

TOWARDS BUILDING MODERN UNIVERSITIES IN TANZANIA: THE ROLE OF ELECTRONIC RESOURCE SHARING NETWORKS IN TEACHING, LEARNING AND RESEARCH

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Abstract

This paper will examine the role of joint electronic resource sharing networks in supporting the key mission of Tanzanian Universities by paying particular attention to the situation in Tanzania. The paper will investigate the problem of institutional collaboration in Tanzania to identify what factors have hitherto hindered effective and formal collaboration among Tanzanian academic libraries. It will then examine whether current environment characterised by liberalised education system, IT developments and applications, globalisation and internationalisation of higher education can act as a catalyst for future institutional collaboration. The role of electronic resource sharing networks and their potential for providing cost effective services and building of modern Universities in Tanzania will be discussed. Experiences from European, American and South African networks will be highlighted and lessons drawn. The main argument of the paper is that the future lies in collaboration rather than isolation. In conclusion the paper will emphasise the importance of joint academic resource sharing networks among Tanzanian academic libraries. It will reiterate the importance of building institutional mechanisms and structures for supporting such initiatives. In addition, institutional support in building and nurturing electronic resources sharing networks is of critical importance for sustainability.

Introduction

The history of University development in Tanzania should be viewed in the context of socio economic and political changes that have taken place at the national, regional and international levels. The first University, the University College of Dar es Salaam was established in 1961 as part of the University of London that had three campus colleges in Kenya, Tanzania and Uganda. In 1970 the University of Dar es Salaam was established out of a decision to split the three colleges into separate Universities for Kenya, Uganda and Tanzania. The University had three campuses the main campus

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at the hill, the Muhimbili Medical Campus and the Faculty of Agriculture in Morogoro. In 1984, the second University was established out of the Faculty of Agriculture, Forestry and Veterinary Science. These Universities were fully financed by public funds as part of the Tanzanian policy that major socio economic and political activities were strictly under government control. In the late 1980s and 1990s the burden of strict control of educational and other sectors was too heavy for the government to bear. Under strict austerity measures the capacity of the Universities to fulfil the key mission and run its activities was severely affected. As a way forward, the University of Dar es Salaam for instance has to institute major changes aimed at building a modern University that can effectively compete at the regional and global arena.

At another level, the pressure of globalisation and the need for socio-economic and political reform as a way forward for sustainable development have had tremendous impact on Tanzanian society. One of the significant impacts has been the dramatic shift in the management of national affairs through a liberalisation policy that allowed the private sector and civil society to play a part in managing the affairs of the nation. This major shift in policy has led to major reforms in almost every sector including the education sector. Under the Education sector reform privately funded Universities were for the first time established in Tanzania. At the same time there was a dire need to expand access to higher education in state owned Universities by increasing student enrolment and to transform them to modern universities of the 21st century. By the year 2002, there were about nine Universities in Tanzania. Out of these five are private (Tumaini University, Herbert Kairuki Memorial University, International Medical and Technological University, St. Augustine University and Zanzibar University) and four state financed Universities (Mzumbe University, Sokoine University, University of Dar es Salaam and the Open University of Tanzania).

Under the current environment characterised by globalisation and internationalisation of higher education it is imperative that Tanzanian Universities for that matter should strive to build modern Universities with competitive academic and research programmes. Building a modern University entails modern administrative and services infrastructure, well-trained personnel, competitive academic and research programmes. University libraries as hearts of modern Universities have a significant role to play in the endeavour to build modern Universities. In the process of transforming Tanzanian Universities into modern Universities, libraries have been part and parcel of the process by undertaking several innovative activities. These include applying Information Technology in organisation and management of information services, imparting new skills to staff, building electronic databases and providing electronic information services.

At this juncture it is imperative that University Libraries have to reflect their roles in building modern Tanzanian Universities. What is important is to examine the role of electronic information resource sharing networks and consortia in supporting the key mission of Tanzanian Universities in the context of globalisation and internationalisation of higher education.

