

# THE PERCEPTION AND READINESS TOWARDS THE UTILIZATION OF ICT RESOURCES FOR RECORD MANAGEMENT IN SECONDARY SCHOOLS: A CASE STUDY OF SCHOOL ADMINISTRATORS IN NIGER STATE, NIGERIA

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## ABSTRACT

The study investigated School Administrators Perception and Readiness to use Information and Communication Technology (ICT) Facilities for Record Management in Secondary Schools in Niger State. The study answered two research questions and tested two null hypotheses. Literatures were reviewed based on the conceptual framework, theoretical framework and empirical studies. The study adopted a descriptive survey research design. Out of a population of 4,870 school administrators, a sample size of 360 was used for the study. The reliability coefficient of 0.742 and 0.708 were obtained from the two constructs used in the study. The questionnaire was used as the instrument for data collection, which was developed by the researcher and validated by different experts. The research questions were answered using mean and standard deviation while t-test statistics was used to test the hypotheses at 0.05 level of significance, using Statistical Package for Social Sciences (SPSS) Version 23. The study revealed that there is no significant difference in the perception of public and private school administrators towards the use of ICT facilities for record management ( $t\text{-value}=0.149$ ,  $p\text{-value}=0.881$  as such  $p>0.05$ ). Also, there is no significant difference in the readiness of school administrators in public and private secondary schools towards adopting ICT facilities for record management ( $t\text{-value}=0.104$ ,  $p\text{-value}=0.917$  as such  $p>0.05$ ). Based on the findings, it was recommended that the government should make policies and furnish secondary schools with facilities to aid effective and efficient record management system in secondary schools, which will eventually enhance the productivity of school administrators. It is also recommended that more staff should be employed in the various schools to manage the ICT facilities to help reduce the rate of unemployment in the country.

## KEYWORDS

Information and Communication Technology (ICT), Record management, School administrators, Perception, Readiness, Record management

## Introduction

Globally, the rapid innovation and advancement in technology has caused an exponential growth in the utilization of Information and Communication Technology (ICT) facilities in all works of life. In recent times, organizations and institutions are shifting from the traditional way of doing things to electronic (computerized) ways, ranging from e-banking, e-commerce, e-health, e-governance, e-learning and then e-record. Marutha and Ngulube (2012) defined e-record (electronic record) as records that are created by machines, and can only be assessed and read by technologies, which include computer hardware and software such as database, word processing, emails, amongst others. Maintaining, transmitting, managing, preserving or storing records electronically in digital form is referred to as e- record management.

Records are data or information on a specific subject that is generated or received and preserved as documents, phonographs or photographs that provides information or evidence of past events (Onifade, 2012). Turkish Standard Institution (2014) revealed that records are documents created or received by an organization that provides evidence of activities performed, events that occurred, statements made and results achieved, that serves as a memorial to the organization. Records are either created or received, and it can be stored or transmitted irrespective of medium and characteristics (Chifwepa, 2013; Hulme, 2012; Toyo, 2017). Record keeping is essential and vital to educational institutions and schools in particular. Ololube (2013) posits that school records consist of existing and assessable records containing useful information that pertains to what goes on in the school system, which could be in the form of books, memos, letters, reports, diaries, pictures, films, journals or in database. Therefore, it is of paramount importance that all schools document their activities and routines and also keep vital records that is needful for the smooth running, and pertains to the growth and development of the school. Such records include: admission and withdrawal register, class register, staff attendance register, class timetable, examination timetable, examination question papers, student's progress report, log book, punishment book, syllabus, scheme of work, lesson plans, lesson notes, curriculum, health record, academic calendar, individual cumulative record (continuous assessment and examination results), school diary, visitors book, school cash book, school stock book, minutes of meetings, movement book and the National Policy on Education (NPE) (Amanachukwu&Ololube, 2015). Hence, there is need for the management all these records in order for the right information to be in the right place and in the right order, and at the right time for the right person at the lowest possible cost (Popoola, 2010).

