At the same time the majority of the patrons are not information literate, lack the ability to select, reject and use information using the appropriate information technologies. The information revolutions taking place in 21st century need to be accommodated to ensure that quality and value added information is made available to or is accessed by the patrons. This paper addresses these issues and recommends some ways to manage information explosion. Some issues have been elaborated using Sokoine National Agricultural Library (SNAL) current situation. It suggests ways of recruiting information professionals training and retraining them so that the capacity to offer quality and required information is attained. Different approaches to enhance library services in the academic circles are recommended.

Introduction

Libraries in higher learning institutions face striking challenges in meeting their strategic plans in this era. Most universities are expanding in terms of increased student enrollment, staff employment and introduction of new courses in the curriculum. At the same time the revolutions taking place in the information industry has resulted in the explosion of information. Thus, investment into information resources, information technologies and human resource is necessary to manage the explosion to ensure quality services. The increase in number of students and staff, results into unmanageable patrons to be served by the professionals. However, libraries are expected to provide comprehensive, quality services with great precision and reliability. Therefore, various tools and mechanisms combined or separately have got to be employed to meet these needs. This paper recommends some ways to manage the information explosion and hence quality services in university libraries. Sokoine University of Agriculture (SUA) and Sokoine National Agricultural Library (SNAL), reflect the actual situation existing in these institutions.

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SNAL and the Growing SUA Population

The library at SUA has the mandate to serve among others the students, and staff. This population is growing significantly. Facts and Figures (2003) indicate that from 1995/96 to 2002/03 there was an increase from 1,154 students to 2,246, which is 53%. This growth in number has been associated with the introduction of new courses, namely, Agricultural Education and Extension, Agricultural Economics and Agribusiness, Wildlife management and Environmental Science. At the same time the number of Academic staff grew from 163 to 243 from 1985/86 to 2002/03. This trend does not include the number of postgraduate students, administrative or technical staff, which also did increase in this period. In view of this the library needs to device ways to ensure provision of high quality services.

Information Explosion in 21st Century

A true characteristic of the 21st century has been the revolution in information industry. The results of these revolutions to the information sector has been the abundant information available for use, this has been termed *information explosion*. The term information explosion has been explained in different ways for example, information age, information society, information flood, information generation, information rich, information overload and information explosion. But all of these terminologies mean one and the same thing. We live in a period when information is being generated, transmitted, stored and processed at high rates, using modern technologies. There is a myriad of information in different formats and by different media being made available every day. Thus, Lyman and Varian (2001) caution that; “we have all had the sensation of drowning in a sea of information; the challenge we face is to learn to swim in that sea, rather than drown in it”.

The challenge for both the professionals and patrons is how to ensure that the right information from the right sources at the right time is made available and used respectively. Therefore better ways to locate, organize, filter (select) and present information are required as well as new tools and mechanisms for its dissemination by the libraries. Geleijnse (quoted in Andrew, L. et. al., 1999) notes that the changes in the information industry requires not only changes in the traditional library elements but also changes in the organization of the library and individuals. He points out among other things that future library should:

- ❖ Focus more on the information management and on selection of relevant information than on collection development as shift from ownership to access is inevitable
- ❖ Emphasize user support more
- ❖ Emphasize user education and user training

- ❖ Provide tailor made services to end-users e.g. easy access to relevant sources

Effects of Information Explosion

Information explosion has the potential to enhance and enrich collections. Lack of information literate patrons, poor information infrastructure and lack or few information professionals may turn this opportunity into a problem rather than a resource for development, in Africa and particularly in Tanzania.

