Integrity Journal of Arts and Humanities
Volume 6(2), pages 82-88, April 2025
Article Number: B3D308D73
ISSN: 2811-2407
https://doi.org/10.31248/IJAH2025.213
https://integrityresjournals.org/journal/IJAH

Review Article

E-administration and organisational performance: A conceptual review

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Received 26th March 2025; Accepted 27th April 2025; Published 29th April 2025

ABSTRACT: This paper presents a conceptual review of the relationship between e-administration and organizational performance, highlighting the transformative potential of digital technologies in enhancing administrative processes across public and private sectors. E-administration, defined as the integration of information and communication technologies (ICTs) into core organizational functions, is examined as a strategic tool for improving efficiency, transparency, decision-making, and service delivery. The review synthesizes existing literature to explore how e-administration influences key performance indicators such as productivity, accountability, innovation and responsiveness. It also identifies the critical enablers and barriers to effective implementation, including technological infrastructure, policy frameworks, staff competencies and organizational culture. By offering a multidimensional analysis of e-administration, this paper contributes to a deeper understanding of its role in organizational development and provides practical insights for policymakers, administrators and organizational leaders aiming to optimize performance through digital transformation.

Keywords: Digital transformation, e-administration, efficiency, ICT, organizational performance.

INTRODUCTION

The dawn of the digital age has ushered in a transformative shift across various sectors of human endeavour, and public and private organisations are no exception (Onwunyi and Okoli, 2017). In the rapidly evolving global landscape, the traditional paradigms of administration, characterised by manual, paper-based, and often bureaucratic procedures, have proven insufficient in meeting the demands of efficiency, transparency, accountability and responsiveness (Obike, 2022). This has necessitated a transition toward a more dynamic, technology-driven approach to management, often referred to as e-administration. The concept of e-administration encapsulates the integration of information and communication technologies (ICTs) into administrative processes to enhance the effectiveness and efficiency of organisational functions. It reflects a new era in governance and management, where digital tools are not merely supplementary but foundational to organisational operations (Obike, 2022; Onwunyi and Okoli, 2017).

E-administration is fundamentally about the digital transformation of internal processes, including decision-making, information dissemination, documentation, communication, performance evaluation and service delivery. While closely associated with e-governance in the public sector, e-administration also extends its utility to private enterprises, non-governmental organisations and educational institutions, where it plays a pivotal role in streamlining workflow, optimising resources, and improving service quality. With increasing digital literacy, growing public demand for accountability, and the global trend towards automation and artificial intelligence, organisations worldwide are progressively embedding e-administration tools to stay competitive and relevant (Obike, 2022; Onwunyi and Okoli, 2017; Udoh, 2024).

The implementation of e-administration holds the promise of enhanced organisational performance, a concept that encompasses a wide array of indicators, including operational efficiency, employee productivity, customer satisfaction, innovation capacity and goal attainment (Udoh, 2024). The theoretical underpinning of this relationship is rooted in organisational development theories that emphasise adaptability, strategic resource utilisation and continuous improvement. As such, e-administration is not just a technical upgrade but a strategic intervention with profound implications for how organisations plan, execute and evaluate their activities (Obike, 2022; Onwunyi and Okoli, 2017; Udoh, 2024).

However, the adoption of e-administration is not without its challenges. Issues such as digital infrastructure deficits, resistance to change, cybersecurity threats, inadequate ICT skills among staff, and lack of coherent policies continue to impede the full realisation of its benefits, particularly in developing contexts. Therefore, while the potential of e-administration to improve organisational performance is widely acknowledged, there is a need for comprehensive conceptual reviews to understand the dimensions of this relationship, identify critical success factors and explore the enabling and constraining conditions that affect outcomes.

This paper seeks to fill this gap by undertaking a conceptual review of the link between e-administration and organisational performance. It draws upon existing literature to map the contours of the subject. The paper aims to provide a clearer understanding of e-administration as a multidimensional construct and to critically examine how it influences organisational performance across diverse sectors and environments. By doing so, the paper not only contributes to academic discourse but also offers practical insights for policymakers, organisational leaders, and administrators seeking to leverage technology for enhanced performance.

