



DIGITIZATION OF STAFF RECORDS FOR EFFECTIVE PUBLIC SCHOOLS ADMINISTRATION IN NIGERIA.

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Abstract

This is paper focused on digitization of staff records for effective public schools administration. It pointed out that digitalized staff records harmonized administrative processes in public schools management. Digitalization of records saves time and other resources to achieving easily objectives and goals. The followings were also suggested from the study (i) compulsory institutionalization of digitized staff personnel system, (ii) protection of data system (iii) adequate storage of records (iv) adequate provision of information communication materials (v) availability of internet facilities (vi) training of school personnel on computer appreciations (vii) library and documentations management (viii) improved salary and welfare package (ix) funding (x) standby technical maintenance team (ix) standby server hosts (xii) constant power supply amongst others to improve staff record management as proactive measures for synchronized administrative system in public schools in Nigeria.

Keywords: Digitization, Staff, Records, Effective Administration

Introduction

Modern technological facilities in organized establishments helped to improve efficiency of tasks and achieving desirable results. These technologies worldwide have immeasurably facilitated managing productivity, cost, time, quality, standard, specification and wastes as part of production process, and improved man-hour amongst others. Technological applications in organizational processes have completely changed organizational narratives in terms of settings, behaviours and role plays, bridging diversities in workplaces and minimized fictitious work teams. Organizations follow up social trends through education as medium for social. All social systems respond to social changes in society to accomplishing its goals and societal development. Staff records storage is a social problem bedeviling organizational efficiencies and required new ways to manage through constructive digitalization.

The challenges in social (education) organizations are diverse, proper staff records management is imperative as these changes occur organizations grow with it. Nwachukwu and Obi (2011) stated that the survival of the social system is made possible through modification. If the system is immune to change; it will become obsolete and out dated which will not be to the interest of humanity. In business or school organizations, staff records keeping is an integral part of the system defining costs, quality and roles performances. Emerging Information Communication Technology (ICT) systems like computers, internet facilities, Wi-Fi connections, telephones, cellular phones, machines and accessories have changed organizational performances hence making unified staff personnel records necessary.

Staff records storage is imperative as Ubeku (1975) posited that the purpose of storing information about employees and events connected with them is to give an immediate, reliable and up-to-date picture of each employee. When staff information are domiciled at a common pool becomes easier to promote organizational efficiency and confidence, rather than when kept on registers and files at different positions where they are easily mutilated and distorted. In this 21st century modern technologies have overwhelmed traditional methods of getting, storing and accessing personnel information for good organization



performance, continuity and survival. Organizational corporate existence absolutely depended on quantum and quality of shared information and trust which digitizing data best exemplified.

As practicable in many large organizations, digitized information are sought from any part of the globe with accuracies. Staff records are provided from inception of employment by each employee to the personnel department for recording, storage and updating. These information if not digitally centralized are always prone to bias. Staff records must be policy tied for effective collaboration to curtailing system disarray in school management. Inadequate centralized digitized records keeping has led to the common syndrome of 'ghost' workers on pay rolls being cankerworm corroding organizations today. Digitization enabled persistence for everyone to be accountable and visible to meeting the common purpose which Nwachukwu and Obi (2011) averred that existing norms and values ensure that individuals are well integrated into the social system.

Information is a good source for planning, Ubeku (1975) stressed that an important aspect in manpower plan involved detailed manpower inventory of all types and levels (unskilled, skilled, supervisory and managerial) of employees. These are information required for staff recording and storage. Digitalized staff records process helped obtain information overtly and covertly than analog system by ministries of education (employers), schools boards and individual schools revealing manpower, skills available or lacked for future recruitment plans.

Although, as postulated, *digitized staff records system is advantageous over paper system, but it does not relieve an HR department from responsibilities for the maintaining and safekeeping of the information (Dresser & Associates, 2014).* Analog (manual) records management processes proved sufficiency in smaller organizations because of non-bulkiness of documents. Scientific and technological evolutions have shaped administrative tasks since these documents can easily be compressed and copied into different portable devices for use at different places and time.

