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Relationship between Effective Service Delivery and Information and Communication Technology (ICT) Utilisation in Universities in Anambra State

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Abstract

The study investigated Relationship between Effective Service Delivery and Information and Communication Technology (ICT) Utilisation in Universities in Anambra State**.** Aspect of ICT utilsation considered in the study were use of Internet and PowerPoint. Three research questions and three hypotheses guided the study. 645 teaching and non-teaching Staff participated in the study. The study adopted correlational survey design. Effectiveness of Service Delivery Scale (QESDS) and Questionnaire on Utilisation of ICT Scale (QUIS). Instruments used for the study was validated and reliability was established at 0.814 and 0.767 using. **Multiple regression was used for analysis. Coefficient of regression and coefficient of determination (R^2) were used to answer the research questions while T-statistics and F-statistics tested the hypothesis.** Results showed Staff use of internet though positive did not determine the effectiveness of service delivery in both public and private universities. Use of PowerPoint significantly determined the effectiveness of service delivery in both public and private universities. ICT utilisation significantly impacted on effective service delivery in public and private universities with the higher impact change on public universities. From the findings of the study, few recommendations were made.

Index Terms--- Realationship, Effective, service Delivery, ICT Utilisations, Universities

INTRODUCTION

Service delivery is the act of providing services to customers. The concept of service delivery however, can only be properly understood by first establishing the meaning of service. Service as an action is experienced but it is neither definitive nor objective because a service provider can change his/her mode of delivery based on moods, changes in working conditions or professional level. Kotler (2015) described service as any valuable action, deed, or effort performed to satisfy a need or fulfill a demand. Service delivery as a provision is effective if it is useful, dependable, authentic, reliable, expandable and when made available in a given time.

To buttress the above point, service, for Cordella and Tempini (2015), may be conceived as something that the public needs such as transport, hospitals, energy supplies, security, education and counseling, which are provided in a planned and organized way by personnel, staff of organisation, an official body or the government.

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Delivery simply implies provision. Put in a more ordinary sense, it is the act of taking something to people, houses, and other such places. Service delivery, therefore, is the provision of public needs such as education, security, transport, energy supplies by an official body, personnel, government or university staff (Matthew & felix, 2016). The extent of ICT usage and service delivery as reported in previous studies (Egessa & Musau, 2016; Onobrakpeya, Nana & Odu, 2018) is unanimously advocated by employers in different works of life. Given the advancements in ICT, employees are expected to be ICT competent and should be able to apply it efficiently in the process of service delivery. As regards to the study, Service delivery is seen as the provision of services such as teaching and learning, information exchange, documentation, security and health services by members of staff of the university. Thus, service delivery in

higher institutions has to do with effectiveness with which universities discharge their academic services to yield the desired dividend**.** Service delivery also defines job effectiveness as the efficiency and effectiveness with which the university staff delivers services (Akpan, 2014).

Effective service delivery determines efficiency of the job. In this connection, effectiveness of job, according to Ntui Iyang (2015), could be referred to as the power of the job to produce an effect. This effect has been already determined as the objectives of that job. Every reasonable job is expected to bring some benefits to either the people hired or employed to do a job, or the owners of the job that have hired or employed people to do it. Not every job can satisfactorily produce the intended result. In other words, not every job could be efficacious in producing the desired result. This is because the job itself cannot produce that intended result. It must be carried out by somebody. If the objectives of the job were well articulated and validated, then it is very logical that the level of effectiveness of the employees in doing the work or job will determine to a large extent, the level of the objectives of the job to be achieved.

In measuring effectiveness of services, especially as it relates to services delivered in the universities, staff effectiveness in carrying out their specific roles will definitely contribute to the realisation of organisational or job goals will be measured. To clarify the above, Ohiwerei, Azih and Okoli (2013) viewed efficiency in services delivery as the provision of services in such a way as to achieve the intended goals or results., Therefore, effectiveness of job is the efficiency to which university staff delivers services to their customers and students. ICT influences employees and collaborative technologies; interactions between people supported by ICTs have expanded the possibilities for increasing job effectiveness.