ELECTRONIC ADMINISTRATION (E-ADMINISTRATION)

Various scholars have differently conceptualised e-administration; by implication, there is no generally accepted definition of the concept. According to Mueen *et al.* (2013), ICT includes an electronic network embodying complex hardware and software linked by a vast array of technical protocols. Ufuophu and Ayobami (2012) in their perspective, view ICT as including: the internet, satellite, cable, data transmission and computer-assisted equipment. ICT, in other words, are facilities, tools or resources that can be used to process, store, preserve, access, retrieve and disseminate information with ease. Hence, it is an engine for growth and a tool for empowerment, with profound implications for education, change and socio-economic development.

The word e-administration is a compound of “e”, which stands for electronic and service, which is an authoritatively coordinated process for the achievement of group objectives, because there must be some form of legal or social parameters indicating the structural and other relationships of persons engaged in administration (Moyo, 2018). In a similar vein, Bosu (2019) perceived administration as activity done in order to plan, organise and successfully run a business, school/or other institution, a process or act of organising the way that something is done. On the part of Eden (2006), administration involves planning activities which aim at the fulfilment of the goals of a particular organisation or institution. It calls for the ability of the administrators to make the right decisions to fulfill the required goals in the university system or setting, therefore, administration has been extended as a service activity or tool through which the fundamental objectives of the institutional process may be more optimized efficiently when allocating human and material resources as well as to make the best use of existing resources (Liverpool and Jacinta,2013). However, the integration of ICT into administration equals e-administration; hence, the need for incorporation of e-administration into the university system will enhance quality assurance and transformational development.

E-administration has been defined by Ogbonna (2011) and Eden (2006) as the variation of electronic information-based services with the reinforcement of participatory elements to achieve administrative management objectives. Dairo (2014) defined e-administration as the delivery of management information systems and decision-making online through the internet or electronic platforms. The implication of the above is that e-administration will enhance cordial relationships between the university stakeholders. Electronic administration is seen as being a more collaborative style of administration, featuring more collaboration with external sectors in making policy and in delivering services, and more collaboration with university stakeholders within the workplace. Ruhode (2013) noted that e-administration enables new information flows that challenge norms and capabilities. According to Ojukwu *et al.* (2014), e-governance is simply defined as digital governmental information or a way of engaging in digital transactions with customers. E-government represents the introduction of a great wave of technological innovation as well as government reinvention. E-administration initiatives can allow university administrators to transcend its traditional hierarchical structures of accountability.

E-administration involves the use of ICT and e-government in order to improve administration processes and the internal working of the departments within an organisation. The main aim of e-administration is effective public service delivery. With the advent of Information and Communication Technology (ICT), dynamic changes have not only been recorded but are still taking place in human society. Today, ICT is influencing all aspects of life. The influence of ICT is thus being felt more and more not only in the education sector but also in the administration and management of organisations, governments and public institutions. ICT is the use of technology in managing and processing information with the use of an electronic computer system and computer software to convert, store, protect, process, transmit and retrieve information (Dei, 2018).

Accordingly, Nwana *et al.* (2017) explained that information and communication technology (ICT) is a technological trend that has brought the world into a global village. It is a buzzword in media and telecommunications which has revolutionised the economy, business, industry, politics and education. They added that ICT uses various information super highways, namely: the intranet and the extent to which it functions. It is a science of information which uses the computer and multi-electronic resources to collect, process, store, retrieve and transmit or disseminate information to any part of the world. Supiandi and Lisa (2018) posited that ICT (information and communication technology) in its widest sense is technological tools and resources used to communicate, create, organise, disseminate, store, retrieve, and manage information. It does not only mean computers. It has to do with technological tools, which include computers, the internet, broadcasting technologies (radio and television), and the telephone. This implies that ICT is a combination of computers and telecommunication applications.

