# AN ANALYSIS OF CIRCULATION USE STATISTICS IN A NIGERIAN UNIVERSITY LIBRARY

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## ABSTRACT

*The study examined use statistics of the circulation unit of the Federal University Of Technology Library, Owerri and provided statistical data on a five year period from 2007–2011. A descriptive survey method was employed to determine the use of library statistics in circulation unit while a face to face interview was further conducted to gather data from library circulation staff. The findings reveal that use statistics provide valuable information on library operations; some of the factors that hinder effective gathering of use statistics include data inconsistency and untimely submission of data. The study recommends training to improve numerical competency of staff and a robust technological infrastructure to ease the onerous task of traditional data gathering.*

**Keywords**: Use statistics, library data, academic library, FUTO library, circulation unit, library users, and Information and communication technologies.

## Introduction

The Federal University of Technology Owerri (FUTO) was one of the three technology universities established in 1981 because of a felt need for technologically oriented manpower. The library which started alongside with the university has been playing supportive roles to meet the mission and vision of the institution through provision of relevant information materials and services. FUTO has two library buildings; the library Phase IV and the new building. Khana (2008) describes the roles of a university library as both a collegiate and research library in its provision of library materials and collection in depth. It plays the role of a public library by serving the university community as a general intellectual and cultural centre. It is a school library in giving instructions to students for completing course assignments. It is a special library in meeting the specialized information and resource needs of students and faculty engaged in advanced research.

The FUTO library is made up of several units; acquisitions, processing, users' services, ICT unit, serials, bibliographic, documents, special collections, and research, training and statistics unit which work closely to achieve a common objective. In carrying out its mission to support teaching, learning and research in the university environment, the library also considers quality as an important factor of her services. Employing quantitative measures to evaluate library operations has become part of its tradition. It is on this premise that the researcher seeks to:

(i)   Identify the meaning of library use statistics
(ii)  Identify the functions of use statistics in the library.
(iii) Examine use statistics in Circulation Unit of FUTO library.
(iv)  Discuss the challenges faced by library staff in data gathering and give recommendations.

## Meaning of Use Statistics

Different writers have used different terminologies to describe use statistics. It has been termed library statistics, usage statistics, library data, library measurement, library usage records. However the case, the terms convey the same meaning. Hiller & Self (2004) and Paris (1996) see usage statistics as data and define it as records of observations, facts, or information collected for reference or analysis. Sokoya (2002) describes use statistics as derived records of library use. As library measurement, it has been defined as the collection and analysis of objective data describing library performance on which evaluation judgments can be based. (Scherrer, 2002). For the purpose of this paper, use statistics will be defined as records generated from the operations of the library to determine the extent of use of library resources and services.

## Functions of Use Statistics

Library use statistics are veritable instruments in the provision of facts on library programs and services. They provide first hand information on the success or failure of the library in meeting user needs. Young (1997) states that conventional library statistics address a wide range of purposes and functions: administration and management; analysis and planning; policy development; and research. IFLA (2010) adds that quantitative and qualitative data about library services, library use and library users are essential for revealing and confirming the outstanding value that libraries provide. In her work, Scherrer (2002) is of the view that statistical data about library activities has always provided important information to library managers. Furthermore, she outlined three management functions of library statistics that were identified at a NISO forum thus:

I.    To assist in internal decision making (purchasing, staffing, etc);
II.   To justify library budgets and activities; and,
III.  To identify broader trends in the use and value of information and libraries.

Hiller and Self (2004), while analyzing the traditional uses of data in libraries add that comparative statistics were also used to develop standards, especially by library organizations.

Administratively, library statistics play a vital role in the decision making process. (Lederer & Feldman 2012; Brannon 2011). Librarians may also use the data to show their impact and identify trends. (Molyneux, 2005 and Lederer & Feldman 2012). IFLA (2010) in her library statistics manifesto points out that library statistics are necessary for the effective management of libraries, but they are still more important for promoting library services to the different types of stakeholders: policy makers and funders, library managers and staff, actual and potential users, the media and the general public. Zeghmouri (2011), agrees that usage reports illuminate the who, what, when and where of access to electronic resources, allowing librarians to make more informed decisions about how to best serve their user communities. Lewis-Sommers, (2001) in demonstrating the importance of use statistics opines that a library may use statistics to present concrete evidence of its case; for instance, a demonstration that the available seating in the

library per student is below the average of peer institutions will make a more compelling argument to the dean for additional seating than a generalized complaint that the library is too crowded. Tucker (2009) posits that usage statistics should be used:

- To justify purchase
- To cancel subscriptions
- To aggressively market less used resources
- To upgrade existing resources
- To aid in strategic planning
- To obtain end of year money from University administration
- To complement existing subscriptions with addition of journal back file purchases
- To help make decisions in Add one/Drop one, depending on the budget.

