Influence of Management Principles of Organising on Automation of Libraries in Federal Universities in South-East, Nigeria

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Abstract
This study investigated the influence of management principle of organising (as in the view of Luther Halsey Gulick and Lyndall Urwick (1937), who coined acronym called POSDCORB. POSDCORB stands for planning, organising, staffing, directing, coordinating, reporting and budgeting, and thus, constitutes what this study regards as the variables that could influence automation in the federal university libraries in south-east, Nigeria. n automation of libraries in Federal universities in south-east, Nigeria. One objective and one research question were used to guide the study while one hypothesis was formulated and tested at 0.05 level of significant. Descriptive survey was adopted for the study. The population of the study comprised 378 personnel (academic and non-academic. Total enumeration was used to cover all of them. The instrument used for data collection was questionnaire. Validated copies of the questionnaire were tested for reliability using Cronbach Alpha, and the reliability coefficient was returned at average of r_{α} *= 0.83 confirming its reliability. The 378 copies of questionnaire were administered to the respondents through the help of research assistants one from each university. 375 were returned and 368 were correctly completed and used for data analysis. Data was analysed using descriptive statistics of mean frequency count and standard deviation. The mean was used for answering the research question while inferential statistics of t-test was used for testing the hypotheses. The result showed mean at 2.80 high extent of responses by the respondents agreeing that management principle of planning influence automation of university libraries in the South East. The conclusion was drawn that management principle of organising influence automation of academic libraries in federal universities in South-East, Nigeria.*

Keywords: Automation, Libraries, Management, Organising, Federal Universities

Introduction

The goal of Library is centred on information acquisition, processing, preservation, storage, dissemination in the most efficient and effective way suitable to the user. Hence, its culture has been flexibility to change in information packaging and services. Information services offered by the library to the general public have great volume of contribution to their output in the labour market, it also empowers educational sectors particularly universities. As early men grew in knowledge, they began to record their knowledge which transited from clay tablet to papyrus to printing and these days to electronic media. Having these accumulated information materials, it become crucial to conserve them and also make them available for consultations, hence the establishment of library. The importance of library automation has been underscored in librarianship literature.

Having assumed a great deal of importance in libraries from the mid 1960's (Amekuedee, 2013). Library automation has become a formidable platform for academic libraries to serve their user publics effectively. Consequently, a lot of studies have been conducted to examine how far university libraries are automating their routines and services, as well as how potential impediments to successful library automation projects are being curtailed (Akande, 2014; Oyetola and Afolabi 2014; Nwakuo and Nwakuo, 2014; Emezie and Nwaohiri, 2014). Despite these efforts, the state of automation of academic libraries in Nigeria, particularly in the South Eastern part of Nigeria, seems unappreciable. Most university libraries, even in the regularly-funded federal institutions, have the culture of acquiring and displaying computer sets without Internet connectivity and or local area networks (LAN) linked to them, let alone running on one or more library management software (Anunobi and Okonkwo, 2008). Yet, no one knows what could be responsible for this sluggish or disinterested approach of university libraries to automate their routines and service.

From researchers' preliminary investigation and informal discussion with staff of some university libraries, it shows that management principles of organising are essential for automation exercises though it has some challenges. The challenges include unskilled manpower, infrastructure, and finance and so on (Anunobi & Okonkwo, 2008). From available literature, there is not yet a study on influence of management principles of Organising on automation of libraries in federal universities in southeast Nigeria. This is the concern that made

the researchers to embark on this study titled "influence of management principles of organising on automation of libraries in federal universities in south east Nigeria".

Purpose of the study

To access the influence of organising on automation of libraries in federal universities in south east, Nigeria

Specific objective

To determine extent management principle of organising influence automation of university libraries in south east, Nigeria

Research question

This question was raised to guide the study

How does organising influence the automation of libraries in federal universities in south east, Nigeria?

Hypothesis for the study

How organising influence, the automation of libraries in federal universities in South-East, Nigeria responses of the academic and non-academic have no significant influence.

How automation influence the organising of libraries in federal universities in south east, Nigeria responses of the academic and non-academic have no significant influence.

