

# The Impact of Digital Integration for Library Networking Services in Nigeria: National Library of Nigeria in Perspective

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**Abstract** - Networks have changed the economics of information distribution world-wide. Once a work is put on the internet it becomes instantaneously available to millions of people. Digitalized information like the integration of Management Information System (MIS) of any given library organization has also changed the economics of information and communication flow by making works and services available to the library users as well as the staffs at the appropriate time. The advent of information and communication technologies (ICTs) has had implications for both Librarians and Library users to have easy access to information through networking services within an organization at different locations. Hence, this paper tries to assess the impact of an integrated systems of the Nigerian Libraries through Digital information in the 21<sup>st</sup> century, using National Library of Nigeria as the pace setter.

**Keywords** - Digital Integration Management Information Systems, Digital Library Networking, National Library of Nigeria.

## 1. Introduction

The term digital integration Management Information Systems (MIS) is often used narrowly to mean or refer to the computerized based (data) systems of an organization for effective dissemination and distribution of information and services. MIS is a combination of organized resources which cuts across functional lines and services the information needs of managers at different levels by providing information in useful formats on a timely basis to support planning and control components.

In other words, MIS is usually a composite of smaller interconnecting sub-systems that are either used to serve the needs of a particular department, division, sections, units, work-group or the entire people of the organization.

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MIS is suitable for an organization like the National Library of Nigeria where Library operations such as Acquisitions, Cataloguing, Classification, Reference and human efforts are still paper based/ manual with little computerized data based sub systems where interface are still equivalent with one another. Trends in technology changes in education and information communication networking services have prompted Librarians involved in instruction to question old approaches and try new methods and social media in order to enhance effective instructional services delivery and productivity.

Libraries have shifted from being repositories of printed and non-printed materials only to hybrid instructional provisions, and access to digital information. Although, it can be arguably said that since the National Library of Nigeria is yet to fully imbibe digital information systems, information flow within the organization still suffer inadequately. Take for instance, the National Library of Nigeria news bulletins which was usually on weekly basis as it used to be, was not so anymore. Some news bulletins could appear occasionally on the designated notice boards with stale or obsolete news. An approach to MIS integration systems in the library will effectively harness this kind of dwindling flow of information in the organization.

Also, Issuance and obtaining International Serials Standard Number (ISSN) and International Standard Book Number (ISBN), Selective Dissemination Information (SDI), Current Affairs Services (CAS), Cataloguing – In – Printing (CIP) and other legal deposit drives can equally be integrated and collected by an individual through on-line digital networking with stress- free and less cost-effective in the state Branches through Headquarters in Abuja.

Orna (1990) has demonstrated the need for effective control and periodic evaluation of various organizations information activities and resources through viable information policies. She stressed further by defining an organizational information policy as a formal understanding among organizational personnel of the appropriate role, use and value of information activities and resources in the organization. Communication and information play a major role in case of Libraries networking. Sound decisions that is timely and accurate will efficiently and sufficiently provides necessary effective service delivery. Just as the saying goes, "Information time frame in an organization erodes all possible intrigues of tyrannical ideas of mirage."

Decision-making is solely the responsibility of the management of the organization. The effectiveness of every decision made by the management is sometime based on the

whole lot of information available. (Ubogu, 2005) asserted that a piece of information can only be put to use effectively if it is communicated through the right channels from the source to the recipient at the appropriate time. Therefore, the management of any reasonable organization is expected to be conversant with the daily trends of the activities especially in information management sectors, so that the organization will not be left behind.

## **2.Provision of Effective Information Flow and Training in National Library of Nigeria**

The truism of information flow and communication in an organization is the peoples tend to spend and to harness the efficiency of the organization. Without adequate dissemination of information flow and communication distribution, potential conflicts are likely to increase and the solutions likely to serve narrow partisan interest as cliques score against such institutional goals and objectives (Ayoku, 2008).

This could lead to low morale and high profile of insubordination in the organization. Therefore, the modern management of any institution should recognize the fact that effective flow of information and communication is the key ingredient that plays the most vital roles in the operations of an efficient organization in executing certain duties such as, passing of orders of the organization, formulations of policies and execution of plans for the success of the organization. Effective flow of information and communication improves the morale and tends to diminish fears and suspicion in an organization.

(Akanmidu, 2014) reiterated that the justification of an effective library services to its clientele is that of the efficiency of the library personnel ranging from the professional Librarians to the least subordinate staff found in the library. Hence, the mechanism of information flow in any Library will always be appreciative to the components of the library resources which include human efforts and materials. In order to articulate the combination of these resources for effective control in an integrated environment, policies are therefore formulated. However, we cannot expound all the numerous kinds of library policies, but we would lay little emphasis on the training in the National Library of Nigeria.