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In a study conducted by Omenyi, Agu and Odimegwu (2007), it was found that on the average, teachers feel that ICT has helped them to increase their classroom efficiency. They also discovered in their study that teachers' perception of their increased job efficiency was associated with the level of ICT competence possessed by the teachers. This finding suggests that ICT is effective in providing educational delivery to students. The use of ICT has been found by researchers to improve job effectiveness of teachers. Thus, the use of ICT by university teachers reduces workload (Omenyi, Aju & Odimegwu, 2007). In support of this finding, Balanskat, Blamire and Kefala (2006) reported that ICT is being increasingly used by teachers in their day-to-day work leading to increased job effectiveness in planning and preparation of work. Despite these studies, observation in some of the Nigerian institutions show that in some cases, delivery of services, such as computation of students' results, access to past records, information desks lecture delivery, old ways have persisted, which are sometimes frustrating to customers. With the development of ICTs, even the most remote areas of the world have opportunities to gain access to the highest quality learning resources.

The concept of information and communications technology (ICT) has no single universally accepted definition. Its diverse definitions result from the very fact that it, ICT, is a broad subject with evolving concepts. ICT can be defined as the group of electronic technology useful in processing, transferring and exchanging information in a meaningful way from one person to another or even group of persons. Given the broad definition of ICT, the study conceptualizes ICT to mean technologies that provide access, storage, retrieval and transmission of information through communication networks.

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The term ICT is also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system (Mathur, 2017). Hilbert (2016) remarked that ICT covers any product that will store, retrieve, manipulate, transmit, or receive information electronically in a digital form (examples, personal computers, digital television, email, or robots).

Essay UK (2013) classified ICT as follows: informative tools: internet, network virtual drive, internet system, message; resignation Devices: CD- ROM, constructive tools: Ms Word, power-point, front page, Adobe Photoshop, Lego mind storm, communicative tools: e-mail, short message service (SMS), and collaborative tools: discussion boards.

It is an undebatable fact that ICT has found application in virtually all works of life. In the field of education, ICT is being used today for service delivery. In order to meet up with societal demands, universities around the world are moving rapidly to incorporate information and communication technologies (ICT) into all aspects of their core business of teaching and learning (Achimugu, Oluwagbemi, & Oluwaranti, 2010). The zeal by governments and university managers to inculcate ICT into the educational process is due to the gains it yields both to the university staff in the process of service delivery, to the students and to the public at large. The realisation of the benefits of ICT in the educational process, to a large extent, depends on the academic staff that play crucial roles in any innovation that takes place in the educational system (Ajegbelen, 2016). Currently, new ICT, according to John (2015), have considerably reduced the cost of transmitting and communicating information over both long and short distances. The relevance of face to face communication indicates how remarkable these distance effects can be. But the internet, telephone and video conferencing, for instance, are all reducing these costs of communicating ideas from a distance (John, 2015).

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Higher education institutions across the world have been adopting ICT teaching and learning technologies in an effort to create environment for both students and their instructors to engage in collaborative learning and gain access to information services (Stantchev, Colomo-Palacios, Soto-Acosta & Misra, 2014). ICT has presented an easy means for students and teachers to access the world quickly, to obtain or disseminate information. The use of ICT makes administrative and teaching process more flexible, less time consuming, and less expensive, and so most of the universities are trying to assume the benefits of ICT.

Administrative services in higher education institutions take care of various activities in areas such as accounts, management of students' data and general administration. These administrative works are found to have enhanced greatly under the application of ICT (Lupu & Laurentiu, 2015). ICT might have brought changes in the administrative services/management of students records in Nigerian universities, with some success recorded, especially in its role in students' enrolments. Students' administration involves the management of students' records, and is evidently the dominant area in which ICT is utilised for administration of education institutions. Activities under students' administration include online application and admission, online registration, fee payment processing, examination procedure, online academic transcript, programme detail and time-table online information about students, accommodation/hostel allocation (Mondal & Mete, 2012). General administrative services supported by ICT include, among others, the following: dissemination of information about the institution, day-to-day accounts and clerical duties.