Literature Review

Management according to Kasf and Ensezuiegh (2003) and Terry (2000) is a process consisting of planning, organising, actualizing and controlling performance to determine and accomplish the objectives by the use of people and resources. Management is considered as a 'process or a systematic way of doing things. Taylor (1911), the father of scientific management, defined management as an art of knowing what is to be done and seeing that it is done in the best possible manner. Massie and Douglas (1973) see management as the process by which cooperative group directs actions towards common goals. Fayol (1917) regarded as the father of modern management defined management as to forecast, to plan, to organise, to command, to coordinate and control activities of others. Sisk (2000) communicates that, management is the coordination of all resources through the process of planning, organising, directing and

controlling in order to attain stated goals. McFarland and Amy (2009) opine that management is that process by which managers create, direct, maintain and operate purposive organisation, through systematic coordination and cooperative human efforts. Kumball (2006) comments that management is a process of working with and through others to achieve organisational objective in a changing environment.

According to Moyo and Maguranyanga, (2006), Agboola, (2000) and Nwachukwu (2000), motivating people at work is part of integral management process. The current authors see management as central to any organisation if the organisation will fulfil their purpose by effectively and efficiently using their limited human and material resources.

Organising: Organising physical facilities are part of the areas that need to be considered in library automation process. The success of an automated library hinged on harnessing automation as a means of providing effective services. To achieve this according to Sani and Taimuyi (2005), there must be adequate equipment and infrastructure. Automation requires a building that is adequate to house equipment and the personnel. Adequate infrastructure includes a steady supply of electricity, telecom, maintenance of hardware and software. According to American Library Association (2014), organisation of the automation process is also another factor, libraries explored to chalk out possible strategy and proper planning. This will accelerate the powers of automating the academic libraries. Nowadays, the amazing growth of documents especially in the areas of sciences, social sciences and technology in the form of books and non-book materials forced the library planners to utilize new technology for the organisation of information and due to heavy influx of documents added new dimension to user's need. These leads to the need for academic libraries to acquire, install, and properly organise computer and its related device for library automation.

Aguolu and Aguolu (2002) comment that Nigerian libraries are generally most deficient in the area of physical facilities. If library is to be effectively used, consideration for its maximum physical accessibility, it must be made very easily, in terms of convenient location in its building complex. This means that, proper organisation of information in automating academic library environment cannot be overemphasised. In a related development Sani and Tiamiyu (2005) stress that, equipment and infrastructure needs of academic libraries should be guided by these questions to assure quality automation: is the building earmarked for the project physically

conducive? Is the seating capacity for the staff and clientele adequate? Are the infrastructural facilities available for automation adequate and reliable? Does the library have plans for challenges that may result from failure of any of the infrastructure? How reliable are the support services for automation in the libraries?

Sharma (2007) observe that well organised automation of all the library operations would better and speed services. According to Tabata, and Johnsrud (2008), organising divides automation into departments according to the needed responsibilities because of the need to develop and build technical skills. The authors maintained that, proper organising of library automation facilitates a number of quality electronic libraries available on the Web as well as YAHOO, GOOGLE, creating your own electronic library which allows access to information that is directly related to courses offered in your academic environment. For proper automation, library space must meet the requirements of office procedure, and also the environmental work needs of employees not only today, but for the entire life span of the building. Proper designed space for automation project in the library is one of the pieces of evidence of good organisation.

The space design process of a library is a process that is categorized in the job of the architecture, but to a greater extent, the librarian participates fully in this aspect because his basic understanding of the nature of the profession. Lawal (2005) stress that the sharing of large building like a university library with other academic department, increases the number of users of the building and their allegiance to units of the university outside the controls of the library makes it difficult to maintain the building richly and satisfactory from a central point. With the introduction of library automation services, academic libraries can save shelf space that would otherwise be taken, and with the introduction of automation the costly handling of paper materials can equally be reduced or eliminated.

Library automation is the application of computer software in handling of the services in the library instead of manual application (Lamkhogen, 2014). Lamkhogen explained that, automation implies the use of automatic data processing equipment such as computer or other labour-saving devices". In the words of the current researcher, library automation can be defined as a technology which concerns, performing a process by means of programmed commands combined with automatic feedback control to ensure prompt execution of the instructions. Emezie and Nwaohiri (2014) contribute that library automation is seen as the vehicle that will

drive the academic library to the next level. In line with this, they further state that, as more people engage in new forms of learning, such as e-learning and distance education, a centralized, automated circulation-control system enables libraries to fulfil their functions to this group. Dhaka (2012) opines that library automation in 21st century is an interrelated system, sharing resources through modern and innovative networking and makes certain impartial access to a broad range of information and users.