(Klatt et al, 1985) defined training as “planned organization efforts or activities concerned with helping an employee to acquire specific and immediately usable skills, knowledge, concepts, attitudes and behaviors to enable him or her perform more efficiently and effectively on his present jobs”. Therefore, training is related to improving upon the present job experience. Going by the above definition, a clear understanding of policy on training should be made relatively

understood by the management of the organization to each of its subordinate in the line of authority. The interpretation of the policy on training the staff is very necessary for effective functioning of the organization. Take for instance, in every public office; there is an administrative body responsible for receiving applications of various types like training, promotion, employment and staff matters et cetera, et cetera. But due to bureaucratic implications, the administrative bodies may not have power of authority to cause an effective action on those applications not until the management’s decision is known, therefore matters on those applications are left unattended to. On the other hand, the applicant’s faith and position is extremely at large at this point in time. Hence, timely communication and information is fast becoming a critical element between the applicants and the management for decision-making.

At this juncture, a good management with a number of supervisors will try to reduce time necessary for supervising and spend more time on other matters that requires immediate attention. This is exactly what an in integrated digital information components will actually imbibe and incorporated into the systems in order to avoid misunderstanding the rules and regulations binding the staff member of the organization.

Policies on staff trainings, seminars, workshops, conferences, and other daily activities of the organization, such as staff redeployments, sudden changes made in terms of postponement of already planned programmes should be made known to the staff at the accurate time and that is the essence of information flow. A timely information on any issue helps to manage crisis in any organization. Therefore, any staff member who wishes to develop himself on the job for effective performance for the betterment of the organization would of course, know the right course to take and seek before embarking on such venture.

## **3. Organizational Planning On Digital Data Integration In Nigerian Libraries**

### **A. Organizational planning**

Organizational planning can be describe as the process of getting the organization from where it is to where it wants to be In a given period of time by setting it on a predetermined course of action. (Lucky, 1987). Planning consists of making decision regarding a possible action in the light of establishing missions, goals and objectives. Perhaps, one may ask, what is the mission of the National Library of Nigeria in

terms of information flow and networking services in this millennium era of information explosion tagged “Information and Communication Technology” (ICT) or better still, global digitalization.

The most common language used in modern Libraries these days is, we have paperless library operations or we operate a paperless library services. Hard copies of documents are not found here but you can search. In order words, the Librarian in- charge of such Libraries is simply saying that hard copies of library materials in form of books, documents et cetera are no longer visible because it is time wasting and occupy space in the library. The application of modern information technology in Nigerian libraries, especially the National Library of Nigeria has generated a lot of interest since early 1990s. It took proper planning and strategies before other paperless Libraries could get there. It is therefore high time, the Nigerian libraries and National Library of Nigeria reinvents, re-orientates and repositions to address her missions and objectives, if the organizations still wants to be part of the world-wide information society providers.

Planning concept begins at the top and are implemented down the streamline with a focused objectives. Planning should be used as a daily guide in an organization. Today’s planning documents becomes a designed for tomorrow actions in any reasonable organizational establishment. However without daily planning, decision becomes ad-hoc choice of activities which result to confusion, chaos and bundles of failures. Thus prevails an adage of failure to plan is the best way of planning to fail.

The vision of the management of the National Library of Nigeria should be transformed into a mission statement that is more specific and precise in nature. A well specific defined mission of the organization would attract many opportunities and challenges that can enhance development the National Library of Nigeria needs to meet the global world on information providing digitally.

### ***B. Prospect of Digital Integrated Management Information System [MIS] in National Library of Nigeria***

MIS epitomizes a system whose objectives are to acquire, process and provide the information required for managerial responsibilities of an organization. MIS can be used to obtain and capture data as input from different departments of the library operations, process the obtained data at an appropriate time to produce satisfying summary reports of the data as output. In the modern library organizations world-wide, MIS are probably the most commonly discussed and adopted because, it involved the use of computer technologies that are

capable of transformation effectively and efficiently. Having earlier described MIS as a composite of smaller interconnection sub-systems that can either be used to serve the needs of a particular department, division, section, unite, work-group or the entire people of the organization, it is very suitable for an organization like the National Library of Nigeria. This is because library operations such as cataloguing, classification, Acquisitions, Reference/Circulation and Human efforts are still paper based/manual operations and little computerized databases sub-systems and interface are equivalent with one another. With MIS, the organizational data can be captured, organized standard reports can be incorporated or integrated. The ability of MIS to maintain facilities and produce for capturing, storing, retrieving, communicating, delivering and information cannot be substituted with another information integrated systems except the internet. Even internet itself is an organized integrated communication networking.

Organizational resources such as books, microforms slides and all other computer storage had already have their traditional ways of managing them separately by Libraries, Archives, Record-Centers and Data processing centers for preservation and conservation. MIS further fosters the integration of these documents by capturing, storing, retrieving, collection, controlling and managing the data by combing these digital technologies into a common document using the methods of document imaging, document indexing, databases and warehousing in an integrated systems, thereby streamlining access to these documents by the staff of the organization as well as users at different locations.

## **4. Implementing Digital Integration in The National Library of Nigeria**

(Tiamiyu, 2003) has this strong advice to any library or information center or organization that intend to undergo digital integration management information systems by saying that “careful management information system planning is crucial because efficient organizational functioning depends on the ability of the organization to harness the organizational database resources”. That digital integration is a long-term project requiring and investing valuable time. (Kanter, 2004) observes that digital integration planning like Library organization should seek realistic answer to the following questions before embarking on it.

