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E-Governance in Nigeria and the Theories of Law and Technology

Chidinma C. Akparanta
PhD Candidate,
Babcock University, Nigeria

Lucky O. Ikuvwerha

Lecturer, Faculty of Science,
University of Lagos, Nigeria

Olubukola Olugasa

Professor, Faculty of Law,
Babcock University, Nigeria



Abstract

The advancement of technology in recent times resulted in changes in the way things are done. The act of governance is not left out in the impact of technology as traditional governance has been disrupted by technology. Governance practices, decision-making processes, and overall corporate performance can be enhanced by adopting technological innovation. Technology plays a crucial role in modern corporate governance by facilitating transparency, accountability, efficiency, and effective decision-making. This paper adopted a qualitative research methodology. It utilized the doctrinal research design which involved the use of primary and secondary sources of information such as statutes, journal articles, and other online sources. The paper found that technology and its quick adoption is a veritable tool for achieving e-governance. Also, it found that there is dearth of digital skills due to the digital divide that exists in the country. It found that abuse of citizens' data could be a major concern of technology for communication in e-governance. It recommended the strengthening of ethics and data privacy regarding technology. It concluded that given the global trend and the benefits associated with E-governance, it should be embraced with zest.

Keywords: Digitalization, E-Governance, Technological Advancement, Technological Innovation, Technological Phenomenon.

Introduction

The emergence of technology has impacted various aspects of the world. Individuals, government, and society at large are all being impacted by technological advancements. Electronic Governance (E-Governance) I.T proficiency and a globally competitive workforce. With the new wave of technological advancements, some things are now done differently; instead of doing things manually, digitalization is gradually becoming the new normal. Human activities have progressed from being carried out manually to being done digitally. Human activities are no longer restricted to time and space.

Technology is an enabler of transformation in governance. The change in the mode of governance that is a result of technology is described as E-governance. The emergence of technology has impacted various aspects of the world. Individuals, government, and society at large are all being impacted by technological advancements. E-governance) I.T proficiency and a globally competitive workforce. With the new wave of technological advancements, some things are now done differently; instead of doing work manually, digitalization is gradually becoming the new normal. Human activities have progressed from being carried out manually to being done digitally. Human activities are no longer restricted to time and space.

This paper begins with conceptual clarifications of some relevant concepts such as government, technology, innovation, and e-governance. Also, it examines some technological innovations that are utilized for e-governance, the benefits of e-governance, and the application of theories of technology to the technological innovations that are used in e-governance.

Conceptual Clarifications

Government

Government is described as the group of people who control a country in an official capacity.¹ The government of a country takes charge of the people of a country. It is a system, activities, or processes through which people, cities, or even countries are controlled. People are taken charge of and managed by a government. The concept of marriage could be location-specific like the government of a particular country, cities for instance, Nigeria. Government has three branches or arms that are referred to as the legislative, executive, and judiciary. The executive is the organ of government which is responsible for implementing the laws made by the executive. The functionaries and agencies of government who are saddled with the role of executing the will of the state which takes the form of a law and they are political executive (Ministers and Head of State) and non-political permanent executive (Civil Service or Bureaucracy).² The political executive makes policies and ensures all the departments of government enforce the laws and the permanent executive are responsible for the day-to-day administration in the

¹Government, '<<https://dictionary.cambridge.org/dictionary/english/government>>accessed 7 May 2024

²Emmanuel Bassi, 'Organs of Government'<<https://www.studocu.com/row/document/nigerian-turkish-nile-university/elements-of-government/organs-of-government/7840469>>accessed 8 May 2024

departments of government.³ Also, the political executive supervises and control the non-political permanent executive.⁴ The legislature has the responsibility of the enactment of laws and the judiciary

Technology

The word, 'technology' has its root from the Greek word, 'tekhlogia' and the Latin word, 'technologia and both of them are words used to "describe a systematic study of the arts or the terminology of a particular art."⁵ Technology is viewed from various perspectives some of which are developments, advancements, improvements to standard or quality of life.⁶ Technology could have many expressions and these technological innovations are applicable in diverse fields which include law, finance, governance, transportation, hospitality, medicine, agriculture, sociology, education, and commerce. The impact of technology on people, the mode of doing things and life generally results in both positive and negative outcomes as will be considered in the course of this paper. The reason is that as much as there are technologically improved ways of living, there also exists the downsides of technology. Some technological innovations lead to questions of law, morality, privacy and ethics. This paper will examine some technological innovations that are utilized in governance in Nigeria and also examine the intersection of the theories of law and technology.

