Retrospective Conversion in Two Nigerian University Libraries: A Comparative Study of Kenneth Dike Library and Obafemi Awolowo University Library

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Introduction

Retrospective conversion has to do with change from manual to automated or computerized system. In consideration of the inefficiency, slow and inadequacy of the existing library manual processes, libraries all over the world are resorting to automation as a means of coping with enormous literature output and greater demand on their services in this era of information explosion.

Nigerian libraries are not left out. Automation in Nigeria is not new, rather it dates back to the early 1970s (Ehikhamenor, 1990). According to him the first product of computerization in Nigeria was the catalogue of serial in March 1975 by the Ibadan University Library.

It is obvious that information technology (IT) has come to stay considering the immense benefit derived from it. The issue now is not whether libraries are going to embrace it, rather it is when will those libraries that are not yet automated, going to do so? In answer to this question, many libraries are in dilemma as to how to go about retrospective conversion (RECON) successfully. For a successful automation, libraries need to learn by examples and for them to learn in this way there must be documents to fall back on.

A number of studies have been conducted on the topic automation, and retrospective conversion. Some of these studies examined the prospects of the use of IT and the development of information systems in developing countries (Taylor and Obudho, 1977, Mills, 1983, Uladimir 1985). While some others delved into problems and the procedures of retrospective conversion (Ehikhamenor, 1990, Ajala, 1997, and Faniran and Oyemakinde, 2000).

This study is necessitated by the fact that there is still need to examine the various processes and problems encountered by one library retrospective conversion in this recent times, and then compare it with those of another library so as to identify the better alternative for the benefit of those Nigerian Libraries who are still looking forward to the actualization of their dream of automation.

Literature Review

In the light of the foregoing, the literature has been reviewed under the following sub-headings:

- The need for retrospective conversion.
- Decisions over acquisition of programme software for libraries.
- Planning and procedures for RECON.
• Approaches to retrospective conversion of card catalogue.
• Problems and prospect of retrospective conversion in Nigeria
• Computerization of university libraries in Nigeria.

Need for Retrospective Conversion

Kesner and Jones (1984) as cited in Oketunji (2000) suggested that in choosing an automated library system the library should do a need analysis so as to review the existing system; its strengths and weakness. It has however been identified that retrospective conversion of library system to computerized or automated system is of tremendous benefits both to the users and the library staff:

Some of the benefits as outlined by Tedd (1984) include the provision of online access, ability to access with ease more information via the online, saves time and cost, and makes for more accurate completion of tasks.

Cochrane's (1992) list of advantages of information technology complements this. They are summarized as follows: It allows easy integration of various activities, facilitates cooperation, helps to avoid duplication of efforts, eliminates repetitive work; saves money and increases efficiency.

Mabawonku (1999) noted that a computerized cataloguing system enables the use of centrally produced bibliographic record, and thus saves time and ensures uniformity of cataloguing procedures as well as standardization of cataloguing rules and procedures. Indeed, computerization of libraries will not only facilitates globalization of information, but will make for effectiveness and efficiency in information handling.

Nwalo (2003) adds that computerization of libraries in Africa will permit the acquisition and use of literature on CD–Rom, which has immense benefit both in terms of cost and durability. It collapses time, space as well as reduces the incidence of mutilation, defacing and theft of library materials.

Edoka (1992) highlighted the advantages of using computers in libraries as speed; improved performance, permanent storage of information, dependability and creation of new services.

Lang (2007) noted that catalogers use the Internet as a tool for locating cataloging documentation and other information. She posited that the main strengths of electronic cataloguing over traditional cataloguing are its ease of use and its ability to reduce the amount of time required to access information.

Generally, computerization enhances various operations and services in the library such as acquisition, serials, catalogue, circulation and information networks as well as library management. Edoka (1992).

Ajala (1997) stated that the great flood of information and the need to avoid keeping backlog of unprocessed materials, the increase in the volume of research activities resulting to mass of materials as well as the need to make bibliographical information accessible to researchers in remote site and satellite campuses have necessitated new and fast techniques of processing information.

In consideration of the inadequacies and dissatisfactions associated with manual system, it is obvious that retrospective conversion is a need that should be embraced by every library, hence the saying of Aramide (1974). “Mechanization has proved its superiority over traditional method in terms of accuracy speed and consistency. Manjunath (2004) added that automation eliminates cumbersome job of printing the cards, enhance simultaneous access to the same database as well as quick and remote access to information on the network.
From the aforewritten, there are two basic objectives of automation: to enhance efficiency and effectiveness in what is already done and to offer more services, which could not be achieved manually. This has been summed up in the statement of Adeyemi (2001).

“Today, the librarian can rely on the computer to perform all the functions of a cataloging system and more. Using an appropriate software, cataloguers can input data for each piece of item on pre-designed work-sheets resident on the system, as well as edit or revise such entries……. Besides, it is now possible to go beyond the traditional fields of information on the catalogue card to provide additional access points using other criteria like the affiliation of authors, key words in the title, or thesaurus descriptors which the economics of manual cataloging and classification did not encourage”.

