MANAGEMENT OF LIBRARY BOOK FUND IN ACADEMIC LIBRARIES:

A case study of Federal University of Technology library,

Minna.

BY

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APPROVAL PAGE

We hereby certify that we have supervised, read & approved this project work which we found to be adequate in scope and qualified for partial fulfilment of the award of a Post - Graduate Diploma in computer science (PGD in Computer Science).

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DEDICATION

This project work is humbly dedicated to the Almighty ALLAH, my parents, wife and children.

DECLARATION PAGE

I hereby declare that this project work "MANAGEMENT OF LIBRARY
BOOK FUND IN ACADEMIC LIBRARIES: A case study of Federal
University of Technology, Minna" is the brain child of my
personal effort in partial fulfilment for the award of Post
- graduate Diploma in Computer Science.

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ABSTRACT

This project attempts to formulate a standard sharing formula for Library books and journals fund (book fund) in academic Library system. The objective is to ensure a fair and proportional allocation based on a standard 'litmus test'. This method will inform each school and department how much money is available to it and how to expend the money based on its own priorities. Each school/department should be aware and involved in building up its resources according to its own needs and priorities in respect to different types of reading materials.

CHAPTER 1

1.0   <u>INTRODUCTION</u>

1.1 <u>BRIEF HISTORY OF F.U.T LIBRARY</u>

The University Library was established in March, 1984. It was
then located in a single room in what is today the Computer
Centre. The Library moved to its present site in 1985, still
operating in a single reading room, with administrative and staff
offices attached to the reading room. In 1993, the Library was
expanded to its present size to accommodate more readers in
response to the growing demand. At present, the Library has
three reading rooms and a reserved reading area for academic
staff and post graduate students. The current Library holding
stands at 31,500 volumes with a seating capacity for 432 readers.
The staff strength has also grown from 9 in 1984 to 43 at
present.

1.2 <u>THE ROLE OF A LIBRARY IN THE UNIVERSITY</u>

The role of the Library in a University system is such that
the quality of Library services reflects on its graduates and the
volume of research work that the University can undertake. The
basis functions of a university are teaching and research.The
library provide books and journals and other learning materials
to support these two functions of the University. There is no
Library that is self sufficient in providing services to its
clientele, however, statutorily, the Library should be able to
support 'reasonably' the research and teaching activities of the
University. It is in this regard that 'huge' financial resources

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is provided for the library to carry out its functions.

The University is a dynamic institution and so is the instructional programmes and research priorities change according to the prevailing needs. The Library must recognize this and continue to update its resources. To maintain a current Library Collection, the system must be dynamic enough to match Library holding with instructional and needs of the faculty programmes (research) to reflect the ever changing instructional and research programs. The implication of the foregoing is the need to pull Library funds together and to work closely with the faculty staff on how best to meet the needs and aspirations of its clientele. This can be achieved by using a standard formula to share the Library funds for acquiring Library materials.

1.3 FUNDING

Hitherto, Library compete along with other departments of the University for funds through the process of annual budgeting and defence. In 1992, Academic staff Union of Universities (ASUU) and Federal Government of Nigeria (FGN) reached agreements on University funding and conditions of service. Among the agreement reached was that 10% of the total recurrent grant to each University shall be given to the University Library. Before this time, the Library was at the mercy of the Vice Chancellors and the ability of the Librarian to defend its budget or the commitment of the Vice Chancellor to the development of the Library. This ASUU/FGN agreement was a turning point in the history of Library funding which brought with it, increased

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funding, some form of stability and ensures that the money gets to the Library. In compliance with that agreement, National Universities Commission (NUC) communicated to all the Federal Universities, a circular partly reproduced below;

"1. Each year, 10% of the total recurrent grant to each Universities should be committed to the operations of the University Library.

2. This is to be fully effective from the 1993 allocation

3. Out of this amount 60% should please be committed to the purchase of books and Journals while 40% is committed to personal emoluments and purchase of other consumable required in the Library"2

The main focus of this project work is how to utilize the 60% meant for books and journals among the schools/departments. The circular cited above further directed that the money should be listed and released separately which will be accounted for on quarterly basis. The fund should not lapse from one year to another. The conditions are made to provide favourable operating environment for library development in view of its importance in the university.

