

IMPACT OF ICTS ON MANAGEMENT OF UNIVERSITY EDUCATION IN SOUTH WESTERN NIGERIA

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Abstract

This paper examined the impact of ICT on the management of University Education in South West Nigeria. It adopted descriptive survey type. The population for the study consisted of 350 academic staff holding administrative positions in the 10 public University existing in Southwest Nigeria out of which 210 samples was drawn through purposive, proportional and simple random sampling techniques. The instrument used was questionnaire tagged: ICT and management of University Education Questionnaire (ICTMUEQ). Three general questions were raised and analyzed descriptively. Two hypotheses were formulated and tested using Pearson product correlation co – efficient. The finding revealed that ICTS were used in the management of problems confronting University Education through the use of ICTS and there was significant difference in the utilization of ICTS between the federal and state Universities. It was therefore recommended that ICTS facilities should be provided and used in Universities.

Key Notes: Information, Communication. Management, Utilization, Universities

Introduction

The need to identify what it entails in improving the University education is a must. This is as a result of the rate of which the educational system all over the world is becoming an exceedingly complex enterprise. University is regarded as the most viable fountain of knowledge where people strive to increase the bounds of research, dissemination of knowledge and the pursuit of service to the country (FGN, 1981, Akpota, 1999). University is a place where knowledge is generated, transmitted and applied in solving society socio – economic, cultural and geo – political problems. The management quality of any educational institution, university in particular is observed to determine the quality of outputs.

It is of no doubt that there is an increasing demand on modern educational institutions for good results in terms of the functionality of the type of education being given. Based on this, there is need for improving on management of university education. Okunrotifa (1982) argued that the state of negligence has generated crisis, threatening the very foundation of the university system. Akpota (1999) also opined that the Nigerian university system has been in a high state of anxiety and frequent crisis of different types and intensity. There are crisis of internal government and control crisis of condition of service and industrial, unrest crisis of brain drain and staff turnover (Omirin 2007).

It is observed that above problems exist as a result of poor management of most of our universities. This affects the quality (though increasing in quantity) of the school system to the point of affecting the outputs. Many seem to share common concerns and challenges imposed by uncertainly information chaos (Faloye and Oparah, 2007).

Lawsent and Vincent-Loncrin (1995) supported by Foray (2004) that knowledge, innovation and information and communication technologies (ICTS) have had strong effect on educational sectors. This serves as signal to us that education should not be left out rather it should be employed in the management of this apex of citadel of learning. This is because education is a prerequisite to the knowledge based economy which requires more lifelong educated population and workforce.

Omirin (2007) argued that the need for an effective ICTs management would develop education in the university system now and in the future. This is so because the university system does not operate in a vacuum. It must plan and decide on its operations in relation to both the internal and external environments towards goal attainment. Due to the multi – divisional goals of the Nigerian universities Abe and Adu (2007) agreed that the organizational structural requirement and information requirement are inextricably linked which characterized by the capacity for processing information. To many designers of ICT, school managers do not have relevant information at their disposal. At variance to this, Adedapo (2007) argued that school mangers need more because of the roles to be played by a computerized MIS in solving school problems.

Adedapo (2007) revealed that administration in Nigeria (university in particular) in bedeviled with series of problems among which are management that leaves much to be desired deficiencies in educational monitoring and evaluation procedure and inadequate access at all levels. It is therefore observed that using ICTs will promote issues on students' affairs administration like designing admission forms, which are properly labeled and numbered for accountability purpose. In addition, examination questions are prepared on the computers password and printed by the administrator himself which will prevent leakage. Registrations are done on the offices at the same time reduce stress. It is also observed that monitoring and evaluation of staff, physical plant planning curriculum development, finical management and information dissemination will increase the efficiency of the universities if ICTs are adequately and properly used. This is expected to go a long way to avoid misinterpretation and ignorance on the part of the stakeholders.

In most countries (Nigeria inclusive) the question is no longer whether or not tertiary education institutions should invest on ICT (Simkins, 1981). The competition between institutions and student demand for easy access to courseware material and flexible learning environments, most tertiary education institutions willing to deliver quality teaching are bound to invest in e – learning. As we have seen, the large majority of institutions are now embracing e – learning adoption cycles one and two, which are basically about providing the students with better access to learning and course material and facilitating the electronic communication between students and teachers. Again, only very few institutions and faculties are however systematically exploring and producing re – usable learning material and objects (third cycle) or have taken full advantage of new ICTs with focus on active learning that combines face – to – face, virtual, synchronous, and asynchronous interaction and learning in novel ways (fourth cycle). The latter approach would require faculty and students to adopt new roles with each other and with the technology and support staff.

While ICTs offer powerful new instruments for innovation, universities are generally decentralized where individual faculty often has the sole responsibility for teaching courses and delivering course materials. Adoption of the third and especially the fourth e-learning cycle would imply changing to more collaborative ways of organizing and producing teaching material. Faculty members would in many cases have to collaborate with a whole range of new staff as e.g, course managers, web designers, instructional / pedagogical designers, and cognitive scientist etc. to produce course materials. This could lead to resistance from “traditional” faculty arguing that current teaching practices have proved its value for centuries and there is no need to change them to new pedagogical and teaching methods, which have hardly proven their efficiency yet. Moreover, promotion of faculty and funding allocations in universities are often linked to research activities rather than teaching activities, often seen as less prestigious. Faculty members have therefore often relatively few incentives to invest their time in ICT activities. On the note, this paper is prepared to focus on the impact of ICT on management of universities in south West Nigeria.