[i] To Information Users

Users or patrons are likely to face predicament due to the explosion. Myriad information available at a given time may confuse a user in many ways. One needs to be sure of where to get the right information, quality information and in the most convenient way. Lets us use this example, of a query, “*information systems in forestry*” there were several sources in which an article by D.P. Dykstra appeared and all are found at Sokoine National Agricultural Library (SNAL). The information was found in The Essential Electronic Agricultural Library (TEEAL) in CD volume 180 pg. 10-15. It was also found in the CD ROM entitled UNASYLVA 1947-2000 and in the Journal title –UNASYLVA and in the internet it was found at the Website www.fao.org/forestry/unasyvla.htm or www.fao.org/docrep/w465/4086e04.htm. The media in which this information appears just confuses the user. The biggest question is where to get particular information. As soon as this question is answered, another question emerges, such as, is this source reliable? is the information relevant? This, coupled with lack of information literacy (IL) skills leave patrons wondering as to which is the right source of information, how to evaluate information for its quality and eventually more time is required to get what is good from various sources.

Users are therefore required to have skills to search, evaluate, select or reject and strategically use the information. In other words the ability to select or abandon, to retrieve and use information through appropriate technologies and skills will determine which users/individuals will have the right information at the right time.

[ii] To Information Professionals

Today information professionals have to work overtime to cope with the information explosion. They need to keep track of the new and useful information produced and make it available to users in a more convenient way. Kenneth,(1993) reveals that library staff act, in one way or another as a bridge enabling the user to be linked to the library stock. Not only that but a link to enable users to access the right information at the right time. The example above on the query “*information systems in forestry*” requires

professionals to be active. They are to render information services, considering all the means by which information is being made available. A user needs to know various sources in which particular information can be obtained. This task of sorting the right kind of information amid the information explosion chaos equates to separating wheat from the chaffs.

A practical system needs to be put in place for processing, gathering, updating and ensuring access to information. This calls for periodic review of the institutional information requirements and the systems for collecting and availing this information to users. At anytime when there are new arrivals, updating and eliminating the useless resources becomes essential. Professionals may soon have to choose between formats to determine how best to handle the advantages and disadvantages of each in accordance with user needs and skills, budgetary requirements and available technologies.

For our circumstances where funds limit most of the activities, training and retraining of librarians is necessary in order to meet user needs. Also there is a need to have committed staff as more time is required in selection, acquisition and licensing to save on costs and to avoid duplication of resources. Team work approach in managing libraries becomes vital in ensuring information needs of the community.

Managing Information Explosion

To manage information explosion and ensure quality services, the strengthening of tradition library services is inevitable. Library co-operations and resource sharing need reconsideration. However, tapping into the development of the information technologies and seeking new funding sources have the potential to enhance library services. Other means of providing effective services are described in the following sections.

(i) The Use of Mass Media

The widespread means of communications has potential to enhance services rendered by the libraries. Ellington (1997), for example observes that, there is a need to provide education and knowledge anywhere and everywhere through new technological advancements. The use of radios, satellite communications, televisions and the like may result in increased awareness of library resources and increased information skills in the community.

Use of mass media such as radio and television can be effective in enhancing access to information in a given community. These sessions can include, techniques to obtain locally available information easily, such as the proper use of catalogues, indexing and abstracting services. They should also be used in broadening the understanding of the ways to obtain information, which is not locally available in our libraries. Instructions on CD-ROM browsing and Internet search techniques can be well demonstrated in such sessions. The use of such facilities like SUA- Television would have

enormous advantages including that of reaching both staff and students at once hence reduced professionals' time required to attend to each library user.

The use of library newsletter may as well be useful to reach many users who could otherwise not be reached through other means. In other words libraries and information centers need to market their services to potential users hence promote the use of the library services.

(ii) Networking

National and regional networks may have far reaching effects in rendering quality services. Most of our institutions cannot afford to provide all of the required resources alone, drawing upon resource of the others becomes useful. United States: the White House conference on library and information services (quoted in Philip, H., 1981) acknowledge that "resource sharing is now mandated by the information explosion, the advance of modern technology, the rapidly escalating costs of needed resources and the wide disparity between resources available to individuals by the reason of geographical location or social economic position". It is vital to meet the needs of patrons and also as a way for managing the effects brought by the revolutions taking place in the information industry in this century.