1.4 <u>COST OF BOOKS AND JOURNALS</u>

Recent advances in the information technology (IT) brought about new medium of information storage and transfer. However, books and journals still constitute the main resources of the library collection. The cost of books and Journals has increased tremendously due to the high cost of publishing. The prices of

journals and books have gone up between 50% and 100% all over the world, yet 95% of books and Journals used in the University Libraries in this country are purchased from abroad. Ogundipe (1989)3 The hard economic conditions that beset the country has adversely affected the Library. The domestic publication of academic books is so low that reliance on foreign sources for books and Journals is ever increasing. The pressure on the Library is increasing as students enrolment is also on the increase. Therefore, it is imperative to design a system of utilizing the available funds through a well articulated criteria to the satisfaction of the competing interest groups. Ehikhamenor (1983)4 outlined the elements to be taken into consideration as follows;

- "Number of students;
- new courses to be offered;
- strength of existing collections;
- existence of satellite Libraries (that is faculty and departmental Libraries);
- Circulation figures;
- whatever is considered to be ideal growth rate of the collections to maintain their currency (perhaps 60% and 10% annually);
- Convenience of access to other libraries external to the University;
- Rate of the growth of literature (which varies from discipline to discipline);

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-    Prices of publication"

1.5 <u>SCOPE & LIMITATIONS</u>

This project "management of Library book fund in academic Libraries: a case study of Federal University of Technology Minna" focuses on identifying the strength and weakness of the existing system with a view to proposing a better and fair methods of sharing Library book fund amongst the schools (Faculty) and departments. One of the benefits of the proposed system to the schools and departments shall be for each school/department to be aware of funds available to it and be able to decide on how much of its fund allocation should be assigned to books,journals and other reading materials in a particular year. Secondly, the schools/departments will be able to appreciate the financial constraints affecting the Library and would if possible demand for more financial allocation to the Library. Thirdly, the Library will became a clearing house for cross checking the existing collection and its utilization. The Library may not be relieved of the User demand pressure but it will reduce if not eliminate the erroneous belief that the Library has a lot of money to satisfy Library Users need.

1.6 <u>METHODOLOGY</u>

This researcher intends to use interview and fact finding techniques to elucidate the project work. These techniques are appropriate since the personnel involved can be interviewed and available documents examined. The current practice has being in use since the inception of the University Library in 1984. Ten

years is long enough to appraise the existing system, its
strength and weakness.

CHAPTER TWO

2.0   LITERATURE REVIEW

The functions of the Library stems from the goal of its parent institution which is clearly defined in the laws setting up the University. The ways and means of attaining these functions are most problematic to the Library administrators. While finance is no doubt an important factor in this regard, it is not true to assume that with enough money, a Librarian can assemble all that users need. Rather effective utilization of available resources and carefully selected reading materials can ensure satisfaction. There is no generally acceptable standard formula for allocating Library fund, although, there are obvious advantages in a collection development procedure that is based on a systematic formula. The choice of any pattern 'simple impulse' or 'carefully calibrated formula' will depend on the system that is "most responsive to the individual Library's needs and capacities"

The ultimate goal of library service is User 'satisfaction' which is often difficult to determine because User needs very considerable. User satisfaction is also relative. A library is not judged by its size (Volumes) or magnificent building, rather, a comparatively small library with a well selected book may be desirable. This is the target of any Library and the method of achieving this is the nightmare of Library administrators. In practice, it is expedient to combine the good elements of one or more practices that would enable the library to achieve its goal.

Whichever system that is adapted will depend on the type of library, size and the institutional budgeting system.

Four trends have emerged as follows:-

2.1. THE HISTORICAL/POLITICAL APPROACH

This approach takes cognisance of the historical development of the institution. This approach follows the political distribution pattern with respect to departments and branches. It follows set pattern which once established becomes the guiding principles. This approach has the advantage of being responsive to individual needs and guarantees autonomy. It ensures careful selection and standard collection development. The disadvantages of this system includes;

  -duplication and overlapping collection which may often lead to waste of resources.

  -it can also lead to competition of funds, resulting in some areas being overlooked became no one is responsible to them. This type of approach is not good for unitary institution but may be convenient for loosely linked system with certain degree of autonomy.

2.2. THE PLANNED APPROACH

The approach looks at the budget as a means to an end. The goals of the institution is the primary target, bearing in mind the available resources. The main objects of this approach is the identification of the component parts. Within each major component, it evaluates variables such as "numbers of published books and average prices on the one hand, and numbers of readers

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or students, circulation or credit hours on the others 2" The evaluation of these variables will give rise to criteria of weighting and prioritizing the budgetary allocation(Spiller 1986)3. This approach does not exclude the use of intuitive sense to make adjustment when necessary. The most difficult task with this system is how to identify the elements used in measuring and how adequate are these elements. This system also has the ability to expose system weaknesses and what adjustment need to be done. The major disadvantage is its rigidity in terms of its application and not in its principles.

2.3. FLEXIBLE/RESPONSIVE APPROACH

The main strength of this approach is its ability to respond to identifiable needs without blindly adhering to practices. This is determined by what is required to realize the set goals or unsatisfied needs. The salient advantages of this approach is that it can respond to need, crisis as soon as the problem is identified. It also support the principles of justification. The disadvantage of this system is its subjectivity and open to abuses and prejudice.

