

COMPARATIVE ANALYSIS OF INTERNET UTILIZATION AMONG AGRICULTURE LECTURERS IN EDO AND DELTA STATES, NIGERIA.

¹**Kenneth A. I, D.U Okoedo-Okojie² and O. F. Igbinoso³**

¹&² Department of Agricultural Economics and Extension Services, University of Benin, Benin City, Nigeria

³ Research Outreach Department, Rubber Research Institute of Nigeria, Iyanomon Benin City, Nigeria

¹ Email: anna.kenneth@uniben.edu

² Email: david.okoedo-okojie@uniben.edu

³ Email: drfrancis@gmail.com

Corresponding Author: Dr David Uromimhemem Okoedo-Okojie, Department of Agricultural Economics and Extension Services, University of Benin, Benin City Nigeria.

Email: david.okoedo-okojie@uniben.edu

ABSTRACT

Limited access to information, updated materials and journals in the libraries of most universities in developing countries is a major problem hindering research and teaching. This Study specifically described the socio-economic characteristics of agriculture lecturers and assessed their level of internet usage in the study area. Lecturers were sampled from University of Benin, Benin City, Ambrose Alli University, Ekpoma, Delta State University, Abraka and its affiliated Institute in Agbor. Data were collected from 130 lecturers using a structured questionnaire and analyzed using frequency counts, percentages, mean and student t-test analysis. Result showed that majority (Edo= 73.33%, Delta= 65.45%) of lecturers were male in Edo and Delta States between the ages of 31-40 years in Edo state and above 51 years in Delta state with a mean household size of between 5 and 8 persons (Edo= 4.56, Delta= 4.75). Only 53.33% in Edo State and 43.64% in Delta State had Ph.D while below average had MSc (Edo= 44.00%, Delta= 43.64%). Consequently, about half (46.67%) in Edo and 38.18% in Delta States spent between 11-15 hours online weekly. Internet was mostly used for sending and receiving e-mail (Edo= 3.56, Delta= 3.71) which have enhanced lecturers contributions to research in progress (Edo= 4.41, Delta= 4.22). However, there was no statistical significant difference in the level of internet usage ($t = 0.757$ $p = 0.05$) among lecturers in Edo ($\bar{X} = 65.45$) and Delta ($\bar{X} = 67.29$) States. In conclusion, agriculture lecturers are internet oriented. Tertiary institutions stakeholders should make internet available for research and teaching which is critical to lecturers profession and advancement.

Keywords: Agriculture lecturers, Comparative analysis, Internet utilization, Universities

INTRODUCTION

The term internet has been coined from a concept, inter-networking to denote interaction between networking of computers. It is an umbrella under which different networks, small and big, freely exchange information across the globe. Internet, thus, can

broadly be defined as worldwide network of computers communicating via an agreed upon protocol (Tadasad, 2002). The internet carries a vast range of information resources and services, such as hypertext documents and applications of the World Wide Web (WWW), electronic mail, telephony and file sharing. Internet gave birth to new activities and services such as email, internet television, online music, digital newspaper and video streaming websites. It provides access to the most diversified source of information hosted by individuals and various organizations worldwide on a vast network of servers. The emergence of internet as a veritable instrument in educational development has equally compelled the stakeholders in education to incorporate internet as a major source of information. This has greatly assisted academics in modernizing the process of teaching, learning and research. This idea motivated Kumar and Kaur (2005) to opine that the advent of internet has increased the following phenomena in higher educational systems: Learner is not dependent on teacher for interaction; Teachers can give lectures virtually to unknown learners and the effect of his work has no bound.

In every institution of higher learning, internet has become a very important need (Thanuskodi, 2011). It provides numerous opportunities for the academic world (Singh, 2002). It is an instrument for information distribution and a medium for cooperative interaction between individuals and their computers without regard for geographic limitation of space.

