



Utilisation of Information and Communication Technologies for Entrepreneurial Skills Development among Students of Selected Agricultural Institutions in Ibadan Oyo State, Nigeria

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Abstract

The challenges of unemployment as a result of limited white-collar jobs prompted the investigation into the study of utilisation of ICTs for entrepreneurial skills development to help train and expose students to opportunities after graduation from school. Hence, the study investigated the utilisation of Information and Communication Technologies for entrepreneurial skills development among students of selected agricultural institutions in Ibadan, Oyo state. The parameters examined were: availability of ICTs, the extent of ICTs utilization, and constraints experienced by respondents in utilizing ICTs in the study area. A well-structured questionnaire was used for collection of data through a purposive and random sampling procedure to select a sample of 105 students for the study. The data collected were analyzed with descriptive statistics such as frequencies and percentages; and inferential statistics like Pearson product moment correlation, PPMC to draw inferences between variables of the hypotheses. The result showed that majority of the respondents (77.2%) ascertained that personal computers were available in their institutions whereas 72.6% of the respondents possessed mobile phones as ICTs devices in the study area. Furthermore, the findings revealed low extent of ICTs utilization among the students in the study area. The findings also revealed that there were major constraints hampering ICTs utilization in the study area. There was no significant relationship between availability of ICT devices and utilization of the ICTs for entrepreneurial skills development ($r=0.117$, $p=0.245$), whereas there was significant relationship between the constraints experienced by the respondents and utilization of ICTs for entrepreneurial skills development ($r=0.060$, $p=0.026$). The study however concluded that generally the utilization of ICTs for entrepreneurial skills development among the respondents was at a low level due to low extent of ICTs use and some constraining factors among the students in the study area. Therefore, the study recommends that awareness creation should be carried out to educate and elicit students' interest on the importance and use of ICTs among students of these institutions, and these institutions should integrate ICTs to strengthen their curriculum for entrepreneurial studies in the study area.

Keywords: Utilization, ICTs, Development Skills, Entrepreneurial, Students

Introduction

The use of information and communication technologies is of great importance among nations of the world in the modern times

especially in entrepreneurial development (Adekunle and Tella, 2008). Therefore, in the light of contribution of entrepreneurial development to nation building, the Federal Government has mandated

all training institutions of higher learning to integrate into the programmes of study, entrepreneurship education that will equip students with appropriate entrepreneurial skills (Oyelola *et al.*, 2013). Abimbola and Agboola (2011) reported that proper acquisition of these skills by the students will enable them establish their own businesses, become self-reliant, and excel in the modern business world after graduation.

Entrepreneurship education enables individuals including those who are physically challenged to learn organization skills, management skills, leadership development and interpersonal skills all of which are highly transferable skills sought by employers (Okwuanaso, 2000). Olaniyi (2016) posited that the aim of entrepreneurship education is to encourage and train graduates of secondary schools and higher institutions to take up self-employment. Students' acquisitions of entrepreneurial skills enable them to develop personal business enterprises and become self-reliant after graduation. The utilization of ICT for entrepreneurial skills will go a long way in developing the students' ICT skills, intellectual and competencies needed in the establishment of business enterprise (Lankard, 1991). The attitude, knowledge, information and Skills garnered from use of ICT will have direct influence on the entrepreneurial development. According to Kler (2014) who found that skills and technical know-how

of both the lecturers and the students determined their readiness to use instructional technologies in teaching and learning processes. Thus, today there is global emphasis on the development of small and medium scale enterprises which can only succeed if it is bed-rocked on strong entrepreneurial skills (Ugwu and Ezeani, 2012). The existence of small and medium scale enterprises in a developing country like Nigeria is of paramount importance. However, despite the favorable geographical location of Nigeria with her valuable natural resources many of her citizens live in poverty characterized with unemployment, hunger, suicide, kidnapping, vandalization of oil pipe lines, robbery and other social violence (Omoankhanlen, 2010). This is attributed to lack of required skills to tap and harness the available resources for her overall growth and development as reported by Jones (2011). Thus, Okwuanaso (2000) expressed that many youths who go into entrepreneurship fail because of inadequate knowledge of what it takes to effectively manage a business. In Nigeria, the impact of ICTs on young adults in particular on entrepreneurship skills development, its availability and utilization cannot be overemphasized. Thus, this paper examined the utilization of ICTs for entrepreneurial skills development among students of selected Agricultural Institutions in Ibadan, Oyo State, Nigeria. The specific objectives of the paper include: to assess the availability of ICTs

among students; ascertain the extent of ICTs utilization among students; and examine the constraints

experienced by students in utilizing ICTs for entrepreneurial skills development.