Innovation

Innovation is a term used to describe a plan to have an improved service or product or an update mode of operations.⁷ It begins with a new idea, could be a new business model or may have been applied somewhere else and can affect any aspect of a business.⁸ Innovation involves the creation of value and as it affects e-governance, innovation depends on the creation of value regarding governance, bringing solutions to issues regarding products and service delivery in governance to enable it to thrive. An innovation should be impactful and be utilized in problem-solving. Therefore, the introduction and application of a technological innovation such as e-governance will potentially enable the governance process to be sustained, stay relevant, and also to thrive.

Electronic Governance (E-Governance)

E-governance is a global phenomenon and a term that was brought into existence due to a revolution in Information and Communication Technologies (ICTs) which

³Ibid.

⁴Ibid.

⁵R. Williams, (1976/1983). Keywords: A vocabulary of culture and society (1976/1983) Oxford University Press. p.316

⁶ Daniel G. Krutka,

'TECHNOLOGY' <https://www.researchgate.net/publication/327755228_TECHNOLOGY> accessed 11 May 2024 (2018) P.4.

⁷ 'What is Innovation?' <<https://www.bdc.ca/en/articles-tools/business-strategy-planning/innovate/what-is-innovation>> accessed 17 May 2024

⁸ Ibid.

has changed the lives of people and the way government and citizens interact.⁹ It implies using information and communication technologies (ICTs) at various levels of the government for the purpose of enhancing governance.¹⁰ In an effort to bring clarity to the concept of e-governance, it was described as focusing on administration and management within an organization that may be public or private, large or small.¹¹ It helps governments to improve the delivery of services to citizens, encourage citizen participation in the decision-making process, improve information and service delivery, makes government more effective, speed, accountable, and transparent using information and communication technologies.¹² E-governance has to do with a wide range of technologies which include internet-based applications, social media, mobile devices, and other digital tools. E-governance reduces focus on traditional governance modes. The activities of e-governance can still be viewed from the perspective of the different arms of government as they separately carry out their functions as impacted by digitalization. Some of the e-governance initiatives in Nigeria are as shown in this paper and they exemplify the usage of technological innovations by the executive, legislature, and judiciary in the process of governance.

With the shift from traditional governance to e-governance, there is enhanced quality of public services. Information is more speedily and better disseminated to the public and other agencies for the performance of administrative activities and for increased government-citizen relationship.¹³ E-government initiatives are initiatives of government and departments to use ICT tools and applications, internet, and mobile devices in order to support good governance, strengthen existing relationships and also build new partnerships within civil society.¹⁴ With the use of technology, innovations termed, ‘telecommunication’ that aid communication in governance by providing easier access and interconnectivity are established

The need for technology in achieving this objective of better service delivery has informed how crucial it is to ensure that the Information technology (IT) systems of government function properly and are secured. Therefore, Nigeria has taken it a step further by establishing the National Information Technology Development

⁹Ibikunle Frank and Sarumi Jerry, ‘Electronic-Governance for Nigeria: Opportunities and Challenges in the Digital Era’, (2012) *International Journal of Electronic Governance and Research*, 1(1) 77

¹⁰ R. W. Okot-Uma, (2000) *Electronic Governance: Re-inventing Good Governance*. London, U.K.: Commonwealth Secretariat.

