



E-Administration And Service Delivery: A Study Of Joint Admissions And Matriculation Board (JAMB) Nigeria, 2013-2018

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ABSTRACT

This study is on e-administration and service delivery: A study of Joint Admissions and Matriculation Board (JAMB) Nigeria, 2012-2018. It examined the impact of e-administration on service delivery using the Joint Admission and Matriculation Board (jamb) Nigeria as a case study. The time frame is 2013-2018. To achieve the objectives of the study, two research questions and hypotheses were formulated as guide for the study. The Ex-post-facto research method was adopted for the study and the study relied on secondary method of data collection. The findings from the study showed that e-administration has impacted on the registration process of candidates for JAMB examination and has positively affected the testing and release of results by JAMB. Also the study identified some challenges on the adoption and use of e-administration on JAMB activities, Drawing from the findings; we recommend that to smoothen s and facilitate the JAMB registration process the Joint Admissions and Matriculation Board should expand its partnership with the private sector to establish cyber cafes in all the cities and rural areas across the nation and install the necessary systems that will facilitate access and limit network and power problems. Secondly, the number of JAMB CBT centers across the nation is grossly inadequate so more CBT centres should be established especially in the rural areas.

Keywords: JAMB, E- Administration, Service Delivery, Computer Based Tests

INTRODUCTION

University education in Nigeria has a long history stretching back to the colonial period when the University of London established a College in Ibadan followed by the establishment of the first indigenous University in the country, the University of Nigeria, Nsukka to subsequent post- independence proliferations such that by 1974, seven federal universities and twenty-one state universities were established in the country. Every one of these existing universities conducted its own concessional examinations and admitted its students. However, these systems of admission revealed serious limitations and quite often waste of resources in the process of administering the concessional examinations, especially on the part of the candidates. The general untidiness in the uncoordinated system of admissions into Universities and the attendant problems were sufficient cause for concern to the Committee of Vice Chancellors (Chukwuemeka, 2015). Consequently, the government set up a national committee on University entrance which eventually led to the establishment of The Joint Admissions and Matriculation Board in 1978 with the responsibility of ensuring a uniform standard for the conduct of matriculation examination and placement of suitable candidates into the nation's Universities. The law was amended in order to add the conduct of Monotechnics, Polytechnics and Colleges of Education Matriculation Examination.

Thus, today, the board conducts entrance matriculation examinations not just into Nigerian Universities but also into Nigerian public and private Monotechnics, Polytechnics, And Colleges of Education. Initially, the Unified Tertiary Matriculation Examination (UTME) into Universities (UME) was held

separately from that of the Monotechnics, Polytechnics and Colleges of Education (MPCE). However, in a bid to save time, cost of operation and give every candidate equal opportunity to gain admission into any institution based on their academic performance, JAMB joined both exams together to form the Unified Tertiary Matriculation Examination (UTME). This helped JAMB to establish a fair method of selection for admission and helped create an equitable distribution of available space in tertiary institutions (Chukwuemeka, 2015).

Being saddled with the responsibility of conducting entrance examinations for prospective candidates into the Nigerian Universities, Monotechnics, Colleges of education and placing suitably qualified candidates into these tertiary institutions, The Joint Admission and Matriculation Board is faced with the challenge of severe complaints of examination malpractices, hindrances caused by the JAMB examination registration processes for candidates sitting for post-UTME tests, high cost of conducting examinations and delay in the release of result. In response to the limitations and complaints against jamb, JAMB introduced a full-scale e-administration system to eliminate all these complaints of examination malpractices, removal of hindrances caused by candidates sitting for post-UTME tests, reducing the cost of conducting examinations and to facilitate examination registration and prompt release of result.

Originally, JAMB had conducted her examinations using the paper-pencil test (PPT) model. This mode of examination is reportedly characterized by inefficiency and inaccuracy (Retnawati, 2015). Although the alternative computer-based test (CBT) has its own challenges, these challenges are primarily of the technology failure (Oduntan, Ojuawo, & Oduntan, 2015; Abubakar and Adebayo, 2014, Joshua & Ikiroma, 2012) which can be rectified easily with state of the art facilities. This is unlike the problem of the PPT that is shrouded in design (Retnawati, 2015). The inefficiency of the JAMB PPT examination was evident in the wide-scale examination mal-practices that often characterized the conduct of the examination in the past (Oyedeji, 2016). As part of the efforts to curb the widespread examination malpractices, JAMB introduced a customized answer sheet in 1994 on which candidate examination numbers and subject types are preprinted (Ojerinde, 2015).

