Sapientia Global Journal of Arts, Humanities and Development Studies (SGOJAHDS), Vol.8 No.4 December, 2025; p.g. 89 – 101; ISSN: 2695-2319 (Print); ISSN: 2695-2327 (Online)

EXAMINIG THE EFFECT OF INFORMATION COMMUNICATION TECHNOLOGY ON STUDENTS' ADMINISTRATION IN NNAMDI AZIKIWE UNIVERSITY AWKA, ANAMBRA STATE 2015 – 2024

MBAMALU KINGSLEY UCHENNA (Ph.D)
Department of Public Administration
Faculty of Management Sciences
Nnamdi Azikiwe University Awka
Anambra State, Nigeria
Mobile: +2348034035978, +2347058155028
E-mail:- ku.mbamalu@unizik.edu.ng

EGWU OTU SYLVESTER (Ph.D)
Department of Public Administration
Faculty of Management Sciences
Nnamdi Azikiwe University Awka
Anambra State, Nigeria
Mobile: +2348034023770
E-mail:- egwuotusylvester@gmail.com
&
PATRICK HAPPINESS CHIKA
Department of Public Administration
Faculty of Management Sciences
Nnamdi Azikiwe University Awka
Anambra State, Nigeria
Phone no: 08037408083
E-mail: h.patrick@stu.unizik.edu.ng

Abstract

This study examined the effect of Information Communications Technology (ICT) on student administration in Nnamdi Azikiwe University (NAU) Awka. The specific objectives of the study were to: ascertain the extent to which ICT affects the process of student course registration in Nnamdi Azikiwe University (NAU) Awka, and examine the extent to which ICT affects the fee Payment process for students in Nnamdi Azikiwe University (NAU) Awka,. In line with the specific objectives, two research questions and hypotheses guided the research. The research was anchored on Technology Acceptance Model (TAM) proposed by Fred Davis in 1986. A descriptive survey research design was adopted for the study. The population of the study was 28,812 students of NAU Awka. The sample size of 395 respondents was determined using Taro Yamane's (1964) statistical formula. Data for the study were collected through structured questionnaire. The collected data were analyzed using the percentages and mean statistical tools, the hypotheses were tested using Chi-square. The findings revealed that ICT significantly and positively affects the process of students' course registration in Nnamdi Azikiwe University (NAU) Awka; and ICT significantly and positively affects fee payment process for students in Nnamdi Azikiwe University (NAU) Awka. Based on the findings, the study recommends that: the university should continually upgrade its course registration application to ensure

it remains user-friendly and efficient; and NAU should invest in upgrading its ICT infrastructure to support more robust and efficient systems for student administration.

Keywords: Information and Communication Technology (ICT), Student Administration, Course Registration, Fee Payment.

INTRODUCTION

Student administration is one of the most demanding responsibilities, as it requires effective management across all administrative areas. It is a crucial component of university administration. This encompasses a range of activities, from the admissions process to educational activities, and includes the processing of results and performance evaluations. These services aim to ensure that students are well-informed about their learning processes and other activities they need to engage in during their time at the institution.

The 21st century has brought about significant changes and progress in the administrative systems of Nigerian universities. The integration of Information and Communication Technology (ICT) into various aspects of life has prompted a transformation in the procedures and methods we use to manage our daily activities, enhancing efficiency and effectiveness in both organizational and national management. ICTs have become essential for supporting the operations of educational institutions and facilitating the entire academic lifecycle. According to Mensah and Ofori (2021) the rapid advancement of Information and Communication Technology (ICT) has profoundly influenced various sectors, notably education. In higher education, universities have increasingly integrated ICT to enhance administrative functions, particularly in managing student affairs. Student administration encompasses a wide range of activities including admissions, registration, record keeping, communication, and examination management, all of which are vital to the smooth and efficient operation of academic institutions (Nwankwo & Eze, 2019).