2.4. THE ORGANISATIONAL APPROACH

The whole organisation is seen as one entity and the fund allocation are made on the basis of identifiable material types; such as books, journals and audio visual materials. Based on this approach the sharing of the book fund was at one time put in the ratio of 40% and 60% for journals and books respectively. However, because of the fluctuating finances and importance of

journals in the University Library, percentages of journals
normally "hovers nearer to the 50% mark than to 40%. Within this
division, departmental and subject variables are considered.
This is rather a simplistic approach as monitoring and control is
relatively simple. Adjustment in subscriptions are done by
increasing or cancelling respectively. The process of reducing
or cancelling are not as easy as it seems, but it is the
realities that Libraries are often faced with.

2.5   BOOK SELECTION

       The actual selection of Library materials is a combined
function for the Library and faculty staff and to a lesser
extent, the students. The process of identifying and designating
which materials should be acquired into the Library is known as
selection. The involvement of the end users is an important
component of the selection exercise. Although this participation
is necessary, appreciated and welcome by the Library, such
participation vary between schools and departments depending on
the personal interest of the faculty staff. In a situation where
faculty participation is not forthcoming, the Library uses its
experience to select materials for the departments.

       The collection development Librarian or Acquisition Librarian
is normally responsible for this job. He/She coordinates,
monitors and liaises with the faculty staff to build library
collection. Although many people are involved in deciding what
materials are to be purchased, the authority to approve
expenditure comes from the Librarian after he/she has satisfied

that the materials selected are needed by the faculty for teaching and research.

Finally there are obvious advantages in strict application of formula to Library fund allocation, however, no system must be enslaved to formula if it is counter-effective. Goehner (1983) identified same of the advantages and disadvantages as follows;

Advantages

- Variable elements can be evaluated and updated periodically.

- The use of formula ensures consistency and objectivity.

- The system encourages and promote cooperation and consultation between the Library and teaching staff.

 Disadvantages

- Librarians loses control over Library fund in terms of distribution.

- Less opportunity to exercise professional judgement in collection development

- The academic staff may use larger amount of their fund allocation to buy esoteric items against standard works.

- The system like any other has its weaknesses.
 In general, caution must be taken that the Selector
 exercises sensitivity and fine judgement along side
 the clearly defined policy statement of fund allocation
 and collection development. Librarians have acquired this
 training and experience over the years.

CHAPTER THREE

3.0 SYSTEM ANALYSIS AND DESIGN

3.1 SYSTEM ANALYSIS AND DESIGN

The main subject of the system study is to determine whether the existing system effectively and satisfactorily ensures the attainment of the goals and objectives of an organization. There is always a tendency for system operators to assume that an existing method of carrying out a task is adequate and effective. system study aims at identifying system that comings and to proffer solutions that will ensure maximum efficiency at a minimum cost.

3.2 SYSTEM CONCEPT.

This connotes the interaction of "a set of interacting elements responding to inputs to produce output". These elements include physical, procedural, conceptual among others to produce output.

3.3 PROBLEM DEFINITION

This is a method or technique of determining the nature and scope of the problem under investigation. It is very important to fully comprehend and appreciate the depth of the problem for proper diagnosis. For example, it is important separate and classify the problems of the system itself from the operational problems or even the cause and effects of the problems. It also helps to eliminate steps that does not lead to the desired solution.

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3.4 OVERVIEW

The Library is a subsystem of the University system and it occupies a very important place in the overall achievement of the objective of a University. It is in the realization of this that the National Universities commission (NUC) singled out the Library subsystem and set aside a separate fund for it-to carry out its functions. Hitherto, most Vice Chancellors do not give the recommended fund to the Library and the University Librarians were left at the mercy of their respective Vice Chancellors. As important as the Library is, it can not be left at the vagaries of the University chief executives, thus a concession was granted in the Academic staff Union of Universities (ASUU) and Federal Government (FG) agreement of september 1992. According to that agreement 10% of the total allocation to each University shall be given to the Library. 60% of the 10% is set aside for the procurement of books and Journals. The 60% must be spent an books and Journals and properly accounted for before the next quarter is released.

Since financial resources available to the Library is limited and no Library can fully satisfy the information needs of its clientele, it is important that the available fund is properly utilized. It follows therefore, that the academic departments which are beneficiaries actively participate and ensure that the fund is put into proper use. This can be done by;
- ensuring that all the books/Journals purchased are needed
  by the respective departments;

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- that the staff and student ratio by departments are

  taken into consideration when buying books and journals.

- that emphasis are geared towards acquiring materials that are

  relevant for interdisciplinary use to maximise resources.

3.5 SYSTEM ANALYSIS

The interview conducted with the staff of Collection
Development Unit and the University Librarian reveals that the
current Library collection department has evolved over the years
in response to the complaints from the Clientele. The Library
does not have a written down policy but one is being prepared.