This paper examines the role of electronic resources sharing networks and specifically it documents the situation in Tanzania. It discusses the potential for Tanzanian academic libraries to benefit from current developments by looking at experiences of resource sharing networks in other countries. It is divided into six sections. The first part is an introduction, followed by a discussion of major issues associated with resource sharing networks. The third section presents an overview of resource sharing networks in other parts of the globe and specifically the situation in Africa. Section four discusses historically efforts made towards sharing resources among Tanzanian academic libraries. Section five discusses challenges to consortia building and the final section presents a conclusion and some recommendations. The paper is basically based on literature survey, interviews and discussions with some senior members of staff in selected University Libraries.

The Problem

Historical analysis of resource sharing among libraries in Tanzania indicates that the early period was characterised by some form of resource sharing that later on died a natural death and only informal links were maintained among libraries. The decline in resource sharing activities on the 1980s and 1990s reflect the situation pertaining at that time mainly characterised by declining budgets, fewer trained professional staff, scarce resources and low morale and thus lack of commitment to undertake such activities. As a result much talk and little action mainly dominated this period as far as formal links and networks were concerned. Alemna and Antwi (2002) argue that the main hindrance to resource sharing include financial, management and accessibility to materials. This situation is not confined to Tanzania alone but also exists in some other African countries. For instance, Ubogu et. al. (1997) paints the same picture when reviewing the state of affairs in Nigeria. They argue that "all efforts at efficient resource sharing in Nigeria seem to have come to naught, most projects lie either on the drawing board or are half completed". They further point out that "library co-operation exists only informally, based on the good will of one library to another (Ubogu et. al. 1997).

In most African countries South of the Sahara, with the exception of South Africa, resource sharing and co-operative library networks as a means of effectively sharing resources has hitherto been confined to talks and resolutions in conferences and workshops. In most of these countries,

resources sharing has been informally managed mainly through inter library loans and to a certain extent through printed union lists of serials (Ubogu et. al. 1997). Most of these efforts did not make much impact in terms of benefits to users because the plans were not well marketed and the whole process of ordering materials proved to be cumbersome and slow. In addition, mechanisms for implementation of the same were not made explicit to staff who were supposed to implement the processes and thus the informal links died a natural death.

Several barriers impinge upon efforts directed towards resource sharing in most African countries. Tashkenty (1992) identifies the following barriers; lack of access to information, lack of experience as well as historical, physical, geographical, psychological and bureaucratic barriers. On the other hand, Siddique (1995) identifies absence of planning, shortage of staff, inadequate databases, lack of networking facilities and inadequate funding as the main barriers to effective resources sharing. To establish successful resource sharing ventures there is need to overcome any barrier that may impede the way.

The Conceptual Framework

Theoretically, the paper is discussed within the framework of the main principle that states “no library can be self sufficient in satisfying information needs of the user.” The above statement sounds familiar in library circles especially during the 1980’s when resources in libraries became scarce, and prices of resources started to skyrocket. The advent of information explosion and developments in information technology signalled the emergence of the information age and information societies. The principle then led to “ownership versus access” debate that has dominated the library literature in recent years. The main argument presented in this debate is the need for libraries to ensure access to information resources to satisfy actual needs rather than to try to build a collection that may not be effectively used. What is emphasised here is the importance of facilitating access to information irrespective of ownership and location. Libraries are challenged to put mechanisms that will ensure access to global collection of information resources. The old quest to create comprehensive collection physically available in a specific library increasingly became a history. In this regard, Budd (1994) in Hiremath (2001) argues that “the historic quest for the great comprehensive collection has been superseded by the need to provide access to collective scholarly resources that no library can afford”. New modes of scholarly publication and making electronic information accessible in a network has acted as a catalyst for libraries to share their information specifically when dealing with issues of joint ownership of full text databases of resources. The current trend in this endeavour has been to put emphasis on

joint ownership of collection of resources especially subscribed databases of full text journals and other resources.