Historically, student administration in universities was dominated by manual processes that were often time-consuming, prone to human error, and inefficient (Adeyemi & Azeez, 2018). These traditional methods limited the ability of institutions to manage growing student populations and respond swiftly to administrative demands. The integration of ICT tools—such as Student Information Systems (SIS), online registration portals, and electronic communication platforms—has revolutionized these processes. These technologies enable universities to manage large volumes of student data more effectively, streamline workflows, and deliver timely services to students and staff alike (Kumar & Kumar, 2019). ICT facilitates efficient storing and retrieval of data, instantaneous transmission of information, processing information and data faster than the earlier manual systems, speeding up governmental processes, taking decisions expeditiously and judiciously, increasing transparency and enforcing accountability. It also helps in increasing the reach of government both geographically and demographically (Kolhe, 2016). Thus, the information and communication technology has brought a sweeping change that has eliminated the geographical barriers between nations and also improved global interconnections of countries as if countries were living next door.

The need for adopting ICT in government, came as an awareness that no country or its government can function properly in the information or digital age without the use of the web

and other mobile internet technologies. Seeing the importance of ICT, the Nigerian Federal Government deemed it necessary for the country to have a national policy on ICT. According to Olatokun and Adebayo as cited in Nchuchuwe and Ojo (2015), the Federal Government of Nigeria, in 2001, announced ICT as a policy of national importance. This further culminated in the creation of the Nigerian Information Technology Policy in the same year. National Information Technology Development Agency (NITDA) was thus created in April, 2001 to implement the Nigerian Information Technology Policy and co-ordinate general IT development in the country. In 2007, the enabling Act - the National Information Technology Development Act - was enacted by the National Assembly and this act mandated NITDA to create a framework for the planning, research development, standardization, application, coordination, monitoring, evaluation and regulation of Information Technology practices, activities and systems in Nigeria (NITDA, 2017).

The goal of the Framework and Guidelines for ICT adoption in Nigerian tertiary institutions is to provide a flexible and comprehensive general framework for the deployment of ICT tools in Nigerian tertiary institutions for the effective and efficient support of the core business processes of teaching, learning, research and administration. (NITDA, 2019). Technological revolution is what is changing our institutions of higher learning at a high speedy rate. The National Universities Commission (NUC) has brought changes into the administration of higher institutions that will enable Nigerian Universities to compete with others across the globe. In compliance with the directives, majority of the Nigerian Universities including Nnamdi Azikiwe University deployed the student's administrative software that would enable students carry out their registration processes, payment of fees, checking of academic results among others through the electronic media (ICT) (Aimufua & Fatokun, 2017). The electronic internet according to Faiku, Awoleye, and Oyebisi (2020) has emerged as a valuable resource for information and a means of communication, allowing students, staff, and researchers to access a wide range of pertinent data and information.

Despite the implementation of ICT in student administration such as online or electronic payment system, electronic course registration, and online checking of academic results in the university, some students continue to have problems with it. Some students still need to physically visit the University to complete their payment and registration processes, which was not planned. Student do complain of slow transaction, slow sever network, that is, poor internet connectivity, lack of accessibility to the school portal particularly during the school hours. In this circumstances, services delivery is likely to be undermined in the institution particularly during student course registration, payment of fees and checking of results due to the poor internet services. It is against this backdrop that the present study is carried out to examine ICT and students administration in Nnamdi Azikiwe University, Awka.

Objectives of the Study

The broad objective of the study is to examine the effect of Information Communications Technology (ICT) on student administration in Nnamdi Azikiwe University (NAU) Awka. The specific objectives are to;

1. Ascertain the extent to which ICT affects the process of student course registration in Nnamdi Azikiwe University (NAU) Awka.
2. Examine the extent to which ICT affects the fee Payment process for students in Nnamdi Azikiwe University (NAU) Awka

Research Questions

1. To what extent does ICT affects the process of students' course registration in Nnamdi Azikiwe University (NAU) Awka?
2. To what extent does ICT affects fee Payment process for students in Nnamdi Azikiwe University (NAU) Awka?

