



Examining the Impact of E-Governance on Personnel and Students Administration in Ibrahim Badamasi Babangida University Lapai

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Abstract

This study investigates the transformative impact of e-governance and Information and Communication Technology (ICT) on administrative personnel and students at Ibrahim Badamasi Babangida University Lapai. Utilizing qualitative methods, including key informant interviews and content analysis, the research reveals unanimous recognition of e-governance's potential to create a student-friendly environment, foster critical thinking, and facilitate global collaboration. ICT empowers students for self-directed learning, reduces exam malpractices, and contributes to their overall development. Government initiatives underline a commitment to enhancing education quality, while challenges such as limited internet access prompt pragmatic recommendations for effective implementation. This study provides valuable insights into the transformative role of e-governance in education.

Keywords: E-Governance, E-Learning, Information and Communication Technology, Personnel Administration

1. Introduction

In an era defined by rapid technological advancements, the fusion of Information and Communication Technology (ICT) and governance has emerged as a transformative force, reshaping various facets of societal functioning. In the realm of education, the integration of e-governance has been a catalyst for substantial change, revolutionizing administrative processes and redefining the student learning experience (Rahimi, et al., 2024; Hillman, 2023; Muthuselvi & Ramganes, 2017). E-Governance in the educational sector emerges as a transformative force, with the potential to improve efficiency, transparency, and accountability. The success of initiatives depends on stakeholder participation, governance-centric focus, and the integration of information technology in administrative and educational processes (Krishnaprabu, 2019). The ongoing challenges underscore the need for a comprehensive understanding of gaps and failures to fully leverage the benefits of e-governance in higher education. E-governance represents a paradigm shift in the delivery of educational services, promising increased efficiency, accessibility, and global connectivity. At the heart of this transformation lies the potential to create a student-friendly environment that not only fosters critical thinking but also encourages collaboration on a global scale. As the digital landscape expands, the implications of e-governance on education extend beyond traditional boundaries, influencing how students



learn, engage, and prepare for the demands of an interconnected world (Rahimi, et al., 2024; Assraf & Esmat, 2015).

This study offers a microcosmic view into the broader impact of e-governance on higher education in Nigeria. The key research objective is to examine the impact of e-governance on personnel and student administration at Ibrahim Badamasi Babangida University Lapai. Thus, how does e-governance and Information and Communication Technology (ICT) influence administrative personnel and student experiences at Ibrahim Badamasi Babangida University Lapai? Through key informants' interviews with administrative personnel and students, this study unravel the nuanced layers of the e-governance phenomenon. From the empowerment of students for self-directed learning to the government's initiatives in enhancing education quality, each facet contributes to a comprehensive understanding of the role of e-governance in shaping the future of education. As the findings unfold, they provide insights into the challenges encountered in the implementation of e-governance, accompanied by pragmatic recommendations for overcoming these obstacles. Ultimately, this study contributes to the evolving discourse on e-governance in education, shedding light on its transformative potential and the pathways to harnessing its benefits effectively.

2. Literature Review

Concept E-Governance

E-governance solution in the field of educational sector has changed the way administration, which is designed to make the system user-friendly, time saving and cost saving also. Many of them are flexible enough to adapt to the changing educational environment efficiently and quickly and effectively (Ebele et al., 2024). It is an integrated solution in the education sector that facilitates the processing and maintenance of large volumes of information such as: registration, admission, student information, classes, time table, transport, attendance, library, salary, expenses, examinations, performance, grades, hostels, security, reports, management, transport, staff details and fees among various departments in an institution (Das & Adhikary, 2022; Jinah, 2021). E-governance enables the Government and Citizens to access easily, to improve new class of quality of services and to provide multi-channel service delivery system (Rahm, 2023). The vision of e-governance is to transform service delivery through the use of IT and Multimedia. E-governance can be defined as delivery of government services and information to the public using electronic means. Such means of delivering information is often referred to as ICT. Use of ICTs in government facilitates an efficient, speedy and transparent process for disseminating information to the public and other agencies, for providing services, and for performing administrative activities (Williamson, 2016). E-governance requires several elements of good governance, such as transparency, accountability, participation, social integration, public financial management reform and development. It includes a very broad range of services for almost all segments of society. The most common areas of e-governance applications.