Fagbami (2005) rated Internet usage as being incomparable to books and journals, this was supported by the rating of research scientists in the use of Agricultural websites such as Access to Global Online Research in Agriculture (AGORA) database where relevant literature are being downloaded. It is very difficult, if not impossible, for universities or other institutions of learning to adequately meet the needs of their academic staff and students in terms of providing them with all the appropriate and required books, journals, and other learning resources. Limited access to up-to-date materials in libraries of universities in developing countries is a major problem that impedes research and teaching (Begum, Rashidah and

Jean(1999).Despite the advantages of internet usage to research, many developing countries continue to have very low internet penetration rates (United Nations Reports, 2005) and consequently the nation's goal in providing food security and self sufficiency has not been attained.Meanwhile, there is an avalanche of information available in the internet to help boost the quality of research. Is it that the information from the internet is not affecting the agriculture lecturers' job performance or they are not accessing the information adequately? It is against this background that this study seeks a comparative analysis of internet utilization among agriculture lecturers in Edo and Delta States, Nigeria. To achieve this, the study specifically examined socio-economic characteristics of lecturers and ascertains lecturers' activities of internet usage. A null hypothesis formulated for the study is that there is no significant difference in Internet usage between lectures of higher institutions in Edo and Delta States.

MATERIALS AND METHODS

The study was conducted in Edo and Delta State, Nigeria. The administrative capital in Edo State is Benin City.The University of Benin currently have ten Faculties including Faculty of Agriculture comprising of six(6) departments with 93 academic staff. Ambrose Alli University is a university in Edo State established in 1981 by Professor Ambrose Folorunsho Alli. Faculty of Agriculture comprises of 4 departments with 41 academic staff.Benson Idahosa University is a private Christian university in Benin City, Nigeria founded by Archbishop Benson Andrew Idahosa. It comprises of 3 departments with 16 academic staff.

Delta State is a state in Nigeria which comprises of 25 Local Government Areas.The administrative capital is Asaba, shares common boundary with Edo State. Delta State University, Faculty of Agriculture is composed of five departments with 72 academic staff.Federal College of Education (Technical), Asaba in Delta State was founded in 1987 with 31 academic staff in the school of Agriculture.The major telecommunication and internet services providers in Edo and Delta state are MTN, Airtel, Glo and Etisalat communications.

The population of the study consisted of agriculture lecturers in University of Benin, Ambrose Ali University, Benson Idahosa University, Delta State University and College of Education, Asaba.Multi stage sampling technique was used for the selection of respondents. First stage involved the purposive selection of University of Benin, Ambrose Ali University, Benson Idahosa University out of the six universities in Edo State. They were selected because they gave a representation of Federal, State and private universities that have an existing faculty of agriculture.

Delta State University was also purposively selected because it is the only state university in Delta state and College of Education Asaba was selected using simple random sampling out of the four educational institutions in Delta State.

In Second stage, based on the total population of agriculture lecturers in both States, given a total of two hundred and fifty three (253) lecturers, the recommended sample size for a population of 253 is 155 using the table for determining sample size for a given population by Krejcie and Morgan (1970). In sum, a total of 155 copies of the questionnaire were distributed in Edo State (92 copies) and Delta States (63 copies) but only 130 were found usable for the study.

The primary source of data was collected with the use of a structured questionnaire while the secondary data were collected from articles, journals and universities.Data collected were analyzed using descriptive statistic such as mean, frequency count and percentages while inferential statistic such as student t-test was used to test the hypothesis.

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents

Table 1 showed that a majority (73.3%) in Edo and 65.4% of the lecturers in Delta States were males, suggesting that more males are employed into university teaching in Edo and Delta States. This agrees with the findings of Agber and Agwe (2013) that a majority (82.4%) of Agriculture lecturers in Benue State, Nigeria were males. Lecturers were relatively young between 31 and 40 years of age in Edo (34.7%) and above 50 years in Delta State (47.3%). Hence lecturers in Edo State were younger than their counterparts in Delta State. This result is an indication that agriculture lecturers in Edo are more likely to utilize internet in their job performance as Bertolini (2006) have noted that younger people are more venturesome and more willing to accept technological change in information storage and handling because they are likely to be more social informed than older people. With respect to academic qualification, higher proportion of the respondents had Ph.D (Edo=53.33%, Delta= 43.64%) and slightly below half had M.Sc (Edo= 44.00%, Delta= 43.64%). The higher proportion of PhD degree holders among the respondents could be expected as it is a mandatory requirement by the National Universities Commission (NUC). It is also a reflection of high academic attainment, an enabling potential for productivity and growth on the job through internet utilization, as Kasika (2015) had noted that education promote job performance among employees.