Methodology

The study was carried out in selected Agricultural Institutions in South-West Local Government Area, Ibadan, Oyo State, Nigeria. These were the Federal college of Agriculture (FCA), Moor Plantation, Apata, Federal college of Animal Health and Nutrition, Moor Plantation, Apata (FCAH&N), and Federal college of Forestry (FCF), Jericho, Ibadan. These selected Agricultural Institutions were sampled with purposive sampling procedure due to Entrepreneurial Studies offered as part of their Curricula. The coordinates of the study area are 79° N and 35° E respectively. The study area is located in the rainforest vegetation of South West Nigeria with a mean rainfall of about 1300/1500mm and average relative humidity of about 80-85% (FRIN, 2013). The population of this study was the HND11 and ND11 students in the selected Agricultural Institutions in Ibadan metropolis engaged in entrepreneurial study. The population of students in FCA was 493, FCAH&H was 514, and FCF was 207 respectively. From each institution, 10% of population was sampled by simple random technique. Therefore, the sample size for the study comprised 49, 51, and 20 from FCA, FCAH&N, and FCF respectively making a total of 120 respondents. Hence, data were

collected with a well-structured questionnaire. Then, 120 copies of questionnaire were administered with 105 retrieved from the respondents. The collected data were analyzed with both descriptive statistics and inferential statistics like Pearson product moment correlation using a four-point likert scale to operationalize extent of ICTs utilization and a three-point likert scale to operationalize constraints against ICTs utilization.

Measurement of Variables

The extent of ICTs utilization in the study area was operationalized by asking the students to indicate the extent of ICTs utilization using a 4-point likert rating scale namely; Always = 3, regularly = 2, rarely = 1, and never = 0. The benchmarks were obtained thus; $3+2+1+0 = 6$ divided by 4 to give 1.5. Mean scores of 2.0 and above (≥ 2.0) implied high extent of utilization, and below signified low extent of ICTs utilization among students in the study area. The mean scores was therefore categorized with the threshold of ± 0.5 using the following decision rule: ≤ 1.0 (low), between 1-1.99 (moderate), and ≥ 2.0 (high). This same procedure was applied for constraints against utilization of ICTs in the study area and it was captured by using a 3-point likert rating scale of major = 2, minor = 1, and no constraints = 0.

The benchmarks were obtained thus; $2+1+0 = 3$ divided by 3 to give 1.0. Mean scores of 1.5 and above implied major constraints while below signified minor and no constraints against ICTs utilization in the study area. Also the mean

scores categorization was done with threshold of ± 0.5 using the following decision rule: ≤ 0.5 (no constraints), between 0.5-1.49 (minor constraints), and ≥ 1.5 (major constraints).