Retrospective conversion is simply “a need not a luxury”, hence libraries are really about providing quick and easy access to information.

**Software Decisions**

According to Ajala (1997) the most important decision in automation are the hardware and the software requirement, and which of software development and use of software packages should be adopted in the automation process. Gibbarelli (1996) suggested that an automation exercise should start with the acquisition of software.

From the study conducted by Valantin (1981) CDS/ISIS possesses the following attributes: it is able to handle variable length records, variable length file, variable occurring fields, sub-fields and long descriptive abstracts. It uses more than one index per file to generate the inverted file in order to ensure rapid access to stored data; the user specifies the field to be indexed. According to Shirley, Perry and Willet (1983), the inverted file consists of a set of lists each of which contains pointers to the document records, which have been previously indexed by one particular term in the set of terms used for the characterization of the documents in the collection.

Manjunath (2004) advised that if a library wants to make a beginning; CDS/ISIS is best suited as it involves minimum investment on both hardware and software. He advocated the following criteria that will help in software selection:

To identify the developers, whether they are institution, reputed company or few individuals (The preference is for institution). Also to find out how many times the software has been revised since the time of its first launch and the number of parameters available for each module. He went further to say that there is also need to find out whether the software has facility to import bibliographic data in 1802709 format and similar export of data in this format; And whether there will be training and guidance after use as well as availability of such software on the major operating systems.

From the study conducted by Ajala (1997), TINLIB seems to be the toast of libraries most especially university libraries. He continued that despite the fact that CDS/ISIS is given free of charge, it is still not as used as TINLIB. TINLIB is more user friendly, versatile, and takes care of all library operators and so suitable for large academic libraries. Nevertheless CDS/ISIS is distributed free of charge and so libraries with limited resources can make adequate use of the software and it can also be used to meet peculiar needs of the library.

Apart from choosing the appropriate software, another decision that has to be made in connection with retrospective conversion is to decide whether to adopt in-house software development or buy existing software package. In-house software development is the designing programming, documenting and testing a system locally from the scratch (Eyitayo, 1990).
Marron and Fifa (1976) lamented that no definite formular for choice of microcomputer software for in-house databases is possible because software choice is ultimately dependent on each individual situation.

Pratt (1980) noted that there does not seem to be anything (software) presently in the market aimed at libraries. Thus it is necessary for libraries to write their own programs suitable for the purpose. This view was supported by Lundeen (1980) that much of the application software being marketed for micro-computers is of mediocre quality, and it is often very poorly documented. He pointed out that the librarian who is contemplating using microcomputers to automate should realize that the programming is not likely to be a trivial task. These views must have been expressed as a result of prevailing situation then.

However, by 1982 more software writer began to realize that astonishing numbers of companies (including libraries) are frenetically anticipating their services. This led to a tremendous growth in the number of software packages suitable for creating in-house databases (Swanson, 1982, Garogian, 1982).

Gordon (1982) and Schuyler (1982) supported packaged software on the ground that expertise needed to program sophisticated application software is quite substantial, time consuming and also expensive; so it is clear that small libraries cannot afford such an investment.

The ready-made package or the buying of existing software has been preferred by Nigerian libraries (Ajala, 1997). According to him the reason may not be unconnected with the fact that the in-house development is difficult, time consuming and even on the long run the software may work no better than the available packages would have done. The ready-made software packages also can be installed within a very short period.

Planning and Procedures

Planning is deciding in advance what to do, how to do it, when to do it and who is to do it, planning is the process of establishing objective and suitable causes of action before taking action. According to Koontz, O'Donnell and Weihrich (1980) planning has four important goals: to offset uncertainty and change, to focus attention on objectives, to gain economic operation, and to facilitate control. Since planning has to do with making decisions that will affect the future it must be done with much care.

In respect of retrospective conversion, thorough and adequate planning must be put in place if it were to be a success. Lack of proper and adequate planning and focus had led to the failure of some Nigerian libraries in the process of RECON (Ehikhamenor 1990).

Kesner and Jones (1984) as cited in Oketunji (2000) reported that in choosing an automated library system, the following guidelines could be considered.

- The library should do a need analysis.
- The library manager should consider the various alternatives available.
- In the selection process, the library manager can ask for proposals from the computer vendors.
- The financial implications should be properly examined as well as the financial options.
- When a decision has been made, the library manager should consider the contract.
- The library manager should keep all the records of the transactions on the purchase or lease of the computer system.

All the aforesaid can only be put in place with effective planning. Diloreto (2004) highlighted seven questions to consider as you work through automation process.
When do I need a library automation consultant? You need a consultant for a quick start and quick result and when your budget will not support additional staff.

How do I select a reliable consultant? Ask other librarians who have automated their libraries. Formal education can be basis for confidence in consultant's ability. A library science degree (an MLS or MSL degree) from an accredited college and courses in automation or information managerial can be an indication of knowledge; however experience can be more relevant than education, especially in this quick evolving field.