Digitized staff record systems have eliminated many bottlenecks hitherto experienced in analog system and other related situations in human resources management. Analog record keeping has been proven tool labour-intensive. Hence, huge documents or files make the job cumbersome and capital intensive in modern organizational settings because of diversifications. Digitalized staff records procedures are appropriate to manage and achieve expected results without duplication of efforts, time and other resources.

World over, school staff personnel perform both curricula and non-curricular activities even guardian functions as “**in-loco parentis**” to the learners (Igwe, 2010, Nakpodia, 2012). Keeping digital records will enhance good administrative procedure to understanding who and who does what in the school. To this end, Ugwulashi and Mba (2021) opined that for school effectiveness, all quality assurance processes must be in place including identifying and regular payment of staff personnel, because if people doing the jobs are not there the system fails. Ubeku (1975) postulated further that where a good records system is in operation, the company will be saved not only time but money and possible embarrassment. Digitization is the best way to maintain accurate staff records to curtailing systemic corruption in public school administration in Nigeria.

In view of the relevancy of staff in organizational life, Abolo (2021) asserted that human resources management should as a matter of urgency be the bane of school effectiveness must be realized. Staff personnel are an important aspect to be transparently controlled because of financial implications with good records as an essential human resources process for organizational dynamic group goal achievement. Digitized staff records is a panacea to flaws in education sector being the largest employer of labour, thus, must be well articulated, communicated, unambiguous, updated and continually monitored amongst others.

In furtherance, developing digital staff records as a policy must be in accordance to Management Systems for

Educational Organizations (EOMS)(ISO 21001:18) Section: 5.2.1 items that:

- (f) takes into account relevant educational, scientific and technical developments;
- (g) includes a commitment to satisfy the organization's social responsibility;
- (h) describes and includes a commitment towards managing intellectual property;
- (i) considers the needs and expectations of relevant interested parties.

Importantly, shrewd application of EOMS principles will improve operational effectiveness and efficiency in digitalization of staff records making organizations more credible in dealing with affairs of all staff equally.

Education being an instrument for societal reformation and transformation, every activity has to be aligned in this technologically driven era. Even though, it is in piecemeal, change is an inevitable factor aimed at continuous improvement. Educational activities need to be digitized for quality service delivery in



this 21st century to meet global challenges and competitiveness. Digitization of staff records in education sector like other sectors can never be underrated. All involved electronic recording and storage of information in the domiciled data server of ministry of education, local and district areas for information easy management, less energy, time and other resources.

As earlier noted, digitizing staff records is a better way to reduce wastage, diversities, complexities, uneasiness, inaccuracies and discontinuity. Egwunyenga (2000) pointed out that properly kept school records provides good information for administrators, teachers, counselors, curriculum planners and instructional supervisors to plan and execute instructional and administrative activities. Based on this, keeping digitalized records of staff helped for conscious planning as school organization personnel comprised of teaching and non-teaching staff, students and any other person(s) having contractual business within the school. This paper focused only on digitizing staff personnel records with the proposition that harmonized staff information helped understanding availability or non-availability, specializations and other school needs assessment at any given time.

Concept of digitalization

Digitalization involved Database Management System (DBMS) being a software or technology used to manage data from a database. Some popular databases are My SQL, Oracle, MongoDB, etc. DBMS provides many operations e.g. creating a database, Storing in the database, updating an existing database, delete from the database. DBMS is a system that enables you to store, modify and retrieve data in an organized way. It also provides security to the database (DBMS Tutorial, 2024). Digitalization is the process of taking data that exists in a digital format and making it more accessible and useful for the business. Digitalization can make data more accessible and useful by making it easier to search, sort, and analyze. It can also make data more portable and shareable (www.easysend). Therefore digitalizing means a shift from analog (paper /manual) to digital (computerized) form of recording, storing and managing information.

