

The Impact of E-Administration on Service Delivery in Adekunle Ajasin University Akungba-Akoko, (AAUA) Ondo State, Nigeria

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ABSTRACT:

Information Communication Technology (ICT) has become a vital tool to drive socio-Economic development in all areas of human endeavor. In response to this global trend, tertiary institutions in Nigeria have adopted electronic administration (E-administration) in the management of their affairs. This study therefore examines electronic administration in Adekunle Ajasin University. A case study research was adopted with sampling size of three hundred and fifty (350) respondents. Frequency and simple percentage method was used to analyze and interpret the data while statistical package for the social science (SPSS) was used to test the hypotheses. The finding reveals that the adoption of e-administration has improved not only effectively, efficiency and accuracy in service delivery, but has saved cost and time despite the challenges of inadequate fund, epileptic power supply and internet hiccups. The study concludes that e-administration in AAUA has greatly impacted positively on the efficiency and effectiveness of services delivery. The study therefore recommends among others that, there is need for explicit full automation of all administrative process to meet global best practices.

Keywords: *University, Tertiary institution, Electronics, Efficiency, Effectiveness*

INTRODUCTION

Globally, there is rapid increase in technology leading to a revolution in information and communication technology (ICT). This poses new challenges and opportunities to both developed and developing nation educational system. The implementation of Information and Communication Technology (ICT) in developing countries such as Nigeria has exerted a great impact on the society and enhanced socio-economic and political

interactions that pave way for new forms of interactivity (Sharma, 2010). This interactivity serves as both social and technical channel that allows information dissemination amongst administrator and sharing between management and administrators.

E-Administration have revolutionized higher institution in various ways; such as, increasing access to post-secondary instruction, improving the availability of educational resources, and

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facilitating meaningful interaction amongst learners. Electronic Administration (E-Administration) has become a critical strategy amongst tertiary institutions in Nigeria that offer an affordable, efficient, and flexible learning environment for rapidly growing.

E-Administration is a basic shift from the traditional setting of administration to the Information, Communication and technological in the 21st century. The Information and Communication Technology (ICT) has ushered in a new dimension in the management of information. The need for educational administrator in Nigeria tertiary institutions to acquire electronic literacy skills cannot be ignored, every modern administrator ought to acquire knowledge and skill in information technology, and to use internet to browse to obtain or circulate information that will enhance organizational productivity and efficiency in their jurisdiction.

In addition, the administrators has to be knowledgeable with the various software packages available like the Microsoft word, Microsoft word excel, data base etc for the use of data processing or management of information technology in their respective field. Hence E-Administration enabled administrator in the running and management of university and more importantly changed induced in the way staff interact and participate in the administration of the university.

Statement of Problem

E-Administration has gained it course in Nigeria higher institution because of the mandate by the NUC that Universities should be assessed and ranked through the level of the functionality of its website, network structure and its associated academic portal. There are many challenges are confronting the model such as information intelligibility, database security, data interoperability, learning and adaptation through virtual platforms, adoption of expert systems and awareness creation for an e-institution. The challenges are indeed numerous and cover all domains of educational administration, such as course registration, accurate and updatable staff/students data profile, hand-out syndrome, financial records and control, staff research and development,

academic programs, Geographic Information systems and many other exogenous factors.

The high cost of administering tertiary institutions reinforces the need for an alternative management framework that reduces cost at the long run but optimizes the University's objective function. This scenario fits the e-concept. The National Universities Commission of Nigeria has over the years argued that for Universities to achieve their mandate they need efficient management of its internally generated resources and an open access to data and information needs of the community. It is foreseen that the introduction of e-Administration will act as a pathway in generating significant or even massive benefits for staff and Economic development in tertiary institutions. For example, the economic impact of establishing an Enterprise Portal which presents an electronic bundle of online resources which functions with increasing effectiveness in database creation and relevant data access is a point to remember. The expected benefit accruable from an efficient E-Administration and its impact on administrator will enhance prompt institution profitability. It is against the backdrops that this study is carry out E-Administration as a useful tool in meeting and planning for ICT integration into the university developmental goals.