Research Hypotheses

1. ICT does not significantly affects the process of students' course registration in Nnamdi Azikiwe University (NAU) Awka
2. ICT does not significantly affects fee payment process for students in Nnamdi Azikiwe University (NAU) Awka

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Information and Communication Technology (ICT)

Information and Communication Technology (ICT) encompasses a wide array of technologies used for managing and processing information and facilitating communication. According to Turban et al. (2020), ICT includes hardware such as computers and mobile devices, software applications, networks, and telecommunications systems that enable the capture, storage, retrieval, transmission, and manipulation of data in digital form. Ewuim, Igbokwe-Ibeto and Nkomah (2016) conceive it as encompassing a lot of activities involving the acquisition, storage, processing and dissemination of information through the use of appropriate software and hardware designed facilities for that purpose. Laudon and Laudon (2021) similarly characterize ICT as the amalgamation of telecommunications (lines and wireless signals), computers (hardware and software), and enterprise software, middleware, storage, and audiovisual systems that are essential for users to retrieve, store, transfer, and modify information (Laudon & Laudon, 2021). Stallings and Case (2021) expand on this definition, emphasizing ICT's role in not only processing and transmitting data but also in enabling remote access to information and supporting collaborative work environments (Stallings & Case, 2021). Kalakota and Whinston (2016) state that Information and Communication Technology (ICT) includes networks, media, hardware, and software used for information gathering, processing, storing, sending, and presenting.

In the words of Rouse (2015) cited in Mavellas, Wellington and Samuel (2016), ICTs is an umbrella term that cover communication devices or applications that include computers, televisions, radios, networks, satellites, video conferencing and e-Learning. Similarly, Mohammed (2017) viewed ICT as the computer- based and other allied automated information and communication system and devices employed to acquire, generate process, store and transmit data. He further stated that ICTS generically considered as technologies used for collecting, storing, editing and passing on or communicating information in different forms within an environment, between and among the environment. In the opinion of Saba, Ladan and Augustine (2017), information and communication technology can be viewed as technologies that are used in creating, accumulating storing, preserving editing and disseminating of information in various forms of format. In other word, ICT is the convergence of communication, media and technologies that are commonly based on digital technologies.

According to Bocij et al. (2020), ICT encompasses any electronic means of capturing, processing, storing, and communicating information, including both traditional technologies such as telephones and fax machines, and modern digital technologies such as computers, smartphones, and the internet (Bocij et al., 2020). For Beynon-Davies (2020), ICT refers to the diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information (Beynon-Davies, 2020). This definition underscores ICT's pivotal role in enabling digital transformation across various sectors of society. Thompson (2023), affirmed that ICT creates robust networks that not only enhance the speed and efficiency of data transfer but also facilitate dynamic, interactive environments in various fields. In educational contexts, for example, ICT is instrumental in transforming teaching and learning processes by providing platforms for virtual classrooms, interactive simulations, and collaborative projects, thereby enabling a more engaging and personalized learning experience (Garcia, & Williams, 2022).

Student Registration (E- registration)

E-registration emerged because of the problems associated with manual handling of registration and student records. Such problems included mismanagement of students‟ academic records, mismanagement of courses registered for, among others (Olasina, 2011 cited in Odero and Oloko, 2013). Ukpai and Emuji (2016) stated that online registration has found its way into the Nigerian education system about a decade ago, from early 2003. Before this time, registration of students and candidates for examinations were done manually involving the filling of several forms. Today, almost all the educational institutions have moved into digital era, of menu-driven ultra-robust specialized online registration applications.

According Idris et al (2016), the major objective of e-registration is to provide anywhere anytime opportunity for students to make their registrations and to provide platform for administrators to manage the on-going registration process. They further stated that, E-registration system can be developed in various ways depending on the requirement of a particular institution. To them, some higher institutions are limited to only student's online registration while others integrate e-learning system where all academic programs are delivered electronically as well as administrative activities.