Information and communication technologies (ICT) have become one of the fundamental building blocks of modern society. Teachers and non-tutorial staff need to

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know exactly how ICT is used as a teaching and learning tool, for their own purposes and to help students to use them.

Globally, educational systems are adopting new technologies to integrate ICT in the teaching and learning process, to prepare students with the knowledge and skills they need in their subject matter (Enyedy, 2014). In this way, the teaching profession is evolving from teacher-centered to student-centered learning environments. Schools use a diverse set of ICT tools to communicate, create, disseminate, store, and manage information. In some contexts, ICT has also become integral to the teaching-learning interaction, through such approaches as replacing chalkboards with interactive digital whiteboards, using students' own smartphones or other devices for learning during class time (Rodriquez, Strnadova & Cumming, 2013), According to Alsied and Pathan (2015), when tutorial and non-tutorial staff are digitally literate and trained to use ICT, these approaches can lead to higher order thinking skills, provide creative and individualised options for students to express their understandings, and leave students better prepared to deal with ongoing technological change in society and the workplace.

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Internet is a means of connecting a computer to any other computer anywhere in the world through dedicated routers and servers. According to Onwubiko (2012), internet resources and services provide essential ingredients for enhancing both the research efforts of academics and indeed their level of intellectual development in the global village of knowledge management. From this inference, it will be equally understood that the use of the internet resources and services will help to improve the quality of academic research as well increase lecturers' level of intellectualism. The internet

offers vast opportunities for users who are hungry for knowledge and information.

Ogunjobi and Fagbami (2012) confirmed that the internet resources and services enable lecturers to update their knowledge, prepare up-to-date lecture notes for their students, download free e-books and e-journals, use e-mail for communication and collaboration with colleagues. Through the use of the internet resources and services, lecturers keep abreast with research and development in their fields of study, bringing them fame, recognition, improving their institutional ranking and ensure regular promotions to higher academic positions.

Internet also promotes multi-disciplinary research, fosters cooperation, and facilitates information delivery, sharing and exchange of ideas among researchers from various institutions, nations or regions. In the era of networked information, internet is the largest worldwide network of networks that has emerged as the most powerful tool for an instant access to information. Information is now just at a 'finger touch' distance away from the user. Thus, internet has become the biggest global digital information library which provides the fastest access to the right kind of information in seconds of time to the end-user at any time and at any place in the world.

Academics from tertiary institutions in developed nations depended on internet resources and services for teaching and research activities, which makes their research output visible and accessible globally (Imhonopi & Urim, 2012). Academic staff of tertiary institutions are expected to make proper use of the internet resources for their academic activities because of the vast and up to date information that can be obtained from them, they are also expected to make proper use of internet services so that they will have effective communication with their colleagues and other researchers around

the globe. However, the use of internet services by staff would make their work more effective and diligent.

Through internet, these days, assignments are given to students and also submitted to tutors, research such as e-interview can be conducted, academic questions can be asked and tutors can reach out to their students, among others. For instance, the recent COVID 19 pandemic has proven internet as indispensable in teaching and learning. Students now share their assignments and project works through internet and other social media platforms for makings and corrections. Internet therefore has useful and vital to higher education.

PowerPoint is a Microsoft Office product or software that provides users with an interface to design multimedia slides to be displayed on a projector system or personal computer. PowerPoint tools could potentially expedite new learning and thus validate knowledge creation and transfer (Hendriks, 2011). PowerPoint enabling tools include multi- media projectors, power point projectors, etc. A PowerPoint presentation most at times goes with audio and video clips. Experts in the fields of education have agreed that, if PowerPoint is properly used, it holds great promise to improve teaching and learning in addition to shaping work-force opportunities. Utilisation of PowerPoint in teaching and learning TVET in tertiary institutions today can assist in reducing the lecturers' (technical educators) workloads through its use for lecture preparation, instructional delivery, collaborative and individualised learning as well as learning evaluation (Ogwo, 2015). It was further buttressed that technical educators will become leaning facilitator, collaborator, coach, mentor, knowledge navigator and co-learner and not only a dispenser of knowledge. The educational reforms policies were aimed at

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integrating the use of ICT tools in the in Nigerian school system. More so, availability of PowerPoint in universities will engender the effectiveness of staff work. .