Objectives of the Study

The broad objective of this study is to access the impact of E-Administration on service delivery in the Nigeria universities with particular reference to Adekunle Ajasin University, Akungba-Akoko, Ondo State. The specific objectives include;

- i. To examine the relationship between E-Administration and quality services delivery in Adekunle Ajasin University.
- ii. To explore the effect of e- administration on service culture in Adekunle Ajasin University

Research Questions

- i. Is there any significant relationship between e- administration and service delivery at Adekunle Ajasin University?
- ii. Deos e-adminsration have any significant effect on service culture in Adekunle Ajasin University?

Research Hypotheses

Ho: there is significant difference between e- administration and quality service delivery in Adekunle Ajasin University

Hi: there is no significant difference between e- administration and quality service delivery in Adekunle Ajasin University

Ho: E- administration has no significant effect on service culture in Adekunle Ajasin University

Hi: E- administration has significant effect on service culture in Adekunle Ajasin University

Literature Review

The information and Communication technology (ICT) is one of the wonders of the 21st century which is ushering in a new dimension in this age of knowledge explosion. Information and Communication technology is the modern electronic techniques of processing, storing, retrieving and circulating information within and outside an organization with speed and little or no stress (Liverpool & Jacinta, 2013). ICT involves the use of electronic communication between department and people within and outside the organization which connotes Electronic Administration (E-Administration). This involves the processing and transmitting of information from one department to another with quick and cheap method of communication. Also, it can be used to advertise and recruit new employees in any institutions.

E-Administration has been defined in different ways by various scholars such as Ogbonna (2011), Eden (2006) as the variation of electronic information-based services with the reinforcement of participatory elements to achieve administrative management objective. Dairo (2014) defined E-Administration as the delivery of management information system and decisions making online through the internet or the Electronic platforms. This implies that E-Administration will enhance cordial relationship between the university stakeholders.

Electronic Administration is seen as being a more collaborative style of administration, featuring, and more collaboration with external sectors in making policy and in delivering services, more collaboration with university stakeholders within the workplace. Bellamy & Taylor (2005) noted that e-administration

enables new information flows that challenge pat norms and capabilities. Propose the e-administration initiatives can allow university administrator to transcend its traditional hierarchical structures of accountability. Fountain (2005) writes that e- administration in conjunction with the redesign of organizational process flows has diminished the amount of red tape and accelerated the delivery of university services for some members of the public,

E-Administration have been viewed as complex, bureaucratic Administration establishments with the aim of information silos that erect barriers to access of information by making provision of services cumbersome and frustrating (Coleman, 2006). Kumar, Mukerji, Irfan, and Ajax (2007) argue that E-Administration can also result in huge cost savings to universities and the system alike, increase transparency and reduce corrupt activities in service delivery in terms of publishing, researching, interacting and transacting.

E-Administration as an effective mechanism for achieving organizational objective through the adoption electronic devices in carrying out administrative functions of day-to-day activities (Zhu and He, 2002). E-Administration in tertiary institutions has shown a lot of maturity in developed countries such as US and Canada which currently is considered the most developed country as far as implementing administration concerned. The government of these developed countries has committed to shaping itself as the government mostly connected to its citizens (Kumar, Mukerji, Irfan, and Ajax, 2007). For instance, the commitment that the Canadian government has done is the allocation of huge some CAD\$880 million to support the development of e-initiative E-administrative in Canada (Kumar, Mukerji, Irfan, and Ajax, 2007).