Online Payment

According to Slozko and Pello, (2015) cited in Mukonde, (2018) online - payment systems are important mechanisms used by individual and organizations as a secured and convenient way of making payments over the internet and at the same time a gateway to technological advancement in the field of world economy. In addition, it has also become the major facilitating engine in ecommerce through which electronic business success relies upon. Electronic payment system has also brought about efficiency, fraud reduction and innovativeness in the world payment system. Online payment system has increasingly becoming a daring means of payments in today's business world. This is due to its efficiency, convenience and timeliness. It is a payment system that is continuously being embraced and adopted in the financial system of both developed and developing countries with a view to simplify and ease payments in business transactions. As a result, many studies were conducted around the globe by scholars on online-payment adoption (Mukonde, 2018).

Online payment systems, also known as electronic payment systems, are inter organisational information systems (IOS) for financial transactions that link various organisations and individual users (Burhan et al., 2017). E-payment systems affect modern electronic business, according to Thabet et al. (2022). This breakthrough pushed businesses to switch from paper-based transactions to e- payment systems. According to Etale and Pouzigha (2020), e-payment is the means of effecting payments from one end to another and through the medium of the computer without manual intervention beyond inputting the payment data.

Electronic payment methods, such as online transactions, mobile payments, and digital wallets, have streamlined financial transactions within the student administration domain. One notable effect is the enhanced efficiency in fee payments and tuition transactions. Electronic payment systems eliminate the need for manual handling of cash or paper checks, reducing administrative workload and minimizing errors associated with traditional payment methods (Smith, 2019). This streamlining of financial processes translates into time and cost savings for both students and administrative staff.

Student Administration

Student administration encompasses the management of student-related information and processes within an educational institution. This includes tasks such as the admission process, library services, course registration, updating of bio-data, issuance of student identification cards, accommodation arrangements, and maintenance of student transcripts, overseeing examination processes, and addressing other social welfare needs of students (Chibuzor, 2023). Al- Khazali (2021) emphasizes the pivotal role of student administration systems in enhancing the efficiency and effectiveness of educational institutions.

Student administration is an important and integral part of information administration. As rightly observed by Pohekar (2018), Student administration involves various activities starting from the admission process to learning activities to the processing of results and performance analysis. Important aspects include the automation of admission process through e-media including dealing with initial student enquiries, applying for admissions through electronic media, registration, electronic enrolment, course allocating, and information about timetable and attendance monitoring. They further stated that student administration includes the various communications relating to transport, hostel accommodation and other communication to guardians /parents. The integration also helps in the geographical boundaries for student intake, thus facilitating cross-border higher education.

Theoretical Framework

This study is anchored on Technology Acceptance Model (TAM). The Technology Acceptance Model (TAM) was first proposed by Fred Davis in 1986 to explain the adoption and usage of new information technologies. The model posits that perceived usefulness (PU) and perceived ease of use (PEOU) are the two primary factors that influence an individual's intention to use a technology, which in turn influences their actual usage behavior (Davis, 1989). The former is the extent to which a person believes that using a particular system would enhance their job performance or effectiveness while the latter is the degree to which a person believes that using a particular system would be free from effort. The TAM has been widely used and validated across a range of contexts and technologies, including in educational settings (Teo, 2015). According to TAM, ease of use and perceived usefulness are the most important

determinants of actual system use. The Technology Acceptance Model (TAM) is highly relevant to studies focusing on Information Communication Technology (ICT) and students' administration in universities. This model provides a framework for understanding how users come to accept and use technology, making it particularly applicable in educational settings where ICT plays a critical role in administrative functions.