Record management is an umbrella word that encompasses information collection, transmission, dissemination, manipulation, use, appraisal, storage and retrieval, for the purpose of enhancing effective administration through enriching communication, decision making, controlling, planning and problem solving ability (Achunoye&Nwiyi, (n.d); Popoola, 2010). Record management as viewed by Atulomah (2011) involves the planning, implementing and reviewing the functions of administrative records of the organization, which helps in controlling the quality and quantity of information that is created. It is a field of management that aids the efficient and systematic control of the capture, creation, receipt, maintenance, storage and retrieval of information (Turkish Standard Institution, 2014). It is an aspect of administrative management,

concerned with attaining economy and efficiency in creation, utilisation, maintenance, reception, transmission, and disposal of records throughout their life-cycle. Or, the systematic control and maintenance of records during the stages of record creation, active records, semi-active records, inactive records and final disposition of records, while downplaying cost (Khali, 2014).

In order to remain relevant in the 21<sup>st</sup> century, there is a need to be conversant with Information and Communication Technology (ICT) facilities and how to make use of it for productivity, effectiveness and efficiency in every field including educational institutions, and schools in particular. Adeleye, Adu and Olatunde (2012) averred that, ICT has revolutionized the method, pattern and format of record keeping practices and record management in organisations and institutions. Therefore, utilising ICT facilities for school record management will in no small measure raise the standard of school records worldwide (Osakwe, 2012). it is therefore worthy of note that the importance of Information and Communication Technology (ICT) cannot be over emphasized in Nigerian educational system, which spans from teaching and learning to record management in schools (Pavel, Fruth&Neascu, 2015; Toro & Joshi, 2012).

The platform for effective and efficient record keeping is ICT tools, in which with the use of computers and other ICT facilities, records are computerized. Computerization of school records has the capacity to drastically improve educational administration in schools, as school administration is primarily about information and communication. The utilisation of ICT in record management enhances efficiency, accuracy, and a more effective way of doing the same old job. Considering the fact that one of the outstanding and efficient tool devised for record keeping and management is ICT (Osakwe, 2011), school administrators should be willing to adopt and implement the computerization of school records considering its enormous benefits as compared to the traditional file organization(Adeleye&Olatunde, 2012).

Perception is the way people think about an idea or a concept. It is the process by which individuals interpret their sensory impressions through selecting, receiving and organizing information from outside the environment (Ou, 2017). In the past few decades, innovations in technology has sharpened perception towards the use of ICT, and the perception held by individuals influence and determines their practices and behaviour (Anero, 2014). In other words, the willingness for school administrators to embrace ICT for record management to a large extent depend on their perception, which whether positive, negative or indifferent will greatly influence their decisions, actions and readiness.

Readiness can be defined as the state whereby an individual is physically or mentally prepared for an experience or an action (Borotis&Poulymenakou, 2008; Falode, Mohammed, Gambari&Ojoye, 2016). Readiness is the state of being prepared or the willingness to do something by people, systems or organisations. Utilising ICT in schools to a large extent depends on the attitude and readiness, availability, perception, self-efficacy and competence of the school administrators towards modern technologies (Nwiyi, 2016).

Manual filing system of record keeping occupies a lot of space, and added that records cannot be fully recovered when they are stolen or mal-handled, damaged or even lost due to fire, flood and any other natural disaster because, this conventional method of record keeping does not make provision for back up. Despite all these shortcomings, some schools are yet to integrate ICT facilities in managing their records. Could it be that school administrators' perception and readiness influence the use of ICT facilities for record management? Hence this study intends to investigate school administrators' perception and readiness towards use of information and communication technology (ICT) facilities for record management in secondary schools in Niger State.

### Research Questions

The study provided answers to the following research questions:

1. What is the perception of school administrators towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools?
2. How ready are school administrators towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools?

### Research Hypotheses

The following null hypotheses were tested in this study:

- HO<sub>1</sub>: There is no significant difference in the perception of public and private school administrators towards the use of Information and Communication Technology (ICT) facilities for record management.
- HO<sub>2</sub>: There is no significant difference in the readiness of public and private secondary school administrators towards the use of Information and Communication Technology (ICT) facilities for record management.

### Methodology

The research design adopted for this study is descriptive research design. The methodology involved the use of questionnaire to elicit needed responses from school administrators on their perception and readiness towards the use of Information and Communication Technology (ICT) facilities for record management. The population for this study comprised of all school administrators from secondary schools (public and private) in Niger State. There are four hundred and eighty-seven (487) public and accredited private secondary schools in all the twenty-five local government areas of Niger State (Niger State Ministry of Education, 2018). The target population for this study comprises 4,870 school administrators from secondary schools (public and private) in Niger State.