In summary, the Council on Library and Information Resources identifies the following functions of library statistics as follows:

Statistics data in circulation are used to identify items that have never circulated and inform retention and cancellation decisions.

Assess or predict book use to help decide what to move to off-site storage.

Decide whether the appropriate materials are in reserve.

Determine staffing at the circulation desk by examining patterns of circulation activity per hour, day, and academic quarter.

Statistics determine user status (outsider, in house, lecturer, and non–teaching staff).

Statistics inform collection development decisions.

**Methodology**

The researcher used a descriptive survey method supplemented with interviews to gather information from library staff on circulation use statistics.

**Use Statistics in Circulation Unit of FUTO Library**

The importance of statistical data in FUTO library cannot be underestimated. According to Gray (2004), statistics are important: they are essential for social and economic development; for understanding among peoples; and necessary for any society that seeks to understand itself and respect the rights of its citizens. Statistics on library operations and services have always provided vital information and has become the hinge on which planning and budgetary processes lie. Use statistics in FUTO library is as old as the library itself. Statistics gathered daily by circulation staff are collected, processed, compiled and sent to the Research and Training Unit at every quarter for collation and administrative uses.

The circulation unit otherwise known as the user services unit is located at the library Phase IV. This area has a sitting capacity of 500 students. The unit is traditionally known for registering users, charging and discharging of books, overdue notices and fines. (Ifidon, 2000). It is presently made up of three professional and seventeen non-professional staff who run shift duty to keep reading and research alive. Other functions of the unit include shelf reading, publication of library guide, library statistics, exhibitions and displays. It also monitors damaged materials which are sent to the bindery for repairs. The services rendered by this unit includes

reference, inter library loan, Selective Dissemination of Information (SDI) and Current Awareness Services.  The unit maintains use statistics records on the following areas:

**Users**

Users are those people who come to the library to exploit the resources and services offered by the library. Aina (2004) sees the term "user" to include all those who avail themselves of the services offered by a library. The term encompasses various terms such as patrons, clients, information users, information seekers, consumers, readers, etc. These terms can be used interchangeably, because they all apply to those seeking the services of a library. The users of FUTO library include academic staff, senior staff, junior staff, Postgraduate students, undergraduate students and outsiders who are required to register with the library before they are allowed access to information resources.  According to Unagha (2009), the composition of university library users is wide and varied. It includes undergraduates of various age groups, postgraduate students, the faculty members, the non-teaching staff members or the administrative staff; there are also other users who are not members of the university community who patronize the university libraries.

**Registered users**

| Year | Male | Female | Total |
|------|------|--------|-------|
| 2007 | 3976 | 1588 | 5564 |
| 2008 | 1863 | 959 | 2822 |
| 2009 | 1514 | 599 | 2113 |
| 2010 | 1470 | 694 | 2164 |
| 2011 | 1501 | 987 | 2488 |

The table shows that more males registered with the library than females. This can be attributed to the nature of courses offered in the university which is a science and technology based institution. These courses are perceived as 'masculine' in nature and are the reasons why males registered more than females. In corroborating this view, Hill et al (2010) states that the striking disparity between the numbers of men and women in science, technology, engineering, and mathematics has often been considered as evidence of biologically driven gender differences in abilities and interests. The classical formulation of this idea is that men "naturally" excel in mathematically demanding disciplines, whereas women "naturally" excel in fields using language skills. Also, Darmody and Smyth (2005), asserts that many girls are reluctant to take technological subjects because they see them as 'dirty', 'noisy' and requiring physical strength, they do not intend to go on to craft jobs, such as mechanic or plumber.

**Number of readers 2007 – 2011**

| Year | Total |
|------|-------|
| 2007 | 39938 |
| 2008 | 108299 |

| | |
|------|-------|
| 2009 | 74185 |
| 2010 | 67399 |
| 2011 | 58325 |

The figures show that readers made most use of the library in 2008. Number of readers continued to decline in 2011. This decline is consequent upon the reduction in admission intake which has affected the student population. Martell (2008), notes that decline in circulation of library materials generally may be considered in relation to other factors e.g. if a college or university has a dramatic drop off in the number of its students, a corresponding drop off in circulation transactions may be deemed reasonable. Decline can also be as a result of readers' frustration in locating information materials. When users find it difficult to access resources of the library, they tend to stay away.