Having dependable Internet and automated library systems in place may render networking more effective. For example, both, local community as well as external users may use libraries' websites to gain knowledge about resources in a given library. SNAL website <http://snalwww.suanet.ac.tz>, can be accessed from and by any connected computer. Services such as online public access catalogue, guide to various information resources found in the institution may form part of the web pages.

The use of the Local Area Networks (LAN) in the institution is another way of managing the explosion. We need to acknowledge that today's learning, education and research at global level depends on access to current information, which is constantly being transmitted through international information super highways. LAN are useful in reaching the majority of the potential users of the library services. Services like current awareness and selective dissemination of information could be mailed in LAN.

A developed information infrastructure is a prerequisite to successful networking. At SUA the LAN is well established and reliable. But for the past one-year we have experienced problems due to lack of Internet connectivity. For example statistics on the use of the PERI/ INASP online (EBSCO) resources indicate that for the period between January 2001 and January 2003 there were only 374 logins, 544 searches and 358-browsed abstract from SUA. Among other factors resulting into the poor use of these resources is assumed by this paper to be poor Internet connectivity.

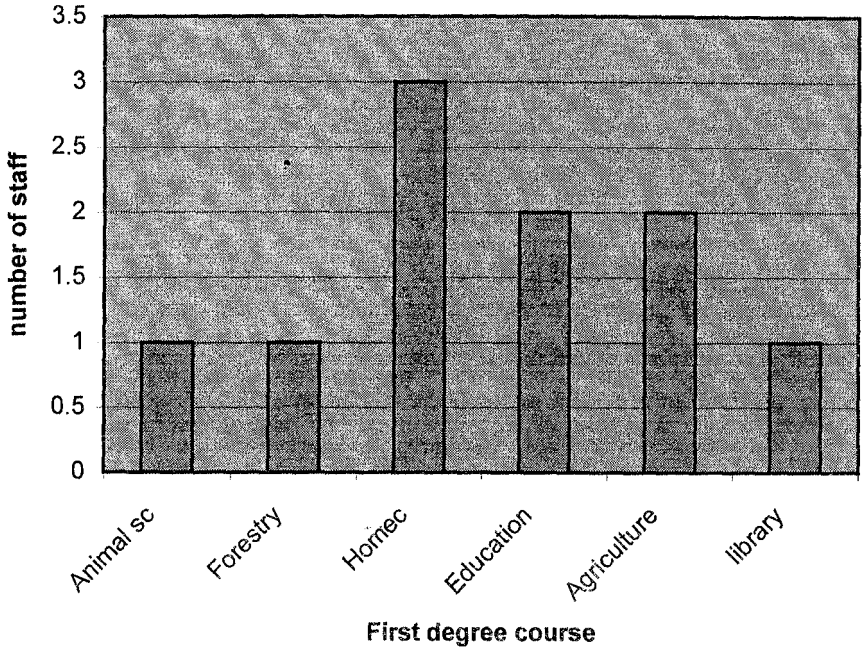
(iii) Information Professionals

The ongoing information revolution calls for adoption and change in ways libraries and information centers work, recruit, train and retrain staff. As myriad information is made available through various means, a typical person deals with a great deal of information. Lancaster and Sandore (quoted in Andrew, L. et. al (1999) appeal that, "it is important for the library managers to develop a culture in which the process of continuous learning and an acceptance of changes by staff is the norm". They further recommend that, there is now a need for library staff to undergo training and educate their users. Therefore it is true that human expertise has always been, and will remain one of the library's greatest assets. This is true for our libraries in this era of information explosion, and increased demand for quality library services.

Library and information centers need to have well equipped working teams. Such teams should be able to manage and keep track of information produced. They need to be able to select, acquire and or access the right information as well as assist users to acquire knowledge on available information resources found in the library and beyond its walls.