How can I minimize the cost? Ask for consultants' advice on software and this can be provided by them free of charge. Beware of the consultants who would create elaborate or overly customized system for your library. Seek simplicity. Your arrangement should be based on mutual trust.

What are the “ground rules”.

What are my responsibilities over the consulting bagains? Communication is the keyword – keep track of the consultants' progress.

What should I expect from my consultant? The person should be willing to present a summary of the project to your manager.

How can I ensure good results? Calculating your goals and expectations can help you ensure success. Ask your consultant to help you clarify your needs and identify the options they can provide to solve them.

Ola (2000) suggested that proper planning is imperative in RECON, to spell out quite clearly the focus of the exercise, the way to go about it, to identify a team of competent staff, to make funds available; to weigh and evaluate different options of RECON, to make management responsible for monitoring the progress made; to ensure that moderate marginal latitude is given to accommodate mistakes or errors among other considerations. He went further to highlight five important areas to consider in planning viz identification of records, organizing the record, costing and funding, staffing and equipment. Deloreto (2004) summed it up by saying “All library automation projects should have a project implementation plan”.

Having identified the need for proper planning in RECOM, it is also expedient to move forward to the step-by-step procedures in RECON.

The following methods are adopted for RECON according to Ola (2000).

- Keying manually: Though it is the most accurate way of getting libraries database into machine-readable form, but the process is time consuming and needs both properly trained people as well as experts supervision.
- Optical character recognition: This is synonymous to scanning: It requires expensive equipment and properly formatted cards. The danger involve with the use of this equipment is that just like any machine, they cannot make sensible decisions therefore records created by a scanner may not be properly indexed.
- Resource database: This involves a library approaching resource databases when engaging in RECON. This system of RECON involves the matching of records through the use of ISBN or LCCN or uses other bibliographic particulars as authors, titles, publication data and other data elements.
- Editing: This has to do with ensuring that converted records are properly edited to ensure that converted records are consistent with local practice.

**Approaches to Retrospective Conversion**

The process of retrospective conversion can be handled in different ways. The options available in retrospective conversion according to Ola (2000) are basically three:
In-house retrospective conversion. This means applying all the necessary tools for the exercise using the staff and materials on ground internally.

Using vendors and/or agencies: these agencies include Saztec Europe LTD, OCCC Europe, North-West data systems, Ebsco, the periodicals subscription agents. The best of these agencies in Sabtec.

Shared retro-conversion. This is a situation where the two options identified above are adopted. Some part of the records can be sent to agencies to handle while the remaining records can be handled in-house by staff.

Adeyemi (2001) grouped retrospective conversion into two broad approaches viz in-house approach and getting the records converted by reputable library consultancy service, which is properly equipped to handle the task in accordance with the data structure in use by the library.

In support of this view Diloreto (2004) added that when the time or the staff for building the knowledge and skills for the automation challenge aren't available, let your consultant be your guide”.

Problems and Prospects in Nigerian University Libraries

Although most libraries in developed economy have developed fully integrated computer system, however, in the developing countries, the situation is different, while most libraries are either planning to computerize their system, only a few libraries have developed fully integrated computer system. For instance the article “computerization efforts in Botswana libraries a state of art review” described various computer applications in Botswana libraries (Adeniran, 1997). Cataloging is partially computerized at Malawi University library (Edoka, 2000).

In Nigeria however some libraries have converted their services to varying degree of automation e.g.

- Library and Document centre, international institute for tropical Africa (IITA), Ibadan.
- Development policy centre (DPC) library, Bodija, Ibadan.
- SS Peter and Paul major seminar, Bodija.
- Kenneth Dike library, university of Ibadan.
- E O Latunde Odeku Memorial library, UCH, Ibadan.
- Centre for Management Development (CMD) Lagos.
- Centre Bank of Nigeria (BN).
- National library of Nigeria Lagos and Abuja.

Although the above list is not exhaustive, but the rate of retrospective conversion in Nigeria libraries is still very slow, considering that there are over 500 functional libraries and media resource centre in the country (Nwalo, 2000).

The reason is not far fetched. Automation efforts have been persistently frustrated by lack of man power, funds, computing facilities, poor maintenance culture destructive interruption of electric power and order infrastructural factors (Menou, 1983, Thomps 1984, Eres, 1985, Ehihamenor, 1990, Idowu and Mabawonku, 1999, Faniran and Oyemakinde, 2000).

These points are complemented by the statements of Oketunji (2000).

“The major problems that can face libraries as they become progressively involved with the use of technologies may be summarized as follows:
• General inadequacy in the level of relevant infrastructure, particularly Telecommunication facilities and human resources supply.
• A large exploitative local computer market is unsatisfactory after sales in maintenance and support.
• An adequate pool of relevant technical staff and problems of recruitment and retention.
• The potential of library staff resistance to the introduction of computer technology.
• The potential of user resistance and failure to adapt to the use of on-line information.
• The database conversion problems.
• Frequent changes in technology.