METHODOLOGY

Descriptive survey design was employed for this study. This method is primarily concerned with the collection of data for the purpose of describing and interpreting existing conditions and prevailing practices using a representative sample for the population (Emaikwu, 2015). This study sought to explain how the Information Communication Technology relates to student administration in Nnamdi Azikiwe University, Awka. The population of the study comprised the undergraduate students in Nnandi Azikiwe University, Awka. According to the data gathered from Academic Planning unit of the institution, the population of students was 28,812. Taro Yamane (1964) was used to obtain the sample size of 395. The sources of data for the study were mainly from the primary and secondary sources. The primary sources included data generated through the questionnaires instrument. The questionnaire consisted of two sections; Part A; demographic data of the respondents such as; gender and age bracket of the respondents; while the part B consists of the core research questions. A structured 5 Likert-scale questionnaire was designed based on; Strongly Agree (SA) 5points, Agree (A) 4points, Undecided (U) 3points, Disagreed (D) 2points and Strongly Disagree (SD) 1point. The questionnaire was designed to elicit information for the study. The secondary sources included data gathered from scholarly publications, academic journals, government publications, and unlimited publications in the internet used for the review of related literature.

The data generated from the field were presented and analyzed using tables, frequencies, simple percentages and mean statistical tool, the hypotheses were tested using Chi-square statistical tool. A total of 395 copies of questionnaire were distributed to the respondents out of which 364 copies were correctly completed by the respondents and found usable for the study. This gives a response rate of 92%. Therefore, the analyses presented below were based on the three hundred and twenty-two (364) copies.

RESULTS AND DISCUSSION

Table 1: Respondents' Views on the ICT and Student Course Registration

S/N	Statement	Scale	Frequency (%)	$\sum Fx$	Mean (x)	Remark
1	The ICT systems used for course registration at NAU make the process easily accessible for students.	SA A U D SD	180 (49.4%) 134 (36.8) 30 (8.2) 10 (5.5) 10 (5.5)	1556	4.27	Agreed
2	The implementation of ICT in course registration significantly reduces the time required for	SA A U D SD	150 (41.2) 160 (44) 25 (6.9) 15 (4.1) 14 (3.8)	1509	4.14	Agreed

	completing the registration process.					
3	**Students find the course registration process at NAU to be cumbersome regardless of the ICT tools provided.**	SA A U D SD	20 (5.5) 20 (5.5) 20 (5.5) 164 (45) 140 (38.5)	708	1.94	Disagreed
4	The integration of ICT into the course registration process enhances students overall satisfaction with the registration experience at NAU.	SA A U D SD	145 (39.8) 145 (39.8) 24 (6.6) 25 (6.9) 25 (6.9)	1356	3.98	Agreed

Source: Field Survey, 2025

The table shows the analysis of student responses regarding the use of ICT systems for course registration at NAU. On the statement that the ICT systems make the registration process easily accessible, 180 respondents (49.4%) strongly agreed and 134 respondents (36.8%) agreed, 8.2% of the respondents were undecided, and 11% (5.5% disagreed and 5.5% strongly disagreed). The mean score of 4.27 indicates strong agreement.

For the effectiveness of ICT in reducing the time required for registration, 150 respondents (41.2%) strongly agreed, while 160 respondents (44%) agreed, 6.9% were undecided, and 7.9% (4.1% disagreed and 3.8% strongly disagreed). This statement received a mean score of 4.14, suggesting considerable agreement.

Students also disagreed that the course registration process at NAU is cumbersome regardless of the ICT tools provided, with 164 respondents (45%) strongly disagreeing and 140 respondents (38.5%) disagreeing, 5.5% of the respondents, were undecided, and 11% (5.5% agreed and 5.5% strongly agreed). The mean score of 1.94 reflects strong disagreement regarding cumbersome of the ICT tools provided course registration process in NAU. Lastly, regarding overall satisfaction with the registration experience due to ICT integration, 145 respondents (39.8%) strongly agreed and 145 respondents (39.8%) agreed, 6.6% were undecided, and 13.8% (6.9% disagreed and 6.9% strongly disagreed) indicated a lack of satisfaction. This statement received a mean score of 3.98 indicating agreement.