The examination system was further improved in 1998 involving reshuffling of question types and candidates seat numbers such that candidates sitting in close proximity cannot copy from one another. Although the newly-introduced measures reportedly curbed the mass cheating in the examination to some extent (Ojerinde, 2015), inefficiency in grading, corrupt collaborations at the examination centers with officials to undermine the system were still pervasive necessitating a new model for the examinations.

Within the period that JAMB introduced the innovation, authors (Omobola, 1995; Isreal, 1996) reported cases of missing results, candidates having wrong types given to them as against the type printed on their answer sheets and similar issues leading to frustrations. Apart from the cheating, the release of results could take months with candidates waiting. This usually put some candidates' life plans on hold as they await the "verdict" of JAMB to determine their next courses of action. The waiting of thousands of candidates constitutes economic loss to the nation. The mass cheating and the inefficiency in the JAMB require a paradigm shift in strategies towards repositioning the agency for better performance. To this end, the idea of a combined exam of PPT and CBT was formed. Later, the CBT examination mode was fully-adopted by JAMB. This birthed the adoption of e-administration (at least e-Application element of e-administration).

The realization of the potentials of ICT and by extension, e-administration towards empowering the citizenry and improving public service delivery in this digital age, led to the formulation of the national policy on Information Technology in 2001 by the General Olusegun Obasanjo-led Federal Government of Nigeria (Awolaye, 2008).

The policy details the roadmap for achieving ICT capabilities in the country by 2005 (Diso, 2005). Sequel to the above, a formal focus on e-administration as a means of improving public service delivery could be said to have existed for at least one and half decades and its appraisal is necessary with a view to understanding its impact on public service delivery in the country. To this end, this study is billed to assess e-administration and Public service delivery using the Joint Admission and Matriculation Board (JAMB) as a case study. Moreover, the printing of examination slip, the checking of results that often involved long distant travelling with its associated risks, checking of admission status, and printing of

admission letters can now be easily done in the confine of a candidates' room on the JAMB portal. This eliminates unnecessary travelling, queuing and exposure of adolescence that dominate candidacy of JAMB examination to undue risks. This was not so in the past when all these services are enjoyed only by visiting a designated JAMB office.

Over the years as could be seen, JAMB had made concerted efforts to achieve this effectiveness in service delivery through various changes in its examinations' and administrative processes with little effect. The recent adoption of e-administration leveraging on the potentials of Information and Communication Technology (ICT) was part of a new effort by the organization to improve service delivery to its user community.

For these years very little has been documented to show the extent to which the introduced system – e-administration has helped to address the challenges of JAMB administrative processes ranging from registration of candidates for the examination, testing and release of results. It is important to understand how JAMB's service delivery has fared in the use of e-administration. Hence this paper seeks to address that gap. The paper covers a sufficient timeframe to assess a performance appraisal of the organization's implementation of e-administration and its relative effect on service delivery.

This paper therefore specifically intends to:

1. Ascertain the impact of e-administration on the registration process of candidates for JAMB examination, testing and release of results by JAMB..
2. Ascertain the challenges to the use of e-administration by JAMB

Conceptual Explanations

E-administration

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 electronic platforms. This implies that e-administration will help organizations and institutions especially complex ones to speedily and effectively deliver on their mandates.

Electronic administration refers to the use of Information and Communication Technology in public management and by extension, public service delivery (Chatfield and Alhujran, 2009). It involves the use of Information Communication Technology (ICT) in executing public services (Saxena, 2005). According to Awolaye, Oluwaranti, Siyanbola, and Adagunodo (2008), e-governance which in extension embraces e-administration include the use of Information Communication Technologies (ICTs) to carry out information exchange with the citizens, businesses and among various government arms and institutions.

Electronic administration refers to the conduct of government processes like accounting, budgeting, internal communications, planning and host of other administrative processes electronically. The primary goal of e-administration is to ensure efficiency in administrative processes

According to Wikipedia (2014) e-administration, or electronic administration, refers to any of a number of mechanisms which convert what in a traditional office are paper processes into electronic processes, with the goal being to create a paperless office. It is an ICT tool, designed to improve productivity and performance of organizations in a complex society. E-Administration can encompass both intra-office and inter-office communication for any organization. Its objective is to introduce total transparency and accountability leading to better service delivery in any organization.

Electronic Administration also known as e-administration is 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.

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.