Fountain (2007), writes that e- administration in conjunction with the redesign of organisational process flows has diminished the amount of red tape and accelerated the delivery of university services for some members of the public, e-administration in the context of administration has been viewed as complex bureaucratic administrative establishments with the aim of information silos that erect barriers to access of information by making provision of services cumbersome and frustrating (Coleman and Gøtze, 2001). Kumar *et al.* (2007) argue that e-administration can also result in huge cost savings and the system alike, increase transparency and reduce corrupt activities in service delivery in terms of publishing, researching, interacting and transacting.

E-administration is an effective mechanism for achieving organisational objectives through the adoption of electronic devices in carrying out administrative functions of day-to-day activities (Zhang and Watts, 2008). E-administration in tertiary institutions has shown a lot of maturity in developed countries such as the US and Canada, which are currently considered the most developed countries as far as implementing administration is concerned. The government of these developed countries has committed to shaping itself as the government mostly connected to its citizens (Kumar *et al.,* 2007). For instance, the commitment that the Canadian government has made is the allocation of CAD $880 million to support the development of the e-initiative on e-administration in Canada (Kumar *et al*., 2007).

E-administration is the online method of assigning and carrying out jobs and responsibilities. The need to improve on the educational delivery process through new and more efficient ways of doing things has given birth to the electronic administration. In managing men and materials, e-administration makes the giving and receiving of instructions to superiors and subordinates easy, faster and even less stressful. Take for example, the office information system, which is also known as office automation, which refers to the number of information and communication technologies that are available in an office for the day-to-day activities in that office. 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 software that is used by top management officers in the decision-making process. Although it is not an alternative to decision making, it gives a list of options that can be selected from, with their advantages and disadvantages.

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 organisation with speed and little or no stress (Liverpool and Jacinta, 2013). ICT involves the use of electronic communication between departments and people within and outside the organisation, which connotes Electronic Administration (E-Administration). This involves the processing and transmitting of information from one department to another with a quick and cheap method of communication with the goal of improving organization performance and productivity. Also, it can be used to advertise and recruit new employees in any Institution.

Organisational performance

As for conceptualising organisational performance, there has often been confusion between "productivity" and "performance". Productivity is typically measured by computing the ratio of the volume of work completed by the organisation over a given period of time. While this is important, particularly when the focus of investigation is on the financial results of a particular strategy, performance is actually better understood as a broader concept that includes not only measures of result-oriented behavior such as productivity but also relative (normative) measures such as effectiveness, efficiency, economy, quality, consistency behavior and development and implementation of tools necessary for building skills and attitudes of performance management (e.g., education and training, concepts and instruments (Heffernan and Flood, 2020). People will not provide and commit their productive assets to an organisation unless they are satisfied with the "value" they will receive in exchange, relative to alternative uses of those assets. As such, creation of value, as defined by the providers of the necessary assets, is arguably the most important objective for an organization and necessary for the organization's survival (i.e., ongoing availability of productive assets is dependent on the value that is created by the use of the contributed assets being equal to or greater than the value expected by those contributing the assets).

However, while all this seems fairly straightforward and somewhat obvious, there are highlighted here, several reasons why assessment and understanding of "value creation" is challenging:

- Value creation is situational since value comes in many forms (i.e., tangible or intangible, operational or financial), and different types of organisations and stakeholders have different concepts of what outcomes are valuable. Creation of shareholder value, as measured by increases in market value plus dividends paid to shareholders, has been a long-standing measure of performance, and arguably the ultimate objective, for public companies. Public companies also pursue non-financial objectives; however, combining both financial and non-financial objectives to measure value creation occurs more often among private companies, and when material owners of the private company also serve as managers it is typical to see non-financial outcomes as a more important part of value creation for shareholders (e.g., lifestyle benefits including work location, work duration and social interactions; ego: and constituency benefits, such as providing income for friends and family, helping people with special needs and providing employment for a depressed community) (Windsor, 2017).
- Performance is a multi-based construct, which means that organisations must be seen as performing and creating value on multiple dimensions, such as growth, profitability, and legitimacy. According to Gutterman (2023), this means that organisations are continuously trading positive outcomes in one dimension for worse outcomes in another and that it is misleading not to take these tradeoffs into account when developing an overall measure of performance. For example, before concluding that a downturn in profitability, as measured by return on investment, is a sign of deteriorating organisational performance, consideration should be given to contemporaneous success in accumulating new resources in the form of capital raised from shareholders. The resource accumulation results in a lower risk-adjusted return on investment; however, it also positions the organisation to create value through being more effective with stable resources and promotes the maintenance of market share.
- Each stakeholder group, as well as each of the members of those groups, has a unique opinion as to what constitutes "value" with respect to the activities and outcomes of the organisation. Even in the traditional model where "shareholder value" is the primary focus, there will be some investors who want short-term profits and continuous dividends and other investors who are content to receive their value from successful exploitation of future opportunities that require investments that will reduce cash flow and tangible organizational assets in the short term. For creditors of the organisation, the most valuable actions are those that generate positive cash flow and preserve the value of the collateral that secures repayment of the organisation's debt obligations, and they have no interest in long-term investments that might increase the risk of default on the organisation's short-term duties to its creditors (Gutterman, 2023).
- Measurements of value should take into account not only the outcome of actions taken to date but also the risk-adjusted present value of future opportunities that have been created through strategic actions and decisions in the past. The problem with this is that reasonable minds may differ as to the probability that future opportunities will be realised, and there will likely be a number of different assumptions and expectations about future actions and conditions that will impact the ultimate value of those opportunities. In other words, assumptions about future outcomes and their value will vary based on the perceptions of the observer and each observer will impose a different tolerance for risk on those outcomes (Slovic, 2016).

The concept of organisational performance is the comparison of an organisation's goals and objectives with its actual performance in three distinct areas - financial performance, market performance and shareholder value. Financial performance refers to an organisation's results with regard to return on investment and return on assets. The market performance refers to a company's ability to set a price that returns a reasonable amount to suppliers. In addition, market performance refers to the ability to make and distribute their outputs in the most cost-effective way and to set a price that returns a reasonable amount (Blount, 2014).

Employee performance is a rating system used in most corporations to determine the abilities and output of an employee. Performance is divided into five components: Planning, monitoring, developing, rating and rewarding. In the planning stage, goals are set to help measure the employee's work time to see if they are able to maintain the goals set or reach new goals. Monitoring is the phase in which the goals are looked at to see how well one is doing to meet them. The one true meaning is that your evaluation on performance can lead to promotion, remaining in the same position, or termination based on what you did in your job (Nongo and Ikyanyon, 2012). Performance can be defined as long-term prosperity and power held by a company against its competitors.

Moreover, associating the term sustainable directs attention to future performance, if performance is somehow seen as a last result (Shabbir, 2013). The concept of sustainability is integrated into management and management accounting issues, making reference to the concept of value. Destruction or poor distribution of value is a threat to business continuity. Integrated management control developments need to manage value through customer value management (or customer value), taking into account strategic factors (often external company). Moreover, the concept of sustainable performance is based on the idea that the client is one of the business partners (known as stakeholders) able to participate in the process of value creation.

Challenges of e-administration to organisational performance

The challenges of e-administration that undermine organisational performance tend to be irregular power supply, insufficient technical know-how, shortage of ICT facilities, poor internet network diffusion, theft and vandalism of ICT equipment, high cost of ICT infrastructure, poor incentives to staff, endemic corruption, which is a cancer in government parastatals. This also constitutes a major problem for the practical implementation of e-administration. To buttress this, Yahaya and Idris (2015) noted that the number of problems facing the implementation of e-administration in Nigeria include; insufficient basic information technology facilities, shortage of information technology skills and knowledge among civil servants, inadequate skilled personnel to manage information and communication technology facilities poor electricity supply and cost of training staff among others. This may probably account for poor service delivery, delay in discharge of administrative tasks and failure in execution of government programmes and policies. This appeared to be in agreement with Hameed and Al-Shawabka (2013), maintained that in the light of the enormous technological and scientific developments witnessed by the world in the field of information and telecommunication technology, leading to the spread of the internet putting the world in the information technology era, there have been a growing interest by all types of organisations to improve their organisational performance through increasing services and encouraging creativity, innovation and customer satisfaction.