Benefits of E-Administration in Nigerian University

According to the Report on the Review of ICT in Government prepared by Service Delivery and Performance Commission in 2006, government's investment in technology provides significant benefits to government, industry and the community at large, including:

- ✓ Increased accessibility, inclusivity and flexibility in government service delivery

the ability for more of the community to interact with government, with the flexibility of choice offered by multiple delivery channels and at more convenient times.

- ✓ Improved value for money, it enables quality services to be provided through lower cost delivery options, it also improved productivity both of public servants and the economy, and
- ✓ Stimulation of the ICT industry through identification of opportunities for innovation and partnering with the private sector to improve government service delivery.

Ssweanyana and Busier (2007) strongly agree that e-administration provides increased savings, increased efficiency, improved service delivery, low transaction costs, and improved performance to the university that invests in ICT.

E-Administration enhances tertiary institutions to improve efficiency, reduce costs and improve on both formal and current service delivery system (Danda, 2004). The fundamental assignment or responsibility of the administrator is to plan or initiate administrative processes as well as store and retrieve former policies decision reached at previous meetings to guide the boards or committee decision. Therefore the administrator needs to acquire electronic literacy i.e. that ability to efficiently utilize computer, assess the internet facilities, process, store and retrieve information to improve the institutional system.

E-Administration creates room for fast access to data. It keeps storage requirements to a minimum. It allows data to be accessed by more than one person at a time. There is better security system. Data can be coded and require less workforce with fewer staff to enforce the system. Data are kept inside the computer system and cannot be discounted. Facilities to share common data such as stores, records, employee's records, financial records with the government can be held in a central computer which allows different departments within the organization to view information that will enhance planning and decision making process.

In managing personnel electronically, database can be used to keep the students, staff information system. These records are then used to calculate the workers output and performance

indicators such as labor turnover, absenteeism, quality defects and lateness to work. Program such as software will enable the administrator to identify and trend and take action accordingly. Such as ghost workers, some State Government recently introducing e-payment of salaries in the public sector and to check financial anomalies.

In managing the (4ms) of management i.e. men, money, machine and materials, e-administration makes the giving and receiving of instructions to super and sub-ordinates easy, faster and even less stressful (Mormah, 2010). Take for example, the office information system which is also known as the office automation, which refers to the number of information and communication technologies that are available in an office for the day-to-day activities. They include the computer, the internet, telephones, photocopier, e-mail, etc. They enable the school administrator to do his job more efficiently. Another software package that can assist the administrator is the Decision Support System. This is a software that is used by top management officers in the decision making process (Contel, 2011). Although it is not an alternative to decision making but gives a list of options that can be selected from with their advantages and disadvantages.

E-Administration and University System: The Nexus

E-administration is the embodiment of e-governance improvement in the university management system. There are numerous components of the electronic administrative system, ranging from its application, structure and function which have been incorporated into the emerging e-administration of university management system (Mueen and Jamsheed, 2013). Efficient and effective service delivery are vital key in university management such as Memos/emails are therefore expected to be distributed on-line rather than dispatch to the university community in a whisker. Transcripts, verification, confirmation is expected to be done on-line. School fees payment via e-transact, course registration and to a large extent exams is administered online by (CBT) Computer Based Test. This will enable students to assess their performance without cue in lecturer office (Chander, 2009). On management staffing, from recruitment exercise to appraisal, electronic

assessment is the ideal thing, makes it more transparent, result oriented and faster. Laxity and truancy, is also checkmated electronically using (BVN) Biometric Verification Machine. Installation of CCTV to check and control crime in the university is a key to reduce violent and conflicts.

E-administrations influence the university stakeholder's transformation in relation with the administration through improvement of service delivery in one hand and vice —versa communication on the other hand. ICT is a resource for renovating university community that allows drastic transformations toward quality change, and in improving services to the staff and students. It is a crucial instrument for re-engineering administrative proceedings and for introducing new organizational progress.