Statement of the Problem

It is observed that educational sector is characterized with slow progress in terms of innovation development which affects the management of university education in Nigeria. Some universities only have interest in the use of ICT because it increases their Internally Generated

Revenue (IGR) service, some fail as a result of inability to manage facilities. In view of the above, the following questions will be answered in this study.

- i. To what extent are ICT used in the management of universities in the Southwest Nigeria?
- ii. What are the problems faced by the universities when using ICT?
- iii. To what extent are ICT available in universities in Southwest Nigeria?
- iv. Is there any significant relationship between the availability and utilization of ICT in universities in Southwest Nigeria?
- v. Is there any significant difference between the utilization of ICT in federal and state universities in South West Nigeria?

Research hypotheses

To guide this study, the following hypotheses were formulated.

- Ho₁: There is no significant relationship between the availability and utilization of ICT in universities in South West Nigeria.
- Ho₂: There is no significant difference between the utilization of ICT in the management of federal and state universities in Southwest Nigeria.

Methodology

The design of this study is a descriptive survey research. Openheim (1966) defines a survey as a form of planned collections of data for the purpose of analyzing the relationship between variables. To him, a survey attempts to answer such questions as what variables should be measured and what kind of sample will be drawn? As a descriptive survey, the researcher is concerned with describing existing phenomena in order to highlight their relevance to given situations.

The population of this study consisted of 350 academic staff holding administrative positions and the 260 senior administrative officers in the 10 public universities existing in the Southwest Nigeria out of which 210 were drawn from 6 universities (3 state universities and 3 federal universities) in the Southwest Nigeria.

The instrument was the questionnaire tagged ICT and Management of University Education Questionnaire (ICTMUEQ) was used to collect data from the subjects.

Five research questions were raised and analyzed with percentages while the two hypotheses were generated and analyzed using Pearson Product Moment Correlation coefficient are tested at 0.05 level of significant.

Descriptive Analysis

Research Question 1: To what extent are the ICTs used by the universities in the Southwest Nigeria?

In answering this question, the data were collected from the respondents and analyzed with percentages as indicated in table 1.

Table 1: The use of ICTs by the universities in southwest Nigeria

S/N	Items	Always		Occasional		Not Used	
		No	%	No	%	No	%
1	Admission of Students	342	76.00	108	24.00	0	0
2	Registration of Students	310	69.00	92	20.44	48	10.66
3	Staff Recruitment	284	63.11	84	18.67	82	18.22
4	Dissemination of Information	290	64.44	107	13.77	53	11.78
5	Used for Seminal Presentation	244	54.22	127	27.11	84	18.07
6	Overhead Projector for teaching	31	6.89	177	17.11	342	76.00
7	For internet services	87	19.33	271	58.00	101	22.67
8	Used for Security Purpose	79	17.56	89	7.7	282	62.67
9	Compilation of Results	412	91.16	31	6.89	07	1.56
10	Used for power point	48	10.67	57	12.67	345	76.67
Mean score		213	47.33	103	22.89	134	29.83

In table 1, it shows that 91.16 % attracted highest responses that ICT was used for computation of result, also admission and registration of students, staff recruitment attracted above 60% responses that ICT were used always. But there was low responses for the use of

over head project for teaching, the use of power point. However ICT were used by the universities in southwest Nigeria.

Research Question 2: What are the problems facing the universities when using ICTs?

In answering this, percentages were used to calculate the data as indicated by the respondents thus.

$$\frac{\text{Number of respondents}}{\text{total number}} \times 100$$

This is indicated in the table 2 below

Table 2: ICT problems in the universities

S/N	Items	Always		Occasional			
		No	%	No	%	No	%
1	Poor power supply	336	74.67	83	33.11	31	6.89
2	Poor support by government	146	84.66	139	30.09	65	14.44
3	Inadequate funding of the ICT	396	85.78	47	10.44	17	3.78
4	Lack of interest by the student	215	47.78	142	31.56	93	20.68
5	Poor Communication network	232	51.56	136	30.22	82	18.22
6	Lack of security for the facilities	193	42.89	186	41.33	71	15.78
7	Inadequate personnel for ICT	316	70.22	73	16.22	61	13.56
8	Inadequate soft ware	93	20.67	241	58.56	116	25.78
9	Virus problem	308	68.44	68	15.11	74	16.44
10	Problems in correcting errors	318	70.67	78	17.33	54	12.00
Mean		264	58.69	119	29.44	67	14.89

As indicated in the table 2 above, 336 (74.67%) responded that there was always poor power supply, poor support from the government attracted 246 (54.66%) inadequate funding of ICT took 396 (85.78%). It shows that universities in southern Nigeria are facing ICT problems when using ICTs.

Research Question 3: Are the required ICT facilities available in the universities?