Need of E-governance

The purpose of implementing e-governance is to enhance good governance. Good governance is generally characterized by participation, transparency and accountability (Saguin, 2019; Oliveira, et al., 2020). The recent advances in communication technologies and the Internet provide opportunities to transform the relationship between governments and citizens in a new way, thus contributing to the achievement of good governance goals. The use of information technology can increase the broad involvement of citizens in the process of governance at all levels by providing the possibility of on-line discussion groups and by enhancing the rapid development and effectiveness of pressure groups (Das & Adhikary, 2022; Rahimi, et al., 2024).. Advantages for the government involve that the government may provide better service in terms of time, making governance more efficient and more effective. In addition, the transaction costs can be lowered and government services become more accessible.

Benefits of E-Governance in an Education Sector

The benefits of e-governance in an educational sector are improved efficiency, increase in transparency and accountability of educational administrative activities convenient and faster access to services, and lower costs for administrative services (Das Adhikary, 2022). Most e-government projects within developing countries employ high-technology intervention whereas citizens are not ready for this (Hillman, 2023). There are successful projects which took low end route. This paper examines one such project to find out the reasons behind its success. The research concludes that stakeholders' participation is the driving factor for success. The major issue is not IT, but an understanding between the citizen population and their complimentary governmental entity, which acts as the critical factor for triumph in e-govemment (Ebele, et al., 2024). Due to the active participation of stakeholders, both the birth registration and immunization rate have increased where concurrently other unforeseen benefits were realized; such as image enhancing of public and elected officials, use of data for school enrolment and decision making for vaccine management for society as a whole (Hillman, 2023; Akther et al., 2007).

It is considered whether information technology will simply support and amplify conventional classroom practice or whether it will have, in terminology, a "transformative" effect on of the curriculum and pedagogy. The widespread introduction of ICT education in Public and private educational institutions is a pre-requisite for producing skilled manpower (Das & Adhikary, 2022). In all levels of education like- primary education, secondary education, higher secondary education, universities etc. the facilities of ICT and computer aided education must be provided. Nigerian universities, both in the public and private sectors shall be strengthened to produce ICT graduates. The management system of education board and institutions must have training programs, diploma course, and computer related course. The civil society, NGO's, Private institutions, Donor agencies must help to adopt this.

E-learning has enormous prospects for Nigeria. For successful deployment of e-learning in Nigeria as a modern teasing method, at first it is needed to measure our readiness both



quantitatively and qualitatively. Government, Industry, Education and Society are identified as the key components in the first level of e-Governance. For this Nigeria must followed the path already taken by the high ranked e-Governance ready countries (Ebele, et al., 2024; Karmakar, 2005).

E-governance initiatives in most countries promise a more citizen-centric government and reduce operational cost. Unfortunately most of these initiatives have not been able to achieve the benefits claimed (Ebele, et al., 2024). Often the reason for this failure is a techno-centric focus rather than a governance-centric focus. The paper explores the necessary attributes of a governance-centric initiative under the banner “excellent e-governance and describe a methodology for ensuring such excellence in e-governance implementations”. Excellence (or governance-centralism) in e-governance requires the initiative to be effectiveness-driven and not merely efficiency driven (Rahm, 2023).

This will require the initiative to be led by “good governance” driven goal/purpose: additionally, the initiative must be outcome-focused (Saxena, 2005). The use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions (World Bank, 2002; Saguin, 2019; Jinah, 2021)).

According to Hossein (2008), “Information and Communication technology provides several facilities and possibilities for educational administrators to do their tasks”. The administrative systems include personnel administration, student administration, resources administration, financial administration and general administration (Maki, 2008; Shrivastava, et al., 2014). Based on the literature review the three main functional areas of e-Governance that are of great significance for day-to-day management of higher education institutions was identified.