Much still is that only a few libraries have a clear automation goal that seems realistic presently (Ehikhamenor, 1990). Ploman (1983) also identified other constrains of a political nature such as concerns about national vulnerability to outside economic and political influence; the question of national security and the fear of compromising national sovereignty.

"Mechanization has provided its superiority over traditional methods" in terms of accuracy, speed, and consistency, Aramide (1974) remarked. Manjunath (2004) added the following barriers of library automation: - fear of adverse impact on employment, apprehension that the technology could be too expensive, lack of support from the management, amongst others.

In spite of the aforelisted problems, the future of library automation in Nigeria looks bright and promising (Ajala, 1997, Idowu and Mabawonku, 1999 and Oketunji 2000). Slamecka (1985) pointed out three technological developments that will favour the "Third World" countries:

A steady and substantial increase in the cost-effectiveness of the technology use of information technology in a programmer-free environment; and advancement in the telecommunication and networking, which has opened up opportunities for new types of information access and delivery services while at the same time reducing costs by about 11 percent annually.

Computerization of University Libraries in Nigeria

University libraries are libraries attached to universities and their objectives are derived from those of their parent institutions. Ezennia (1995) defined university library as a library or group of libraries established, maintained and administered by a university to meet the needs of its students and members of the academic staff. Muogehin (1996) described university library as ‘the heart of the university. It is great in size, coverage and diversity. It provides materials for research, teaching and learning which are the major aims and objectives of the universities.

Braimoh et al (1997) stress that university library serves more as a place for independent work because at this level, the users should be able to locate, assess, use, compare and contrast as well as evaluate information for meaningful educational inquiry.

According to Ifidon (1999) the university library is a service organization and its primary obligation is to provide the bibliographic resources that are essential to the fulfillment of the university's mission.

He further highlighted the six major categories of functions of universities as:

• To pursue, promote and disseminate knowledge.
• For research purpose.
• For the provision of intellectual leadership.
• Human resources development.

The promotion of social and economic modernization and
Promotion of intra and intercontinental unity and international understanding.

Computerization of library activities therefore is the application of computers to carry out library operations that were manually performed. Computerization of university libraries activities becomes inevitable if the libraries were to fulfill their role in the realization of universities’ mission or goals, summarized as preservation, transmission and advancement of knowledge. This is so because information explosion has brought with it huge problems of management and control of not only the published sources of information but also less formally produced documents (Ifidon, 1999).

Interestingly, a number of Nigerian libraries had attempted to automate their operations at one time or the other. For instance, Mabawonku (1999) reported that the International Institute of Tropical Agriculture IITA had computerized its operations since 1983, the Federal Agriculture Coordinating Unit (FACU) since 1992, Nigerian Institute of International Affairs (NIIA) library 1986; and the Raw Materials Research and Development Council (RMRDC) library in 1987.

Awogbami (1994) ascertained that University of Ibadan attempted to computerize her activities in 1975, University of Lagos 1982, Ahmadu Bello University 1987. According to him, all the attempts to achieve a complete automated library services failed.

Ogunleye (1997) states that some people have expressed trepidation about library automation; some felt that automation would replace the profession of librarianship rather than upgrade it. Sagar (1985) asserted that the introduction of automated library system would not save libraries any money but rather cost more.

However UNESCO has come to the aid of information centers and libraries of non-profit oriented when they designed CDS/ISIS free of charge for interested libraries all over the world. Adedigba (1996) confirmed this statement when he wrote “Mini Micro CDS/ISIS is distributed on the basis of a cost free license agreement which states the right and limitations of its usage. This statement was complemented by Omowunmi (1996) which states that micro CDS/ISIS was developed in 1985 by UNESCO to address the needs of small libraries in developing countries in the bid to enable them participate in computerized information processing technology, using expensive micro-computers.

From the reviewed literature, it has been established that retrospective conversion of library catalogue is imperative. The related literature reviewed has brought to limelight the various benefits associated with computerization. It also highlighted the procedures and problems associated with retrospective conversion as well as solution and prospects of this current venture in Nigeria. However not much has been done on comparative study of libraries' retrospective conversion of card catalogue in Nigeria.

Objectives of the Study

The main objective of this study is to compare the retrospective conversion experience of University of Ibadan Library: Kenneth Dike Library (KDL) with that of Obafemi Awolowo University (OAU) library.

The specific objectives will include to:

- Investigate the processes/approaches adopted in retrospective conversion and period of time taken.
- Determine the hardware and type of software best suitable in this new system.
- Identify the problems encountered in the process of retrospective conversion and how such problems were resolved.
- Determine the effectiveness of the new system in comparison to the old manual card catalogue.
- Assess users utilization and satisfaction with the OPAC System.
- Determine the human resources requirements for a successful retrospective conversion.
- Determine the financial implications of retrospective conversion (RECON).

**Methodology**

The Research Methodology is divided into four sections:

- Target population and sample.
- Instrumentation.
- Data collection procedure.
- Method of data analysis.