Automation has modified the definition of the librarians and libraries; it provides the practicing librarian with the skill and knowledge needed to make intelligent decisions. Adegbore (2010) sees library automation as application of information technologies in libraries. Automation is the recital of a procedure, a string of operation or a process by self-activating, self-controlling. According to Lamkhogen, (2014) automation means that the resulting system is capable of operating without human intervention. Automation is a process of using the machineries for easy working and saving the human power and time (Edwin and Pwadura, 2014; Aghadiuno, Agbo and Onyekweodiri, 2015; Bruno, 2010). Rajput and Gautam (2010) describe library automation as creation of database and information retrieval, computerized library network and use of telecommunication for information needs and careful handling and systematical planning. According to Rajput and Guatam (2010), library automation involves the creation of database and information retrieval devices, computerized library network and use of telecommunication for information needs and careful handling and systematical staffing. Staffing is an important part in library automation.

Methodology

The research was conducted at Federal universities in south-east, Nigeria. Descriptive survey was adapted for the study. The population of the study comprised 378 personnel (academic and non-academic. Total enumeration was used to cover all of them. The instrument used for data collection was questionnaire. The instrument used for data collection was questionnaire. Validated copies of the questionnaire were tested for reliability using Cronbach Alpha, and the reliability coefficient was returned at average of r_{α} = 0.83 confirming its reliability. The 378 copies of questionnaire were administered to the respondents through the help of research assistants one from each university. The population which comprised 375 were returned and 368 were correctly completed and used for data analysis. Data was analysed using

descriptive statistics of mean frequency count and standard deviation. The mean was used for answering the research question while inferential statistics of t-test was used for testing the hypotheses. Then the average of the Cronbach's coefficient alpha of the independent variables is the reliability of the instrument is r = 0.83

Reliability Test Using Cronbach's Co-Efficient Alpha (R) method

Table 1

X	31	32	33	34	35	36	37	38	39	40	Total	d^2
4	6(24)	4(16)	3(8)	0	7(28)	2(8)	4(16)	6(24)	5(20)	6(24)	168	19712
3	15(45)	17(51)	6(18)	2(6)	8(24)	6(18)	6 (18)	13(39)	15(30)	15(45)	294	
2	0	0	10(20)	16(32)	6(12)	10(20)	8(16)	2(4)	1(1)	0	105	5,990.8
1	0	0	1 (1)	3(3)	0	5(5)	3(3)	0	0	0	12	234.4
Total	69	67	47	41	64	51	53	67	51	69	57	
mean $\bar{x}$	3.3	3.2	2.2	2.0	3.0	2.4	2.5	3.2	2.4	3.3	$\bar{x} = 27.6$	$SD_x^2 = 4615$
SD_i^2	SD_i^2	90.2	28.6	43.3	54.6	27.8	26.9	81.7	51.1	103.2	852.7	

$$r_i = \frac{21}{20}\left[1 - \frac{852.7}{4615}\right]$$

$= 1.05\ [1 - 0.18]$

$= 1.05 \times 0.82$

$= 0.83$

The table 1 above shows the Statement and Frequency of reliability test Analysis

Presentation of Finding

Research question

How does organising influenced automation of university libraries in federal universities in south-east, Nigeria?

Table 2: Mean responses on influence of organising on automation of university libraries in south-east, Nigeria.

Item Statement	N	Mean	SD
Remark			
1. Without hardware and software automation is not possible in my Library High Extent	368	2.96	3.14
2. Accommodation is a special factor that affects automation High Extent	368	2.98	31.2
3. My library automation is currently affected with accommodation Challenges High Extent	368	2.85	2.96
4. My library automation success would be traceable to good Accommodation Low Extent	368	2.43	2.49
5. Lightning is directly connected to the success or failure of my Library automation project High Extent	368	2.36	3.45
6. Hardware brand and company name is affecting my library Automation project Low Extent	368	2.37	2.48
7. The location of my library's automation office affects the Automation Project High Extent	368	2.78	2.86
8. Poor internet connectivity affects my library automation project High Extent	368	2.87	2.95
9. A standby power generating set is indispensable for library Automation to work High Extent	368	3.08	3.19
10. Manual – to – Digital conversion technologies are used in the automation process of my library High Extent	368	2.88	2.86