Some of the measures that evolved include;

(i)   Sending Publisher's catalogue round for Deans of schools to

      select material to be purchased for their use. The

      selector must append his/her signature. By this

      arrangement, the Dean is expected to circulate the

      catalogues to their staff.

(ii) When poor responses are received, the Library staff goes

      round to remind the heads of department concerned.

      In some cases, the Library staff carry the catalogues round

      to Heads of department. Some even misplace the catalogues.

(iii) Cancellation due to inadequate fund is also referred to

      the department. This is to ensure that departmental

      priority titles one considered first. Items cancelled are

      set aside until money is available.

(iv) Creation of a Separate reading area for the academic staff

to encourage the use and to enhance the general awareness of the Library collection.

(v)   Selection of five Core journal titles by each department that the Library can maintain their regular subscription.

The current Library holding stands at 32,000 volumes. There are 27 academic departments with a total students enrolment of about 4,000. This figure comprises of Remedial, undergraduates and postgraduates students. The academic staff strength is about 200. The remedial students do not have borrowing rights but enjoy all other services offered by the Library. There are technical staff in the Laboratories and workshops and administrative staff that enjoy services of the Library. The Library acquires a minimum of three copies of each book title but this is always not the case.

The Library does not have the statistics of students and staff distribution by departments. The collection development unit is aware of department that are deficient because of persistent complaints. For example Urban and Regional planning, Estate Management and Land surveying department in the school of Environmental technology. There are cases of complaints of inadequate and some times irrelevant books. However, staff of collection development unit confirmed that most of these are based on ignorance because some academic staff do not patronize the Library and does not know if the books are available. The staff confirmed that complaints of inadequacy is not peculiar to this Library alone. It is a Universal phenomenon but the case of

this Library may be acute in the sense that students enrolment is increasing yearly without adequate corresponding increase in money. Other factors such as cost of science and technological based books and journals and high rate of exchange was adduced since most of these materials are procured from abroad.

The Library tried to address some of the above problems by sending the catalogues to the Deans. The Deans are expected to circulate the catalogues through the departments. This did not work perfectly because either the Deans did not circulate, or some Heads of department did not see it at all. The Library decided to send the Catalogues to the Heads of department but the same complain came up again. Some Heads of department did not involve their staff. This often led to complaints from individual lecturers that their areas (discipline) are not adequately catered for or neglected. In this regard some Heads of departments are alleged to have given emphasis to their own areas of specialization or may not even be competent to select books for other areas. This is contrary to the Library's good intention.

Another trend that was also observed is because of staff mobility when a new staff is recruited there is the tendency for him/her to say that the available books are not good enough or relevant. This happen even when the Library has just recently acquired recommended books by the former lecturer.

3.5.1 USE STUDY

In 1994, a use study was conducted and the result shows that the Library collection was extensively used. Daily report of statistics of users, consultations and books borrowed also reveals that the library is extensively used. That study may not be comprehensive, but the report gave a clear insight into the relevance of the collection.

3.5.2 FINDINGS

The system study reveals the need for a more thorough and clear policy statement for the collection development. The university system is dynamic and the library must rely on a well articulated fact to make the best use of its book fund. One of the major weaknesses of the existing system is the absence of staff/student ratio by departments and the annual growth rate as a basis for collection development.

Secondly, the bulk is passed on to the Deans/Heads of department, and the expected result is still not achieved. There is the need to go beyond these levels. It was assumed that the heads of department are closer to members of staff and will involve them but this was not the case for most of the departments. Beside, if a lecturer is not in good working relationship with the head of department, this may affect the selection of books for that unit. The library need to guard against such sentiments. The assumption here is, the decisions of how to expend fund allocation will be taken at departmental level and personal sentiments are not likely to be involved.

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Thirdly, although the collection development staff may have intuitively 'mastered' and monitored the growth of the library collection over the years,it is a good idea to have a written policy to guide the staff. It is necessary to have a reference document to ensure consistency, fairness and a balanced collection growth.

3.6 SYSTEM DESIGN

This implies the transformation of identified problems into feasible solution. The following objectives are supported in the new database system being proposed.

i)   supports the organization's performance and efficiency.

ii) provides a logical design that will give detailed specifications of input, output and procedure required by the new database.

iii) The software guarantees flexibility, maintenablity and security.

iv) The system is simple and user friendly.

3.6.1 INPUT/OUTPUT

These are taken into consideration at the design stage. The principles of GIGO (garbage in garbage out) is an old adage and the computer religiously adheres to this principles.

Input

The system will reckon with the following input parameters to generate output.

i) Total annual library book fund.

ii) Number of academic departments.

iii) Number of staff/students per department.

iv) Number of available books (library holding)for each
    department.

v) Annual volume of books borrowed per department.

vi) Availability of alternative library facility(school or
    departmental).