The gains in efficiency and effectiveness are focused on different fields of reforming and simplifying administrative procedures starting from modernizing recruitment procedures, improving decision making, combating corruption, enabling trade of information, reducing the costs, enhancing the coherence, increasing the control, consolidating basic principles of good governance etc.

The transformation of university administration was made possible by use of ICT in the daily performance of the institution. The process would be more comprehensive with involvement of institutional reform and technological improvements. Use of ICT can considerably change the way in which services are offered to the university community overcoming the logistical and temporal barriers and obstacles. ICT empowers the staff and the students to actively participate in policy formulation and help to ensure transparent use of university resources.

RESEARCH METHOD

A case study research design was adopted to find out and describe the extent to which e-administration enhance quality service delivery among the students and staff of Adekunle Ajasin University Akungba Akoko Ondo State. Many scholars agreed that case study is the best design for collecting data on variables under investigation. These were done with a view to enhance response rate and reduce

anxiety and subjectivity, which may interfere with the result of the study. An in dept interview was conducted with the eleven (11) Heads of Departments of the Faculty of Social and Management Sciences, to elicit relevant information on the subject under investigation.

RESULTS

Data Analysis

Data were analyzed using frequency, percentage method, statistical, package for social sciences (SPSS) and t-test was used with Pearson product movement correlation to test the hypotheses. The research hypotheses generated for this study were answered at 0.05 alpha levels using a two tailed test.

Population, Sample and Sampling Procedure

The population consists of all the current final year students of Faculty of Social and Management Sciences in Adekunle Ajasin University Akoko, Ondo State (AAUA) and the Staff of the University. The sample for the study was Three Hundred and Fifty (350). A simple random sampling technique was used to select 200 final year students of Faculty of Social and Management Sciences and 150 Staff of University. A purpose sampling technique was also adopted.

Instrumentation

A questionnaire was designed by the researcher to collect data on the e-administration and service delivery from the students and the University Staff. The validity of the instruments was sought by distributing the draft copies of the questionnaires to experts in item construction for their criticism and suggestions. The experts' comments/suggestions were incorporated into the final draft of the instruments.

The permission of the Deans of Faculty of Social and Management Sciences with the assistance of the Heads of Departments were obtained in addressing the students to elicit their co-operation and in administering the instruments. The respondents were given opportunity to clarify necessary issues. Also, with the assistance of the Faculty Officer obtained in administering the questionnaire to the University Staff.

Table 1: Ratings used in questionnaire data analysis

Rating	Interpretation %	Used value
Very high	0 – 24	1
High	25 – 49	2
Low	50 – 74	3
Very Low	75 – 100	4

Source: Field survey February, 2017

Table 2: ICT deployment in students and staff based activities

Students based services stage of development

LEARNING	AAUA DESIGN
Students admission	Implementation
Students registration	Implementation
Result checking	Implementation
Transcript Preparation	Design
Students Academic data	Design

Source: Field survey February, 2017

Staff based services stage of development

LEARNING	AAUA DESIGN
Research	Implementation
Staff administration	Implementation
Staff global world	Implementation
Intra-campus communication	Implementation
Electronic publication	Design

Source: Field survey February, 2017

Table 3: Showing the sample size of the respondents

Respondents	Frequency
Staff	147
Students	195
Total	342

Policy Awareness Levels Among Staff and Students

The awareness level of e-administration among staff and students respondents was rated on a four point scale (very high, high, low and very low). The ratings are represented in table 1.

Based on the above ratings, Analyses show that the awareness level of four (4) of the Eight

policies (Infrastructural acquisition, staff manpower development, students man power development and internet access) was high amongst staff, while only one of the policies (student manpower development) recorded high awareness level among students (table 2).

Analysis of Data Collected from the Questionnaire Survey Through The Use of SPSS, T-Test and Pearson Product Moment Correlation

H0: there is no significance difference between e-administration and quality service delivery at Adekunle Ajasin University.