Concept of staff records digitalization

Personnel is defined as the people who are employed by a company or organization: It is also collection of people in an organization, such as employees etc. (Cambridge; Wikipedia). This human representation in work spaces is important for organization results achievements. To realize numerous organization goals and objectives people are involved to ensure that they are achieved. Staff personnel are involved in carrying out day to day organization activities to accomplish goals. It is the duty of school heads (head teachers) to put in use staff appropriately to realize results that gives learners good academic and non-academic trainings.

Digitization of staff records involved holistic arrangement of entering all staff records into a digital format for easy identification and authentication of their records. Staff services is very important from top to bottom of an organization strata contributing to achievement of goals. The quantity and quality of staff determine to large extent organizational failure or success. Ubeku (1975) summed it that purpose of personnel (staff) record is to store information about employees and to give an immediate, reliable and up –to – date picture of each employee. Hence, pointed that the health of an organization from the view of employees can be diagnosed where accurate data are kept. Digital data systems provide access of information easy for administrative purposes providing accurate information for decision making.

In school organization like other organization every staff is productive, from head teachers to labourers all contribute to what makes or mars success in the school. Staff personnel are the centre piece of organizational success if well managed and failure if not well managed in terms of roles and responsibilities. What will be the fate of the school if teachers are not teaching students as well as when labourers are not tidying the environment. Every organizational member is relevant only role differences put together with other parts help to realize results.

Digitization enabled information security and files hacking by using password protection and encryption against information theft. Koula (2021) in Abolo (2021) asserted that efficient management of the personnel by the principal using the necessary interpersonal relation skills is important in instilling trust, mutual dependence, team spirit and avoidance of conflict among staff. Digitized record keeping is an impeccable model to maintain accurate, non-personalized and understanding administrative relationship in an accountable manner.



Challenges of digitization of staff records

In their study on challenges of digitization of National Archives of Nigeria, Balogun and Adjei (2018) noted that respondents admitted that digitization would be highly beneficial to the institution, but issues such as lack of funding, lack of digitization policy and lack of trained personnel are the major challenges facing the digitization project. Adeleke (2016) cited Fatoki, (2005) and Masakazi (2009) earlier postulations that skilled personnel are a major requirement for digitization projects. Similarly cited Alegbeleye (2009) and Shibanda (2001) works that lack of skilled manpower is a major challenge militating against digitization projects in Africa. The key for institutionalization of digital system is funding which is fundamental in actualizing every project. Correspondingly, Jabil (2024) noted the biggest barriers to digital transformation as employee pushback, lack of expertise leading to digitization initiatives, organizational structure, lack of overall digitization strategy and limited budget. Functional digital staff record system required funding for procurements, assemblages and continuous maintenance of equipment and personnel trainings to be competent to operate and manage the facility.

In compliance with EOMS (ISO21001:18) rules that the education organization shall create an environment where all interested parties can interact with the educational organization in full confidence that they maintain control over the use of their own data, and that the educational organization will treat their data with appropriate care and confidentiality (section 11.1). Digitizing staff records must follow this guideline as stated in section 11.2, that successful organizations will create confidence by ensuring confidentiality, integrity and availability of data by identifying threats and vulnerabilities of their activities, and setting controls to prevent and mitigate those threats and vulnerabilities.

Staff records must be non-vulnerable to manipulation and complicity to malicious acts. When suspicion occurs people will quickly want to criticize defeating overall objectives and goals. As Okeke (2006), firmly avowed that the success in education like other organizations is highly dependent on the quality of human resources available to the school. Organization cannot propel itself, it is people that are responsible for its survival. Transparently maintained digital staff records system prevents spites, resentment, resistance and fears affecting performances like in school organization.