Kumar, Mukerji, Irfan, and Ajax (2007) argue that e-administration has resulted in huge cost savings to public institutions, increase transparency and reduce corrupt activities in service delivery in terms of publishing, researching, interacting and transacting.

Fountain (2005), posits that e-administration in conjunction with the redesign of organizational process flow has diminished the amount of red tape and accelerated the delivery of services for some members of the public. It is an effective mechanism for achieving organizational objective through the adoption of electronic devices in carrying out administrative functions of day-to-day activities (Zhu and He, 2002).

Service Delivery

Kayode (2013) posits that service delivery in the context of public sector organizations imply tangible and intangible goods and services provided by the government in order to improve the well-being of the citizenry. It encompasses services and their supporting systems that are typically regarded as a state's responsibility Bello-Imam and Roberts (2001) quoted in Agba (2013), agree with this understanding of service delivery when they noted that service delivery is the provision of services intended to alleviate human suffering and by extension, enhance the quality of life of the citizens.

The existence of any organization is anchored on productivity and its importance cannot be over-emphasized. It is the wish of every organization to be productive and this forms the cardinal essence for which every organization exists. To be productive is to deliver services. In fact, service delivery has often become the most central, contentious and analytical issue in all organizations whether public or private.

Oronsaye (2010), Cetoma (2009), Anthonella, Benard and Pace (2017), see public service delivery as 'the process of meeting the needs of citizens through prompt and efficient procedures'. This implies that the interaction between public sector organizations and citizens should happen in a way such that the needs of the citizens are met in a timely manner, thereby making the citizens key in public service delivery.

According to ISS (2015), there are four main elements for effective and efficient service delivery which include, service culture, quality of service, employee engagement and customer experience.

The public service in Nigeria is the machinery of government through which policies are implemented. However, apart from this key function, it also provides services through the Ministries, Departments and Agencies. Over the years, these services have been said to be poor in terms of the way and manner in which they are delivered. This is often classified as the traditional public administration characterized by "paper based long procedures that make the citizen dissatisfied with the services because of several problems such as delay in service delivery, corruption and other related issues(Karim, 2015).

E-administration and the Registration Process, Testing and Release of JAMB Results

The ultimate goal of the adoption of e-administration by JAMB is to be able to offer an increased portfolio of public services to the society in an efficient and cost effective manner. It allows for transparency because it allows the public to be informed about every activities of Jamb.

Apart from the vastly improved flow of information from JAMB to the public, the implementation of electronic administration has gone a long way in bringing administrative procedures into the modern digital era.

Electronic administration has helped to improve the efficiency of JAMB current system (paper based system). It has also facilitated better communications between JAMB, as a public institution and the general public. Applicants can obtain information at a faster speed and it is possible at any time of the day.

The society is moving towards mobile connections and the ability of an e-administrative service oriented institution to be accessible to citizens irrespective of location throughout the country is a very good mark on the educational sub system. Fountain (2005) writes that e-administration in conjunction with the redesign of organizational process flows for instance in JAMB, has diminished the amount of red tape and accelerated the delivery of JAMB services for some members of the public.

The implementation of e-administration in JAMB processes has increased efficiency in not only JAMB registration processes, testing and release of JAMB results but has resulted in improved services, better accessibility of the public to numerous JAMB activities and services, and more transparency and accountability.

In the area of e-administration, JAMB has made tremendous progress. The students' application process, the conduct of the matriculation examinations, the marking and the release of the examination results has been computerized. It is no longer impossible for students to see their Unified Tertiary Matriculation Examination (UTME) results in a matter of hours after sitting for their respective examinations. This was not possible in the past when the examination was paper-pencil rather than computer-based (Chukwuemeka, Okeke and Onwuchekwa, 2018).

The paper-pencil mode of conducting the examination was reportedly characterized by massive irregularities and inefficiency (Sanni and Mohammad, 2015; Alabi, Issa and Oyekunle, 2012) necessitating a paradigm shift. This paradigm shift in the conduct of the matriculation has had its own fair share of pros and cons but general improvement over the traditional paper-pencil mode has been reported. According to Chukwuemeka, Okeke and Onwuchekwa (2018), the adoption of e-administration by JAMB also has drastically reduced information asymmetry that fraudsters often capitalize on to defraud unsuspecting candidates. Information asymmetry refers to information gap between JAMB and prospective candidates. The fraud associated with the information asymmetry manifests in the sales of fake registration forms to candidates. The shift from the paper to electronic form appears to have reduced to the barest minimum if not totally eliminated the possibility.

