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Paper presented at the NLA National Conference / AGM
held at Emmaus House, Awka, July 10-15, 2011
Introduction

- Library and Information Center Transformation;
- Three Levels of Metamorphosis in Nigeria;
- Challenges to the Major input during Transformation: skills Acquisition;
- Strategies to Ensure Skills Acquisition and Remain Relevant.
Library and Information Center Transformation

- Information age;
- Changes in Packaging mode;
- Changes in user approach to information sourcing and use;
- Changes in operations and services.
Three Levels of Metamorphosis in Nigeria

- Result of Transformation: metamorphosis in Library operations and services characterized by input, process, output and feedback with skills as major input.

Each has peculiar Input, process, output and Feedback/control.
Graphic Representation of Operations of the three levels of the Library and Information System Development in Nigeria

TRADITIONAL LIBRARY
- **Collections Development**: Print using bibliographic sourcing tools: catalogues, publishers/vendors lists, donations, deposits etc.
- **Technical Services**: Use of: cataloguing/classification, and indexing tools;
- **Public Services**: Print: circulation, reference, CAS, SDI, bibliographic search, print library instruction, management information in form of print statistical report.

COMPUTERIZED/AUTOMATED LIBRARY
- **Collections Development**: Print and CD/ROMS, offline/online databases, other storage materials: using bibliographic sourcing tools etc as in the traditional mode
- **Technical Services**: Use of: cataloguing/classification indexing tools, MARC as well as computer facilities and library software
- **Public Services**: OPAC, computerized/automated circulation and reference service, bibliographic search, library use instruction with offline media facilities, library software enabled management information

DIGITAL LIBRARY & SOCIAL MEDIA SERVICES
- **Collections Development**: Not well defined yet, digital or electronic through licensing; information gained through networking, search, digital content development etc
- **Technical Services**: Use of ICT hardware and software namely networks, server hardware, network operating systems, web server, relational databases, web applications, online publishing, electronic pointing and hyper-linking, web portals and repositories, in some cases a minimal use of traditional technical tools for extracting metadata.
- **Public Services**: Online access (bibliographic, abstract and full text), online reservation, borrowing and return, collaborative services and interactive social networking services using wikis, blogs, facebook, flixter, twitters, myspace, youtube, e-reference services and e-instructions.
The Traditional Library System

- Prints: sourced, acquired, processed and provided to patrons.
- Public libraries: poor man’s university
- School libraries: support teachers and inculcate reading habit in pupils/students
- Academic libraries: Pillar of teaching, learning, research and recreation
- Special Libraries: A must visit for every researcher
The Traditional Library System

Cont...

Traditional Library Environment

INPUT
Traditional skilled staff; print resources; equipment and infrastructure needed for traditional operations.

PROCESS
Print: collection development; cat & class and public services operations.

OUTPUT
Print services to users and interacting physically with them.

CONTROL
Monthly, quarterly and annual reports/statistics
The Traditional Library System

Cont...

INPUT

- Traditional skills: Management, Collection Development, Technical Services, Public Services skills;
- Print resources,
- Catalogue cabinets, cataloguing and classification tools (Sears list, Library of Congress Subject Heading, Ulrich, AACR2 etc)
- Shelves, circulation cards, spiral labeling tools, accessioning machines, book trolleys, stamps etc.
The Traditional Library System

Cont...

PROCESS

- Traditional collection development functions all utilizing print;
- Cataloguing and classification services utilizing the traditional input tools and equipment;
- Public services operations: shelving, stock evaluation and weeding, prerequisite operations for circulation and reference services.
OUTPUT

- Services involving physical interaction: circulation, reference and bibliography, Current Awareness and Selective Dissemination of Information, Interlibrary loans and Reservation services.

CONTROL

- Management information: monthly, quarterly and annual reports

System transformation for continuity else atrophy

- Application of technology in library functions termed Automation
LIS professional with above skills highly respected;
Continuity in traditional librarian’s authority ensured through
- Library schools training using initial curriculum;
- Mentoring by more experienced colleagues;
- Skills and tools needed for selection, acquisition and other library operations are already established;

System transformation for continuity else atrophy
- Application of technology in library functions termed Automation
The Automated Library System

- Dated back 1970’s: UI serials list, Union List of serials by CULNU;
- Success story by special libraries: IITA, FIIRO, NIIA etc;
- Academic Library partial success story with TINLIB.
The Automated Library System

Computerized/Automated Library Environment

**INPUT**
Staff skilled in traditional and computerized operations, Databases, PC, equipment and infrastructure needed for traditional and computerized operations.

**PROCESS**
Computerized acquisition, cat & class, public services.

**OUTPUT**
OPAC services, computerized reference services, bibliographic search, instruction using offline multimedia facilities.

**CONTROL**
Automated management information system enabled by automation software.
## INPUT

- Staff skilled in both traditional and computerized operations.
- Basic computer literacy;
- Ability to use any library software deployed in the institution
- Zeal and motivation to drive the system;
- Computer hardware, software (ILS), databases, communication equipment
- Traditional operation tools;
- Technical staff (Hardware and software).