A majority of the SNAL academic staff are not trained in information and library studies in their first degrees. With the exception of two who specialized in information technology, the rest were trained in information and library studies in their postgraduate studies. The graph below shows the field of staff specialization at undergraduate level.

SNAL STAFF ACADEMIC BACKGROUND



The graph reflects a fairly well distributed academic background representing the majority of degree programs offered at SUA. This and the related nature of staff selection, has advantages in enhancing library services. For example activities like current awareness, selective dissemination of information, indexing and abstracting are more effective and efficient when done by librarians with a relevant academic background. Another approach, which can equip library and information professionals with the right skills, is through training and retraining them in areas identified by library management to be in need of strengthening. For example if the library lacks computer specialists staff should be trained in such areas

[iv] Proactiveness in Various Academic Activities

[a] Curriculum development and faculty/departmental meetings

Librarians must be active in curriculum review and development in order to keep track of the academic information needs of users. Thus, the ability to avail the right information to the right users at the right time will be enhanced in managing the explosion.

When courses are reviewed or changed and or new courses introduced, librarians must be active participants rather than passive observer. Any change of curriculum means changes or additional information resources. To be able to connect the right information to the right users and to be cost effective, librarians should take into consideration such changes. Information literacy (IL) as a course has to be incorporated in the curriculum, but can only be known to administrators and curriculum reviewers through librarians. In LIRT 15th anniversary publication (1995) it is asserted that, producing information literate people will require schools and colleges to appreciate and integrate the concept of information literacy into their learning programs. For example the introduction of the course in environmental science by the faculty of science at SUA was preceded by a workshop. From this workshop a proposal to incorporate IL in the course was written by a librarian who participated in the workshop. As a result IL is among the taught subjects in this course.

The SUA Library has representatives in different faculties, directorates or institutes' meetings. This opportunity can be utilized to establish information needs of different departments and faculties. The library representatives should strive to ensure that information becomes an agenda in such meetings and have it intensively discussed and given the required attention.

[b] Consultancy

To manage the huge information, there is a need to establish a strong link between library and faculties in the institution. Professional meetings and discussion on information from department or faculty level if conducted may result into capturing of the real information needs thereof. It is therefore important for the library managers to have in their plans such consultative meetings with different staff to discuss information needs of different departments.

The opportunity may as well be used to introduce and educate both the administrative and academic staff on information literacy and the importance of information in enhancing learning in institutions. Since information is neglected by many managers and hence given less priority this might be the right time to advocate on the role of library in the learning environment. Nyerembe (2001) airs sentiments on the need to have strong library-faculty relationships/ cooperation to be able to cope with the revolutions happening in the entire information discipline.

[v] Information Literacy

A need to have a community, which is information literate, has been advocated by many. It is important for the university and learning centers to ensure that its population including students, lecturers and administrators are

information literate. Hardesty (2000) stress that, competency in information literacy is crucial as a direct results of the web revolution (information explosion), where a phenomenal amount of information of varying quality is continuously generated. Thus, more guidance in selection, location, use and evaluation of information is needed. Hence librarians and information professionals are important in supporting education in this era.

Patrons themselves need to have the ability to evaluate information from various sources in terms of appropriateness, quality and quantity. For students the introduction or strengthening information literacy in the curriculum is invariably vital at this time. Wade (1996) stress that, IL training should be planned and integrated into curriculum and at an early stage. She further noted that the sessions should be part of students' formal timetable. For the remaining segment of patrons, which include professors, lecturers and administrative staff there is a need for different approaches. Workshops, seminars and consultative meetings, which may enhance information literacy of this segment as well. These programs should aim at helping students and staffs from different faculties to learn evaluate, access, and use information resources effectively and efficiently.

Conclusion

The use of various means including that of making education the top most agenda of the library, recruiting, training and retraining of the information professional strategically, funding and having strong networks are among ways to manage the explosion. Library activities that reflect the information in the real problem should be the central library agenda to be able to manage the explosion and hence improve the quality of the services.

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