Table 1: Socio-economic characteristics of lecturers

Characteristics		Edo (n=75)		Delta(n=55)	
		Freq	%	Freq	%
Sex	Female	20	26.67	19	34.55
	Male	55	73.33	36	65.45
Age (range) years	≤ 30	6	8.00	5	9.09
	31 – 40	26	34.67	12	21.82
	41 – 50	25	33.33	12	21.82
	>5	18	24.00	26	47.27
Marital status	Single	8	10.67	6	10.91
	Married	65	86.67	49	89.09
	Divorced	1	1.33	0	0.00
	Widow(er)	1	1.33	0	0.00
Household size (range)	≤ 4	35	46.67	20	36.36
	5 – 8	40	53.33	34	61.82
	9+	0	0.00	1	1.82
Highest academic qualification	BSc	2	2.67	7	12.73
	MSc	33	44.00	24	43.64
	Ph.D	40	53.33	24	43.64

Source: Field survey, 2018.

Internet characteristics of lecturers

Table 2 shows the result on internet characteristics of lecturers. 46.67% of the respondents in Edo and 38.18% in Delta States spend between 11-15 hours online weekly which shows that most lecturers in the study area spend more time surfing the internet for information and communication. This is in line with Asemi (2005) who reported that all lecturers used the internet frequently in their routine lecturing. The result in Table 2 further indicates that 36.00% and 56.36% of the respondents in Edo and Delta States accessed the internet from their homes. while only 29.33% and 34.55% of the respondents in Edo State and Delta States accessed the internet from

their offices. This could be an indication that communication network signals are rarely available in universities in the study area and more conveniently assessed at home by respondents.

Results on Table 2 further show that above average (52.00%) of the lecturers make use of Glo network in Edo State, a higher proportion(34.55%) in Delta State make use of Airtel network. While 14.67% and 27.27% of the respondents in Edo and Delta States, make use of MTN network. The result suggests that the respondents made use of different networks with some network described as being more stable as internet providers, and this can affect their utility by the lecturers.

Table 2: Internet characteristics of lecturers

Characteristics		Edo		Delta	
		Freq	%	Freq	%
Time spent online for research purpose hrs/week	0-5hrs	3	4.00	0	.00
	6-10hrs	13	17.33	5	9.09
	11-15hrs	35	46.67	21	38.18
	16-20	17	22.67	19	34.55
	>20	7	9.33	10	18.18
Access point of internet usage	University library	2	2.67	3	5.45
	Office	22	29.33	19	34.55
	computer lab	12	16.00	1	1.82
	Home	27	36.00	31	56.36
	Cyber café	2	2.67	1	1.82
	Others	10	13.33	0	.00

Internet Service provider (ISP) used	MTN	11	14.67	15	27.27
	Airtel	14	18.67	19	34.55
	GLO	39	52.00	11	20.00
	Others	11	14.67	10	18.18

Source: Field survey, 2018.

