



E-ADMINISTRATION USAGE FOR SERVICE DELIVERY IN UNIVERSITIES: HIGHLIGHTS OF SELECTED SURVEY FINDINGS

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ABSTRACT: e-Administration, or electronic administration, is an Information and Communication Technology (ICT) tool that is aimed at improving performance and productivity at the workplace through the conversion of the traditional office, paper-based processes into electronic processes, to establish a paperless one. As a new and evolving mechanism, the e-Administration aids a seamless service-oriented and real-time information exchange between citizens and government, students and school authorities, etc. The study, therefore, focused on the utilisation of ICT in delivering services in universities. The review focused primarily on secondary data from journals, textbooks, and internet sources. Findings from the study indicate that most university students benefit more from the use of ICT in carrying out their academic activities and other personal endeavours. The study also adopted the Technology Acceptance Model (TAM) which stresses that when teachers and learners are given a modern and new technology like the ICT instruments, two (2) factors persuade their decisions on when and how they would use “Perceived Usefulness and Perceived Ease of Use”. Findings from the study also indicate that e-Administration as it is used in universities has certain drawbacks ranging from poor connectivity, unstable power supply, and lack of skill/training amongst others. The study found that access to the internet is directly related/proportionate to students’ performance as students with access to quality internet performed better compared to others who had limited access. There were further pieces of evidence of the existence of ICT instruments since the early 2000s in many universities but mostly revolve around telephones and basic computer software such as Microsoft word, as well as other internet connectivity-based communication systems like e-mail. It is, therefore, necessary for governments and university administrations to come up with a policy that addresses the issues/challenges hampering the full utilisation of ICT in universities.

KEYWORDS: E-Administration, Service Delivery, ICT, Traditional Office



INTRODUCTION

Among the wonders of this century is the prevalence of Information and Communications Technology (ICT), which is a modern electronic system that has the capacity of storing, retrieving, transmitting and receiving information within and outside organisations. UNESCO made integrating ICT into education part of its effort to ensure equity and access because it has the potential to contribute to universal access and delivery of quality education and learning, equity in education, educators' professional development, and efficient administration, management and governance of education.

The adoption of this ICT in governance is referred to as "e-Governance", and subsequent application in administration is termed "e-Administration", which is being done through involving the utilisation of communications between people, units and sections within and outside an organisation, with very fast delivery of information. In building transparent, reliable and efficient administration, the system of e-Administration came in as a new strategy introduced to replace traditional administration. This is considered an innovative system, through the rapid development of ICT with the ultimate goal of improving productivity and performance.

Across the world, in recent years, governments have made use of e-government initiatives in order to deliver services or information to citizens almost every day, seven days a week, to the extent that almost every national government, majority of sub-national or state governments, and many governments at the local level have set up web presence through which they deliver e-government services (Norris & Lloyd, 2006). The services are provided to residents or constituents, workers of public and private bodies, as well as other bodies at different levels.

Universities' transition to ICT implementation has undoubtedly put forth an overwhelming impact on the administrative culture of academic institutions, with universities adjusting to more challenging, innovative and modern techniques of administration offered by cyber technology. These adoptions of electronic systems have been embraced by many universities worldwide in delivering information and services, record keeping, and communication transactions.

E-Administration

By definition, e-Administration is a web-based initiative that proposes a paperless communication and interaction software application which includes management of workflow for introducing accountability and transparency, addressing corruption, establishing a level playing field and lessening poverty among the citizens (Kris, 2007). Going by this definition, e-Administration is a platform for e-Governance. The instrument mainly helps in removing the lack of transparency and the consequent lack of accountability in government-to-government (G2G) and government-to-citizen (G2C) transactions and communications, and empowers the citizens or constituents with the right to know on a real-time basis, everything pertaining individual and community development or services.