Anwar and Mathew (2014), Jaleel (2014), Bhatnagar and Agarwal (2014), and Ghavifekr (2013) said that student administration which involves various activities beginning from the students’ admission process to publishing of results and performance analysis. Then Staff Administration which includes recruitment and work allotment of staff in the institution. Also, their attendance, pay slip generation, leave management, and performance appraisal. Finally, General Administration of higher education institutions which incorporates the various day-to-day activities of the entire system. As well as, it helps in processing of voluminous records in a quick, meticulous, and perfect manner (Das & Adhikary, 2022).

The higher education faces tough challenges in the recent times due to the growing international demands (Ebele, et al., 2024. Seddiky (2015) stated that the present education



system could not work effectively to meet the ever evolving demands in today's competitive environment. In deed the whole education system is not updated and effective to face the challenges of electronic governance. The Modern world is now around with the idea of e-Governance and all countries want to go ahead with this concept to ensure development in global context (Kumar, 2012). Use of e-Governance in educational management will benefit for analyzing the data accurately quick, decision making, provides the power to the administrators for efficient management of education and institution. e-Governance helps in improving transparency, dissemination, accountability and public services in all the aspects of education (Shrivastava, et al., 2014; Kapoor & Kelkar, 2013).

The purpose of implementing e-governance in any educational system will enable effective monitoring of academic standards and broaden innovations. In addition, it will help for the betterment of the higher education in the country and increase the number of employable students (Rahimi, et al., 2024; Das & Adhikary, 2022; Jinah, 2021). Selwood (2004) has analysed the primary teachers' actual use of ICT for administration and management. As a result, the levels of e-governance use are quite low. Ramganes. et al., 2016 in their study states that m-Governance is not a replacement for e-Governance, rather it complements e-governance. E-Governance enables the students & administrators to access easily, to use new class of quality of services and to provide multi-channel service delivery system. Such a inclusive and integrated system can also enable authorities to analyze the performance of one of the best performing institutes and compare it with other colleges to identify the gaps. Also, the system can obtain feedback from students to modify the course curriculum (Alam, 2016). Indian government has offered several ICT facilities for the past few decades. Even though they are investing more money on ICT infrastructure, the institutions still are not attaining the expectations (Oliveira, et al., 2020). Most of the Higher Education Institutions do not leverage e-Governance up to the mark to address the demands of their stakeholders. Some have successfully implemented the intranet and achieved considerable improvement in educational administration (Jinah, 2021). The need for the educational institutions in Nigeria to understand the gaps and failures in the implementation of e-Governance in higher education is timely (Ebele, et al., 2024).

3. Methodology

The study adopted qualitative method with a key informants interview (KII) and content analysis. The qualitative method was chosen to gain an in-depth understanding of the perceptions and experiences of key informants regarding the impact of e-governance on administrative personnel and students of Ibrahim Badamasi Babangida University Lapai. Using key informants interview method, purposive random sampling technique was used to collect the data among a population of about 50 ICT experts/staff and 20 students' leaders. The selection of respondents was basically on the recognition of their important role as the most informed persons about how e-governance influences staff and students' experiences. Data was collected from 10 administrative personnel who are ICT experts and 5 students' leaders of Ibrahim Badamasi Babangida University Lapai.



To explore and analyze insights, opinions, and experiences related to e-governance in the university context. The study employed semi-structured interview questions conducted with the purposively selected informants. This format allowed for flexibility in questioning while ensuring key topics related to e-governance were covered. Information regarding the impact of e-governance on administrative processes, student experiences, and overall perceptions was gathered through open-ended questions during the interviews.

Content analysis was employed to systematically analyze and interpret the qualitative data collected during the key informants' interviews. The collected data, including interview transcripts and any relevant documents, were coded based on emerging themes. This allowed for the identification of patterns, trends, and significant statements. Common themes and patterns were identified through a systematic review of the coded data. Themes were derived from recurring topics related to the impact of e-governance on administrative processes and student experiences. The identified themes were interpreted to draw meaningful conclusions about the perceptions and experiences of the key informants regarding e-governance at Ibrahim Badamasi Babangida University Lapai.