Table 2: Respondents' Views on the ICT and the Fee Payment Process

S/N	Statement	Scale	Frequency (%)	$\sum Fx$	Mean (x)	Remark
5	The application of ICT for fee payment at NAU offer multiple convenient options for students to complete their payments	SA A U D SD	155 (42.6%) 155 (42.6) 34 (9.3) 10 (2.7) 10 (2.7)	1527	4.19	Agreed
6	Using ICT for fee payment at NAU significantly speeds up the transaction process, allowing students to pay fees quickly	SA A U D SD	174 (41.2) 160 (44) 20 (6.9) 0 10 (2.7)	1580	4.34	Agreed
7	**Students experience frequent issues during the fee payment process due to a lack of effective ICT systems at NAU.**	SA A U D SD	10 (2.7) 15 (4.1) 15 (4.1) 160 (44) 164 (45)	639	1.75	Disagreed
8	The ICT systems at NAU provide easy access to payment receipts and transaction records after making fee payments	SA A U D SD	140 (38.5) 150 (41.2) 34 (9.3) 20 (5.5) 20 (5.5)	1462	4.04	Agreed

Source: Field Survey, 2025

Table 2 displayed the analysis of students' responses regarding the application of ICT for the fee payment process at NAU. For the statement regarding the convenience of ICT in offering multiple payment options, 155 respondents (42.6%) strongly agreed, and another 155 respondents (42.6%) agreed. 34 (9.3%) respondents were undecided, while 20 (5.4%) respondents expressed disagreement. The calculated mean score is 4.19, indicating a general agreement. In relation to the speed of the transaction process enabled by ICT, 174 respondents (41.2%) strongly agreed, while 160 respondents (44%) agreed. Only 20 respondents (6.9%) were undecided, and 10 respondents (2.7%) disagreed. The mean score for this statement is 4.34, suggesting strong agreement that ICT significantly speeds up payment transactions.

On the issue of lack of effective ICT systems, 160 respondents (44%) strongly disagreed and 164 respondents (45%) disagreed that students experience frequent issues during the fee payment process due to a lack of effective ICT systems in NAU. A total of 15 (4.1%) respondents were undecided, and 25 (6.8%) respondents agreed. The mean score was 1.75, reflecting disagreement in the perceived frequent issues during the fee payment process due to a lack of effective ICT systems in NAU. Lastly, concerning the ease of access to payment receipts and transaction records, 140 (38.5%) respondents strongly agreed, while 150 (41.2%) respondents' agreed. 34 (9.3%) respondents were undecided, and 40 (11%) respondents disagreed. This statement received a mean score of 4.04, suggesting overall agreement on access to receipts.

Test of Hypotheses

This section test the hypotheses stated to guide this study using the inferential statistics of Chi-square. The formula for Chi-square is shown below.

Chi-square = $\chi^2 = \Sigma \frac{(O-E)^2}{E}$

Where:

$\sum$ = Summation notation

χ^2 = Chi Square distribution

O = Observed frequency

E = Expected frequency

Level of Significance adopted or chosen = 5% (0.05)

Degree of freedom = (R-1) (C-1)

Decision rule:

Reject null hypothesis (H^o) if the calculated chi-square (χ^2) statistic is greater than the critical value from the chi-square (χ^2) distribution table at 5% level of significance and degrees of freedom. And accept null hypothesis (H^o) if the calculated chi-square statistic is less than or equal to the critical value, and reject alternate hypothesis ((H^1).

Test of Hypothesis One

H^o: ICT does not significantly affects the process of students' course registration in Nnamdi Azikiwe University (NAU) Awka.

Table 3 Calculation of Chi Square value for Hypothesis One

Fo	Fe	(Fo – Fe	$(Fo - Fe)^2$	**$\frac{(Fo-Fe)2}{Fe}$**
20	83	-63	3969	47.8
20	83	-63	3969	47.8
20	22	-2	4	0.1
164	95	69	4761	50.1
140	82	58	3364	41
145	83	62	3844	46.3
145	83	62	3844	46.3
24	22	2	4	0.1
25	95	-70	4900	51.5
25	82	-57	3249	39.6
Total				**370.5**

Source: Field Data, 2025

Chi-square (χ^2) cal. =370.5

Degree of freedom

DF = (r -1) (c-1)