These input parameters will be used to determine what amount
will be spent on books and journal for each department per
annum. The departments will in turn be eager to know the
amount due to it, identify areas of priority, deficiencies
and select the needed books for library to purchase.

output

The following output will be useful for management and planning.

i) Annual fund allocation per department.

ii) Total number of staff/student per department.

iii) Total books borrowed per department.

iv) Annual growth of books/journals per department.

v) Department that does not fully utilize its fund.

vi) Department that does not patronize the library among others.

3.6.2 **SYSTEM REQUIREMENT**

The proposed database will require the under listed elements
to operate successfully.

3.6.2.1 Hardware requirement - This includes the following

items and specifications.

1. An IBM compatible personal computer - #70,000.00

   - Processor   486DX4

   - Speed   100 Mhz

   - RAM   8MB

   - Hard Disk   630MB

   - 14" SVGA Monitor

   - Enhanced keyboard

   - MS DOS   6.22

   - Floppy disk drive 3.5"

2. Printer

   - Deskjet 500c   - #34,000.00

3. UPS - 600KVA   - #35,000.00

4. Consumable

   - Diskette (1pk)   - #1,000.00

   - Print cartridge (2)   - #7,000.00

   - Paper (2 Rims)   - #1000.00

5. Miscellaneous   - #1,500.00

   The unit already have these hardware requirements which
makes implementation cheaper.

3.6.2.2 Software requirement. A database that will be used to
computerized the operations as proposed.

3.6.2.3 Manpower - the staff of the unit are adequate to run
the new system. The proposed system does not required
additional staff. Some of the staff are already

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computer literate and may not require long period of training to operate the system.

3.6.2.4   **Cost implication:-** The cost benefit analysis favours the new system. The library will be exonerated from the perennial problem of unsatisfied needs which are often put on it. Departments that have large number of students/staff and uses the library most are adequately compensated. This factor of working with facts and balance growth is a major requirement from the library to its patron and this can not be materially quantified. The advantages are however, overwhelming. The operational procedure and cost will be reduced by at least 30%.

CHAPTER FOUR

4.0   PROGRAMMING CONCEPT.

A program is a set of logical instructions that informs the computer the sequence of steps required to perform a given task(s). There are various ways of communicating with the computer using defined set of characters, symbols and words with defined rules for each language.

4.1 EVOLUTION OF PROGRAMMING LANGUAGES

4.1.1   The first generation of computers use sequence of binary numbers (0's and 1's) as instructions for the computer to execute. The programmes are often difficult to learn. They are machine dependent.

4.1.2   ASSEMBLY LANGUAGE

This was an improvement on the machine language. The instructions consist of mnemonics and symbols to represents opcodes and addresses. For examples BAL which run on IBM's 360 and 370 computers.

This language has a relative advantage over the earlier one because it is easier to learn and recall the mnemonic devices than the series of binary numbers. It is also easy to locate and correct errors. However, this language is also machine dependent because instructions have to be translated into machine language.

4.1.3   HIGH LEVEL LANGUAGE

The high level languages were designed to alleviate the problems identified with the machine and assembly languages. The instructions resemble human language i.e. English - like.

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Programming in the high level languages (HLL) is machine independent. However, a compiler is required to convert the instructions to machine language.

4.2 CLASSIFICATION

The high level languages (HLL) are classified into four categories based on their suitability to various areas of human endeavour.

4.2.1 SCIENTIFIC ORIENTED LANGUAGES - These are suitable for scientific and engineering applications. They have powerful/complex functions for scientific and engineering calculations. For example Fortran (Formula Translation) and ALGOL (Algorithm Oriented Language).

4.2.2 SPECIAL PURPOSE LANGUAGES - These are set of programming languages that are specially designed for certain types of problems. For example CSL (computer simulation Language) designed for simulation and CORAL is suitable for control of physical processes e.g science experiments.

4.2.3. MULTI - PURPOSE LANGUAGES - These programming languages have capabilities for both scientific and business environments. For example - PASCAL.

4.2.4. BUSINESS ORIENTED LANGUAGES - This category of programming languages consist of extensive mathematical operations and file design functions. The most popular in this category are Dbase programme and COBOL (Common Business Oriented Language).

4.3 CHOICE OF PROGRAMMING LANGUAGE

Dbase: This project work is designed to handle operation, processing and management of data in an organisation - the library. The use of Dbase programme is relevant and appropriate. A Dbase programme is one of the Database management software (DBMS) that has capabilities to manage, store and facilitate the manipulation of data to generate different types of report. Dbase is an integrated database which is suitable for this project because of the following reasons:-

-It ensures efficient record management.

-Increase data integrity and security.