Just as in the case of registration of JAMB organized examinations in the past, the post offices played pivotal roles in the distribution of examination results after each year's exercise. Ogbonna (2008) argued that the Board started its online services which enabled UME/MPCEME candidates to check their examination number/centres and results through the internet. Continuing, she said, today, prospective students do their registration and check their results online in the comfort of their homes.

Besides, with open-access information on authorized places where candidates could purchase the form, incidence of fake forms appears to have drastically reduced. An important service that JAMB often renders to the admission aspirants is change of course/institution. This service occurs when a candidate voluntarily changes his/her mind about his/her choice of institution having submitted an admission registration form or compelled to do so by circumstance which may relate to not meeting the score requirements of earlier chosen course and/or institution. Previously, this service requires that a candidate purchase a form, fill and do a physical submission at designated JAMB office. Complaints of missing forms, mishandling of forms resulting in names being wrongly spelt etc. were often reported but with the adoption of e-administration, candidates can now easily process the change of course/institution form in the comfort of their home by registration on the JAMB portal and online convenient payment with the use of Automated Teller Machine (ATM).

Continuing, Chukwuemeka, Okeke and Onwuchekwa (2018) posits that the printing of examination slip, the checking of results that often involved long distant travelling with its associated risks, checking of admission status, and printing of admission letters can now be easily done in the confine of a candidates' room on the JAMB portal. This eliminates unnecessary travelling, queuing and exposure of adolescence that dominate candidacy of JAMB examination to undue risks. This was not so in the past when all these services are enjoyed only by visiting a designated JAMB office.

Without doubt, progress has been made by JAMB with e-administration with respect to service delivery. The procurement of a registration portal which enabled candidates to register online made it possible for applicants resident anywhere in the world to register for Universities Matriculation Examination (UME) or the Monotechnics, Polytechnics and Colleges of Education Matriculation Examination (MPCEME). The conduct of public examinations in Nigeria, JAMB UTME inclusive, prior to this latest reform in JAMB is faced with the menace of examination malpractices, cases of incomplete result, owing to incomplete registration etc (Popoola, 2015). All these have impacted negatively on the integrity and sanctity of the Board but the implementation of the computer-based test and e-administration packages has eradicated almost all these challenges. The introduction of this form of examination may have been

controversial but the need for increased examination security, improved test formats and more flexible scheduling for examinees, a more efficient test administration process among others, necessitated the paradigm shift.

The introduction of e- administration is a positive and timely attempt to actualize the provision of Nigeria's National Policy on Education, section 2 paragraph 29 (FGN 2008) that government shall provide adequate infrastructure and develop capacity for effective utilization of I.C.T. Thus, JAMB's introduction of e- administration is neither based on arbitrariness nor a struggle in vain.

Commenting on what was obtainable in JAMB prior to the introduction of e- administration Sola (2015) believed that candidates usually waited for several months to see their results and the Board's headquarter was always crowded with students and parents desperate to see the list of successful candidates pasted on the board". This according to her no longer obtains today as prospective students do their registration and check their results online in the comfort of their homes.

With the introduction of e-administration the release of result became more prompt. By this feat, the era of long months of waiting results and its attendant consequences is over. Most candidates now have their examination results released completely hours after the examination. These testimonies and commendations about prompt release of examination results by the Board by relevant stakeholders are indications that there is efficiency in service delivery in Joint Admissions and Matriculation Board (JAMB). Prior to the introduction of these reforms in JAMB, it takes as long as six months to release result of examinations, before then some candidates became disenchanted and go into other vocations while waiting without end. But with the introduction of the reforms in JAMB examinations, examination results are generated instantly immediately after the examination. To most stakeholders, this was a miracle and a big relief and it has been applauded by all. Without any fear of double speaking, one can safely conclude that the prompt release of results in JAMB organized examinations, has led to efficient and improved service delivery to the public.

As it pertains to the advantages of adopting e-administration for JAMB activities, Ndou (2004) posits that it offers the platform for which public institutions can be assessed. This is because of the transforming virtues that come with it, especially in the relationship between such institutions and citizens. He further pointed out that e-administration adoption has the capacity of increasing the involvement of citizens in governmental processes at all levels, it can also help in providing better services in terms of the timely manner in which government services are delivered, thereby making them more efficient, cost effective and encourage accessibility of government services.

Challenges to the Use of E-administration by JAMB

It is axiomatic and true that every innovation comes with its own unique challenges; e-administration is no exemption. There are few challenges associated with the conduct which are expected with any new technology which we constantly admit but believing that with the active support of all, we will gradually get it perfect.