Aggregate mean and Standard Deviation High Extent	**2.76**	**2.85**

The analysed data on the above Table 2, showed highest value status responses of the respondents to 7 out of 10 items on influence of organising on automation of university libraries in federal universities in south-east, Nigeria. This is because the mean responses of the respondents of the 7 items ranged from 2.78 – 3.08 with average mean of 2.76 which is above the 2.50 mean cut off mark of a 4-point rating scale used in scoring the items. As the standard deviation (SD) of the 7 items also ranged from 2.86 – 3.19 with average SD of 2.85, whereas the mean responses of the respondents in items 4 and 5 were regarded as lowest value status because their mean scores ranged from 2.36 – 2.43 which are below the cut-off mark of 2.50.

Hypothesis

How automation influence the organising of libraries in federal universities in south east, Nigeria responses of the academic and non-academic have no significant influence.

The test was conducted using t-test statistics and the result was shown on the Table 2 below.

Table 3: Summary of t-test analysis of responses of academic and non-academic librarians on how organising influence automation of university libraries

Group	Number	Mean	SdDf	t-Cal	t-Tab	Decision
Academic	**135**	**2.97**	**1.52**			
				366	**2.91**	**1.65** **Significant**
Non-Academic	**233**	**3.17**	**0.95**			

Sd = Standard deviation Df= Degree of freedom

t – Cal= Calculated value t-tab = table value (value from the table)

The data on the above Table 3, showed a t-calculated value of 2.91 and t-tabulated value of 1.65 at 0.05 alpha levels. This implies that the null hypothesis is rejected while the alternative which states that "there is significant difference between the mean rating of academic and non-academic librarians on how organising influences automation of university libraries in federal Universities in South-East, Nigeria was retained, since the tabulated value is less than t-calculated value of 0.05 significant level at 366 degrees of freedom (df). This is suggesting that both academic and non-academic librarians' responses were of high extent status which shows that organising influences automation in Federal University libraries in South-east, Nigeria. They also maintain differences in their approach.

Summary of the study

The result of the findings shows that the respondents were of the opinion that organising has significant influence on automation of federal universities in south-east, Nigeria, which suggested why these libraries have not been fully automated. The majority of the respondents showed that lack of commitment from management account for the libraries' inability to full automation. This is in addition to organisational strategies on university library automation. According to American Library Association (2014), organisation of the automation process is also another factor, libraries explored to chalk out possible strategy and proper planning. This will accelerate the powers of automating the academic libraries. Aguolu and Aguolu (2002) comment that Nigerian libraries are generally most deficient in the area of physical facilities.

If library is to be effectively used, consideration for its maximum physical accessibility, it must be made very easily, in terms of convenient location in its building complex. This means that, proper organisation of information in automating academic library environment cannot be overemphasized. In a related development Sani and Tiamiyu (2005) stress that, equipment and infrastructure needs of academic libraries should be guided by these questions to assure quality automation: is the building earmarked for the project physically conducive? Is the seating capacity for the staff and clientele adequate? Are the infrastructural facilities available for automation adequate and reliable? Does the library have plans for challenges that may result from failure of any of the infrastructure? How reliable are the support services for automation in the libraries?

Sharma (2007) observed that well organised automation of all the library operations would better and speed services. According to Tabata, and Johnsrud (2008), organising divides automation into departments according to the needed responsibilities because of the need to develop and build technical skills. The result of the findings showed that the construct of the management principle of organising were found to have significant influence on the automation of federal university library in south-east, Nigeria.

Recommendations

Librarians should organise for the automation of their libraries along selection and implementation of automation system (information and communication technology) that support

the mission and priorities of the institution for efficient, effective and sustainable service delivery to patrons.

This can be done by achieved by:

1. Visiting libraries that have fully automated their library services to find out how they implemented the process.
2. Requesting automation proposal from different agents without letting have the idea that you made request from more than one agent.
3. Choose an agent most suitable to your plan. Most importantly, considering the strength the source of your fund.
4. Plan towards efficient, effective and sustainable library automation.
5. Choose your automation software wisely, as it also determines continuity, among others.

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