Table 4, shows that E-administration enhances quality service delivery in Adekunle Ajasin University. (t=1.616, p<0.05). Thus,

e-administration drives the University activities to improve efficiency in service delivery.

H0: E-administration has no significance effect on service culture in Adekunle Ajasin University.

Table 5, where $r = 0.005$, $p = 1.354$ this implies that $p < 0.05$, it indicate that e-administration significantly affect on service culture in Adekunle Ajasin University.

Table 4: Analysis of data collected from the questionnaire survey

Variable	Respondents staff	N	Mean	Stf Dev	DF	T	P	Remarks
E-Administration	Students	147	161.233	8.461	338	1.616	0.612	S
Quality service delivery	Staff students	147	4.364	0.250	338	1.052	0.861	S
		195	3.437	0.224				

S= Significance P<0.05

Table 5: Analysis of data collected from the questionnaire survey

Variable	N	Mean	Student	Df	r	P	Rmks
e-administration	342	173.661	4.352	338	0.005	1.354	S
Service culture	342	168.321	7.693	338	0.005	1.354	S

S= Significant, P <0.05

Table 6: Major Challenges facing respondent's use of E-Administration in Adekunle Ajasin University

Variables	Frequency	Percent
Poor electric power supply	272	79.5
Inadequate computer systems	23	6.7
Poor ICT literacy	7	1.7
Inadequate ICT personnel	12	2.9
Status discrimination	8	1.9
Inadequate ICT infrastructure	9	2.1
Inadequate internet access	6	1.4
Other	5	1.2
Total	326	96.2
System	16	3.8
	342	100

As presented in table 6, the most crucial challenge facing the respondents in their use of E-Administration facilities, as indicated by 79.5% of respondents, is poor electric power supply, followed by inadequate computer system (6.7%) and then inadequate ICT personnel (2.9%). The category with the least percentage is those who are of the opinion that inadequate internet access is the major challenge facing them. Other challenges indicated by the respondents are financial-related including affordability in terms of ownership of ICT equipment and cost of access to internet facilities. This result in more or less not surprising in that poor energy infrastructure has been a knotty challenge to successive governments in Nigeria for decades and the two universities are not excluded.

DISCUSSION

The Adekunle Ajasin University E-Administration index is 2.57 over a scale of 1 to 4 (with one (1) being the lowest value and four (4) the highest). Contributory to this score are varying indicators indices discussed in table 7.

In the hypothesis 1, E-administration has a significant effect with quality of services delivery in Adekunle Ajasin University. There is a positive relation between e-administration and quality of service delivery ($t=1.616$, $p<0.005$). This study agrees with the view of Ogbona (2011) and Eden (2006) who of the opined that the variation of elections administration enhance administrative management objective Ajax (2007), also contend that e-administration can result in huge lost saving to university and the system alike such as increase transparency reduce corrupt activities in service delivery in term of publishing, researching interacting and transacting.

The second hypothesis states that e-administration significant effect on service culture at Adekunle Ajasin University. Since $p<0.05$, it indicate strong positive significant relationship. This is correlated with Mormah, (2010) e-administration create opportunity to the University community and interact with the environment thereby making ICT as a veritable tool for day to day activities.

Table 7: Adekunle Ajasin University E-Administration indicators and indices

E-Administration Indicator	Contributory parameter	Calculated value	Parameter Index	Indicator Index
Infrastructural availability	Intra-Campus Network system	100	4.00	3.3
	Local Area Network system	100	4.00	
	Computer	37.5	2.00	
Access to infrastructure	Access in Faculty	70.9	3.00	2.2
	Access in Department	65.5	3.00	
	Access in Offices/classrooms	14.3	1.00	
	Access in Administration Block	34.2	2.00	
	Access in departmental /Faculty Computer rooms	40.5	2.00	
Manpower availability	Trained Users	46.5	2.00	1.5
	Users possessing enough skill	81.22	4.00	
	Users needing more training	(74.8)	-3.00	
Enabling policy and regulatory framework on E-Administration	Effectiveness of staff enabling policies	2.57	2.57	2.57
	Effectiveness of student enabling policies	2.14	2.14	
	Effectiveness of controlling regulations	3.00	3.00	
ICT Deployment	Deployment in staff based activities	3.78	3.78	3.3
	Deployment in student based activities	2.89	2.89	