¹¹Shailendra C. Jain Palvia¹ and Sushil S. Sharma, ‘E-government and E-governance: Definitions/Domain Framework and Status around the World,’ <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=c21604a8a51bee3f83f662db661d018f31769be0> accessed 19 May 2024

¹²Anthony Ogbonna Agu and Sunday Virtus Agu, ‘Cashless Policy and the Nigerian Economy: A Disaggregated Approach’, (2020) *International Journal of Humanities, Social Sciences and Education* 7(4)21 ISSN 2349-0373 (Print) & ISSN 2349 – 0381 (Online)

¹³Ugochukwu Onwudebelu, Uchenna C. Ugwoke, Godwin O. Igbinosa, ‘E-Governance Initiatives in Nigeria’, (2012) *IEEE 4th International Conference on adaptive Science & technology (ICAST)*

¹⁴ Frank (n 9).

Act¹⁵ that has the responsibility for developing and regulating Information Technology in Nigeria.

With the shift from traditional mode of governance to e-governance, there is enhanced quality of public services. Information is more speedily and better disseminated to the public and other agencies for performance of administrative activities and for increased government-citizen relationship.¹⁶ E-Government initiatives are initiatives of government and departments to use ICT tools and applications, internet, and mobile devices to support good governance, strengthen existing relationships, and also build new partnerships within civil society.¹⁷

Initiatives of E-Governance in Nigeria

The Head of state, ministers and the civil service, law makers and the judiciary all form the government and they employ technological innovations in governance. This is referred to as e-governance. In recent times, these arms of government are seen to adopt some digitalized modes of carrying out their functions which when utilized properly result in benefits and transform governance and Some technological innovations that are used in the process of e-governance are as shown below:

INEC Continuous Voter Registration Portal

The INEC portal for voter registration is a technology that is employed by INEC for citizens with voting capacity to register to vote. This portal also enables registered voters to track their Permanent Voter Card (PVC), check their voter status, and identify their polling unit. It is an innovation that facilitates electoral process. This innovation will foster governance and specifically a democratic government though encouraging active engagement of citizens of Nigeria in the electoral processes in the country.

Bimodal Voter Accreditation System (BVAS)

This BVAS is a technology that was introduced by INEC to enable the credibility of elections. It is a multifunctional device used to perform an array of functions that include voter enrolment or registration, facial and fingerprint verification at the polling units, and allowing election sheets to be uploaded to the INEC Result Viewing Portal (IReV). The BVAS is used to register voters, get accredited using fingerprints or facial features. Thereafter, they are allowed to vote. After the accreditation of a voter, this is digitally captured on the central database of INEC and it enables the commission to track the number of actual votes in a polling unit.

How to Use the BVAS Technology for Accreditation

Scan the QR code on the PVC.

Conduct an online search using the last 6 digits of the PVC.

Conduct an online search using the surname of the card bearer.

¹⁵ National Information Technology Development Act 2017

¹⁶Onwudebelu (n 13).

¹⁷ Frank (n 14).

INEC Result Viewing Portal (IReV) Portal

The IReV portal is one of the most significant innovations that the INEC introduced was first used during the Nasarawa Central Constituency bye-election in August 2020 and was designed for the uploading of result sheets from polling units on Election Day. It shows images of the original results from the polling units as recorded in Form EC8A. This will enable the public to view results in real time. The aim is to promote integrity and transparency as the public would be able to view the results as they are uploaded real time and await the official declaration of results.

The IReV portal is prone to privacy issues due to possible cyber-attacks which can alter information that are uploaded to the website of INEC. Another issue that may be encountered poor electricity or internet access may have worse technical glitches or malfunctioning on the use of this type of technology as was alleged during the presidential election in 2023.

Electronic Tax (E-Tax) Administration

Tax administration is about the registration, assessment, returns, collection, compliance, monitoring, compliance enforcement, sanction, taxpayer education and other actions which are geared towards increasing the efficacy and efficiency of taxation. Though the finance unit of a government is in charge of tax administration, the executive is responsible for changes in the structure and administration of tax. In Nigeria, tax administration has evolved to a digitalized mode of tax and this is expressed in various forms.

Tax Registration

The Nigerian government has introduced the registration of its taxpayers and the issuance of a unique Tax Identification Number (TIN) upon registration by the taxpayers. A taxpayer can only have one TIN that is unique to him. The TIN is a uniform mode of identification of all taxpayers in Nigeria. Also, it provides a database that can be accessed by all tax authorities and government agencies (Local government, State, and Federal) in Nigeria). The establishment of TIN provides easy and complete access to information of taxpayers nationwide and this could only be possible using ICT. It makes for ease of reference to taxpayer data, reduces cost of administration and supervision, and enhances tax payment compliance.