-Reduce duplication of data in an organisation.

-It has powerful tools for creating, storing, retrieval and deleting of records.

-It is widely used and easy to learn compare to other programming languages.

-It is very flexible and can be modified easily to suit different purposes.

4.4 DATABASE STRUCTURE

FIELD	FIELD NAME	FIELD TYPE	WIDTH	DEC
1.	Dept_CD	Character	3	-
2.	Dept_Name	Character	25	-
3.	No._of_Dept	Numeric	2	-
4.	No_of_Staf	Numeric	3	-
5.	No_of_Stud	Numeric	4	-

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6.	Stf_Std_TT	Numeric	5	-
7.	D35_Perc	Numeric	6	2
8.	Bks_Qty	Numeric	4	-
9.	Qtty_Borrow	Numeric	5	-
10	Dept_Amt	Numeric	7	-
11.	Libr_Fund	Numeric	10	2
12.	Five_Perc	Numeric	6	2

4.5 PROGRAMMES

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```
* * * * * * * * * * * * * *
*-- Name.......: LIBRARY.PRG
*-- Date.......: 1-21-98
*-- Version....: dBASE IV, Format 1.1
*-- Notes......: Format files use "" as delimiters!
*****************************************************************
* * * * * * * * * * * * * *

*-- Format file initialization code
-------------------------------------------------

SET TALK OFF
SET SAFE ON
SET CENT OFF
SET DATE AMER
SET BELL OFF
SET ESCA On
SET STAT OFF
set proc to library
do libr

proc libr

* * * * * * * * * * * * * * * * * * *
clea
i=0
DO WHIL .T.

do LIB2

mdpcd = "     "
@ 6, 31  GET  Mdpcd PICT "@!"
READ
IF Mdpcd = "XXX"
   **** return to procedure after the second do jssp
   RETU
ENDI

use LIB
go top

if mdpcd = "     "
   ? chr(7)
   @22,5 say space(74)

   @ 22,5 say "Space NOT Allowed !"
   set colo to W+/B
   @22,47 say "Press any key to continue !!!"
     set cons off
   wait

   @22,5 say space(74)
```

```
   set cons on
 loop
endif

go top
loca for dept_cd = Mdpcd
if .not. eof()
   @22,5 say space(74)
   ? chr(7)
   @ 22,5 say "Department code already exists    "
   set colo to W+/B
   @22,47 say "Press any key to continue !!!"
      set cons off
   wait

   @22,5 say space(74)

   set cons on
 loop
endif

do LIB3

MDpnm = SPACE(25)
DO WHILE .NOT. MDpnm <> SPACE(25)
@ 10,21 GET MDpnm PICTURE "@!"
read
endd

go top
mlfd = libr_fund
if mlfd  = 0
   MLFD = 0
   DO WHILE .NOT. MLFD <> 0
   @ 14,25 GET MLFD PICTURE "99999999.99"
   read
   endd
else

   @ 14,25 SAY "********.**"
   mlfd = libr_fund
endi

clea gets

@22,5 say "[S]ave / continue,   [R]epeat / abandon,   [Q]uit   [  ]
!!!"
i=0
do while i=0
i=inkey()
```

```
@22,55 say " "
if upper(chr(i)) $ "SRQ"
exit
endi
i=0
endd

do case
case chr(i) $ "Qq"
    clear all
    RELE ALL
    CLOS ALL
    clea all
SET COLO TO W+/B
    SET STAT ON
    RETU

case chr(i) $ "Ss"
  @22, 5 say space(72)
    do LIB4
    RELE ALL
  loop

case chr(i) $ "Rr"
  @22, 5 SAY SPACE(72)
  loop
endc
endd

PROC LIB2
**************************
@ 3,10 SAY "L I B R A R Y   B O O K   F U N D   S H A R I N G"
@ 7,25 SAY "Department code "
@ 22, 5  SAY " OR Enter  XXX  OR Press  ESC  Key to Exit !!!"
@ 1,8 TO 20, 60 DOUB
@ 4,9 TO 4, 59
RETU

PROC LIB3
***********************
@11,26 SAY "Department name "
@ 15,22 SAY "Total library fund "
retu