Gradually, in classroom teaching is made possible through PowerPoint presentations which bring more life, interactivity and connectivity to pedagogy. Teaching is no more a stale, blackboard, chalk and talk phenomenon but is now typified by visual as well as audio learning processes which enhance learning results.

According to Kiener (2013) a public university is a university that is in state ownership or receives significant public funds through a national or sub national government, as opposed to a private university. On the other hand, private colleges or universities, according to Francis and Glenn (2014), are institutions of higher learning funded by private donors and individuals who are not part of the government.

University staff refers to those people who work in educational institutions, and they are of two groups; which are teaching and non-teaching staff. Kolawole and Issa (2015) highlighted the following functions of academic staff of University as follows:

(i) They help to facilitate learning and mentor students to perform better. (ii) They are learners' model for continual improvement, demonstrate lifelong learning, and use what they learn to help students achieve better. (iii) They are resource providers to their students and colleagues. (iv) They serve as instructional specialist by assisting their students in implementing effective strategies in classroom activities. (v) They help implement new ideas of solving educational problems for their students. (vi) They are experts who know the best way of using curriculum in planning instruction and assessment.

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Furtherance to the functions of academic staff of universities, a research carried out evinced that ICT provides a variety of tools their support and facilitate their functions for efficient job efficacy. Hence, ICT transforms teaching and helps teachers to be more efficient and effective, thereby increasing their interests in teaching. The use of ICT has also been shown to assist in the organisation and the structure of the course and course materials, thereby promoting rethinking and revision of curriculum and instructional strategies (Yusuf et al, 2013). ICT increases teachers' emphasis on individualised instruction, and as such enable them spend more time with individual students. This carried a halo effect in enhancing students in their ability to carry out work independently and gives the teacher more time to focus on teaching higher level concepts in the classroom. Teaching staff utilisation of ICT engenders a multi-media presence in the classroom which enhances increased opportunities for collaborative network among colleagues, between them and students, while opening doors for lifelong learning.

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In the study conducted by Onifade, (2010), opined that non- teaching staff of universities carry out the following functions: (i) Non-teaching staff provide general clerical and administrative services to support the operations of schools. (ii) They assist in managing the day-to-day financial and human resource aspects of school operations. (iii) They receive voucher and issues receipts to the students. (iv) Non-teaching staff also aid in scrutinizing invoices received for payment in the school. (v) They also advise on general financial policy within the school and administer pension schemes for teaching and non-teaching staff. (vi) They help in maintaining effective records, administration, communication and correspondence in the school.

Furthermore, to the roles of non- teaching staff of university, a research carried out by Onifade (2010) revealed that the use of ICT by the Secretaries help them to execute

their work and enable them to coordinate the logistics of face-to-face meetings. ICT is also used by secretaries to catalogue expertise of organisational members and as a result facilitates access to the right people and enhances the dissemination of information and knowledge sharing. In organising meetings and other official gatherings, the secretary uses ICT to execute these tasks efficiently and effectively.

Abosede and Akintola (2015) also revealed in their work that there is a consequential impact of ICT facilities utilisation on secretaries' job performance. The emergence of ICT has increased secretarial efficiency and has made accessibility of information easy for decision making. ICT has made today's office look more sophisticated and more interesting place of work and helped the secretary in executing their tasks. To locate a student's record that is up to ten years may present problems which can be addressed simply through the use of ICT.

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ICT is the product of the convergence of modern telecommunication technology and digital data processing technology. The world of information and communication is rapidly changing, and today their convergence with one another can be seen more than ever so that data is transferred quickly and incredibly made available to users all over the world.