Tax Audit and Investigation

For tax audit and investigation, tax authorities have been encouraged to promote the use of electronic and other technology-related systems in the audit process for reduction of time and cost and to ensure the integrity of the audit process.

Tax Filing

The filing process for tax has also taken a new turn from a manual to a digitalized method.

Virtual/Remote Court Proceeding

Technological innovations have become a necessity owing to their many benefits. The Nigerian judiciary has benefitted from the introduction of technology which has led to the improvement and advancement of justice. Technological advancement has been observed in the judiciary arm of government in Nigeria and this is not new globally because some other jurisdictions have introduced and adopted remote court proceeding(RCP) such that the traditional physical court proceeding is gradually been migrated online.¹⁸ The application of technology to the judicial processes yields benefits which include easier access to information, better and faster filing of processes, faster and better research. Generally, it aids easy and quicker dispensation of justice.

Further to the outbreak of the COVID-19 pandemic in 2020 and its attendant consequences, one of which was restriction of movement and public gatherings, the Chief Justice of Nigeria, Justice Tanko Mohammed issued a circular NJC/CIR/HOC/II/656 in April 2020 to Heads of Courts recommending the adoption of remote court proceedings while suspending court sittings except they are urgent, essential or time-bound in line with the extant laws¹⁹. On the basis of the recommendation by the then Chief Justice, the Heads of Courts issued Practice Directions which made room for remote court sittings pursuant to the powers granted by the Constitution.²⁰ Virtual court hearing is court hearing that allows stakeholders such as judges, counsels, witnesses, court staff, and others to attend court hearings online. This is enabled using skype, zoom, google meet and other internet and computer devices. The use of these technologies by the judiciary enabled the judiciary to remain active in spite of the COVID-19 pandemic.

However, the adoption of remote court proceedings in Nigeria is not without some challenges and require clarity of some grey areas which include filing of court processes, service of court processes, provisions for actual court sittings, admissibility and taking of evidence, and commencement of remote court proceedings.²¹ In spite of the challenges, the benefits of virtual court proceedings cannot be over-emphasized. This has led to the recommendation for the adoption of the technological innovation of video conferencing for quick hearing of cases and to administer bail promptly as it affects criminal cases.²² The use of technology to facilitate activities in the judiciary enables the wheel of judiciary to roll faster because some court proceedings can still be had virtually despite the physical

¹⁸ Tania Sourdin, Bin Li & Donna Marie Mc Namara 'Court Innovations and Access to Justice in Times of Crisis' 9 Health Policy and Technology 2020, pp. 447–453.

¹⁹See National Judicial Council Covid – 19 Policy Report: Guidelines For Court Sitting and Related Matters in the Covid-119 Period, National Judicial Council, 2020, Circular No. NJC/CIR/HOC/II/660 [accessed 19 May 2024]

²⁰See Sections 236, 248, 254, 259, 264, 269, 274, 279 and 284 of the Constitution of the Federal Republic of Nigeria 1999

²¹Olubukola Olugasa and Abimbola Davies, 'Remote Court Proceedings in Nigeria: Justice Online or Justice on the Line' (2022) 13(2) International Journal for Court Administration. DOI: <https://doi.org/10.36745/ijca.448>

²²Olubukola Olugasa, Utilising Technology in Making the Nigerian Administration of Criminal Justice Act Effective for Criminal Trials 11(2) International Journal for Court Administration 2020, pp. 1–11.

absence of stakeholders. Therefore, it expedites justice through convenience, speed, and it is time-saving.²³

Filing of Court Processes Online

In recent times, filing and tracking of cases online have been introduced as different from the manual way by which it was done previously and for a long time. Lawyers do not now necessarily need to be in court physically to file court processes, make certain payments to court, generate suit numbers and have cases assigned to them. These are digitalized ways of administration of justice. E-filings and tracking of cases are essential tools of E-governance used in the judiciary.