PROC LIB4
************
USE LIBRARY
APPE BLAN
REPL Dept_cd WITH MDPCD, Dept_NAME WITH MDpNM
REPL LIBR_FUND WITH MLFD
stor reccount() to mcount
repl no_of_dept with mcount
```

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```
md35 = 0
mfp = 0
mbl = 0

mfp = 0.05 * mlfd

repl all five_per with mfp

mbl = mlfd-mfp

md35 = 0.35 * mlfd
repl all md35_perc with md35
retu
*-- EOP: LIBRARY.PRG -----*

******************************************************************
***************
*-- Name.......: LIBRARY1.PRG
*-- Date.......: 1-21-98
*-- Version....: dBASE IV, Format 1.1
*-- Notes......: Format files use "" as delimiters!
******************************************************************
***************

*-- Format file initialization code
------------------------------------------------

SET TALK OFF
SET SAFE ON
SET CENT OFF
SET DATE AMER
SET BELL OFF
SET ESCA On
SET STAT OFF
SET PROC TO library1

do 1YA

proc 1YA

******************
clear
i=0
DO WHILE .T.

do la2YA

mdcd = "      "
@ 5, 45  GET  Mdcd PICT "@!"
READ
IF Mdcd = "XXX"
    **** return to procedure after the second do jssp
```

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```
     RETU
ENDI

use library
go top

if mdcd = "     "
    ? chr(7)
    @22,5 say space(74)

    @ 22,5 say "Space NOT Allowed !"
    set colo to W+/B
    @22,47 say "Press any key to continue !!!"
       set cons off
    wait

    @22,5 say space(74)

    set cons on
 loop
endif

go top
loca for dept_cd = Mdcd
if eof()
    @22,5 say space(74)
    ? chr(7)
    @ 22,5 say "Department code DOES NOT exist !"
    set colo to W+/B
    @22,47 say "Press any key to continue !!!"
       set cons off
    wait

    @22,5 say space(74)

    set cons on
 loop
endif

if .not. eof()
mdnm = space(25)
mdnm = dept_name
@ 2,17 SAY "Department name: "
@ 2,35 say MDnm
endif

if mdnm = space(25)
    @22,5 say space(74)
    ? chr(7)
    @ 22,5 say "Department name DOES NOT exist !"
    set colo to W+/B
    @22,47 say "Press any key to continue !!!"
```

```
        set cons off
    wait

    @22,5 say space(74)

    set cons on
retu
endif

do la3ya

MNf = 0
mnd = 0
mdst= " "

@ 7,45 GET MNf PICTURE "999"
@ 9,45 GET MNd PICTURE "9999"
read

DO WHILE .NOT. MDst $ "NnOo"
@ 11,45 GET MDst PICTURE "@!"
read
endd

MBqy = 0
@ 13,45 GET MBqy PICTURE "9999"
read

MQbrow = 0
@ 18,45 GET MQbrow PICTURE "99999"
read

CLEAR GETS

@22,5 say "[S]ave / continue,  [R]epeat / abandon,  [Q]uit  [  ]
!!!"
i=0
do while i=0
```

```
i=inkey()
@22,55 say " "
if upper(chr(i)) $ "SRE"
exit
endi
i=0
endd

do case
case chr(i) $ "Ee"
    clear all
    RELE ALL
    CLOSE ALL
    clea all
SET COLO TO W+/B
    SET STAT ON
    RETU

case chr(i) $ "Ss"
  @22, 5 say space(72)
    do la5ya
    do la6ya
rele all
  loop

case chr(i) $ "Rr"
  @22, 5 SAY SPACE(72)
rele all
  loop
endc
endd

PROC lA2ya
**************************
@ 3,10 SAY "L I B R A R Y   B O O K   F U N D   S H A R I N G"
@ 5,27 SAY "Department code: "
@ 22, 15  SAY " OR   Enter   XXX   to   Exit !!!"
@ 1,8 TO 20, 60 DOUB
@ 4,9 TO 4, 59
RETU

PROC la3ya
*************************
@ 5,27 SAY "Department code: "
@ 7,20 SAY "Dept,s staff strength: "
@ 9,18 SAY "Dept,s student's strength: "
@ 11,15 SAY "Qty of books per dept: "
@ 15,18 SAY "Total loans per dept: "
retu

PROC lA5YA
*************
```

```
USE LIBRARY
go top
loca for dept_cd = Mdcd
REPL No_of_staf WITH MNf, No_of_stud WITH MNd
repl stf_std_tt with (Mnf + Mnd)
Bks_qty WITH MBqy, Qty_borrow WITH MQbrow
retu


proc la6ya
****************
do whil .t.
clear
use LIBRARY
go top
mlfd = 0
md35 = 0
mfp = 0
msh = 0
mbal = 0
mbl = 0
mlfd = libr_fund