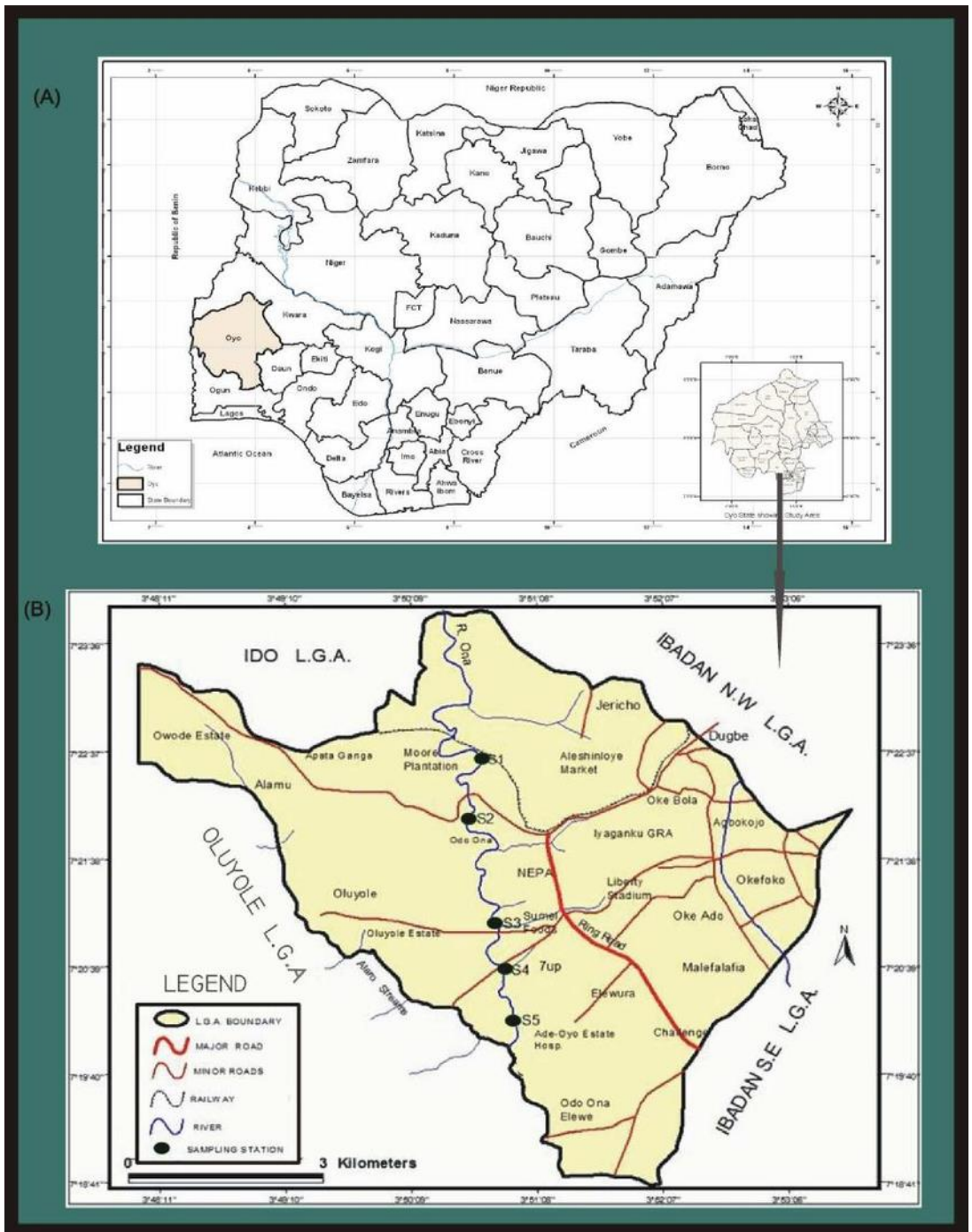


Figure 1: Map of Oyo State showing the study area in South-West Local Government Area

Results and Discussion

The result in Table 1 revealed that majority of the respondents (77.2%) showed that personal computer were available in the study area, and that most of the respondents (72.6%) possessed mobile phones among other ICTs devices respectively. This is an indication that the respondents possess both personal

computers and mobile phones. This corroborated with the findings of Owino (2013) who opined that most students have mobile phones or laptop computer in this modern age. The result in Table 1 further revealed that some respondents (56.9%) and (55.7%) reported availability of E-library and Internet facility respectively.

Table 1: Availability of ICTs for Students Use in the Study area (n=105)

Variables	Yes	No
Radio	62 (58.3)	43 (41.7)
Television	33 (31.1)	72 (68.9)
Mobile phones	75 (72.6)	30 (27.4)
Personal computers	78 (77.2)	27 (22.8)
Internet facility	59 (56.9)	46 (43.1)
Electronic library	56 (55.7)	49 (44.3)
Software packages	23 (21.0)	81 (79.0)

Source: Field Survey, 2019

The result in Table 2 indicated that majority of the respondents (67.1%) always utilised personal computer as one of the ICTs facilities to browse relevant development skills with the mean score of 2.62. Furthermore, most of the respondents (49.7%) always utilised internet facility as a form of ICTs to learn entrepreneurial skills online with the mean score of 2.11. Also, majority of the respondents (82.3%) too

utilised mobile phones always to seek for training in skills development with the mean score of 2.64. Hence the grand mean utilisation score for ICTs devices was 1.79 indicating low extent of ICTs utilization in the study area. The result corroborated with the findings of Owino (2013) who submitted that most students had access to ICTs devices but underutilise them.

Table 2: Extent of Utilization of ICTs among Students for Entrepreneurial Skills Development (n=105)

Variables	Always	Regularly	Rarely	Never	Meanscore
Radio					
Use of radio to listen to business program	16(15.1)	49(48.7)	25(24.3)	15(13.9)	1.63
Listen to adverts of business opportunities	9(8.3)	19(18.4)	18(17.7)	59(55.6)	0.79
Television					
Viewing of business opportunities	43(41.3)	41(38.3)	17(16.7)	4(3.7)	2.17
Viewing adverts of new business skills	5(4.7)	25(23.3)	7(6.8)	68(65.2)	0.69
Personal computer					
Documentation of business opportunities	32(30.2)	34(32.4)	18(17.8)	21(19.6)	1.73
Use for saving files of new business skills	59(56.8)	29(28.2)	7(6.1)	10(8.9)	2.31
Use to browse relevant development skills	69(67.1)	21(19.9)	13(11.3)	2(1.7)	2.62
Use to develop graphics designs	49(46.3)	25(24.7)	17(16.1)	15(12.9)	2.20
Internet					
Use to search for business skills online	50(48.9)	21(19.1)	15(14.1)	19(17.9)	1.97
Use to learn entrepreneurial skills online	51(49.7)	27(26.4)	15(13.3)	11(10.6)	2.11
Use to monitor market prices/opportunities	39(36.9)	28(27.1)	21(20.1)	17(15.9)	1.85
Mobile phones					
To seek for training in skills development	83(82.3)	11(9.7)	6(4.9)	5(3.1)	2.64
To source for market sales and business	75(71.1)	16(15.9)	6(5.3)	8(7.7)	2.50
Electronic library					
To consult e-journal for business strategies	23(22.5)	24(23.1)	22(21.5)	36(32.9)	1.32
To source for business information	19(18.7)	27(26.3)	20(19.4)	39(36.6)	1.25
Software packages					
Installed to design business skills	34(33.8)	23(21.2)	17(16.8)	31(28.2)	1.57
Installed to design business application	13(12.6)	21(20.4)	24(23.5)	47(43.5)	1.00
Grandmean					1.79