Use of Technology for Alternative Dispute Resolution

Technology has advanced to the extent of its inclusion in arbitration and mediation. Online mediation and arbitration are now allowed and they aid the dispensation of justice because of the convenience and speed associated with them.

Electronic Interaction

The government (Executive) has taken to interacting with its populace through debates organized on television. The government also communicates to the public through social media platform such as twitter.

Use of Paperless Office

This is an e-administration concept which seeks to create a paperless by hanging a traditional office into a paperless office.²⁴ It converts paper processes into electronic version. It involves the use of online timesheets and expense account. Apart from the benefit of reduction of paper usage and cost of governance, it makes efficiency of work process, for transparency and accountability of government officers or workers.

Cashless Policy Technology

The cashless policy was rolled out by the Nigerian government through the Central Bank of Nigeria (CBN). The technology is one that encourages electronic transactions and digital payment systems. It is a system whereby transactions are carried out or operate without the use of coins or banknotes.²⁵ It is intended to reduce the need for and use of physical cash. This will aid security, combat corruption, increase financial inclusion, and modernize the economy.

To achieve a cashless economy, certain initiatives have been employed such as use of Automated Teller Machine (ATM) transactions and Point of Sale (POS) payment modes or patterns, acceptance of card payments and electronic transfers in public places and for government services. The more acceptance of non-cash modes of transaction in the society has been made possible through the encouragement of

²³S. Fafinski (2009) *Computer misuse: response, regulation, and the law*. Cullompton, Devon: Willan Pub.

²⁴Anthony Ogbonna Agu and Sunday Virtus Agu, 'Cashless Policy and the Nigerian Economy: A Disaggregated Approach', (2020) *International Journal of Humanities, Social Sciences and Education* 7(4)21 ISSN 2349-0373 (Print) & ISSN 2349 – 0381 (Online)

²⁵ *ibid*.

the government through its financial sector. Enhance revenue in the banking sector and enhance the overall Nigerian economy.

This technological innovation seeks to encourage payment security, convenience and affordability. It reduces financial crime, tax avoidance, decrease cash dependency, and advances the adoption of digital financial services.

3.10 PROVISION OF EASY ACCESS PHONE NUMBERS FOR GOVERNMENT SERVICE DELIVERY

The government of Nigeria has made efforts at better service delivery by providing its citizens with short codes or emergency numbers with which they can access some public services like police, accident emergencies, and fire services.

3.11 ACTIVITIES OF THE CORPORATE AFFAIRS COMMISSION (CAC)

The technological tools deployed in this area of governance include ability of the CAC accredited persons to be able to register business and not-for-profit organization in the CAC portal without the previous mode of doing this which involved several visits to CAC office.

3.12 USE OF SOCIAL MEDIA APPLICATIONS

Facebook, LinkedIn, Instagram, and Twitter are technological platforms that have become some of the expressions of e-governance. In a bid to upgrade the traditional mode of governance, government has made recourse to utilizing some social media technologies for ease of communication with stakeholders. Official information as necessary are better disseminated on these platforms, making for a shift from the traditional mode of governance.

3.13 USE OF BANK VERIFICATION NUMBER

The use of bank verification number (BVN) is a government financial initiative that is implemented through the Central Bank of Nigeria across the banks in Nigeria. It is a technological innovation that fosters e-governance with respect to the operations in the financial sector of the economy.

3.14 E-DIVIDEND MANDATE ACTIVATION FORMS

The E-dividend mandate activation form is one of the initiatives of the Securities and Exchange Commission. It is an electronic form that the shareholder of a company completes to let a company know to whom to pay dividends. Securities and Exchange Commission has placed the E-dividend mandate activation form of various registrars on its website for easy accessibility by the public.

3.15 CHECKING FOR UNCLAIMED DIVIDENDS

In recent times and with the aid of technology, the SEC has made it possible for a person to check for his unclaimed dividend. This can be achieved by visiting the SEC website for your name and all the details sought. After this is determined, you can proceed to download and complete the appropriate registrar's E-mandate forms with the required information which includes your bank name, BVN, account number, and other personal details.