Research Questions

1. What is the extent of internet usage for service delivery in public and private universities in Anambra State?

2. What is the extent of PowerPoint usage for service delivery in public and private universities in Anambra State?

3. What is the impact of ICT utilisation on effective service delivery in public and private universities in Anambra State?

Hypotheses

1 Staff use of internet though positive did not determine the effectiveness of service delivery in both public and private universities.

2 Staff use of PowerPoint significantly determined the effectiveness of service delivery in both public and private universities

3 ICT utilisation significantly impacted on effective service delivery in public and private universities with the higher impact change on public universities.

Research Method

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This study adopted correlational survey research design. 645 members of the teaching and non-teaching staff from two private and two public universities. The total number of Computer Operators and Secretaries in public universities and private universities are (41 and 33) respectively; while the total number of academic staff in public universities and private universities are (463 and 108) respectively. Two public universities and two private universities were purposively sampled. Faculties of Education and Management Sciences were purposively sampled because these Faculties have relatively greater number of departments compared to other Faculties in the universities. In the departments, judgmental procedure was used to sample the Secretaries and Computer Operators because it is expected that the job description of the group critically involves use of ICT to enable them keep accurate records of departmental events and students 'records. Use of ICT by this group of staff will help them keep accurate records of departmental events and students records.

The instruments used in the study were Questionnaire on Effectiveness on Service Delivery Scale (QESDS) and Questionnaire on Utilisation of ICT Scale (QUIS). The questionnaire consists of 10 item questions to capture the extent of effectiveness of staff on the job. The second questionnaire (QUIS), it has two (2) sections of 10-item questions each consisting 10 items to address the level of ICT utilisation on service delivery. The sections in (QUIS) elicited responses on the various components of ICT usages that forms the objectives of the study covering Staff use of internet and Staff use of PowerPoint Presentation.

Validation and reliability of the Instrument

The instrument developed was subjected to content and face validity and trial tested on 10 teaching and 20 non-teaching staff of Delta State University, Abraka, Awai, campus which was not part of the study area. The data collected from test trial testing were used to determine the reliability of the instruments. The scores from QESDS and (QUIS) were analysed using Coefficient of regression and coefficient of determination (R^2) and the reliability was established to be 0.814 and 0.767

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Method of Data Analysis

The research questions posed were answered using Coefficient of regression and coefficient of determination (R^2). The hypotheses were tested at .05 level of significance using T-statistics and F-statistics in testing the entire hypotheses.

Results

Results of this study were presented according to research questions posed and postulated hypotheses.

Research Question One

What is the extent of internet usage for service delivery in public and private universities in Anambra State?

Hypotheses One

Staff use of internet does not significantly determine the effectiveness of service delivery in public and private universities in Anambra State.

Table 1: Regression coefficients and corresponding t-values for the extent of internet usage for effectiveness of services delivery, in private and public universities

	Coefficient of Regression	T-Test		Remark	**Decision**
		T-Statistics	P.value		
Private Universities	.021	.233	.816	p > 0.05	Accept
Public Universities	.014	.326	.745	P > 0.05	Accept

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The results of the coefficient of regression on table 1 are 0.021 for private universities and 0.014 for public universities. The results revealed that use of internet has positive relationship with service delivery for both private and public universities. This indicates that a unit increase in the extent of internet utilisation leads to 2.1% and 1.4% increase in effective service delivery for private and public universities, respectively. To answer the research question therefore, the study posits that use of internet has positive relationship with effective service delivery in private and public universities in Anambra State.

To test hypothesis one, t-statistics for private universities (0.233) and public universities (0.326) has corresponding probability values of 0.816 and 0.745, which are above the benchmark decision criteria of .05 level of significance. Since the p.values

are greater than .05 level of significance, the study accepted the null hypothesis for both private and public universities. The study thus concludes that staff use of internet though positive did not determine the effectiveness of service delivery in both private and public universities in Anambra State.

Research Question Two

What is the extent of PowerPoint usage for service delivery in public and private universities in Anambra State?