Although Nigeria is increasingly employing ICT in the conduct of both public and private businesses, leading to more effectiveness and efficiency in service delivery to the citizens, the adoption of e-administration has appeared to remain below expectations. Arguably, the full and widespread adoption of e-administration in the management of organisations (both public and private) has not been fully implemented as desired. Furthermore, Aneke *et al.* (2019) noted that adequate Information Technology infrastructure, such as hardware, software, network, intranet and extranet, telecommunications and enterprise applications are key barrier for e-governance adoption in Nigeria.

Currently, the state of implementation of e-administration with specific regard to the improvement of administrative processes in organisations, improving the speed of processing documents, enhancing inter and intra communication and improving the quality of e-services as being rendered to the people with particular reference to improving organisational performance, needs to be examined for accountability. There has been division among scholars on the importance of the adoption of e-administration in the management of public finance. To some, scholars like Hameed and Al-Shawabka (2013), the adoption of electronic administration to a very large extent helps in the increase of public trust since the said fund belongs to the generality of the masses and hence, there is a need for stewardship on how these raised revenues have been utilised. The implication of the above is that the adoption of electronic administration would help increase efficiency in financial management and greater organisational productivity. But despite the introduction of electronic administration in Nigeria, there are still cases of administrative sharp practices, which therefore call into question the very usefulness of the adoption of electronic administration. This is worrisome owing to the adoption of Information and Communications Technology in the ministry.

Moreover, it is a truism that because of the differences and disposition of human resources in organisations, most especially public organisations, harmonious existence has always been an onerous task. This is because in large organisations, there are different persons with differing backgrounds, religion, ethnic inclinations, orientations, culture, ideology and even languages with different interests. Hence, the need for the application of Information and Communication Technology (ICT) to enhance communication among different departments/ offices in the organisation needs to be fully implemented through policy innovation that would enhance proper communication among staff.

CONCLUSION

The review affirms that effective implementation of e-administration can significantly improve performance outcomes, including faster decision-making, better communication, streamlined workflows and increased accountability. These benefits contribute to the overall competitiveness and responsiveness of organisations, whether in the public or private sector. However, the adoption of e-administration is not without challenges. Issues such as inadequate infrastructure, limited digital skills, resistance to change and cybersecurity risks can undermine its success. Therefore, organisations must adopt a holistic approach, investing in technology, capacity building, and change management to ensure long-term impact. In conclusion, e-administration is a powerful tool for driving organisational performance in the modern age.

Its success depends on strategic planning, supportive leadership and a culture of continuous innovation. As digital transformation becomes inevitable, organisations must embrace e-administration as a pathway to greater effectiveness and sustainability. The advent of Information and Communication Technologies (ICT) has provided a platform for effective and efficient service delivery electronically. E-administration is also being embraced as a means of better service delivery to both organisations and the general public.

Recommendations

1. E-administration is an important step towards enabling the running of state agencies. The agencies, through their management, should therefore ensure that e-administration is adopted through the embrace of different aspects such as the Integrated Human Resource and Payroll Systems and the Integrated Financial Management Systems. Through these systems, the agencies are able to achieve accountability and integrity in dealing with public funds as well as effectively managing the workforce to ensure productivity and commitment to service delivery. The management of state agencies could enhance the use of strategy execution practices so as to enable the success of e-administration strategies, which are significant to enhanced public service delivery.
2. The need to address the problem of epileptic power supply in Nigeria cannot be overemphasised. This will put a stop to cases of power failure interrupting examinations. Also, institutions should improve on their current ICT infrastructure and strategy, particularly as regards the accessibility of websites and the internet.
3. Frequent training and retraining of both workers and students in ICT is also important. This will not only enhance the implementation of e-administration but will generally improve organisational performance.
4. The operation of e-administration should be improved upon to ensure effective and efficient data storage and retrieval system that will guarantee quality service delivery to the public and also meet the demands of the global best practices in the implementation of Information Communication Technology.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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