For a government to attain this level of performance that meets citizens' expectations, Poister et al. (2010) and Walker (2013) emphasised that strategic management in form of e-Administration is necessary. In designing the strategic mechanism for the effective functioning of e-Administration, administrators require the establishment and strengthening of the public administration staff's role, involvement of the general populace, and procedural as well as



organisational improvements, and the eventual transformation and adoption of the right environment or background to new circumstances.

As the world moves towards a digital era, only those who take advantage of trends in technology stand the chance of being relevant in the global community. Technology has changed the way organisations and governments conduct their affairs. The administration is undoubtedly inevitable in any organisation formal or informal, private or public. Researchers in the discipline of management and administration have often developed models for the smooth running of organisations. Notable among these models is the Bureaucratic model developed by the German scholar, Max Webber. The model is designed as an administrative tool for accomplishing large-scale administrative duties through the coordination of tasks of many individuals. Excessive delay and red-tapism are some of the drawbacks of the Weberian model and other traditional or manual methods of carrying out day to day activities of organisations.

e-Administration's extensive discussion should prevail over the Webberian sort of thinking, often considered rigid with its focus on an 'ideal-type' sort of organisation. A sound rationale for such is the systemic feature of e-administration which emphasise the total change of public structures' self-centeredness to introduce values for citizens, their needs and adequate participation in government and administration (Matei & Iancu, 2009). Considering this, e-Administration in universities can facilitate the achievement of set goals by management and students in real time. e-Administration has the goal of bringing governance closer to the people. e-Administration turns out to be a necessary system in actualising the target of e-democracy, which has to do with transparency and active citizen participation in decision-making processes. Similarly, the initiative can aid the establishment of a comprehensive database facilitating interphase between students and staff in universities.

THEORETICAL FRAMEWORK

As e-government and e-Administration research is scattered in various disciplines, exploration of in-depth theoretical development is required to help the current and future researchers to better comprehend the knowledge-gaps nature in existing works, and further, explore how those gaps can best be filled. Several theories and models have been proposed and utilised in the context of ICT usage in e-Governance and e-Administration in organisations. Notable among these theories is the Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Diffusion of Innovation (DOI) Theory, Information System Success Model, Unified Theory of Acceptance and Use of Technology (UTAUT), Extended TAM (TAM2), Theory of Planned Behavior (TPB), amongst others. For this study, TAM theory shall be accepted as a basis for the theoretical framework.

Davis (1986) introduced TAM, which is among the commonly accepted models in explaining the behavioural acceptance of users. The model is generally obtained in Social-Psychology, and in particular, the TRA (Fishbein & Azjen, 1975). TRA emphasise that beliefs influences attitude, which leads to intentions and consequently produces behaviour. It has some underlying tenets. The tenets are 'Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude, and Behavioral Intention to Use'. PU and PEOU form the belief of users on



information technology, hence predicting one's attitude in relation to technology, that in turn envisages its acceptability.

Based on Technology Acceptance Model, PU and PEOU are principles that are assumed to persuade attitudes concerning modern technology and serve as the mediator in the relationship linking attitudes, variables and external (Davis et al., 1989). PU is greatly influential on users' attitudes concerning technology and intention (of behavioural) that is persuaded by the attitude concerning the technology used.

PU is the principle that computer or technology usage is advantageous as it enhances performance. Davis (1989) in support of this, stated that the PU is the acceptance that one's performance would be increased if one uses an application. PU principle is capable of providing significant facts on how managers of academia perceive information technology and the way teachers and students continues to use computer or technology. Teachers' and academic managers' beliefs about the relevance of information and communication technology in education are critical for effective technology utilisation.

Perceived Usefulness (PU) makes clear the perception of users that information and communications technology is capable of enhancing performance. The perception of how relevant the ICT is functioning is critical for enhancing efficiency, minimising time spent doing work, and increasing accuracy.