The sample for this study comprised of 360 school administrators from 72 (36 public and 36 private) secondary schools in six (6) local governments of Niger State. The sample is in conformity with Krejcie and Morgan (1970) sample size determination table. A multi-stage sampling technique was used in selecting the respondents for this study. First, cluster sampling technique was employed in dividing Niger State into three senatorial

Districts. Two Local Governments were selected from each district using simple random sampling technique. The selected LGA from Zone A is Bida and Lapai, from Zone B, Bosso and Chanchaga and from Zone C, Kotangora and Magama. From each of these LGAs, 12 schools were selected which comprised of 6 public and 6 private schools. Purposive sampling was used to select each of the schools because of distance in relation to one another. This was to minimize factors that influence schools within proximity. Finally, five school administrators were randomly selected from each of the school.

The research instrument that was used in this study to collect needed data is questionnaire and it was designed by the researcher. The questionnaire was titled 'Questionnaire on School Administrators' Perception and Readiness toward the use of ICT Facilities for Record Management (SAPRIRM). The questionnaire was divided into three sections; Section A was used to collect data on demography, Section B consist of fifteen (15) items on the perception of school administrators towards the use of ICT facilities for record management and Section C consist of seven (7) items on the readiness of school administrators towards the use of ICT facilities for record management using five-point rating scale. The questionnaire was validated by four experts, all from Federal University of Technology Minna. Their suggestions were used to modify and improve the items. To determine the internal consistency among the items of the questionnaire, a pilot study was carried out using 30 respondents selected from six (6) (three public and three private) schools in Wushishi local government area of Niger State. which was part of the population, but not part of the sample to be used for the study. The administration was done once and a reliability coefficient of 0.742 and 0.708 from the variable perception and readiness respectively was obtained using Cronbach Alpha formula. Based on the coefficient obtained, the questionnaire was considered reliable.

The data collected was analyzed using descriptive statistics. Mean and standard deviation were used to answer the two research questions. A five-point rating scale of Strongly Agree (SA, 5 points), Agree (A, 4 points), Undecided (U, 3 points), Disagree (D, 2 points) and Strongly Disagree (SD, 1 point) was used in weighing responses to items in the questionnaire. In section B of the questionnaire, the mean response below 3.0 was adjudged as negative perception, while mean response of 3.0 and above was adjudged as being positive perception. Similarly, in section C, a mean response below 3.0 was adjudged not ready, while mean response of 3.0 and above was adjudged ready. Descriptive statistics in Statistical Package for Social Sciences (SPSS Version 23) was used for testing the hypotheses in the study and the significance level was ascertained at 0.05 alpha level.

## Result

Research question 1: What is the perception of school administrators' towards the use of ICT facilities for record management in public and private secondary schools?

**Table1.** Perception of School Administrators towards the Use of ICT Facilities for Record Management in Secondary Schools in Niger State

S/N	Item	N	$\bar{X}$	SD	Decision
1	ICT facilities are essential for typesetting examination questions.	360	4.53	0.59	Agree
2	I think ICT facilities enhance quick and easy preparation and retrieval of summary/broad sheet records.	360	4.49	0.47	Agree
3	I believe recording, keeping and controlling students' results can be done more efficiently with the aid of ICT facilities.	360	4.44	0.56	Agree
4	Examination Management Information System (MIS) is essential in computing and analyzing students' results.	360	4.31	0.79	Agree
5	I feel ICT facilities increase the effectiveness and efficiency of keeping and storing students' academic records.	360	4.22	0.89	Agree
6	With ICT facilities, I feel students' school fees payment can be recorded, updated and retrieved easily.	360	4.53	0.67	Agree
7	Databases and other ICT facilities are essential in tracking and verifying school fees payment status in my school.	360	4.24	0.67	Agree
8	I think ICT facilities enhance quick and fast preparation and retrieval of staff salary schedule, pay slip and payroll voucher records.	360	4.14	0.95	Agree
9	Student bio-data, and admission records can be created, stored and managed effectively with the aid of Database Management Systems (DBMS).	360	4.33	0.72	Agree
10	Record of staff bio-data, appointment, promotion and transfer records can be created, stored and managed effectively with the aid of Database Management Systems (DBMS).	360	4.17	1.07	Agree
11	Using ICT can enhance my job efficiency and satisfaction.	360	5.00	0.00	Agree
12	I believe records can be managed effectively without the use of computer and other ICT facilities.	360	4.00	1.16	Agree
13	I feel the use of ICT threatens my job security.	360	4.97	0.00	Agree
14	I think the funds being invested on ICT can best be applied in other vital needs of the school.	360	3.84	1.25	Agree
15	I feel using ICT facilities will require training and re-training which wastes a lot of class time.	360	3.76	1.02	Agree
<b>Average Mean</b>			<b>4.00</b>		