Source: Field Survey February, 2017

It was observed that the assessed level of ICT deployment in the activities of the university gives a considerably high index value of 3.3 out of 4. The indices of parameters yielding this value are 3.78 and 2.89 for deployment in staff-based activities and student-based activities respectively. The higher being the deployment in staff-based activities. Although the assessment shows relatively high indices for ICT deployment indicator and its parameters, observing the university activities, it was discovered that the university staff only make use of only two of the staff-based activities, namely research and staff publicity. The other three (staff administration, intra-campus communication and electronic publishing) are inactive, probably because the teaching staff are limited by inadequate hardware and software to support some of those activities. This, in essence, means that though ICT deployment is relatively high, participation of the university populace is maximally making use of the ICT is still low. The United Nations (2005) recorded that Nigeria's performance shows a very low e-participation index of 0.079 when compared with 0.223 and 0.590 for web measure and human capital indices respectively. This shows that it is one thing for the facilities to be available or for ICT to be deployed and yet another for people to appropriately participate in its use of expected.

CONCLUSION

This study based on the impacts of E-Administration in Nigeria tertiary institution with reference to Adekunle Ajasin University (AAUA). It provides information on the current level of the university attainment on the use of e-administration (application of ICT) enhances quality service delivery. this improve the efficiency and effectiveness of the university administration in term of service delivery With an overall E-Administration index of 2.57, on a scale of 1-4, the university E-Administration rating is above average (about 64.25%). However, considering the indicators and parameters that contribute to yield the overall index, four out of five indicators (infrastructural availability, ICT deployment in university activities, access to infrastructure; and policy and regulatory framework) have indices that are above average in value. That is 3.3 or 82.5%

each for infrastructural availability and ICT deployment in the two named universities activities; 2.57 or 64.25% for enabling policy and regulatory framework; and 2.2 or 55% for access to infrastructure. The remaining one indicator (manpower availability) has an index that is below average, that is 1.5 or 37.5%. This means that the most critical indicator that needs improvement is manpower availability.

RECOMMENDATIONS

Based on the above submission e-administration has greatly impacted positively on the effectiveness and efficiency of service delivery in Adekunle Ajasin University. However to achieve the objective of E-Administration, there is a need for it to exert effort towards improving E-Administration. Adekunle Ajasin university can thus benefit more from the use of E-Administration if proper implementation that would enhance explicit full automation of all administrative process should be pursuit with renewed vigor. There is need for the extension of internet connection to offices and classrooms to increased access to the internet by staff and students. The university should have a well equipped internet accessing computer room accessible to both staff and students to complementary provision of enough computer systems for user to access the internet. Since access to ICT is crucial to its productive usage, the university should make a policy by which every academic department would, of a necessity, have a well equipped computer room.

Periodic workshops and regular lunch hour hands on trainings should be organized as means through which university staff and students ICT skills could be developed enough to make them well able to use the available ICT infrastructure. These workshops and trainings should be organized at the university level by the ICT unit and also at the faculty and departmental levels. They should be designed to impact the requisite ICT skills in staff.

Academics, non-academics, staff and students of the university need to be well informed about the content and provisions in available ICT policies as a means of making all stakeholders adequately informed. The University ICT unit should publicize as much as possible all available policies for all those concerned and affected by the policies. This

could be done by sending them electronically to staff and students.

Finally, the university should develop a university portal that's will be used in e-governance and e-administration of the university as a means of increasing awareness and popularization of ICT usage on the university campus, and effective discharge of university functions.

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