**Target Population and Sample**

The population to be used in this study includes the library staff of the two university libraries (UI and OAU) and their library users. The researcher made use of university libraries because in Nigeria major developments and achievements in the use of automated systems have been mainly in the academic and research libraries. The staffs of interest to the researcher are the librarians, cataloguers and those involved in the retrospective conversion of card catalogue in Kenneth Dike library and Obafemi Awolowo University library. A total of ten staff will be used (Five staff from each of the libraries). The reason for this few number of staff is that the information needed can be provided by just two respondents (system librarians) the remaining eight respondents are to complement the effort of the librarians.

The users to be used in this study are registered users of the library, those directly involved in the use of the new system (OPAC). The users will include different levels of users, such as undergraduates, postgraduates and diploma students. A total of 50 users will be made use of in this work, 25 users from each university. The reason why only fifty users are to be selected in this study is because, users response are just to complement the response of the system librarians in evaluating the effectiveness and efficiency of the OPAC system.

**Instrumentation**

The main instrument to be used in this study is questionnaire. This is in consideration of the users large number hence the questionnaire is suitable for gathering enormous quantity of data from large population within the quickest possible time.

There are two questionnaires. One directed to the librarians, cataloguers and those encharge of library automation. This questionnaire consists of a set of 23 questions aimed at investigating, identifying and determining the processes involved in retrospective conversion of card catalogue (RECON), financial/material implications of RECON as well as human resources necessary for a successful retrospective conversion.

The second questionnaire is for library users of the two universities. This questionnaire is in two sections (A and B). Section A deals with demographic information of the respondents; such as sex, age, marital status and highest educational qualification. On the other hand section B consists of questions, probing the efficiency and effectiveness of the OPAC in comparison with the old card catalogue. Also, the researcher will visit the libraries to observe the catalogues and the procedures involved in retrospective conversion of card catalogue, e.g. data entering manually.
Data Collection

The researcher made use of both primary and secondary data. The existing materials in the library such as the university calendar and other publications relevant to the study formed the secondary data.

The questionnaire will be used to gather information from the respondents, which forms the primary data.

The researcher will visit the libraries and personally administer the questionnaires with the permission and assistance of the library staff on duty. The questionnaire copies will be randomly distributed to the users, with adequate instructions given to assist them in completing the questionnaires. The project writer will wait for all the respondents to return completed questionnaire at the circulation desk. This is to enhance high percentage of return of completed questionnaire.

Apart from the use of questionnaires, interview will be conducted with the chief librarians of the two libraries, and the librarian in charge of automation.

Furthermore observation will be added to these two methods (questionnaire and interview) to help eliminate subjectivity characterized social science research involving human beings and their feelings.

The data collected were reported using simple frequencies and percentage.

Findings of the Study

The presentation and analysis of the research findings are discussed under the following broad headings to meet the research objectives.

- Background information of the libraries.
- Background information of the users of the system.
- User's assessment/satisfaction with the system.
- Evaluation of effectiveness of the system.

Background Information on the Libraries

This section deals with the profile of the libraries in study. Such background knowledge include the year of establishment of the libraries, total collection size, time the constitution started RECON amongst others.

Table 1: Collection size and Period of time taken in RECON

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total collection size</td>
<td>6,000,000</td>
<td>700,000</td>
</tr>
<tr>
<td>Time started</td>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>Time ended</td>
<td>Still on</td>
<td>Still on</td>
</tr>
</tbody>
</table>

The finding revealed that UI RECON started in 2002 while OAU library started in 2003. This date was contrary to literature, which ascertained that UI started as far back as 1975, and OAU in the 70s and 80s (Ehikhamenor, 1990 and Jagboro 2003). Both processes were still on as at the time of study. That
means RECON takes some time. The researcher is of the view that the respondents based their judgement on the time serious effort was channeled towards the RECON.

**Processes and Approaches**

Table 2: Processes/approaches in RECON

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECON approach</td>
<td>In house retrospective conversion and vendors retrospective conversion</td>
<td>Contractor/consultant (OCLC)</td>
</tr>
<tr>
<td>Reason for the approach</td>
<td>To eliminate errors</td>
<td>To relieve cataloguers</td>
</tr>
<tr>
<td>Methods of RECON</td>
<td>Keying manually</td>
<td>Keying manually and resource database</td>
</tr>
<tr>
<td>Reason for choice of method</td>
<td>The only available option</td>
<td>No need to re-invent the wheel</td>
</tr>
</tbody>
</table>

Table 2 revealed that UI RECON approach was: in-house, and vendors i.e. shared RECON, OAU library approach was contractor/consultant. The reason behind the two-university libraries approaches was to eliminate errors and to relieve cataloguers, respectively.

Also while UI method of RECON was input manually (The only available option they had at long run after other methods have faded), OAU employed both keying manually and Resource Database on the ground that such method saved cataloguers time.

**Hardware and Software Required**

Table 3: Number of hardware/type of software

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of computers started with</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>No. of computers now</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>Software in use</td>
<td>TINLIB and Alice</td>
<td>Ansythec E-library</td>
</tr>
<tr>
<td>Reason behind software in use</td>
<td>Comprehensive</td>
<td>Custom built</td>
</tr>
</tbody>
</table>

From table 2 any number of computers is good enough for a library to start the process of RECON, from that point, such library can move forward.