Activities we use internet for

Table 3 shows the activities lecturers use internet for in the study area. The pooled mean indicated that out of the twenty three areas listed, respondents made use of the internet in almost all the areas except engaging in online business transaction (Mean= 2.35), download images (Mean= 2.29), download movies (Mean= 2.25), pleasure and entertainment (Mean= 2.24), download music (Mean= 2.17), watch movies (Mean= 2.10) and play games (Mean= 1.95). This result may be attributed to the fact that respondents are either not competent with the use of internet to explore this areas, lack the awareness of internet potential on this areas or do not consider it relevant relative to their job. However, lecturers displayed high internet usage for sending and

receiving e-mail (Edo= 3.56, Delta= 3.71); accessing global information (Edo=3.44, Delta= 3.56), literature search (Edo= 3.41, Delta= 3.56) crosschecking of work (Edo =3.32, Delta= 3.60) among many others. The result is expected as Internet is an asset for lecturers on their job and primarily, the use of e-mail by lecturers is unlimited who perhaps due to the nature of their job, extend outside the physical boundaries of the workplace. This is in agreement with Ajala, Adegun and Oyewunmi (2010) who revealed high utilisation of e-mail and internet services by academic staff of Ladokpe Akintola University, Nigeria. The finding also conform with Ukpebor (2011), that e-mail was the most preferred internet service among engineering lecturers and students of the Edo State University, Nigeria.

Table 3: Activities we use internet for

Internet use	Edo		Delta	
	Mean	SD	Mean	SD
Send and receive e-mail	3.56*	0.87	3.71*	0.71
access global information	3.44*	0.89	3.56*	0.69
read articles	3.41*	0.84	3.56*	0.71
My literature search is made easier using internet	3.45*	0.87	3.47*	0.63
Crosschecking of works/articles under review	3.32*	0.96	3.60*	0.63
contribute ideas	3.27*	0.84	3.58*	0.69
upload files/document using internet	3.17*	0.99	3.55*	0.69
access foreign news	3.01*	1.06	3.31*	0.84
Source for materials in writing articles	3.03*	1.03	3.25*	0.99
Sourcing for research topic	2.81*	1.11	3.38*	0.73
Source for materials in writing conference paper	3.08*	0.94	2.78*	0.81
prepare lectures	2.99*	0.92	2.84*	1.05
use the internet social networking site such as facebook, Twitter, youtube, my space	2.81*	1.14	3.07*	1.00
follow online training course	2.81*	1.02	3.00*	0.86
use internet chat room to communicate with friends and other lecturers	2.67*	1.14	3.16*	0.94
Source for materials in writing thesis	2.87*	0.99	2.64*	0.78
engage in online business transaction using internet	2.47	1.13	2.20	0.95
download images	2.36	1.11	2.20	1.08
download movies	2.25	1.09	2.24	1.04
Pleasure and entertainment	2.32	1.20	2.13	1.07
download music	2.24	1.14	2.07	1.00
watch movies	2.11	1.13	2.09	0.95
play games	2.00	1.09	1.89	0.96

Source: Field survey, 2018. *Often (mean > 2.50)

Difference in internet usage between lecturers of higher institution in Edo and Delta States

Table 4 shows the difference in internet usage between lecturers of higher institution. The result revealed that

there was no statistical significant difference in the level of internet usage (t= 0.757 p> 0.05) among lecturers in Edo (\bar{X} = 65.45) and Delta (\bar{X} = 67.29) States. The null hypothesis was therefore

accepted. Possible reason for this may be that due to the nature of their job, lecturers are more likely to make use of the internet for academic papers, teaching and

effective communication which are critical for their promotion.

Table 4: Difference in internet usage between lecturers of higher institution in Edo and Delta States

Internet use	Edo		Delta		Mean Difference	T	Prob. Level
	Mean	SD	Mean	SD			
Lecturers	65.45	14.884	67.29	11.792	-1.838	0.757	0.450

Source: Computed from Field survey, 2018.

CONCLUSIONS

From findings, the study concludes that Agriculture lecturers in Edo State are young compared to their counterpart in Delta State hence are more likely to utilize internet on their job. Higher proportion of the lecturers has PhD and assessed internet from their homes which may be convenient for them. Internet was mostly used by lecturers for sending and receiving of e-mail which perhaps is expected due to the nature of their job. In addition, there was no significant difference in internet usage among lecturers in the two study areas. Based on this findings, Stakeholders in higher institution should make internet services available and job performance appraisal should be carried time to time to give lecturers more room to exploit the usefulness internet on their job especially in the area of research and teaching which is a key area in their job.

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