Table 1 showed the mean response on perception of school administrators towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools in Niger State. A total number of 360 school administrators responded to the questionnaire. The table showed that the average mean for the response was 4.00. This implies that there is high perception of school



administrators towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools in Niger State.

**Research question 2:** How ready are school administrators towards the use of ICT facilities for record management in public and private secondary schools?

**Table 2:** Readiness of School Administrators towards the Use of ICT Facilities for Record Management in Secondary Schools in Niger State

S/N	Item	N	$\bar{X}$	SD	Decision
1	I am computer literate and have basic ICT skills.	360	4.30	0.87	Agree
2	I am proficient in the use of ICT facilities.	360	5.00	0.00	Agree
3	My school has the basic ICT facilities needed for integrating ICT in record management.	360	4.41	0.66	Agree
4	Adopting ICT in my school will enhance efficient and effective record management.	360	5.00	0.00	Agree
5	Funds are needed to implement the utilisation of ICT for record management in my school.	360	4.12	0.82	Agree
6	Seminars, trainings and workshops enhance school administrators' preparedness on the use ICT for record management.	360	4.48	0.69	Agree
7	Adopting ICT in record management will increase the productivity of school administrators' in administrative and managerial tasks.	360	4.48	0.56	Agree
<b>Average Mean</b>			<b>4.50</b>		

Table 2 showed the mean response on readiness of school administrators towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools in Niger State. A total number of 360 school administrators responded to the questionnaire. The table showed that the average mean for the response was 4.50. This implies that the school administrators show high level of readiness towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools in Niger State.

**HO<sub>1</sub>:** There is no significant difference in the perception of public and private school administrators towards the use of ICT facilities for record management.

In testing hypothesis one, t-test analysis was used to test the hypothesis, which is reported in Table 4.7.

**Table 3:** Summary of t-test Analysis of the Perception of Public and Private School Administrators towards the Use of ICT Facilities for Record Management.

Group	N	Df	$\bar{X}$	SD	t-value	P-value
Public Schools	180	358	65.12	2.934	0.101 <sup>ns</sup>	0.170
Private Schools	180		65.58	3.407		

*NS: Not Significant at 0.05 Alpha level*

Table 3 shows the t-value was 0.101 the P-value was 0.170 which is  $P > 0.05$ . This means it was not significant as such hypothesis one was accepted. The average mean score of public school administrators' responses was 65.12 with standard deviation of 2.934 while the average mean score of private schools administrators' responses was 65.58 with standard deviation of 3.407. This implies that there was no significant difference in the perception of public and private school administrators towards the use of Information and Communication Technology (ICT) facilities for record management.

**HO<sub>2</sub>:** There is no significant difference in the readiness of public and private school administrators towards the use of ICT facilities for record management.

**Table 4:** Summary of t-test Analysis of the Readiness of Public and Private School Administrators towards the Use of Information and Communication Technology (ICT) Facilities for Record Management.

Group	N	df	$\bar{X}$	SD	t-value	P-value
Public Schools	180	358	31.91	1.488	0.131 <sup>ns</sup>	0.720
Private Schools	180		31.84	2.005		

*NS: Not Significant at 0.05 level*

Table 4 shows the t-value was 0.131 the P-value was 0.720 which is  $P > 0.05$ . This means it was not significant as such hypothesis two was accepted. The average mean score of public school administrators' responses was 31.91 with standard deviation of 1.488 while the average mean score of private school administrators' responses was 31.84 with standard deviation of 2.005. This implies that there was no significant difference in the readiness of public and private school administrators towards the use of Information and Communication Technology (ICT) facilities for record management. Although the public school administrators showed to be also ready in using Information and Communication Technology (ICT) facilities for record management based on the mean difference.