Hypotheses Two

Staff use of PowerPoint does not significantly determine the effectiveness of service delivery in public and private universities in Anambra State

Table 2: Regression coefficients and corresponding t-values for the extent of PowerPoint usage for effectiveness of services delivery, in private and public universities

	Coefficient of Regression	T-Test		Remark	Decision
		T-Statistics	P.value		
Private Universities	.797	13.598	.000	p < .05	Reject
Public Universities	.003	.036	.972	P > .05	Accept

Table 2 showed the regression coefficients and corresponding t-values for the extent of PowerPoint usage for effectiveness of services delivery, in private and public universities. The coefficients are 0.797 for private universities and 0.003 for public universities. These indicate the use of PowerPoint has positive relationship with effective service delivery. This implies that a unit increase in the extent of PowerPoint utilisation leads to about 80% increase in effective service delivery for private universities and 0.03% for public universities in Anambra State. Thus, staff use of

PowerPoint significantly determines the effectiveness of service delivery in both public and private universities.

The result of the t-statistics are private and public universities are 13.598 ($p < .05$) and .036 ($P > .05$), respectively. Since the probability values for private universities are less than .05, the study rejected the hypothesis, but accepted the null hypothesis for public universities where the probability value is greater than .05 level of significance. The study thus concludes that use of PowerPoint significantly determines the effectiveness of service delivery in both public and private universities with a greater significance for public universities.

Research Question Three

What is the impact of ICT utilisation on effective service delivery in public and private universities in Anambra State?

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Hypotheses Three

ICT utilisation does not have a significant impact on effective service delivery in public and private universities in Anambra State.

Table 3: Cumulative effect of the coefficients determination and corresponding F-values for the impact staff utilisation of ICT on the effectiveness of services delivery, in private and public universities

	Coefficient of Determination (R^2)	F-Test		Remark	Decision
		F-Statistics	P.value		
Private Universities	0.704	48.656	.000	$p < .05$	Reject
Public Universities	0.262	4.257	.025	$P < .05$	Reject

The results on Table 3 explain the overall effect of staff utilisation of ICT on the effectiveness of services delivery, in private and public universities. The coefficient of determination (R2) is 0.704 and 0.262 for private and public universities, respectively.

This suggests that the extent of ICT utilisation, determined about 70% of changes in effective service delivery for private and 26% for public universities, in Anambra state.

To test the hypothesis, the F-statistics private universities 48.656 with p.value = 0.000, and public university is 4.257 with p. value of .025. Since the p.values for private and public universities are less than 0.05 we reject the null hypothesis that is, ICT utilisation significantly impacted on effective service delivery in private and public universities with the higher impact change on public universities.

Discussion

Base on the analysis of data from the study, results showed that service delivery will be more efficient with use of ICT.

Previous findings from Ntui Inyang (2015) supported that staff use of internet, even in library enhances job effectiveness; and customer service delivery in general (Egessa & Musau, 2016). The findings on specific objective one of the study revealed that staff use of internet though positive did not determine the effectiveness of service delivery in both public and private universities. This explains that utilisation of internet services has a supportive aid to boosting the quality of educational services. A staff in educational institution exposed to internet services can employ it to access quality information from the web, and to deliver more reliable information to students, fellow staff, and the world at large. However, the extent to which internet service enhances quality of educational services depends on the user.

The work of Ntui Inyang (2015) was supported by results in public universities. This equally explains that the effect of utilisation of ICT gadgets on service delivery is influenced by manpower development and effectiveness of application of the ICT

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appliances. Therefore there is need for the teachers and the students to familiarize themselves with PPT tools to enhance effective teaching and learning.

From the findings of objective three to the study, staff use of PowerPoint significantly determines the effectiveness of service delivery in both public and private universities.

The works of Omenyi, Agu and Odimegwu (2007) and Balanskat, Blamire and kefala (2006) supported the findings of this current study. Their findings revealed that the use of ICT by university staff helped them to increase their job efficiency, reduce their workload and provide effective educational delivery to students.

The findings showed that ICT utilisation significantly impacted on effective service delivery in public and private universities with the higher impact change on public universities respectively. This means that public universities in Anambra State have derived more quality service delivery from ICT utilisation than the private universities. The cruise in the findings were that application of ICT, will not only enhance Information Age, it will also bring about staff job effectiveness and enhance administrative services.