Library Resource Sharing Networks and Consortia Building: a Survey

Library resource sharing networks refer to a co-operative arrangement among several libraries for the purpose of sharing of resources. Electronic resource sharing networks on the other hand refer to the application of Information Technology (IT) to a network environment to enhance sharing of resources among several participating libraries. Library consortium is a more formal association of libraries, which is established to develop and implement resource sharing among its members. A library consortium has the objective of reducing costs, achieve efficiency in joint electronic database procurement, sharing licensing issues and developing a networked information environment (Jalloh, 1999, Alemna and Antwi 2002).

Rationale for Resource Sharing and Consortia Building

Considering the fact that “no library can satisfy the dynamic and increased user demands for services”, resource sharing is seen as a solution that will maintain satisfactory levels of service. Through resource sharing, resources of a group of libraries can be pooled together to ensure cost effectiveness in service provision. Experts have identified various factors that necessitate the need for resource sharing, these include; shrinking resources, skyrocketing price of journals and other resources, the information explosion, avoiding duplication of efforts, dynamic and comprehensive user needs, developments in information technology and the need to promote optimum utilisation of resources. (Chandra 2001, Wijasurya 1995, Jalloh 1999). Other factors that have acted as catalyst to renewed interest in consortia building include; developments in information technology, the availability of infrastructure that facilitates resources sharing, institutional goals and the need to use each others resources effectively (Chandra 2001). Alemna and Antwi (2002) point out that the main impetus to this new trend includes the need to enhance quality, reduce costs and to minimise duplication of efforts among libraries. The rationale behind the trend towards resource sharing and consortia building include the recognition that resource sharing plays a significant role in improving access, developing a comprehensive shared stock, sharing staff and expertise, technology and promoting optimum use of space (Anwar and Al-Jasem 2001). This means that co-operating libraries achieve enhanced access to reciprocal collections facilitated through inter library loan and document delivery arrangements or direct access to electronic resources through networks. Co-operative acquisition on the other hand enhances quality of stock and saves time and financial resources by avoiding duplication of efforts among participating libraries.

Application of Information Technology in Resource Sharing Networks

In recent years, the application of information technology in information management has equally generated renewed interest in establishing and managing resource-sharing ventures. Resource sharing in technology enhanced environment has assumed new dimensions in the form of multilibrary networks involving shared databases, telecommunications links and common applications (Alemna and Antwi 2002). In addition, new modes of scholarly publishing, delivery and access to information have necessitated the need for libraries to re-examine their stance regarding resource sharing. In a new challenging context, electronic resource sharing is viewed as a promising solution to the evolving precarious situation characterised by electronic publishing, access control to electronic databases, archiving electronic information and licensing issues as far as purchase of electronically published scholarly information is concerned.

Electronic resources sharing networks among libraries are formed to facilitate fast and efficient access to information resources and are regarded as one among several cost-effective strategy of using scarce resources effectively. The benefits that accrue from electronic resource sharing have led a number of libraries, in America and Europe to apply technology in their co-operative and collaborative ventures.

Challenges to Consortia Building

Successful resource sharing ventures enhances access to information resources and satisfaction of users' needs. However, the process of building and managing consortia present some challenges that need to be transformed to opportunities for change and success. Alemna and Antwi (2000:5) argue that "the main challenge for consortia building especially in the African context is financial, managerial and accessibility to materials". They further point out that successful co-operative ventures require high levels of skills and commitment (Alemna and Antwi 2002). Tools for consortium building should be taken seriously by participating libraries and these include creation of local databases and serials union lists (Alemna and Antwi 2002). On the other hand, Hiremath (2001) identifies loss of freedom, cost implication, electronic resource pricing and lack of trust as some of the challenges that may be contended in a consortium. Other challenges are at the level of implementation and arise out of licensing issues for consortia electronic resources and the changing role of the reference librarian. There is therefore a need to be conversant with licensing issues and to have good negotiation skills. Furthermore, participating libraries are challenged to anticipate increased workloads in the areas of selection, access control, training and decision making. However, given the enormous benefits that potentially

accrue from a consortium it is important to work out mechanism to transform the challenges to opportunities by learning from the experiences of other networks. At this juncture commitment to the consortia has to be given due attention in the working of participating libraries. Other issues that need due consideration include structure and governance, including funding, membership and commitment on the part of libraries and their parent institutions.