- i. What is the current situation of the institution in term of organization goals, strategies and how does the current MIS fit into the situation?

- ii. What is the strategies long-term plan of the organization and where should MIS be in order to adequately support the organization in the future?
- iii. What specific and cost-effective MIS strategies, Programs or applications that it requires to move the organization from its current level to the target level of development?
- iv. What human resources, and which organizational and project scheduling arrangement are required to implement the strategies, programs and applications?
- v. Finally how much will it cost the organization, can the organization afford it now or in the future?

The above questions are quite unique and require a lot of commitment from the management and every stakeholder in the organization to answer. To further comprehend the above questions, it would be necessary to take a cursory look at the resources components of digital integration in an organization, which includes:

- i. People
- ii. Organizational Framework
- iii. Computer infrastructure :  
(a) Hardware (b) software
- iv. Data and databases and database management
- v. Integrated document management system. (IDMS)

### **A. People**

These are staff of the organization in their various contemporary and complementary roles as decision-makers, managers, operational staff-librarians, data collectors, operators, supervisors and all sundry personnel in the organization.

### **B. Organizational Framework**

These comprise the policies, procedures and social behaviors and networks that govern the relationships among the personnel between the personnel and organization, between personnel and their works, data processing equipment. The organizational framework is the interrelationships between the integration department/unit that is charged with the functions of coordinating all the activities that makes the organization work.

### **C. Computer Infrastructure**

Obviously these are the required electronic gadget such as computers of all types that would be able to accept the software data processing and digital integration database creation, data input, and output, processing, storing, and transferring of information within and outside the

organization. Also software that can be used with the computer hardware and software that could facilitate data capture, transformation analysis reports, communication and storage.

### **D. Data and Database Management**

Data are raw materials that are processed before it could be used as information. Piece of information gathered such as statistics, volume of books collected or purchased, ordered, number of books catalogued, number of registered library users and the daily routine activities are a good number of examples of a data.

Services of the library are good examples of data collection. It is when you store these information into the computer system that it becomes data. Therefore, data is processed information. In a broader sense, database is any electronically stored collection of information (data) in a computer system. In other word, database is a collection of interrelated files that are organized according to their elements, so that they can be retrieved easily. This is what is sometimes called Database Management Systems (DBMS) which is commonly known as digitalization.

Digital Integration requires data for processing information in an organization. It can be programmed with the software that can control the structure of a database and accepts systematic storage, protection and management of the database. However, databases are created with software known as Database Management System (DBMS). MIS must be able to provide an organizational framework like National Library of Nigeria that is integrated with lager organizational framework and enables the people of the organization to work effectively with computing hardware and software to collect, process, communicate report and information sharing. MIS must be able to manage and integrate different types of data towards providing the right information to Library users and be cost-effective. Integration Management Information Systems will go a long way to boost networking services of the organization if adopted in the National Library of Nigeria.

## **5. Conclusion And The Way Forward**

In conclusion, the researchers wish to affirm that the responsibility of the National Library of Nigeria to meet and be able to compete with other developed Libraries worldwide, indeed lies in the hand of every stakeholder and not the management alone. But nearly every Library has an information access problem that could be solved by the



creation of a local database. Virtual Library cannot exist in a vacuum, it has to be supported by a combination of local and global telecommunications and networking infrastructure put in place by the organization. One major primary opportunity for Librarians working with digital integration is in collaboration with the integrated database information technologies in a Library setting. This will further affords the (Librarians) acquiring additional professional competencies in order to promote and ensure the value of the Library services to the organization and the society in general.

## A. The Way Forward

With the level of information technology (IT) in the National Library of Nigeria today, one is convince that the organization is gradually embracing Information and Communication Technology (ICT) digitally though it is yet to imbibe full digitalization.

An assessment has shown that the National Library of Nigeria have lived with the evolutionary trends of changes in the past years on the positive side, of course. Therefore, the same institution as a product of development can expect revolutionary changes in this era of information digitalization called Information and Communication Technologies (ICT). Although, people hate change because it has its natural implications but changes comes today for a better tomorrow. (Fullan, 1993) shared eight basic lessons of the new paradigm of changes to be drawn by any organization that must move forward for effective and efficient services. These include:

- i. “Changes is a journey and not a blue print
- ii. You can’t mandate what matters most
- iii. Problems are our friends when changes comes
- iv. Individualism and collectivism must have equal power
- v. Neither centralization nor decentralization works
- vi. Vision strategic planning comes after statement of mission is known
- vii. Connection with the environment is critical
- viii. Every person in the organization is a change agent”

The National Library of Nigeria can apply the above points to manage its resources to achieve her mission of providing effective networking services to the entire society of the world.

The researchers would like to emphasis critically that despite some departments have computerized their operations and

currently maintaining their various databases for easy accessibility and increase in productivities, it is imperative that all the departments in the National Library of Nigeria be networked through digital integration of management information systems databases to complement the effectiveness of the networking services. The National Library of Nigeria should provide a twenty four (24) (7) internet services in all her locations throughout the Country. It is only when this is achieved that the National Library of Nigeria can be said to be fully ready to meet up with the challenges of the digital age.

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