E- Dividend

This involves the direct crediting of dividend warrants into the bank account of shareholders. Prior to this time, physical dividend warrants were sent to shareholders. The E-dividend service is available to all shareholders free of charge. It is safe and convenient, saves time and resources, and enables shareholders to be notified on their mobile phone once payments (dividends) are made into their respective bank accounts

Use Of Websites by Government and Its Agencies

Government of Nigeria at different levels and its various organs and agencies have embraced the use of websites and portals. This is a technological innovation that makes it possible for the activities and contacts of government and its agencies to be easily accessible to the public because it is put on display on the websites.

E-Governance Framework.



Figure 1: E Governance Framework

Figure 1 represents a high-level overview of an e-governance framework, illustrating the interconnections between various components crucial for its successful implementation.

Microsoft Teams

Microsoft Teams is a messaging application that can be used by organizations as a workspace for meetings, file and app sharing, and real-time collaboration and communication.²⁶ It is a digital tool that fosters work, moreso, and work in the gig

²⁶ 'What is Microsoft Teams'? <<https://support.microsoft.com/en-us/topic/what-is-microsoft-teams-3de4d369-0167-8def-b93b->

economy. Microsoft Teams is also described as a hub for teamwork in Office 365. The basic features of Microsoft Teams involve having all your files, conversations, meetings, and apps.²⁷ Teams can be used in organizing a personal virtual workspace and also to ensure effective collaboration among workers. Microsoft Teams can be used to do the following: Microsoft Teams video calling, asking a quick question, making calls from any device, integration with the Microsoft Suite, Microsoft Planner App in Teams, and, easy scheduling of meetings.²⁸

Zoom Platform

Zoom has been described as a platform for communications that allows users of the platform to connect with one another with audio, video, phone, and chat. The use of Zoom is possible when the devices to be used are connected to the internet.²⁹ Zoom is a video conferencing platform that allows its users to connect online for video conferencing meetings, live chat, and webinars through various devices such as laptops, desktops, and mobile phones.³⁰ Users of Zoom can utilize the Zoom platform for communication such as meetings and conferences. Zoom technology is used amongst workers (whether part-time or full-time employees. With a Zoom app, persons can join the Zoom platform where virtual meetings and meeting spaces are created. Participants in a Zoom meeting are able to communicate with each other via video or audio. It has additional features that allow participants to share their screen, share files, and also use text chat generally within the meeting group or privately or directly amongst themselves.³¹

The use of the Zoom platform was made popular during the COVID-19 pandemic in 2020 because it became a necessary technological intervention to enable people to stay in touch for business and personal reasons and it fostered collaboration. The Zoom platform is a technological innovation that served as an intervention for the barriers that became existent due to the incidence of COVID-19. As a technological innovation, it introduced a new process of having meetings and conferences. It is a digital innovation that takes the place of physical meetings and meeting rooms. It facilitates the judicial process by making meeting attendance and court hearings to be conducted in a more convenient way. For instance, in Nigeria, the judiciary adopted virtual court hearing which is conducted via Google Meet, Microsoft Teams, Zoom, Skype and other video conferencing platforms designated.³² The enhanced collaboration that the zoom platform provides cannot

0eb5286d7a29#:~:text=Microsoft%20Teams%20is%20the%20ultimate,and%20even%20the%20occasional%20emoji!>accessed 7 November 2023.

²⁷ '10 Benefits of Microsoft Teams (To make Life a Whole Lot Better),'

<<https://www.bemopro.com/cybersecurity-blog/10-benefits-of-microsoft-teams>>accessed 7 November 2023

²⁸ Ibid.

²⁹ What is Zoom Video Conferencing?,

<https://support.zoom.com/hc/en/article?id=zm_kb&sysparm_article=KB0059590> accessed 11 November 2023.

³⁰ 'Explained: What is Zoom,?' <https://www.webwise.ie/parents/explainers/explained-what-is-zoom/> accessed 11 November 2023.

³¹ Ibid.