**Book Loans**

The loans collection forms the bulk of the library's holdings and consists of textbooks and monographs of a more or less specialized nature. Through library use studies, books on heavy demand are identified and withdrawn from open stock and held in the reserve collection so that a good number of users can have access to them.

**Statistics on book loans**

| Year | Open stock | Reference | Reserve | Total |
|------|------------|-----------|---------|-------|
| 2007 | 33064 | 2421 | 12405 | 47890 |
| 2008 | 34380 | 1764 | 9528 | 45672 |
| 2009 | 22187 | 1061 | 4429 | 27677 |
| 2010 | 22881 | 1059 | 2541 | 26481 |
| 2011 | 13384 | 1386 | 2863 | 17633 |

The table show that users borrowed more books in 2007 and 2008. The year 2009, witnessed a three month industrial strike by universities in Nigeria. This affected library usage and transactions. However, loans continued to decline in 2011. This is not surprising as students no longer visit the library regularly. The emergence of information technology and the increased availability of digital information have caused students to find alternative means of study and research with the aid of laptops and cell phones. Mayo & Aslam (2005) reports that digital technology has undermined the importance and usage of libraries in developing countries, while Ugah (2007) asserts that the acquisition of information online using PC's such as laptops and palmtops and even phones is proving to be detrimental to academic libraries in terms of patronage. According to Chiemeke et al (2007), another challenge to the Nigerian university libraries in meeting users' service demands in this 21st century is the proliferation of information providers…, libraries face an increase in interest and competition from other information providers like the internet cafés, bookshops, search engines, many Nigerians now visit these other information providers than libraries.

**Challenges of Use Statistics**

The success of use statistics in FUTO library is often hampered due to the following the following reasons:

*Data inconsistency*: Findings reveal that sometimes data gathered are not consistent. Data inconsistency makes it difficult for administrators to rely on the figures for decision making. In supporting this view, Troll (2006) adds that the absence of reliable information that documents and explains shifting patterns in library operations and use is adversely affecting strategic planning. Furthermore, he views that sources of library use data exist, but the data are incomplete and problematic.

*Time factor*: Timeliness was identified as an obstacle to effective data gathering and presentation. Sometimes, library use statistics are not taken on time. This is because staff on duty may not be available or too busy with circulation transactions. This could delay data gathering and could affect the authenticity of results. Time is an important factor in library statistics. Gray (2004) mentions timeliness as one of the key considerations in data collections.

The emergence of information technology has impacted on librarians and is changing the way work is perceived. This change is beginning to affect traditional use statistics which is often repetitive and tiring. Findings reveal that library staffs are yearning for better means of collecting data with the aid of technology. Troll (2006) adds that though librarians have always collected data to support strategic planning, the rampant changes precipitated by new technologies are making traditional performance measures less effective in demonstrating the library's contribution to higher education. Sometimes, staffs involved in data gathering do not possess the basic computational skills needed for analyzing statistical data. This hinders effective computation and presentation. Allen (1985) states that librarians are undoubtedly great compilers of statistical data but exhibit poor abilities in its interpretation, manipulation or use. Also, Hiller and Self (2004), in buttressing this fact adds that while many libraries recognize the value of using data for planning and decision-making, they are unsure how to collect, analyze, and apply the data effectively in library management.

**Recommendations**

In view of the challenges listed, the researcher recommends the following;
1. Staff should constantly be trained to acquire the necessary computational skills needed to function efficiently and effectively.
2. There should be the provision of sufficient funds for increased level of training.
3. Library administrators should connect with university management towards developing a robust technological infrastructure for the library. This will ease the onerous task of traditionally gathering statistical data.
4. Staff responsible for data gathering should be provided with adequate tools (calculators, computers) and furniture to enhance effective data analysis and computation.
5. Sessions on library statistics should be included at national workshops and conferences to enable librarians acquire statistical skills and produce uniform standards for Nigerian academic libraries.

**Conclusions**

Library use statistics has proved to be an effective tool for evaluating the quality of library collections and services. In FUTO library circulation unit, the advantages of use statistics are enormous. Use statistics have helped in the development of collections that meet user needs and interest. It has been used to justify reserve materials; it has also given proof to materials in low demand which has prompted their removal from the reserve shelf. Use statistics have indicated the number of registered users, library peak hours and user category. It has served as a yardstick for staff disposition and a functional tool in the hands of library administrators in the decision making process. It is a window through which the university management sees the strength of the library in supporting teaching and learning. However, FUTO library management needs to equip the statistics unit with necessary working materials for better productivity since use statistics play a crucial role in improving the library's functions and services.

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