Where

r = number of rows

c = number of columns

DF = (2 -1) (5 -1)

=1 x 4 = 4

Therefore 5% level of significance at 4 degree of freedom = 9.488.
From the Chi- Square (χ^2) table, Table Value at 5% significance and 4 degree of freedom is 9.488. calculated value χ^2cal (370.5) is greater than the table value χ^2 tab (9.488) We therefore reject null hypothesis and conclude that ICT significantly and positively affects the process of students' course registration in Nnamdi Azikiwe University (NAU) Awka

Test of Hypothesis Two
H^o: ICT does not significantly affects fee payment process for students in Nnamdi Azikiwe University (NAU) Awka.
Table 4 Calculation of Chi Square value for Hypothesis Two

Fo	Fe	(Fo – Fe	$(Fo – Fe)^2$	**$\frac{(Fo – Fe)2}{Fe}$**
174	92	82	6724	73
160	88	72	5184	58.9
20	18	2	4	0.2
0	80	0	0	0
10	87	-77	5929	68.1
10	92	-82	6724	73
15	88	-73	5329	60.5
15	18	3	9	0.5
160	80	80	6400	80
165	87	78	6084	69.9
Total				**484.1**

Source: Field Data, 2025

Chi-square (χ^2) cal. =484.1
Degree of freedom
DF = (r -1) (c-1)
Where
r = number of rows
c = number of columns
DF = (2 -1) (5 -1)
=1 x 4 = 4
Therefore 5% level of significance at 4 degree of freedom = 9.488.
From the Chi- Square (χ^2) table, Table Value at 5% significance and 4 degree of freedom is 9.488. calculated value χ^2cal (484.1) is greater than the table value χ^2 tab (9.488) We therefore reject null hypothesis and conclude that ICT significantly and positively affects fee payment process for students in Nnamdi Azikiwe University (NAU) Awka.

FINDINGS AND DISCUSSION

The findings from the research conducted to examine the effect of Information Communications Technology (ICT) on student administration in Nnamdi Azikiwe University (NAU) Awka demonstrate that Information and Communication Technology (ICT) significantly enhances student administration. The Chi-Square test revealed a calculated value of χ^2 (370.5), which is substantially higher than the critical value of χ^2 (9.488) at a 5% significance level and 4 degrees of freedom. This shows that ICT positively affect the course

registration process for students at NAU. The finding is in agreement with the findings of Usman (2019) who established that ICT has a significant impact on school records management, student's academic performance, teacher's job performance and instructional supervision which are amongst the key components and essential parameters of measuring the achievement of tertiary institutions in Nasarawa state.

The findings from test of hypothesis two also revealed that that ICT significantly and positively affects fee payment process for students in Nnamdi Azikiwe University (NAU) Awka (χ^2cal (484.1) > χ^2 tab (9.488). The finding is in line with the research findings of Tella, and Abdulmumin (2015) who reported that there is significant correlation among the entire e-payment characteristics/factors (perceived speed, security, anonymity traceability, and perceived ease of payment.

Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance the effectiveness and benefits of Information Communications Technology (ICT) in student administration at Nnamdi Azikiwe University (NAU) Awka:

1. The university should continually upgrade its course registration application to ensure it remains user-friendly and efficient.
2. NAU should invest in upgrading its ICT infrastructure to support more robust and efficient systems for student administration. This includes ensuring reliable internet access across campus and improving server capacities to handle high volumes of traffic during peak registration and payment periods.

REFERENCES

Adeyemi, T., & Azeez, O. (2018). Challenges of ICT adoption in university administration: A case study of Nigerian universities. *Journal of Educational Technology & Society, 21(3), 45-56*.

Beynon-Davies, P. (2020). Business information systems. Palgrave.

Bocij, P., Greasley, A., & Hickie, S. (2020). Business information systems: Technology, Development and Management for the E-Business. Pearson.