md35 = d35_perc

mfp = five_per

mbl = mlfd-mfp

stor reccount() to mcount

msh = md35 / mcount

mbal = mbl - md35

mstd = .45 * mbal

msstd=0
msstd = stf_std_tt

if msstd < 201
   mdpsh = 0.05 * mstd + msh
endif

if msstd > 200 .and. msstd  < 401
   mdpsh = 0.17 * mstd + msh
endif

if msstd > 400 .and. msstd < 601
   mdpsh = 0.20 * mstd + msh
endif
```

```
if msstd > 600 .and. msstd < 801
    mdpsh = 0.23 * mstd + msh
endif
if msstd > 800
    mdpsh = 0.25 * mstd + msh
endif
use Library
go top
loca for dept_cd = Mdcd
repl dept_amt with mdpsh
clear
retu
 endd
mlbalan = mlfd - mfper _ mdper - mstd
mstdd = 0.075 * mlbalan
mbQy = 0
mdsh1 = 0
If mbQy < 201
 mdsh1 = 0.067 * mstdd + mdsh
endif
If mbQy >201 .and. mbQy < 401
 mdsh1 =0.134 * mstdd + mdsh
endif
If mbQy > 401 .and. mbQy < 601
 mdsh1 = 0.2 * mstdd + mdsh
endif
If mbQy > 601 .and. mbQy < 801
 mdsh1 = 0.266 * mstdd +mdsh
endif

If mbQy >800
 mdsh1 = 0.333 * mstdd +mdsh
endif

Use library
go to
repl dept_amt with ( mdsh1 + mdper)
retu
*endd

mlbalan = mlfd - mfper - mdep - mstd - mstdd
mQbrow = 0
mdsh2 = 0
If mQbrow < 1001
 mdsh2 = 0.067 * mstddd + mdsh
endif
If mQbrow > 1001 .and. mQbrow < 2001
 mdsh2 = 0.134 * mstddd + mdsh
endif
If mQbrow > 2001 .and. mQbrow < 3001
 mdsh2 = 0.2 * mstddd + mdsh
endif
```

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```
If mQbrow > 3001 .and. mQbrow < 4001
 mdsh2 = 0.266 * mstddd + mdsh
endif
If mQbrow > 4001
 mdsh2 = 0.333 * mstddd + mdsh
endif
use library
go to
repl dept_amt with (mdsh2 +mdper)
retu
*endd
*--EOP:Library1.prg --------------------*
```

SAMPLE DATA

Dept-Name	Dept-Code	D-Staf	Dept-Stud	BQty	Total Loans
Maths/ computer	001	15	1200	1120	15676
Soil Science	002	10	550	190	1436
Agric.Eng.	003	4	130	740	670
Arch.	004	19	700	349	520
Chem. Eng.	005	31 ·	300	526	700

The sample data above is based on the assumption that there are five departments. The annual library book fund is also put at #1,000,000.00 (one million naira). This amount is to be shared between the five departments with respect to the following criteria.

1. 5% of total library fund is to be set aside for Bibliographies/General Works.

2. 35% of total funds to be shared equally among the departments

3.45% of the total fund to be shared according to the following conditions.

(i)	001 - 200	0.150
(ii)	201 - 400	0.170
(iii)	401 - 600	0.200
(iv)	601 - 800	0.230
(v)	> 801	0.250

4. 7.5% of the total is to be shared according to the following conditions. If the existing Library collection ranges between;

(i)	001 - 200	0.067
(ii)	201 - 400	0.134
(iii)	401 - 600	0.200
(iv)	601 - 800	0.266
(v)	> 801	0.333

5. 7.5% of the total fund is to be shared according to the following conditions. If the circulation figures ranges between;

(i)	0001 - 1000	0.067
(ii)	1001 - 2000	0.134
(iii)	2001 - 3000	0.200
(iv)	3001 - 4000	0.266
(v)	> 4000	0.333

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

All libraries perform two basic functions i.e. collection of books and other reading materials and making these materials available to users who seek for information. The bottom line of a good library service is its collection. The library collection is supported by the funds available to it to acquire needed materials. However, the irony is, it is not how much money but how well managed the fund is put to use that determines a good collection and by extension a good library service. This is why this project work is emphasising on identifying the quantifiable elements during planning and execution. The results of hypothetical data fed into the computer generated fund allocation obtained below for the five departments:

1. Maths/Computer/Statistics   = # 232,450.00

2. Agric. Eng. Department   = # 162,475.00

3. Architecture Department   = # 198,550.00

4. Chemical Engineering Department   = # 181,450.00

5. Soil Science Department   = # 175,075.00

6. Bibliographies/General Works (5%)   =   #50,000.00

                Total   = # 1,000,000.00

This result shows that planning with adequate facts is indispensable to any organization. This is necessary to ensure efficient utilization of resources. The library's clientele vary considerably and these variations must be taken into consideration in resources allocation.

I wish to recommend that :-

(1)　The library must prudently control financial expenditure, allocation of funds and resources to individual schools and departments according to their needs and available funds.

(2)　Provide professional leadership role in academic activities and liaise with other agencies for financial and materials assistance to improve its services.

(3)　Research activities and user needs change and the library should be informed in good time so that the it can acquire materials to support research work.

(4)　Encourage close working relationship between library clients and dispenser of the resources to foster better understanding of client needs.

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