PEOU on the other hand is another critical principle when one is about to introduce information and communication technology in higher institutions of learning as the initiative is effort free. PEOU explicate the perceptual understanding of users of the sum of effort needed to utilise the platform as well as the level to which those using accepts as true that using certain ICT-based tool will be effortless (Davis et al., 1989).

PEOU factor can grant significant facts about people's differences like computer anxiety and resistance to change (i.e. computer self-efficacy); people attributes such as resistance to change or attitudes towards the change.

Top managers, teachers and students' attitudes in relation to technology utilisation in higher institutions of learning are the foremost factors in whether they reject or use ICT. Acceptance of using ICT-based universities is relevant to enabling the utilisation by teachers and students.

This theory is, therefore, apt in this study because students and teachers make use of ICT due to the perceived value and benefits obtainable from it. TAM is significant in this study in that the model shows how users embrace ICT, which can be employed in how teachers and students come to accept and use technology in universities.

Literature has shown that most university staff and students make use of ICT in accomplishing set goals because they perceive it to make work easier and faster. The theory despite its acceptance globally has some limitations.

Ajibade (2018) noted that one of the limitations of the TAM has to do with the variable that has to do with the attitude of utilisers that is unavoidably measured via subjective ways like behavioural intention (BI) such as interpersonal influence (II). Nonetheless, II as a subjective ritual is described to refer to when an individual is persuaded or persuaded through words spit by a friend or colleague. While an influence can come from superior workers that can easily



direct the lower-ranking workers to do a particular task using technology due to the presence of an information technology policy. However, a friend does not have such directive power over other staff who are subjected to a certain line manager.

e-Administration and Service Delivery in Universities

Electronic Administration, otherwise known as e-Administration is an enabler of information flow which challenges traditional norms and capabilities and proposes an electronic system. With e-Administration, accountability is promoted and the amount of red-tapism is diminished with accelerated delivery of organisational services. The system replaces all the barriers to accessing information, especially in the provision of services, reduces operational and managerial costs, minimises corrupt practices and enhances transparency.

e-Administration facilitates the attainment of the organisation's goals and objectives. Through this system, efficiency and effectiveness in administrative functions are guaranteed. e-Administration increases accessibility, inclusivity and flexibility in service delivery. It enables quality service provision with very low-cost delivery options and improved productivity. The system stimulates the use of ICT facilities, encourages innovations and creativity, and improves the performance of universities globally.

Specifically, e-Administration creates a forum for fast access to information or data and keeps storage requirements to a least or minimum. It equally allows information or data to be accessed by many people at the same time. There is improved security in the initiative. Data can be coded and needs few workforce with less staff to strengthen the system. Data can be kept in computer systems without being discounted. It has gadgets to share data in a centralised computerised system and allows various units within the organisation to view information that enhances decision-making and planning processes (Osakede et al, 2017).

With the introduction of e-Administration in universities, staff can be recruited, promoted or appraised online, memos can be distributed via emails, transcripts can be processed and verified online, University tuition fees can be paid using e-Transact or Remita, and students can register for a semester and choose courses using online platforms. Lectures, examinations, seminars and assignments can be administered virtually, and the University's records can be stored, retrieved and transmitted with a high level of accuracy and reliability. In fact, all the 4ms (men, machines, monies, and materials) can be effectively managed with e-Administration. For instance, Osakede et al (2017) posit that an electronic database of personnel in an organisation like a University can be used to calculate workers' output and performance indicators such as labour turnover, lateness to work, absenteeism, quality defects and detection of ghost workers. Thus, e-Administration embodies e-Governance improvement in an entire organisational system with numerous components of e-system incorporating its application, structure and function.

Internet and ICT Usage in Universities' Administration

Poda (2003) researched the utilisation of the internet by staff and students at Burkina Faso's University of Ouagadougou, where he attempted to reveal factors that influence internet use as a driver of information and communication technology facilities. His study revealed that internet usage is basically driven by 7 elements – accessibility to information, technology infrastructure and equipment, personal satisfaction, cost-effectiveness, enhanced learning, skill challenges, and financial challenges.