UI library made use of TINLIB and Alice on the point that they were comprehensive; on the other hand OAU was using Ansythec E-library because it was custom built and in consideration of situation around. From this point it can be inferred that the software a library can adopt will to some extent be determined by circumstances and peculiarity of the library as noted by Marron and Fifa (1976). From the background of OAU RECON, (see OAU RECON History)one could realize the issues that necessitated them to change from TINLIB to Ansythec E-library. This finding also agrees with Ajala (1997) that TINLIB seems to be the toast of libraries especially university libraries because both UI and OAU have made use of TINLIB in RECON.
Table 4: Human and financial resources

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional staff</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Para-professional staff</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>Other staff</td>
<td>80</td>
<td>105</td>
</tr>
<tr>
<td>Cost of RECON</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

The data in table 4 revealed that a reasonable number of professionals is needed for a successful RECON. UI had eighteen professionals while OAU twenty. OAU was able to achieve such number of professionals because of their constant training and retraining of staff while UI with a huge volume of over six million is facing a serious staff deficiency.

The two universities described the cost of their RECON as moderate, such response will help to clear an erratical believe of many that RECON is very expensive. Not only can a library source for external fund for RECON but also it can start with what it can afford (both material and human resources).

Table 5: Problems and Solutions

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROBLEMS</td>
<td>Lack or fund</td>
<td>Lack of fund</td>
</tr>
<tr>
<td></td>
<td>Poor maintenance Culture</td>
<td>Lack of skilled human resources</td>
</tr>
<tr>
<td>Electric power</td>
<td>Electric power</td>
<td>Frequent change in technology,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy changes in OCLC</td>
</tr>
<tr>
<td>SOLUTION</td>
<td>Not yet</td>
<td>Training and experience</td>
</tr>
</tbody>
</table>

From table 5, it was obvious that both OAU and UI experienced similar crises situations in the process of RECON such as lack of fund, skilled human resources interruption of electricity and change in technology. This was in agreement with the reasons behind frustrated automation efforts as cited in Menon 1983, Thomps, 1984, Eres 1985, Ehikamenor, 1990, Feniran and Oyemakinde, 2000, Idowu & Mabawonku, 1999.

Concerning the resolution of the problems, the study revealed that UI was still battling with the problems while OAU claimed to have overcome the problems through training and experience.

Nevertheless, eyewitness account noted that these problems were not yet fully solved because users in OAU library were complaining about the system.

Demographics of Users

This section presents findings on personal data on the users, with particular reference to their sex, age, academic qualification, library-users membership, computer literate and the use of the library.

Table 6: Distribution of Respondents by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>UI %</th>
<th>OAU %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 15-25</td>
<td>36.0</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>(b) 25-35</td>
<td>48.0</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td>(c) 35-45</td>
<td>12.0</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>(d) 45-55</td>
<td>4.0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 6 shows that the respondents fall majorly within 15 – 25 years (48% in UI and OAU 64%), while the least are ages 45-55 (4% in UI and O% in OAU).

Table 7: Distribution of Respondents by Academic Qualification

<table>
<thead>
<tr>
<th>Qualification</th>
<th>U.I %</th>
<th>OAU %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Sch. Cert</td>
<td>8.0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>(b) Diploma</td>
<td>8.0</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>(c) NCE/OND</td>
<td>4.0</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>(d) Bachelors</td>
<td>20.0</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>(e) Undergraduate</td>
<td>32.0</td>
<td>11</td>
<td>44.0</td>
</tr>
<tr>
<td>(f) M.S.C.</td>
<td>28.0</td>
<td>3</td>
<td>12.0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>60</td>
</tr>
</tbody>
</table>

From Table 7, it could be seen that the respondents were more of undergraduates followed by M.Sc. and Bachelors degree holders.

Table 8: Distribution of Undergraduates by Academic levels

<table>
<thead>
<tr>
<th>Level</th>
<th>U.I %</th>
<th>OAU %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 100</td>
<td>4.0</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>(b) 200</td>
<td>16.0</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>(c) 300</td>
<td>20.0</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>(d) 400</td>
<td>8.0</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>(e) 500</td>
<td>28.0</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>17</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 8 shows that most of the undergraduate respondents, in OAU were 300 level students while in UI they were 500 level. The 100 level students were almost missing among the respondents; the reason could be attributed to the fact that this set of students were fresher in the university as at the time of study and so they were still doing their registration.
Table 9: Distribution by Computer Literacy

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI</td>
<td>24</td>
<td>96.0</td>
<td>1</td>
<td>4.0</td>
<td>25</td>
</tr>
<tr>
<td>OAU</td>
<td>25</td>
<td>10.0</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>49.0</td>
<td>296.0</td>
<td>1</td>
<td>4</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 9 revealed that most of the respondents (UI 96%, OAU 100%) were computer literate. The researcher was of the view that this finding was not a parameter to judge the library users in that, it was only the users directly involved in the system that were used.