## Discussion of Findings

Finding revealed that there is high perception of school administrators towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools in Niger State and it was found out that there was no significant difference in the perception of public and private school administrators towards the use of Information and Communication Technology (ICT) facilities for record management. This could be as a result of the fact that regular use of ICT facilities by school administrators increases their confidence and attitude, hence perceiving ICT as a useful tool as observed by BECTA (2004). The finding was supported by Papaionnou&Charalambous (2011) who conducted a study on principals' attitudes and their perceptions about the factors that facilitate or inhibit ICT integration in primary schools in Cyprus and found out those school principals had positive attitude and perception towards the use of ICT.

Furthermore, this finding is in agreement with Wanjala (2013) who carried out a study teachers perception on the use of information and communication technology in the administration of public secondary schools in Kimililidistrict, Bungoma County, Kenya and observed that many schools had basic ICT software and hardware facilities which are inadequate for use in administrative tasks, school administrators and teachers were willing to adopt ICT in administration, but its utilisation was limited in administrative tasks due to inadequate computer hardware or the absence of the relevant software. But the finding disagrees with the study of Lazarus et al (2012) who determined the significant difference between teachers' and administrators' perceptions on the importance of Information and Communication Technology (ICT) and the extent to which it is used by secondary school administrators and found out that there was significant difference between the perception of administrators and teachers on the importance of ICT in secondary school administration, in areas like: general administration, student administration and supervision of instruction. The study further revealed that administrators had a positive perception on the importance of ICT in supervision of instruction and as well as student administration. It also disagrees with the finding of Biegon (2017) who carried out a study to examine the perceptions of school principals and teachers on the usefulness of ICT to school management and discovered that principals and school administrators in West-lands do not prioritise the implementation and use of ICT for school record management, and this has caused a major setback in electronic record management in secondary schools. The study also established that secondary schools emphasized more on ICT in teaching and learning rather than in school record management, showing that ICT was not fully adopted for school record management.

It was found out that the school administrators show high level of readiness towards the use of Information and Communication Technology (ICT) facilities for record management in public and private secondary schools in Niger State and also, that there was no significant difference in the readiness of public and private school administrators towards the use of Information and Communication Technology (ICT) facilities for record management. This could be as a result of the fact that if school administrators and teachers perceived technology as irrelevant to their needs or their students' needs, they will neither adopt nor be ready to integrate

technology in teaching and learning or administrative duties (Wanjala, 2013). The finding was supported by Tahir et al (2015) who investigated on ICT literacy and readiness in using computers among head teachers in their tertiary learning experience and school management task and found out that most head teachers are significantly ready to adopt ICT in school record management, claiming that it would also aid them in connecting with other head teachers in other districts. The finding also corroborates the finding of Peter (2012) who carried out a study on to investigate the extent of use of ICT in education management in public secondary schools in Naivasha District, Kenya and observed that some secondary schools in Naivasha district were ready and utilised ICT, others were not ready and as such did not have the ICT facilities needed for effective school record management. But the finding disagrees with Unachukwu and Nwankwo (2012) who examined principals' readiness for the use of ICT in school administration in Anambra state of Nigeria and found out that, most secondary school principals in the state are not ready for the use of ICT in school administration. The study further revealed that principals differed significantly in their physical readiness due to the location of their schools, and in their level of knowledge and skill in ICT, and its application. Hence, they were inefficient in their administrative task resulting to poor management of staff and students, poor performance of students.

### Conclusion

Findings of this study has revealed that school administrators in secondary school in Niger State perceived Information and Communication Technology (ICT) facilities to be used for better record management in secondary schools and also ready. Both private and public schools should to be equipped with ICT facilities in order to help the school administrators to be more effective in record management. Also, the school administrators should be trained in the use of ICT facilities for more effectiveness and efficiency in record management. The use of ICT would in no doubt improve the record management.

### Recommendations

Based on the findings that emanated from this study, the following recommendation were made:

1. The government should make policies and furnish secondary schools with facilities to aid effective and efficient record management system in secondary schools, which will eventually enhance the productivity of school administrators.
2. More staff should be employed in the various schools to manage the ICT facilities to help reduce rate of unemployment in the country.

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