The study was conducted at Ibrahim Badamasi Babangida University Lapai, ensuring that the data collection site was directly relevant to the research context. Ethical consideration was applied to ensure the protection of participants' rights and confidentiality. Informed consent was sought from all participants, clearly explaining the purpose of the study, the voluntary nature of participation, and the confidentiality of their responses.

The study acknowledged potential limitations, such as a relatively small sample size and the subjective nature of qualitative data. However, efforts were made to enhance the validity and reliability of the findings through careful participant selection, data triangulation, and ethical considerations. The combination of key informants interviews and content analysis provided a robust qualitative methodology for exploring and understanding the impact of e-governance on administrative personnel and students at Ibrahim Badamasi Babangida University Lapai. The results derived from this methodology contribute valuable insights for future research and practical applications.

4. Findings

Effects of E-Governance on Educational Administration

Universal Acknowledgment of E-Governance and ICT Impact: All respondents, including administrative personnel and students, unanimously recognize the transformative impact of e-governance and Information and Communication Technology (ICT) in the educational sector (Krishnaprabu, 2019).

Creation of a Student-Friendly Environment: All the respondents agree that e-governance and ICT contribute to the creation of a student-friendly environment, fostering critical thinking abilities and redirecting focus towards higher-level and more meaningful concepts. This position was stressed more by a student postgraduate leader (interview with a postgraduate student, IBBUL, December 14, 2023).



Global Collaboration and Communication: 12 of the respondents mentioned that e-governance enables students to communicate, share, and work collaboratively on a global scale. According to an ICT expert, “teleconferencing and virtual collaboration platforms provide opportunities for students to participate in topical discussions with peers worldwide, fostering a global perspective” (interview with an ICT expert, IBBUL, December 15, 2023).

Enhanced Understanding and Learning Capacity: All the respondents mentioned that ICT plays a pivotal role in developing students' understanding capacity across diverse learning areas. Through ICT, “students can access advanced materials, constructive solutions, and relevant vocabulary-building activities, contributing to a richer learning experience” (interview with an ICT educationist, IBBUL, December 14, 2023).

Empowerment for Self-Directed Learning: 13 of the respondents state that e-governance empowers students for self-directed learning, encouraging independent and collaborative work. It was stressed by a student leader that multimedia tools, such as projectors, facilitate dynamic presentations, boosting students' confidence, and providing avenues for self-evaluation (interview with a postgraduate student, IBBUL, December 14, 2023).

Role of E-Governance in Exam Integrity and Ethical Development: All respondents emphasized the role of Information and Communication Technology in reducing exam malpractices and promoting ethical values. An ICT expert specifically mentioned that e-governance enables self-dependence and contributes to the ethical development of students, recognized as crucial elements of overall development (interview with an ICT Lecturer, IBBUL, December 15, 2023).

Government Initiatives and Commitment: According to 12 respondents, the government demonstrates a commitment to improving education quality through initiatives such as providing computers with internet connectivity, offering multimedia-assisted lessons, and implementing distance learning programs. An ICT administrator testified to the provision of computer hardware and internet services at the ICT Complex (interview with ICT administrator, IBBUL, December 14, 2023).

Web Portals for Student Welfare: 12 respondents mentioned that the practical applications of e-governance are evident in the use of web portals like e-SIF, e-FF, HF, e-TIF for online admission, result processing, and other student welfare initiatives in the university. The evidence of such practices was demonstrated by an ICT expert using the university website (interview with an ICT expert, IBBUL, December 14, 2023).

Barriers and opportunities: Each respondent was able to mention at least one facing IBBUL in e-governance implementation. However, cumulative challenges in the effective implementation of e-governance include limited internet access, electricity shortages, and a need for skilled manpower. Thus, they each provided recommendations which include use of solar as alternative source of power for university community electrification, training programs for ICT personnel, and strategic recruitment to address these challenges.



Significant number of recommendations on alternative power sources come from students (interview with a student union official, IBBUL, December 15, 2023).

In summary, the findings highlight the multifaceted impact of e-governance on education at Ibrahim Badamasi Babangida University Lapai. The positive outcomes, coupled with the acknowledgment of challenges and suggested measures, offer valuable insights for enhancing the integration of e-governance in the education sector, contributing to overall societal development and improved human resource capabilities.