Conclusion

Based on the findings and discussions so far, the study concluded that ICT technologies must be effectively utilised and at high extent to brings about effective service delivery to the educational institutions and the public in general. Utilisation of ICT tools will foster effective service delivery to the student and lessen work loads of teaching and non- teaching staff .The adoption of ICT technologies such as internet, PowerPoint etc are vehicles to effective service delivery in service industry in general and educational

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institutions in particular also make their services more efficient and lesser time consumption in delivery of services.

Recommendations

Base on the findings of the study, the following recommendations were made: Managements of higher institutions of learning should embrace and introduce consistent in the use of ICT tools such as internet, PowerPoint etc, in every activities in their educational institutions both teaching and non- teaching staff are included.

- Despite the recent adoption of online services such as internet by most Nigerian universities, full computerisation can be achieved so that effective service delivery can be delivered both to the students and the general public through distant learning, online access to institutions and interactive interfaces. This would have huge administrative and educational impact on the Nigerian society.
- The government should enhance the adoption of ICT by educational institutions by allocating funds and goodwill towards the development and maintenance of ICT system applications.
- The management of higher institutions in Nigeria should organise and train their staff to acquire skills on how to use the in PowerPoint and projectors software in order to offer efficient services.
- The government should sponsor full provision of ICT facilities and equipment in the tertiary institutions in Nigeria. This can be achieved through the TETFund programmes and would enable institutions to gain world class view and improve the Nigerian society.

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REFERENCES

Abosede, S. C. & Akintola, O. A. (2015). Information and communication technology facilities' utilization and job performance of secretaries in public and private universities. *International Journal of Managerial Studies and Research,* 3(3), 44-52.

Achimugu, P., Oluwagbemi, O., & Oluwaranti, A. (2010). An evaluation of the impact of ICT diffusion in Nigeria's higher educational institutions. *Journal of information technology impact, 10*(1), 25-34.

Ajegbelen, A.J. (2016). The use of ICT to enhance university education in Nigeria. *International Journal of Education, Learning and Development, 4*(5), 1-11.

Akpan, CP. (2014), Journal of Humanities and Social Sciences, 2014-pdfs. Semanticescholar.org.

Alsied, S.M. & Pathan, M.M. (2015). The use of computer technology in EFL classroom: Advantages and implications. *International Journal of English Language and Translation Studies, 1*(1), 12-19.

Aniebiet Inyang Ntui. "Utilization of Information and Communication Technology (ICT) Resources and Job Effectiveness among Library Staff in the University of Calabar and Cross River University of Technology, Nigeria" *Journal of Education and Practice* Vol. 6 Iss. 6 (2015) Available at: http://works.bepress.com/aniebiet_ntui/4/

Balanskat, A., Blamire, R. & Kefala, S. (2006). The ICT Impact Report. [Online] Available: www.insight.eun.org. (June, 2013).

Cordella, A., & Tempini, N. (2015). E-government and organizational change: Reappraising the role of ICT and bureaucracy in public service delivery. *Government Information Quarterly,* 12-19.

Egessa, M.E., & Musau, F. (2016). E-service & devolution: Usage of ICT applications on customer service delivery in Machakos county government, Kenya. *International Journal of Management Research & Review, 6(4),* 451-461

GSJ© 2021
www.globalscientificjournal.com

Enyedy, N. (2014). *Personalized instruction: New interest, old rhetoric, limited results, and the need for a new direction for computer-mediated learning.* Boulder, CO: National Education Policy Center..

Essays UK. (2013, November). Types of ICT Tools in Education Essay. Retrieved from Uni Assignment: https://www.uniassignment.com/essay-samples/education/types-of-icttools-education-essay.php?vref=1

Francis, M., & Glenn, W. (2014). The University of London, 1858-1900: The politics of senate and convocation. *Boydell Press*, 7–8.