In research on students' attitudes towards internet use for education at the Sarawak's University of Malaysia, Hong et al (2003) discovered that learners had internet which made students have positive attitudes towards education or learning. The students also had rudimentary skills in operating the internet and considered the University's environment for learning very conducive to internet usage as a learning initiative.

Studies by Ray and Day (1998) at Cape Coast University in Ghana revealed that 83% of students appreciate the use of ICT and the internet. Most of those surveyed considered using electronic resources as an initiative capable of saving them a huge time, promoting efficiency for them, and being relatively easy to use. In the same University, Egberongbe (2011) discovered over 77% of instructors favoured the use of ICT-based resources instead of print ones or hardcopy documents because it's considered less time efficient. Nonetheless, 66% of the same lecturers believe that print resources' importance and relevance can never be diminished as a result of a preference for electronic resources (Kwafoa, Imoro & Afful-Arthur, 2014).

In another study on the utilisation of electronic services and resources at Tirupati's S. V. University, Chandran (2000) discovered that over 56% of staff and students use online platforms to access resources. At Guru Nanak Dev University, Kaur (2005) made a similar study where he revealed that scholars, faculty members and learners used the internet for scientific enquiry and education purposes.

In a research conducted by Gay (2006) at the West Indies University on internet and ICT usage, it was discovered that learners were predisposed to use electronic platforms for assignments typing (92%), distance education from home (68%), e-mailing questions to teachers (90%), and supplementing other teaching activities (72%). However, learners rejected the full replacement of traditional teaching experience by the computer-based learning system. This finding indicates learners' increasing preference for both forms of learning which enables them to interact with their teachers and with ICT facilities.

The Internet and ICT usage by learners of the University of Dares Salaam has been investigated by Luambano and Nawe (2004) who found out that most of the learners could not use the Internet as a result of computer inadequacies with an internet connection, slow speed of the existing computers, and inadequate skills in internet usage. The work further unveiled that most learners that utilise ICT don't utilise it for research and scholarly endeavours.

At the Iranian Institute of Industrial and Scientific Research (IIISR), Tasviri-Ghamsari (1999) studied information technology usage among the staff of the institute and discovered that regular ICT usage was the e-mail interaction and that field of study and university degree were positively correlated with the sum of usage. High levels of positive effects of ICT and internet usage by teachers or lecturers of Iranian universities have also been revealed for study disciplines, teaching experience, age, and a university degree (Sharifi, 2003).

In Iran, a study by Salajagheh (1998) revealed the computer users' attitudes in the Information and Communication Technology Centre of the Medical University of Shiraz and discovered that almost every client had very positive behavioural feelings towards ICT usage in learning and teaching. Salajagheh discovered no difference between sub-groups of clients with unlike teaching experience, study fields and gender. Then again, in different findings on the issues that affect the use of ICT for instruction and research among Iranian members of faculty,



Sarmadi, et al (2010) discovered significant implications on the sum of information and communication usage for positive behavioural feeling toward the merits of ICTs, perceived complexity, perceived evidence of learning and teaching information technology. Sotoodeh (1998) investigated the utilisation of the internet and computers in Shiraz's universities of medical and non-medical sciences. His efforts revealed that the majority of users move towards Information and Communication Technologies for retrieving new ideas and thoughts and that the frequent usage was e-mail and word processors.

Ajuwon (2003) assessed information and Communication Technology uptake by learners of University College Hospital Ibadan. His study found that ICTs usage was inadequate. The reasons were as a result of poor awareness, insufficient training on ICTs, inadequate computer access, and the abnormal cost involved in the delivery of the internet. The Dadzie (2005)'s research on examining the usage of and access to electronic materials at Ashesi University College. Dadzie's work revealed that the general usage of computers and the internet for access to data was high due to the institution's latest Information Technology infrastructure. However, the utilisation of scholarly platforms was discovered to be depleted. This was characterised by inadequate awareness of the presence of library materials.