## PROCESS

- Automation of: acquisition, cataloguing and classification, reference and other bibliographic services;
- Creating a network within the library or becoming part of the external network of the institution
• OUTPUT
  - Operations and Services through LAN, WAN, Web (OPAC) e.g. LC Online cataloguing, OCLC WORLDCAT;
  - Computerized: circulation and reference services, bibliographic search of print and electronic resources, library used instruction employing offline multimedia facilities are provided for users.
The Automated Library System

Cont...

- FEEDBACK
  - Automated management information system using the automation software;
  - Alternative feedback with print reports.
  - The traditional skills and ability still subsist for effective operations and service;
  - Many Nigerian libraries are explicitly or implicitly excluding themselves from operations and services available in the global information community engendered by Web 2.0 as they operate at this level.
Digital library System

- Radical departure from the fundamental practices.
- Long established practices and benefits challenged and in most cases wiped out.
- A paradigm shift in the traditional role, purpose and operations of library. Information packaging and mode of access by users have changed.
- Print is giving way for digital resources,
- Ownership giving way for access.
- Library services shifting from library-centric to user-centric.
World Wide Web, electronic mails, newsgroups, electronic journals, electronic databases, video conferences and lately Web 2.0 giving rise to library 2.0;

Digitization of already existing print and attempt to displace LIS professionals and what their operations and services stand for (google project, Internet archives);

Scholarly communication and the open access initiative (Directory of open access journals [http://www.doaj.org](http://www.doaj.org));

Generally users needs and outlook changed requesting for digital environment;

Digital environment: all human, physical and operational elements in the environment think/talk, perform/operate digitally.
Digital library System Cont.

Public library users:
Who are willing to visit the library only if Internet enabled so that they can:

- Read newspapers online;
- Chat with friends or see what they are doing online using social networks e.g. facebook etc;
- Book their tickets/interviews;
- Find jobs online;
- Listen to music;
- Watch films and football matches.
Digital library System Cont.

Academic library users:

- Who will want to:
  - Browse and see journal articles, books, dissertations etc and download them digitally;
  - Have recreational, research, other collaborative and interactive access using social software such as facebook, blogs, twitter, flicker, myspace, youtube;
Users of Special libraries

- Who will want to access report of an ongoing research / ground-breaking research on real time;
- Collaborate research-wise;

These users need changes in input, process, output and feedback
Digital library System Cont.

INPUT

- Complete departure from other two systems;
- Ubiquitous electronic resources with amorphous boundaries, digital asset or repositories, course management systems, electronic posting and possibly online public access catalogue to print resources that are moved to remote locations within the campus as well as harvesters to crawl through the entire resources;
- Server with Digital library architecture, Internet and intranet enabled environment, digitizing facilities as well as storage facilities;
- Cataloguing and classification tools are required for metadata operations;
- Staff with high level computer skills with variety of applications such as, database management applications and programming languages (Java, Php, mysql, html), Web Servers such as Xamp, Wamp, etc, user interface and information architecture design.

- Staff should have 3 levels of competencies
  Technical, Library related and special management;
<table>
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<tr>
<th>PROCESS</th>
<th>OUTPUT</th>
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<tr>
<td>Content creation, Site licensing, Registration of new information objects, Search and Browse;</td>
<td>Online interactive services using library 2.0 (Blog, Wikis, Facebook, Social bookmarking, Twitter, Youtube, etc);</td>
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<td>Development of harvester that searches across databases;</td>
<td>E-referencing, e-instruction, online circulation and reservation services;</td>
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<td>Integration of access to materials with access to tools.</td>
<td>Embedded Librarianship (informationist);</td>
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<td>Services relating to downloading and manipulation of files as well as providing assistance with software.</td>
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**CONTROL**

- Interactive communication;

- Attainment of Digital Library system difficult in Nigeria: challenges to skills acquisition
Challenges to Digital Library Skills Acquisition

Ideological challenges

- Status Quo Ante Ideology;
- Conflicting Interest and Confusion;
- Resentment and fear;

Environmental challenges

- Lack of Opportunity for New Skills Acquisition;
- Limited Mentors / Experts;
- Limited Facilities for Skills Acquisition;
- Poorly Defined Digital Library Programs and Courses;
- Library Stakeholders Apathy.
Strategies for Ensuring the Availability of the New Skills

- Digital library skill is a major requirement for stepping up the traditional and automated library systems;
- Responsibility of stakeholders: professionals, institutions, associations;
- How:
  - Life Long Learning and Training;
  - Change of Attitude and Work Style;
  - Review of Educational Program;
  - Review of Needed Facilities;
  - Collaboration with Other Disciplines (Fertilization of knowledge).
Conclusion

• Need transformation, remain relevant and avoid atrophy;
• Skills are very essential for Library transformation;
• Skill continues to evolve;
• Library and Information science stakeholders must join in the move to ensure availability of skills and knowledge.

10/23/2017
Reflection

The Benchmark is Choose to be: regenerated, transform and re-engineered or be left behind by the band wagon

Thank you for your time
Enjoy your conference!!!