The researchers surmised challenges affecting successful digitization of staff records to include amongst others:

- i. **Poor funding:** the lean budget to education adversely affect initiation or successful completion and maintenance of projects. Digitizing staff records required good funding for equipment and personnel maintenance.
- ii. **Poor supply of electricity:** the erratic power supply in the country will always affect digitalized data base if not backup for continuous storage and update. Constant power supply helped to safeguard operations and equipment.
- iii. **Inadequate trained ICT operators:** there is low appreciation of ICT trainings. More personnel need to be trained periodically on operations and maintenance to ensure data security.
- iv. **Poor personnel behaviours:** ICT personnel need to exhibit good conducts / behaviours. Act professionally to avoid suspicions or compromises.
- v. **Corruption:** societal decay has created lacuna for nepotism and corruption to thrive, integrity of operators to be ascertained periodically to avoid undue favouritism. Even, embezzlement of funds for maintaining the project and staff welfares are also compromised by dubious administrators.
- vi. **Discipline:** officials of ICT units defaulting to be disciplined as deterrent to others.
- vii. **Internet failure:** this is unforeseen circumstances affecting server data storage and retrieval of information. There should always be network connectivity and maintenance of server to always be available.
- viii. **Inadequate server protection:** protection of server is important to secure networks while running applications based on user request swchich includes web servers, application servers, file servers and database servers. These helped against cyber thefts (hacking server site, phishing attacks) malwares protection, connectivity, loading speed, backups, updates etc. (ihcomwork.com)
- ix. **Job insecurity:** operators to be job assured for continuity of service rather than frequent change of operators that could lead to poor services delivery.
- x. **Facility insecurity:** adequate security to ensure the server room is well protected and theft not carried out.



- xi. **Poor salary and benefits:** poor salary and welfare packages. Need to provide better pay and welfare packages to avoid attrition of personnel. This brings about information divulging to interested parties.

Benefits of digitalizing staff records system

Digitized staff data system ensured aptly the following but not limited to:

- (i) Auditing school staff: it help to qualitatively and quantitatively analyze manpower available in each school, district, rural and urban differences and gender ratios when needed.
- (ii) Determining accurate number of staff for salary payment and other social welfare packages.
- (iii) Determining staff competences: capability of personnel, job descriptions, level of growth. Also qualification of staff, core areas, certificates, skills, and positions obtained.
- (iv) Staff placement analysis (department, class arms, teacher-pupils ratios). Where to assign staff, those transiting from primary to secondary, junior to senior secondary, rotating or transferring from one school to another and retirement periods at each level.
- (v) Infrastructure need analysis: to know classrooms, libraries, laboratories, toiletries etc availability in school and where they lack.
- (vi) Training need analysis; to know those that have attended or to be attend seminars, workshops, conferences, in-service courses without difficulty.
- (vii) Welfare package analysis: it helped to know those staff on leave, bonuses, trainings, health scheme, and promotions.
- (viii) Disciplinary record analysis: to know about demotions, queries, suspensions, warnings issued amongst others.

Conclusion

Digitalization of staff records involved effective and efficient management of teaching and non-teaching personnel records. It is a way of abandoning analog methods for digital provision of records through computerized method in central installed servers and backup servers in case of cybercrime effects. System administrators are trained to man the facility on day to day basis at the central service point to continuously monitor stored information and retrieval when needed. Digitalization of staff records involved finance to pay personnel, train and maintain equipment. Records are stored centrally and safeguarded for different organizational purposes to facilitate decision making, accountability and probity in managing scarce resources for the need to achieving educational goals and objectives.

Suggestions

The researchers suggested that proactive measures be put in place in digitalizing staff records in the following ways:

1. Provision of funds for equipping, maintaining servers installed for efficient and effective storing and retrieval of information. There should be an increased budget to education to accommodate desirable changes and innovations to improve quality system in this 21st century.
2. Constant power supply to avoid internet failures (power and servers to be always available) by having standby generators 24/7 hours as substitute.
3. Training of personnel on operations and data management system through internal and external in-service trainings, workshops, conferences, seminars.
4. Disciplinary policy to forestall data manipulation by dubious personnel and information theft.
5. Proper cybercrime protection to avoid hacking of site and other critical system.
6. Better salaries and welfare packages to avoid corruption amongst others.
7. Continuous collation of staff records whether old or newly recruited into the server system for effective data management and information.

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