Agaba, et al (2005) examines the usage of internet materials by lecturers and researchers at the University of Makerere. Their research discovered the inadequacy of functional telephones among some of the foremost obstacles to e-administration by Ugandan libraries. The findings of the study revealed that 82% of the surveyed identified lack of infrastructure, plus low bandwidth as reasons preventing them from retrieving internet-based information and materials.

The examination of the National Survey of Student Engagement 2003 in the United States showed that 2/5 of the surveyed learners spent many hours daily undertaking academic research using the internet. This was revealed in Nelson-Laird and Kuh (2004)'s work, which further indicates the majority of learners have active social media accounts which they use for personal and academic endeavours. Additionally, more than half usually completed academic work by ensuring they interact with other fellow learners using the internet. The learners that engage in such communications with their fellows in learning quests have higher likelihood tendencies to belong to fields which stress higher thinking abilities than those other learners that do not collaborate with fellow students via the internet platforms. Meek et al (2009) discovered even though nearly half of learners of the British university examined utilises Facebook as a social media platform to informally learn, as well as discuss and collaborate about assignments, projects, etc.

ICT and the Internet have been investigated by Asemi (2005) with a focus on Isfahan's University of Medical Sciences, Iran. The findings of the research indicate that the surveyed utilised electronic platforms regularly due to their accessibility and availability in all faculties. The work further showed that scholars in the institution access quality patient care and healthcare-related information via the internet. Over 55% of the responses generated healthcare-related materials online because the library of the institution provides access to online journals as well as other databases to staff and students (Thanuskodi, 2011). Thanuskodi (2011) conducted similar research at Annamalai University, Annamalainagar. The findings revealed that Sciences Researchers are more positive about using the internet and considered it more impactful on their teaching and learning experience. The entire respondents (100%) portrayed positive feelings towards the use of online services and prefer retrieving information



online for personal as well as academic reasons. The study further indicated that nearly 60% of scholars in the Social-Science fields equally agree with the relevance of ICTs' information materials.

In a study on internet diffusion in Saudi universities by Allehaibi (2001) on the form of online services usage by the university staff and their feelings about information technology. His study revealed that the circulation of online-based information facilities and services technology is at the beginning of an explosion level with nearly 75% of the surveyed persons indicating that they were using internet-based information technology and that over 25% of the faculty members were unwilling to use it. Another research on the use of internet-based information technology staff of Sharjah University was carried out by BuMa'rafi (2009). The findings of the research indicated that the 69% surveyed utilise online information technology every day and become conversant with its usage for most of it on their own or with the support of colleagues (89%). They used internet-based information technology mostly for contacting colleagues, e-mail communications and accessing library catalogues.

In another study on the accessibility of online data at the Library of the Abeokuta University of Agriculture, where the researchers discovered that online-based data traverses the entire institution and was considered too extensively, something not difficult to operate with overwhelming satisfaction with its search results. Though there were certain constraints as a lack of enough operational terminals for usage despite the high demand and the lack of adequate electricity supply (Oduwole & Akpati, 2003).

CONCLUSION

From the foregoing, it is evident that the emergence of ICT and its adoption in organisations such as the university paves way for students and staff to carry out activities with ease. As a cost-effective mechanism, ICT makes it possible for administrations both government and private to generate new services and practices, and to minimize the time and cost of the services rendered. This study, therefore, concludes that e-Administration enhances the overall performance of university students and staff members. However, due to limitations and challenges observed much is still left to be desired in the full utilisation of this new technology. The study further notes that as far back as the early 2000s, a lot of universities globally have instituted online information technology practices in the running of their administration and management. Instances of e-mail, telephone, and computer applications like Microsoft word utilisation have been found in certain universities in the early 2000s and kept developing till recent years.

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