Library Networks and Consortia

Successful library networks have been established in the developed world and some parts of Asia and Latin America. For instance, in the United States and Canada, there are more than 100 large electronic resource sharing consortia, some of which are centralised, well staffed and highly integrated while others are loose federation with minimum levels of co-operation (Hiremath 2001). In the United Kingdom, consortia developments have made great achievements by developing a national framework contract so that every academic library is a participant to a national site license (Hiremath 2001). In China, there is the CALIS, the Chinese Academic Library Information System that is a highly centralised and wholly integrated consortium. It serves the information needs of over 700,000 students spread over 27 Chinese provinces (Hiremath 2001).

In Africa, most of the successful resources sharing networks have been established in Southern African region. In South Africa, there are at least five co-operative ventures. These include the following; South African Bibliographic and Information Network (SABINET), Gauteng and Environs Library Consortium (GAELIC); Cape Library Co-operative (CALICO), Cataloguing Network in Pietermaritzburg (CATNIP) and South Eastern Academic Library System (SEALS). Most of these multilibrary networks have successfully applied information technology and have achieved tremendous success in their work. For instance, SABINET has successfully promoted resource sharing through an interlending system. It is reported that the system processes about 90% of interlending requests in South Africa (Kemp 1996). SABINET also maintains other services such as index to South African Periodicals (ISAP), research at Southern African Universities (UCTD), research at SS Technikons (NAVTECH), South African co-operative indexing database and full text of South African Government and Provincial Gazettes (Kemp 1996). On the other hand, GAELIC has promoted resource sharing and facilitated access to resources through shared computer systems and networks, sharing training resources and expertise and building links with other libraries and networks (Edwards, 2000, and Alemna and Antwi 2002).

Resource Sharing and Consortia Building: the African Situation

Although, South Africa leads the way in consortium building, recently, initiatives have started in other African countries including Zimbabwe, Ghana, Kenya, Botswana, Swaziland, Namibia and Tanzania to establish electronic resource sharing networks in order to improve access to information and improve competence in handling interlibrary loans and document delivery. In Namibia, a co-operative venture (COMLIB) has been initiated to link the main library, Faculty libraries and Distance learning centres scattered all over the country (Alemna and Antwi 2002). In Swaziland, advanced plans to build a computerised resource-sharing network of all libraries and information services termed SWALINET (Swaziland Library and Information Network) are in place (Jalloh 1999).

Resource Sharing and Consortium Building: the Tanzanian Situation

In Tanzania, efforts to share resources among University libraries started long way back when the University was established as part of the University of London with three campuses. At this time libraries of the three colleges collaborated by exchanging bibliographic information and information resources in order to build the East Africana collections. Also informally, these libraries maintained inter library loan services whereby resources were made accessible to users in all the three colleges. This went on until in the 1970 when the University of Dar es Salaam was established as an autonomous University that maintained three campuses that is the main campus, the Muhimbili campus that housed the Faculty of Medicine and the Morogoro campus that housed the Faculty of Agriculture. Resources sharing among the three campuses was maintained by a union catalogue whereby bibliographic records were exchanged to facilitate provision of inter library loans services. However, in the 1980s amidst scarce resources this form of co-operation could not be sustained for long and the co-operation among the three libraries was mainly informal in character. Apart from lack of financial resources to sustain any form of formal co-operation, lack of commitment among the key role players also played a significant role in creating conditions for lack of co-operation among libraries in Tanzania.