Hendriks, P.H.J. (2011), Many rivers to cross: from ICT to knowledge management systems, Journal of Information Technology, 16, 57-72.

Hilbert, M. (2016). The bad news is that the digital access divide is here to stay: Domestically installed bandwidths among 172 countries for 1986–2014. *Telecommunications Policy, 40(6),* 567–581.

John, S. P. (2015). The integration of information technology in higher education: a study of faculty's attitude towards IT adoption in the teaching process. *Contaduríay' Administration*, *60*(51), 230-252.Kiener, R. (2013). Future of public universities. *CQ Researcher*, 23(3), 53–80

Kiener, R. (2013). Future of Public Universities. *CQ Researcher*, 23(3), 53–80.

Kolawole, C. O. & Issa, A.O (2015).The Role of Lecturers in the Provision/Maintenance of Quality Assurance in Higher Education. Being a Paper Presented at 2015 Academic Retreat on Promoting Quality Assurance Practices in Higher Education. Kwara State University, Malete, Ilorin

Kotler, P. (2015). *Marketing management book*- https://prezi.com

Lupu, D., & Laurenţiu, A. R. (2015).Using New Communication and Information Technologies in Preschool Education. *Procedia-Social and Behavioural Sciences, 187*, 206-210.

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Mathew, M. E., & Felix, M. (2016). E-services and devolution: usage of ICT application on customer service delivery in Machakos county government Kenya. *International Journal of Management Research & Review, 6(4),* 451-461.

Mathur, P. (2017). *Technological forms and ecological communication: A theoretical heuristic.* New York: Lanham Boulder.

Mondal, A., & Mete, J. (2012). ICT in higher education: opportunities and challenges. *Institutions, 21*(60), 4-11.

Ogunjobi, T. E., & Fagbami, O. O. (2012). Use of the internet by researchers in agricultural research institutes in Ibadan, Oyo State. International Journal of Library and Information Science, 4(4), 52-56. doi:10.5897/IJLIS11.068.

Ogwo, BA (2015). Modern Instructional Techniques and Their Applications In Technical/Vocational Education (TVE) Programmes of Polytechnics and Monotechnics. A Commissioned Paper Presented at the Capacity Building Workshop for Lecturers in Nigeria. Organised by ETF held at Abiokuta, on August 24, 2005, Akwa, and Ikot Osurua on September 21, 2005 and Auchi, on November 2, 2005

Ohiwerei, F. O., Azih, N., & Okoli, B. (2013).Problems militating against utilization of ICT in teaching of business education in Nigerian universities. *European International Journal of Science and Technology, 2(7),* 40-48.

Omenyi, A. Agu, N. N. & Odimegwu, C. O. (2007). Increasing Teacher Efficiency through ICT usage in Tertiary Education. Nigerian Journal of Educational Administration and Planning (NAEAP). 7 (2), 107-119.

Onifade, A. (2010). The Indispensable Secretary, Mooshood Abiola polytechnic Abeokuta, Ogun State South- Western Nigeria. Journal of Social Science,22(1),47-51.

Onobrakpeya, A.S., Nana, O.G., & Odu, P.E. (2018).Improving service delivery through information and communication technology in the Nigerian

manufacturing industry. *Journal of Management Services and Technology, 5(2),* 61-84.

Onwubiko, C. P. C. (2012). Impact of the Internet on research effort of academics at Abia state University,Uturu,(ABSU).Library Philosophy and Practice, 1-18, Retrieved from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2112&context=libphilprac

Rodriquez, C.D., Strnadova, I. & Cumming, T. (2013). Using iPads with students with disabilities: Lessons learned from students, teachers, and parents. *Intervention in School and Clinic, 49*(4), 17-19.

Stantchev, V., Colomo-Palacios, R., Soto-Acosta, P., & Misra, S. (2014). Learning management systems and cloud file hosting services: A study on students' acceptance. *Computers in Human Behaviour, 31*, 612-619.

Yusuf (2013). Appraising the role of information communication technology (ICT) as a change agent for higher education in Nigeria. *International Journal of Educational Administration and Policy Studies*

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