In analyzing this general question, numbers of available ICT facilities were used. The frequency count and percentages were used to analyses the responds. The results are shown in table 3.

Table 3: Availability of ICT Facilities in the southwest Nigeria

S/N	Items	Available		Not Available	
		No	%	No	%
1	Internets	437	97.11	13	2.89
2	Computer	337	84	72	16
3	Overhead projector	74	15.44	376	83.56
4	Fax	38	8.44	412	91.56
5	Telegram	428	95.11	22	4.89
6	Intercom	410	91.11	40	8.89
Average		294.17	65.37	155.83	34.63

As indicted in table 3 above, most of the ICTs facilities were available always. Those available are: computer set, internet, telegram and intercom while overhead projector and fax were said not to be available.

Testing of Hypotheses

Hypothesis 1: There is no significant relationship between the availability and utilization of ICT in Universities in Southwest Nigeria.

In testing this hypothesis, the responses to the item 1 – 8 on availability of ICT are correlated with items 9 to 15 on the utilization of ICT in management of universities in Southwest, Nigeria. The results were showed in table 4.

Table 4: Correlation coefficient of availability and utilization of iCT in the management

Universities	N	df	r – cal	r – tab	Result
Availabilities of ICTs	450	898	0.263	0.195	Significant
Utilization of ICT	450				

Table 4: above shows that the r – calculated value is 0.263 while the r – table value is 0.195. The calculated value is greater than the table value at 0.05 level of significance. Hence the hypothesis is rejected. Therefore, there was a significant relationship between availability of ICTs and utilization of ICTs in the Southwest Nigeria.

Hypothesis 2: There is no significant difference between the utilization of ICTs in the management of federal and state Universities in Southwest Nigeria.

The hypothesis was tested using the responses in the items 9 – 15 of the instrument for federal and state universities on utilization of ICT as indicated in table 5 below.

Table 5: t-test analysis in between the utilization of icts in the management of federal and state universities in southern Nigeria

Group	N	X	SD	df	t-cal	t-tab
Federal	168	2.81	2.18	448	3.45	1.96
universities						
State	282	3.04	2.75			
Universities						

As revealed in table 5, the differences in the utilization of ICT in the Federal and State Universities. The t – cal of 3.45 was found to be greater than the t – table value of 1.96 at 0.05 level of significant. This shows that the hypothesis that there was no significant difference between the utilization of ICT in the Federal and State Universities is rejected. Therefore, there was significant difference between the utilization of ICTs in the management of Federal and State Universities.

Discussion

The result of the descriptive analysis revealed that ICTs are used in the management of the universities. This might be as a result of its relevance in the school system as agreed by Sambo (1992) and Omirin (2006) that relevant information is that which increases knowledge, reduces uncertainty and is used for the intended purpose. Abe and Adu (2007) also summarized the characteristics of good information as relevant for its purpose, sufficiently accurate for its purpose and completely enough for the problem.

Also revealed was that the universities always faced lot of problems when using ICTs. This is in line with the view of Kolade, Ojo and Omodara (2007) that there was no clear direction on teacher training on ICTs in the National Policy on Information Technology (NPIT). Lack of competency by the lecturers and administrative staff in utilizing the ICT facilities, high price of the ICT items and epileptic supply of electricity in Nigeria.

On the availability of ICT facilities, it was indicated that ICT facilities were available in most of the Universities. This disagreed with report of Adigun (2007), Alabi (1997), Ogiebaren and Iyanu (2005) that ICT related facilities were not available in most of the education institutions in Nigeria.

As shown in result of the hypothesis that there was significant relationship between the availability of ICT and their utilization in the universities. This might be as a result of the needs in the society. Most of the universities would go along with the advancements in technology as supported by Aribamikan (2007) that the solid achievements many industrialized nations have been attributed to technology and most of the developing country (including Nigeria) can not do away with the use of Information and Communication Technology (ICT).

The result also shows that there was significant difference in the utilization of ICTs between the Federal and the State Universities. Contrary to Omirin (2007) that state universities have the higher means than the federal universities indicated that state universities use more of ICTs related facilities in the management of its institutions. Observation also shows that most of the state universities engage in ICTs services to increase their Internally Generated Revenue (IGR).

Conclusion

From the findings, it is concluded that;

- i. Information Communication and Technology is used in the management of Universities in South West Nigeria.
- ii. There are lots of problems confronting the universities through the use of ICTs, ranging from poor power supply to lack of competence by the academic and non-academic staff of the universities.
- iii. The ICT facilities are available in the universities.
- iv. There was significant relationship between the availability of ICT and utilization of ICT in Universities in Southwest Nigeria.

- v. There was significant difference in the utilization of ICT between federal and state universities.

Recommendations

Based on the findings and conclusions of this study, the following recommendations were made:

- i. There should be improvement on the power supply so that ICT can be used at appropriate time.
- ii. Competent and experienced ICT personnel should be employed in the universities for effective management of the institutions.
- iii. Since there was significant relationship between availability and utilization of ICT in the management of universities, provision should be made for the availability of ICT.
- iv. Adequate security should be made available for the ICT facilities.

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