Table 10: Respondents Use of the Library

<table>
<thead>
<tr>
<th></th>
<th>U.I</th>
<th>%</th>
<th>OAU</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Daily</td>
<td>18</td>
<td>72</td>
<td>19</td>
<td>76</td>
<td>37</td>
</tr>
<tr>
<td>(b) Weekly</td>
<td>5</td>
<td>20</td>
<td>5</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>(c) Twice a week</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>(d) Rarely</td>
<td>2</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100</td>
<td>25</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 10 revealed that most of the respondents (UI - 72%, OAU – 76%) made daily use of the library.

Table 11: Respondents’ Assessment on Effectiveness of card Catalogue

<table>
<thead>
<tr>
<th></th>
<th>U.I</th>
<th>%</th>
<th>OAU</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Good</td>
<td>15</td>
<td>60</td>
<td>9</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>(b) Very good</td>
<td>4</td>
<td>16</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(c) Not so good</td>
<td>6</td>
<td>24</td>
<td>15</td>
<td>60</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11 shows respondents assessment of card catalogue. Their assessment of the card catalogue was mainly, “not so good” in OAU and “good” in UI From the responses one could infer that card catalogue was not good enough. This finding indeed supported literature, which emphasized the need for (RECON) (Edoka 1992, Idowu and Mabawonku, 1999)

Table 12: Respondents Use of OPAC

<table>
<thead>
<tr>
<th></th>
<th>U.I</th>
<th>%</th>
<th>OAU</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Very often</td>
<td>17</td>
<td>68</td>
<td>4</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>(b) Occasionally</td>
<td>8</td>
<td>32</td>
<td>9</td>
<td>36</td>
<td>17</td>
</tr>
<tr>
<td>(c) Rarely</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The findings in table 15 (the use of OPAC) revealed that in UI, 68% of the respondents made use of the OPAC very often and 32% occasionally. On the contrary, majority of the respondents in OAU library hardly made use of the OPAC. With further inquiry, the researcher was meant to understand that the OAU's OPAC was not yet fully opened to users.

**Quality of OPAC**

**Table 13: Speed of access to catalogue**

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Slow</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(b) Fast</td>
<td>9</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>(c) Very fast</td>
<td>15</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
</tbody>
</table>

From table 13, respondents were of the view that OPAC was very fast in terms of speed. (UI 60%, OAU 60%).

**Table 14: Accuracy of Catalogue**

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Good</td>
<td>7</td>
<td>28</td>
<td>64</td>
</tr>
<tr>
<td>(b) Very good</td>
<td>18</td>
<td>72</td>
<td>36</td>
</tr>
<tr>
<td>(c) Not good</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 14 revealed that most of the respondents in both UI and OAU claimed that the OPAC system was good in terms of accuracy as none of the respondents ticked “not good”.

**Table 15: User Friendliness of Catalogue**

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>OAU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Good</td>
<td>10</td>
<td>40</td>
<td>64</td>
</tr>
<tr>
<td>(b) Very good</td>
<td>13</td>
<td>52</td>
<td>16</td>
</tr>
<tr>
<td>(c) Poor</td>
<td>2</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 15 showed the respondents assessment of the OPAC in terms of user friendliness. While many respondents were of the view that the OPAC was good, a few users in both UI and OAU (8% and 12% respectively) claimed that the system was poor in user friendliness. That means there was need for improvement.

By comparison with manual card catalogue the finding ascertained that OPAC system is better than card catalogue. This proves the point of Aramide (1974) that Mechanization has proved its superiority over traditional method in terms of accuracy, speed and consistency.
Satisfaction with OPAC

Table 11: Respondents Assessment on System Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Yes %</th>
<th>No %</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI</td>
<td>23</td>
<td>92</td>
<td>25</td>
</tr>
<tr>
<td>OAU</td>
<td>11</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>136</td>
<td>50</td>
</tr>
</tbody>
</table>

The study also revealed that while most of the people in UI (92%) felt satisfied with the OPAC system, more people were dissatisfied with OPAC in OAU. Their reasons ranged from the fact that computer terminals were very few compared to the users, no computer orientation for the users, and interruption of electricity and other infrastructural factors. That means that there was need for improvement especially in OAU.

It could therefore be inferred that the staff of the two libraries were effective and working harmoniously with the users in their search for information because respondents did not choose staff negligence of duty.

On the other hand the finding revealed urgent need for more computer terminals functioning, computer orientation programme put in place and a means of ensuring regular electricity power supply, which would mean the purchase of very good standby generators.

Summary of Findings

This study was directed toward comparing the retrospective conversion experience of University of Ibadan library card catalogue to that of Obafemi Awolowo University library in terms of processes/approaches, financial/material and human implication as well as problems/solutions and effectiveness and efficiency of the OPAC.

Having analyzed and discussed the data, summary of the findings is hereby made.