When CBT was introduced, there were cases of anxiety among students that were to take the examination, probably because of lack of familiarity with the computer and the programme generally. However, it is hoped that with continuity and repeat of the test almost on an annual bases, the apprehension will reduce. Also, infrastructural backing for CBT programme is still very low. There are limited numbers of qualified and registered CBT centres leading to overcrowding and overload on available facility. Longer time is spent for examinations as time-table is usually spread out to accommodate large numbers of candidates using the few available facilities. Oladeji (2014) acknowledged this fact when he noted that the only challenge currently facing the implementation of JAMB's CBT programme is that the computer penetration and infrastructure backing is still very low in our society. This view is substantiated by the fact that there are very few public CBT facilities in Nigeria, as most Basic and Post-Basic educational institutions rarely have ICT centres. Even in tertiary institutions where they exist, have limited capacities and in some cases unsuitable for CBT exercises

According to Dode (2007), e-administration practice is bound to meet with strong opposition from the bureaucratic quarters of the policy. By this, we mean the over-bloated public service whose members will

analyze this practice as a deliberate attempt by the government to throw majority of their members out of their jobs. Majority of the public servants are thus, likely to use their positions to frustrate the effective application of e-administration in Nigeria. They will definitely dislike a system that will reduce to the minimum, face-to-face contact between citizens

According to Abdel-Fattah and Galal-Edeen (2008), the main challenge of e-administration in the Nigerian public service is lack of trained and qualified personnel to handle and operate its infrastructures. They further opined that due to the high cost associated with the procurement and training of public servants with ICT skills, government sometimes develop cold feet in the real implementation of e-administration in the public service. In the same vein, Ayo & Ekong (2008) also emphasized the lack of skilled workers to handle various ICT services and their applications in achieving the successful implementation of e-administration in the government organizations. They also observed that the absence of government regulatory policy is a critical issue that needs urgent attention if e-administration is to be a reality in public sector. To them, for e-administration to be effective and successfully implemented, experts would be needed to coordinate and operate the ICT-related infrastructures as the absence of competent personnel to handle IT infrastructure, will render the procurement of such infrastructures useless (Ayo & Ekong, 2008).

Another challenge is associated with the state of electricity supply and internet connectivity in Nigeria, which is unstable and irregular. This has constituted a major obstacle to achieving the purpose of e-administration in Nigeria. Okwueze (2010) also opined that sufficient and stable power supply is crucial to the effective implementation of e-administration in the country's public sector. In juxtaposition to what is obtainable in the public sector, most government agencies like JAMB rely on generators for power supply and most times the generators do not have the required capacity to power the ICT facilities.

Similar to this view, Gberevbie; Ayo; Iyoha; Duruji & Abasilim (2017) observed that it is absolutely necessary for JAMB to make provision for the needed infrastructure in electricity power supply, internet connectivity, telecommunications and computer hardware, optical fiber cables, among others for the successful implementation of e-administration. This implies that the successful implementation of e-administration by JAMB is no small measure dependent on solving the erratic power supply problem, among others.

For Bansode & Patil (2011) the digital divide is another obstacle to effective implementation of e-administration by JAMB. This simply means "the gap between those with regular, effective access to digital and information technology and those lacking this access". Keniston (2003) simply sees digital divide as the widening gap of ICT knowledge between the rich and powerful who constitute part of the information age and the poor and powerless that do not.

The implication of this is that, the challenge of digital divide encompasses the access to technology hardware physically and the required skills and resources needed for the judicious application of its use. However, there are factors that are known to have contributed to this digital divide. For instance, physical disability, physical access, access to the contents and lack of ICT skills contribute to the digital divide (Bansode & Patil, 2011).

FINDINGS

1. E-administration has positive effect on the registration process of candidates for JAMB examination.
2. The study identified some challenges to the adoption and use of e-administration on JAMB activities, These are: poor state of electricity supply and internet connectivity in Nigeria, lack of trained and qualified personnel to handle and operate its infrastructures, limited numbers of qualified and registered CBT centres leading to overcrowding and overload on available facility, low computer penetration etc.

RECOMMENDATIONS

Drawing from the findings, we recommend that;

1. There is need for the Joint Admissions and Matriculation Board to expand its partnership with the private sector, to establish cyber cafes in all the cities and rural areas across the nation in the spirit of Public-Private Partnership.
2. The Board urgently needs to expand and improve on their Information and Communication Technology (ICT) systems and equally employ highly experienced professionals to operate these systems

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