Figures in Parenthesis are percentage; **Source: Field Survey, 2019**

The results in Table 3 revealed that the majority of respondents (65.1%) indicated inadequate monetary capital as the major constraint hampering ICTs utilization in the study area with the mean score of 1.53. Furthermore, some of the respondents (43.4%) also indicated that institutional inadequacy of ICTs facilities as major constraint also affecting ICTs use with the mean score of 1.79. The grand mean score for constraints affecting ICTs utilization was 1.5 which is an

indication that both inadequate finance and institutional inadequate ICTs facilities were the major challenges affecting the utilization of ICTs among the students in the study area. This corroborated with the submission of Achonna (2008) and Ugwu (2012) that inadequate financial capital and inadequate ICTs facilities were major factors hampering the use of ICTs among students of tertiary institutions in Nigeria.

Table 3: Constraints Experienced by Students in ICTs Utilisation for Entrepreneurial Skills Development (n=105)

Constraints	Major	Minor	No Constraints	Mean scores
Poor power supply	55(52.4)	42(41.2)	8(6.4)	1.45
Inability to operate ICTs devices	48(46.7)	46(43.2)	11(10.1)	1.35
Inadequate monetary capital	67(65.1)	27(24.8)	11(10.1)	1.53
Institutional inadequate ICT facilities	45(43.4)	49(47.4)	11(9.2)	1.79
Inaccessibility of ICT facilities	55(50.5)	30(30.3)	20(19.2)	1.33
Grand mean				1.5

Figures in Parenthesis are percentage; **Source: Field Survey, 2019**

Hypotheses testing

Table 4: PPMC analysis showing relationship between availability and utilization of ICTs for entrepreneurial skills development among respondents

Variable	r-value	p-value	Decision
Availability of ICTs versus Utilization of ICTs	0.117	0.245	Not significant

Source: Data Analysis, 2019: Level of significance @ 0.05

The result from Table revealed that there was no significant relationship between availability of ICTs and its utilization for entrepreneurial skills development among students in the study area ($r = 0.117, p > 0.05$). This is an indication that availability of ICTs did not have corresponding effect on its utilization for business

skills development in the study area. This meant that ICTs availability never amounted to its optimum use in the study area. This result corroborated with Andrew (2012) who submitted that availability of ICTs in higher institutions were not significantly used for training and learning.

Table 5: PPMC analysis showing the relationship between the constraints experienced by students and utilization of ICTs

Variable	r-value	p-value	Decision
Constraints versus Utilization of ICTs	0.060	0.026	Significant

Source: Data Analysis, 2019: Level of significance @ 0.05

The result from Table 5 showed that there was significant relationship between the constraints experienced by students and utilization of ICTs for entrepreneurial skills development ($r = 0.060$, $p < 0.05$). This is an indication that the constraints had positive influence and direct effect on the utilization of ICTs in the study area. This result corroborated with Paul (2017) who opined that there were challenges which hindered utilisation of ICTs for skill advancement.

Conclusion

Finally, based on the findings of this study, it revealed that the ICTs availability did not really amount to how well the students utilized the ICTs facilities in the study area. Findings further revealed that the ICTs utilisation for entrepreneurship skills development was at a low level due to low extent of ICTs utilization among the respondents and the challenging factors ranging financial incapability, Institutional inadequacy of ICTs facilities, and

poor power supply which could affect effective entrepreneurial skills development to be enhanced in the selected Agricultural Institutions in Ibadan, Oyo State.

Recommendation

The Federal and State government should make adequate provision of functional ICTs facilities in institutions of higher learning for effective teaching and learning.

The school managements should ensure the efficient use of available ICTs facilities in the selected Agricultural institutions taking entrepreneurial course in the study area.

Improved awareness creation should be carried out to educate and elicit students' interest on the importance and use of ICTs in these institutions, and these institutions should integrate ICTs to strengthen their curriculum for entrepreneurial studies in the study area.

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