Burhan, U. K., Rashidah, F. O., Asifa, M. B., Adil, A. L., & Shahul, A. (2017). A compendious study of online payment systems: Past developments, present impact, and future considerations. *International Journal of Advanced Computer Science and Applications, 8(5), 271-256*. https://thesai.org/Downloads/Volume8No5/Paper_32-A_Compendious_Study_of_Online_Payment_Systems.pdf

Chibuzor, O.J. (2019). Effect of information and communication technology in Ahmadu Bello University Zaria. Being a Dissertation presented in the Department of Public Administration Ahmadu Bello University Zaria.

Etale, L. M. & Pouzigha, Y.A. (2020). Effect of electronic payment systems on payroll fraud prevention in selected Ministries in Bayelsa State Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Sciences 10, (3), Pp. 38–51*

Ewuim, N.C., Igbokwe-Ibeto, C.J., & Nkomah, B.B. (2016). Information and communication technology and public service delivery in Amuno-Odofin Local Government Council of Lagos State-Nigeria. *Singaporean Journal of Business Economics and Management Studies*, 5(1), 13-25.

Garcia, M., & Williams, K. (2022). Enhancing teaching and learning in business courses through ICT: A systematic review. *Journal of Interactive Learning Research, 33*(4), 345–364.

Idris, B, Yau, L, Jelani, A.S & Falalu, Z.A. (2016). Perception of administrators on the adoption of e-registration system in selected tertiary institution in North-West, Nigeria. *Global Conference of Information Technology and Multimedia*.

Kalakota, R., & Whinston, A. B. (2016). Frontiers of electronic commerce. Pearson.

Kayode & Odogbo, B. O. (2022). The use of information and communication technology (ICT) and its implications on academic excellence in Federal University Wukari, Taraba State. *Journal of Emerging Technologies (JET), 2 (2)*

Laudon, K. C., & Laudon, J. P. (2021). Management information systems: Managing the digital firm. Pearson.

Mensah, J., & Ofori, K. (2021). ICT adoption in university administration: Enhancing student services in Ghanaian universities. *African Journal of Information Systems, 13(2), 112-127*.

Mohammed, Z. (2017). *Towards exploiting the dynamics of information to cope with the present and catch up with the future.* An Inaugural Lecture presented at The Assembly Hall, Ahmadu Bello University, Zaria, 18th October, 2017.

Mukonde, M (2018). Effectiveness of the student's electronic payment system: A case study of the University of Zambia. A master's dissertation submitted to the University of Zambia in collaboration with Zimbabwe Open University

Nwankwo, C., & Eze, S. (2019). Student administration and the role of ICT in Nigerian universities. *International Journal of Educational Development, 65, 102-110.* https://doi.org/10.1016/j.ijedudev.2018.12.007

Pohekar, D (2018). Role of ICT on universities administrative services and management. *International Research Journal of Engineering and Technology (IRJET), 05*

Smith, A. (2019). The impact of electronic payment systems on financial transactions in higher education. *Journal of Educational Technology, 42(3), 158-175*.

Tella, A. & Olasina, G. (2015). Predicting user's continuance intention toward e-payment system: An extension of the technology acceptance model. International Journal of Information system and social change (IJISSC) 5(1), 47-67.

Thabet, A., Allam, H., Yousif, A., & Ali, B. (2022). Factors affecting e-payment acceptance by customers: an empirical study in the Kingdom of Bahrain. Competitiveness Review: *An International Business Journal*. https://doi.org/https://doi.org/10.1108/CR-09-2022-0133

Thompson, L. (2023). Emerging trends in ICT for business teaching: A forward-thinking approach. *International Journal of Educational Research, 27*(1), 56–78.

Ukpai, U. & Emuji, E.C. (2016). Current challenges and the needed competences in the management of university education in Nigeria. *A British Journal of Education, 4*(2), 74-86

Usman, Y. D (2019). The impact of information and communication technology (ICT) on tertiary institutions' administration in Nasarawa State, Nigeria. *The Impact of Information and Communication Technology (ICT) on Tertiary Institutions' Administration in Nasarawa State, Nigeria, 10 (1), 133- 142*