Processes/Approaches in Retrospective Conversion and period of time taken

Kenneth Dike Library (KDL) made use of shared RECON i.e. both in-house and vendors in RECON, the reason being that the two approaches complemented each other and helped to eliminate errors. Indeed errors were eliminated as this manifested in the users response to satisfaction with OPAC.

On the other hand OAU made use of contractors and consultants in order to relieve cataloguers. The findings revealed that KDL adopted input manually, while OAU supplemented input manually with resource database.

The study revealed that RECON process took some time, while KDL stated in 2002, OAU library started in 2003 and both libraries RECON were still on.

Financial/Material and Human Requirements for RECON

While KDL combined in-house with outside funds, OAU depended entirely on outside fund (Carnegie foundation, New York): The financial implication of RECON was described as moderate by both libraries. This could be attributed to support fund from outside.
The findings revealed that KDL started with just two computers and now have one hundred computers while OAU started with eleven now with thirty. This showed that no number of computers is too small for any library to start RECON but the library must plan to improve as suggested by Ola (2000) that proper planning is imperative in RECON, to spell out quite clearly the focus of the exercise and how to make funds available.

The study revealed that UI was short of staff while OAU kept training and retraining staff to be competent in RECON because RECON is a process that could only be handled by well trained, skilled and efficient staff.

Also while KDL was currently making use of two software: TINLIB and Alice, OAU was using Ansyl-Tech E-library.

Problems and Solutions in RECON

The findings revealed similar problems for both UI library and OAU library. The problems included lack of fund, poor maintenance culture/poor skilled human resources and poor electricity power supply and other infrastructural problems.

This finding agreed with literature that automation efforts have been persistently frustrated by lack of human resources, funds, computing facilities, poor maintenance cultures, destructive interruption of electric power and other infrastructural factors (Menou, 1983, Thomps 1984, Eres, 1989, Ehikamenor, 1990, Mabawonku, 1999, Faniran and Oyenakinde, 2000).

The findings also revealed that adequate solution to these problems have not been put in place as noted by UI library. From observation, even OAU that claimed to have solved their problems needed to be queried. This is so because how can such claim be objective when there were few computers serving many users and even the users were still complaining that the system was still lacking in terms of efficiency and effectiveness.

Evaluation of Effectiveness and Efficiency of OPAC

Effectiveness and efficiency of the OPAC can be measured by speed of access of information, accuracy of information retrieved and user friendliness with the system. In the case of KDL, the OPAC system was very fast, accurate and user friendly. However, OAU system needed more improvement because some users affirmed dissatisfaction with the OPAC system.

Conclusion

Developing countries of Africa including Nigeria with their unique wealth of oral tradition, written records and relevant unpublished works need to be computerized for wider consumption and on-word transmission of knowledge and culture. Computerization of academic libraries is very inevitable if the libraries are to fulfill their mission statement of preservation, transmission and advancement of knowledge in this era of information explosion.

Retrospective conversion however is very imperative in a computerized library system to ensure effective and efficient management, control and utilization of library information resources. Though a number of Nigerian libraries attempted to automate their operations at one time or the other, but quite a few have achieved the full automation. The number of Nigerian libraries that have made any remarkable effort in RECON process is quite negligible when compared to the number of libraries in Nigeria as revealed in literature. This situation is a great challenge if Nigeria and other African Countries should rise up to the demand of globalization.
Although numerous crises are associated with RECON in Nigeria such as human, economic, cultural and social barriers but these problems can be surmounted by determined libraries in their RECON Processes. Inspite of these inhibiting factors. University of Ibadan and Obafemi Awolowo libraries had attended a very high degree of success in RECON, while U.I library OPAC had been opened to users, OAU's OPAC was almost fully open to users. These two libraries should act both as a challenge as well as a motivational factor to those libraries still dreaming of automation. Its time to take appropriate actions and move forward, the world is not static.

Recommendations

Adequate and appropriate skilled human resources is a prerequisite for a successful RECON. In the light of this study, more skilled specialist should be invited to look into the RECON processes in both KDL and OAU. Also the two universities (especially KDL) should recruit and train more staff to handle the affairs of RECON.

Technicians who are competent in computers should be recruited or internally trained to ensure that the system is in good state and to avoid frequent breakdown.

Furthermore the Nigerian government needs to devote more attention to library development, considering that the library carries with it the image and status of our educational sector. It should be realized that development must start with the people and for the people to develop, there must be enough and quality literature to fall back on; the answer to this is RECON. Therefore the effort of the universities towards RECON should be commended and supported both financially and morally by the government and the people. Other sources of funding such as philanthropists and well to do Nigerians are hereby appealed to support RECON in Nigerian libraries. The findings show that there have not been regular and adequate library use education put in place for freshers in the universities. The findings necessitate adequate and relevant programmes to be planned out and enforced among libraries in order to acquit and fully train students on how to effectively use the equipment/materials in the libraries. Such training will help to update users knowledge of the system as well as enhance longevity of the library resources. This is very crucial because loses and damage of software and hardware by users are sometimes as a result of ignorance on the part of the patrons.

References