³² Part F Federal High Court Practice Direction for Covid – 19 Period 2020, Section 6-7 Ogun State Practice Direction No. 2 of 2020, Section 7 of the NICN Practice Direction and Guidelines for Court Sitting 2020, Section 4(b) High Court of River State Practice Direction No. 2 of 2020

be over-emphasized, hence its use in the various arms of government in Nigeria to facilitate the process of governance.

Others

Use of drones, use of traffic cameras, use of e-passports, use of official websites, online law reports, adoption of electronic contracts, online court proceedings, electronic filing of court processes, telephone banking, mobile banking, internet banking, use of e-health digital tools

Benefits of Technology in E-Governance

The benefits that technology will bring to governance through e-governance are intended to help the organizations and organs of government to function more effectively, efficiently, be responsive to the needs of citizenry. Better government service delivery can be enhanced by facilitating access to services, automating procedures, and correct, adequate and faster access to information or data. E-Governance has some values or benefits that comes with it and they include:

- Efficiency
- Convenience
- Transparency
- Data Security Enhancement
- Promoting inclusiveness and participation of wider industry
- Boost citizens' confidence
- Boost economic confidence
- It facilitates collaboration amongst governments of different countries

Challenges of E-Governance in Nigeria

Just as there are the benefits of the use of technology in governance, there are also challenges of e-governance in Nigeria. Some of the challenges include the following:

- (a) Digital divide - Poor knowledge of ICT/Lack of I.T skills
- (b) Inadequate infrastructure (telecommunication)
- (c) Digital exclusion
- (d) Resistance to change/ Poor interest in ICT
- (e) Security issues
- (f) Budget constraints
- (g) Misappropriation of funds
- (h) Poor engagement of the citizenry

- (i) Insufficient legal framework
- (j) Poor coordination and unified action plan among government agencies.

Application of the Theories of Law and Technology to E-Governance

In this segment of the paper, some theories of law and technology will be examined regarding the application of technology to E-governance. These theories of technology will provide an understanding of the acceptance and application of technological advancements through legal and ethical perspectives. The narrative of technology will be complete without examining the intersection of legal theories and theories of technology.

Necessity Theory

The Necessity bothers on how technology became necessary to sustain the existence of human beings. In a bid to bring clarity to the use of technology, legal minds like Widdison and Teubner examined the necessity theory. Widdison posits that when technology is employed, it dematerializes physical human activities and it is omni- present and malleable ³³

Technology makes it possible for things to be done more easily, conveniently, and faster. During the COVID-19 pandemic, there were restrictions on movement and associations. Therefore, it became necessary to seek other ways of continuing with the activities of life. Technological innovations provided these alternatives or options to continue with the activities of life without bringing harm to human beings and the environment we live in.³⁴ The key word that underlines technology is the need for sustainability of human existence and the environment. Things were no longer done like in the past. The status quo before the COVID-19 pandemic changed as a result of the advancement of some technological platforms for holding meetings digitally such as Zoom, Teams, and Google Meet. The legislature, executive, and judiciary all resorted to having meetings using these technological platforms. These technological phenomena are innovations that displaced physical meetings. Zoom, Teams, and Google Meet are online applications that allow persons to connect digitally to have meetings because the legislative, executive, and judiciary activities need to be continued inspite of the drawback from the pandemic. E-governance means the digitalization of governance is a product of the theory of necessity.

Autonomous Theory

The Autonomous theory encompasses Innovative theory, disruptive theory, and the reverse reactionary theory. Innovation means a new way of doing something as different from the way it was done previously. When the technology that is developed brings a change to the status quo and benefits such as efficiency, effectiveness, precision, convenience, and easier ways of doing things, it is referred

³³ Robin Widdison, 'Electronic Law Practice: An Exercise in Legal Futurology' (1997) 60 Modern Law Review 143.

³⁴ Prof. Olubukola Olugasa, Lecture Note on Law and Technology 2023/2024 Session, School of Law and Security Studies, Babcock University, Ilisan, Nigeria

to as innovation and it is seen as autonomous. It implies gaining autonomy from what used to be or changing the status quo of the way things existed or were done. It means that technological innovation has brought a change from the old way of doing something. Specifically, as it affects this paper, e-governance changes the status quo of traditional governance due to the introduction of technological innovations that are instruments of change in the mode of governance. The new expressions of governance as occasioned by technology have been identified and examined in the earlier part of this paper.