However, efforts toward resource sharing was done when in 1989 an attempt was made to hold a conference to discuss critical issues in resource sharing among libraries. However, through support from sida/SAREC an attempt was made to compile a list of periodicals in Tanzanian libraries in order to facilitate sharing of resources, unfortunately this Serials list was not marketed seriously to make an impact on sharing resources. As a result to a great extent the University of Dar es Salaam library continued to use the services of the British Library Document Supply Centre for its document delivery needs. In 1992 ESAMI conducted a Library Networking

Management Course for Librarians of East African countries whereby participants developed a model for resources sharing among libraries in the region. However, until the close of the century not much was done to initiate formal resource sharing networks among libraries of the region.

However, recently, the situation is in the process of being transformed dramatically. Most academic and research libraries have applied information technology in their operations albeit at differing levels. With increased donor support to provision of information services in Tanzania, most libraries have satisfactory levels of funding to implement innovative IT projects, train its staff and to provide technology enhanced library and information services. In addition, after being dormant for prolonged period the Tanzania Library Association (TLA) has actively started to bring together Library and Information Science (LIS) professionals and other workers. The Tanzanian Academic and Research Libraries Association (TARLA) is working hard to share information and expertise among its members. Through training and continuing education there is excellent expertise that exist among Library and Information Services (LIS) professionals. Even more promising are the initiatives that are at advanced stages, among academic and research libraries to establish a consortium in Tanzania.

In the meantime, less formal resource sharing arrangements exist among Tanzanian libraries. For instance, the Programme for Enhancement of Research Information (PERI) of which the University of Dar es Salaam (UDSM) Library is the Country Co-ordinator is facilitating co-operation in the form of accessing electronic information resources. The programme is promoting, resource sharing among libraries through the extension of access to electronic journals, electronic databases and electronic document delivery services as well as training of staff of participating libraries. At the same time, the University of Dar es Salaam is in the process of developing a union catalogue of resources held by Faculty and Departmental libraries on campus in order to promote resource sharing. It is hoped that soon College Libraries will follow suit by creating union catalogue of college resources, which will eventually be linked to the main campus union catalogue. To enhance further resources sharing the UCLAS library has acquired and installed a software package used by UDSM library and MUCHS in the process of acquiring the same. Expertise available in the UDSM library was effectively used to install the software and to train college library staff in the management and use of the software.

Developments described above indicate a promising future for more formalised resources sharing among Tanzanian academic libraries in order to promote access and enhance service provision and use resources effectively. However, there are challenges that have to be considered in order to build a sustainable electronic resource-sharing network.

Conclusions and Recommendations: the Future of Resource Sharing in Tanzania

As discussed above, the current situation in Tanzanian academic and research libraries is characterised by the desire to apply technology, and to share resources and expertise. This sense of desire is emerging in an environment of limited financial resources and consortia building skills and consortia management. At the same time, more Universities are established in Tanzania to meet the demand for higher education. The challenge now is how to build a consortium that will ensure optimum utilisation of resources, avoid duplication, share expertise, enhance acquisition of new skills and also build national sources of information.

The review of consortia building in other parts of the globe indicates that consortia have a tremendous role to play in facilitating acquisition and use of technology among university in libraries, and in the process of teaching, learning and research. The main governing principle according to experts is that “no single institution can or should attempt to be all things to all people and voluntary co-operation fosters effective, concerted action while preserving institutional autonomy and diversity”. Increasingly, resource sharing is becoming a globalised process. The emerging trend now is that resource sharing transcends geographical boundaries and increasingly libraries are collaborating at international levels.

In the Tanzanian context, electronic resource sharing networks should play a significant role in enhancing the process of teaching, learning and research. In the endeavour, it is essential to ensure high levels of professional and institutional commitment, to develop a dynamic administrative support within institutional framework in order to build sustainable consortia that will implement its objectives effectively and efficiently. The importance of building institutional mechanisms and structures for supporting such initiatives is of critical importance for sustainability. Finally, consortia building in Tanzania is critical as any success in the future will depend on institutional collaboration rather than isolation. Commitment and willingness to cooperate and effective communication are among important issues that will promote success. Therefore, in building modern Tanzanian Universities that can respond to the challenges of globalisation and internalisation of higher education, electronic resource sharing networks have a crucial role to play.

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