Discussion of Findings

All respondents, comprising administrative personnel and students, converged on the acknowledgment that e-governance and Information and Communication Technology (ICT) usher in a new era in education as noted by Muthuselvi and Ramganes (2017); Das and Adhikary (2022); and Rahimi, et al (2024). This transformative technology is seen as instrumental in creating a student-friendly environment that nurtures critical thinking abilities and redirects focus towards higher-level concepts. E-governance, specifically, empowers students to communicate, share, and collaborate globally, fostering an environment conducive to constructive discussions and problem-solving through teleconferencing and shared virtual spaces.

ICT plays a pivotal role in developing students' understanding capacity across various learning domains (Chai & Tsai, 2010; Hillman, 2023). It provides avenues for students to explore constructive solutions to diverse learning inquiries and easy access to advanced materials, promoting vocabulary building activities and reading skills. Moreover, e-governance serves as a crucial tool for both students and teachers in making topics interesting and facilitating a clearer understanding of concepts through practical examples.

Students, empowered by ICT, exhibit increased capabilities in independent and collaborative work. Teachers can authorize students to complete tasks individually or in groups, promoting confidence, risk-taking, and learning from mistakes. Modern tools, such as multimedia projectors, enable dynamic presentations, contributing to students' self-evaluation and voice recording, a significant aspect of self-development (Krishnaprabu, 2019).

In response to the question of how e-governance contributes to shaping students as human resources and improving the quality of education in Nigeria, respondents emphasized the role of ICT in reducing exam malpractices and promoting self-dependence and ethical values (Assraf & Esmat, 2015; Hillman, 2023). Authorities actively seek global educational developments, incorporating constructive ideas into the curriculum to meet the demands of the global market.

The government's initiatives, such as providing computers with internet connectivity in schools, offering multimedia-assisted lessons in urban areas, and implementing distance learning through e-governance, demonstrate a commitment to enhancing education quality and accessibility. The utilization of web portals like e-SIF, e-FF, HF, e-TIF for online



admission and result processing exemplifies the practical applications of e-governance in addressing students' welfare.

Despite these positive findings, respondents acknowledged challenges hindering the effective implementation of e-governance. Issues such as the lack of internet and electricity access, insufficient skilled manpower, logistical support, and potential misuse of IT equipment were identified. Suggestions for improvement included rural electrification, training programs, logistic support, and the recruitment of IT specialists.

In conclusion, the study at Ibrahim Badamasi Babangida University Lapai reveals the multifaceted impact of e-governance in shaping students, improving education quality, and aligning the educational system with global demands. These are some of the issues identified by Ebele, et al (2024).affecting e-governance. Addressing challenges and implementing the suggested measures could further enhance the integration of e-governance in the education sector, contributing to overall societal development.

5. Conclusion and Recommendations

In conclusion, the study at Ibrahim Badamasi Babangida University Lapai underscores the transformative impact of e-governance and Information and Communication Technology (ICT) in the education sector. Through interviews with administrative personnel and students, it is evident that e-governance provides a platform for global collaboration, fostering critical thinking and redirecting focus towards meaningful learning. The integration of ICT not only enhances students' understanding across various domains but also empowers them for self-directed learning and collaborative endeavors.

E-governance initiatives contribute significantly to addressing challenges in education, reducing exam malpractices, and promoting self-dependence and ethical values. The government's commitment to providing technological infrastructure, distance learning opportunities, and web-based portals for student welfare exemplifies a dedication to improving education quality.

Despite these positive strides, challenges such as limited internet access, electricity shortages, and the need for skilled manpower persist. However, recommendations for rural electrification, training programs, and strategic recruitment provide a roadmap for overcoming these obstacles.

In essence, Ibrahim Badamasi Babangida University Lapai serves as a microcosm, illustrating the potential of e-governance to revolutionize education and align it with global demands. By addressing challenges and implementing suggested measures, the integration of e-governance in the education sector can pave the way for holistic societal development and improved human resource capabilities.

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