Innovative Theory

The Innovation aspect of the Autonomous theory which is called 'Innovative theory' considers an impactful technology as innovation. This is because such technology brings about the improvement of a product or delivery of services. The technological phenomenon of e-governance is an innovation that is making strides in Nigeria as shown by the various expressions of technology that are applied in the legislature, executive, and judiciary. The use of digitalized meeting platforms, websites, Twitter, LinkedIn, Facebook, and others examined above are all innovations.

Disruptive Theory

This theory is an off-shoot of the Innovative theory. The emergence of technological innovation results in the disruption of some things or some people. The presence of technological advancement brings about innovation and its attendant benefits and challenges for end users. However, some persons consider technological innovations as having a negative effect because it seemingly makes them irrelevant in the scheme of things.

Ethical Theory

Ethical theory regarding E-governance will mean examining the technological innovations used for E-governance to see whether or not the use of such technology will uphold ethical practices. It involves applying technology based on ethical standards of governance which include accountability, integrity, diligence, transparency, honesty, and conflict of interest. Ethical theory considers the ethics of e-governance, whether or not the e-governance technological innovation is done bearing in mind the proper way governance should be conducted. Compliance with codes of conduct in the field of governance is an ethical question that the intersection of this theory with technology seeks to answer. The question then becomes, does the technological phenomenon of e-governance satisfy the ethics of the ordinary mode of governance? Does it promote fairness and equity in its application?

Privacy Theory

Technology has its transformative benefits. However, it can also pose a threat to the privacy of its users. Communication and data collected in governance should be protected. One of the drawbacks of certain technologies would be the challenge of invading the privacy of both its users and other people. The use of Google applications and other digitalized forms of communication can result in the

invasion of the data of people that are collected for official purposes. An indicator of the need to protect the privacy of users of the technology will stem from the fact that the technological innovation might be a creation of foreigners with a different culture from that of the users of the technological innovation. Impliedly, the developers or owners of a technological innovation will know who has access to the platform. If total access is not allowed to a user of technology, it can amount to a breach of privacy for a user.

Additionally, the introduction of the Internet of Things could amount to a breach of privacy of user data and collated data if not properly managed. Mismanagement of data provided and collated jeopardizes data security and privacy. Also, cybersecurity issues pose a threat to the assurance of the privacy of users of technological innovations used for e-governance. The attention drawn to data management by the privacy theory is intended to show the challenge of digitalization. Therefore, for e-governance to thrive, government agencies, parastatals, the legislature, and the judiciary ought to fix data management and security if privacy is to be achieved. The ability to and benefit of working remotely, enhanced work methods, the internet of things, and other forms of advancements that are made possible by digitalization should not be the end of privacy. Given Privacy theory, the technological phenomenon of e-governance and the tools it employs should be utilized in such a way that the rights to privacy of persons is not breached. This is because an infringement of the rights to privacy of an individual in the course of applying the technology would amount to a breach of the Constitution of the Federal Republic of Nigeria³⁵ and regarding privacy of data, the National Data Protection Act³⁶ will be contravened.

Conclusion

Technology is largely expected to bring about innovation, improvement and advancement. Therefore, e-governance which is a technological advancement is perceived as a tool for the improvement of the process of governance. E-governance goes to show that governance can be enhanced by technology. Technology has become a vital tool that can be used to drive advancement and improve performance in the public governance sector.

Recommendations

Government should collaborate with ICT and technology service providers. This will foster the adoption of the right technologies that will be used for e-governance and also curb the deficit of technological infrastructure.

Also, government is encouraged to develop capacity building among its citizens, with special emphasis on the employees of government in the various agencies, and parastatals representing the arms of governments. This would enable them to be tech-savvy enough to make the most of the digital tools available and make work seamless.

³⁵ Section 37 of the 1999 Constitution of the Federal Republic of Nigeria (as amended)

³⁶ Section 35 Nigeria Data Protection Act 2023