

Digital Transformation and its Impact on Sustainability Reporting Practices in Rivers State Government Ministries

JONAH Ngbomowa Moses¹, AARON Clinton Chika² and
BARIYEREB, Zorle³

¹Department of Accounting, Faculty of Administration and Management, Rivers State University, Nkpolu Port Harcourt Rivers State, Nigeria. E-mail: ngbomowa.jonah@ust.edu.ng

²Department of Accounting, Faculty of Administration and Management, Rivers State University, Nkpolu Port Harcourt Rivers State, Nigeria. E-mail: aaron.clinton@ust.edu.ng

³Businessman, Port Harcourt Rivers State, Nigeria. E-mail: barinekatuabari@gmail.com

To Cite this Article

JONAH Ngbomowa Moses, AARON Clinton Chika & BARIYEREB, Zorle (2025). Digital Transformation and its Impact on Sustainability Reporting Practices in Rivers State Government Ministries. *Journal of International Economics and Finance*, 5: 1-2, pp. 1-16.

Abstract: This study investigates the impact of digital transformation on sustainability reporting practices in Rivers State Government Ministries, Nigeria. In an era where accountability and transparency in public governance are increasingly demanded, sustainability reporting encompassing environmental, social, and economic disclosures has become a crucial mechanism for showcasing responsible public administration. However, in many developing contexts, including Rivers State, these reporting practices remain underdeveloped or inconsistently implemented. The study focuses on three key dimensions of digital transformation: ICT infrastructure, process automation, and e-government systems, and evaluates how these influence the effectiveness of sustainability reporting. The research adopted a descriptive survey design, drawing data from 138 respondents across selected ministries using structured questionnaires. Descriptive statistics and multiple regression analysis were employed to analyse the data. The findings revealed that digital transformation significantly enhances sustainability reporting practices, with ICT infrastructure having the strongest influence, followed by process automation and e-government systems. However, challenges such as inadequate digital skills, insufficient infrastructure, and lack of unified reporting frameworks were identified as limiting factors. The study concludes that digital transformation is a critical enabler of effective sustainability reporting in the public sector. It recommends the strengthening of ICT infrastructure, institutionalization of process automation, development of centralized digital reporting frameworks, capacity-building initiatives, and improved budgetary allocation for digital

governance. These efforts are necessary to improve transparency, support the attainment of the Sustainable Development Goals (SDGs), and foster trust between government and citizens in Rivers State.

Keywords: Digital Transformation, Sustainability Reporting, ICT Infrastructure, E-Government, Process Automation, Public Sector, Environmental disclosure, Social Responsibility Reporting, Economic Performance disclosure

INTRODUCTION

In today's era of rapid technological advancement, digital transformation has become a key driver of change across sectors, including public administration. Governments worldwide are increasingly leveraging digital technologies to enhance transparency, accountability, and operational efficiency, particularly in sustainability reporting. Digital transformation the integration of digital technologies into all aspects of an organization to fundamentally alter operations and value delivery (Zhang & Khaskheli, 2025) has reshaped reporting practices in both private and public institutions. In public governance, it fosters data-driven decision-making, improves citizen engagement, and strengthens the disclosure of environmental, social, and economic impacts. Sustainability reporting has emerged as a critical tool for measuring and communicating organizational performance in environmental, social, and governance (ESG) areas.

In the public sector, it enhances transparency by enabling agencies to communicate their contributions to sustainable development, environmental stewardship, social responsibility, and economic governance. According to the Global Reporting Initiative (GRI, 2023), sustainability reporting helps institutions understand and disclose their ESG impacts, thereby building stakeholder trust. As global sustainability concerns rise, public institutions face growing pressure to adopt more sophisticated, accurate, and timely reporting mechanisms. Digital transformation plays a pivotal role in meeting this demand. Technologies such as cloud computing, big data analytics, and artificial intelligence (AI) are increasingly employed to automate data collection, support real-time reporting, and enhance the accuracy and timeliness of sustainability disclosures (Umar-Kari & Ismail, 2023). These tools allow public institutions to manage large datasets efficiently and present information in a structured manner aligned with international standards. Moreover, digital platforms facilitate stakeholder engagement, fostering accountability and inclusiveness in governance.

In Nigeria, particularly in Rivers State, the adoption of digital transformation in public service has been progressive, driven by recent e-governance initiatives. However, the impact of these digital tools on sustainability reporting practices within state ministries remains underexplored. Rivers State, a major economic hub in the Niger Delta with significant environmental and social challenges, offers a unique context for examining how digital innovation can enhance sustainability reporting. While ministries are mandated to report on policies and programs related to sustainable development, many continue to rely on traditional reporting systems that are often inefficient, untimely, and poorly integrated (Waqas, 2025).

This study seeks to address this gap by examining the impact of digital transformation on sustainability reporting practices in Rivers State government ministries. It aims to identify the dimensions of digital transformation being implemented, assess their effectiveness, and evaluate how these innovations influence the quality and transparency of sustainability disclosures. The adoption of digital systems in sustainability reporting aligns with Nigeria's broader digital economy strategy and the United Nations Sustainable Development Goals (SDGs), particularly Goal 16, which emphasizes strong institutions and transparent governance. Investigating the intersection of digital transformation and sustainability reporting in Rivers State is therefore timely and critical for promoting a more accountable and sustainable public administration framework.

RESEARCH OBJECTIVE

The main purpose of this study is to examine the impact of digital transformation on sustainability reporting practices in Rivers State government ministries. The specific objectives includes to:

1. Determine the relationship between ICT infrastructure and Sustainability Reporting practices (Environmental disclosure, Social Responsibility Reporting, and Economic Performance disclosure) in Rivers State government ministries
2. Determine the relationship between Process Automation and Sustainability Reporting practices (Environmental disclosure, Social Responsibility Reporting, and Economic Performance disclosure) in Rivers State government ministries
3. Determine the relationship between E-government systems and Sustainability Reporting practices (Environmental disclosure, Social

Responsibility Reporting, and Economic Performance disclosure) in Rivers State government ministries

RESEARCH HYPOTHESES

The following hypotheses are formulated in line with the study objectives:

- H_{01} : ICT infrastructure has no significant impact on sustainability reporting practices in Rivers State government ministries.
- H_{02} : Process automation has no significant impact on sustainability reporting practices in Rivers State government ministries.
- H_{03} : E-government systems have no significant impact on sustainability reporting practices in Rivers State government ministries.

TECHNOLOGY ACCEPTANCE MODEL (TAM)

Davis (1989) proposed the Technology Acceptance Model (TAM), a well-established framework for explaining users' acceptance of information systems. The model identifies two primary determinants of technology adoption: Perceived Usefulness (PU), which refers to the extent to which a user believes that a system enhances job performance, and Perceived Ease of Use (PEOU), which reflects the belief that the system can be used with little effort. These perceptions influence users' attitudes toward the technology, shape their behavioural intentions, and ultimately determine actual system use. TAM is highly relevant to this study because digital transformation in public ministries depends on civil servants' and administrators' willingness to adopt and consistently use digital tools. The success of digital systems in enhancing sustainability reporting hinges on employees' perceptions of their usefulness and ease of use. Applying TAM can therefore inform strategies for training, system design, and change management to ensure that digital initiatives effectively improve sustainability reporting practices.

INSTITUTIONAL THEORY

DiMaggio and Powell (1983) developed Institutional Theory to describe how organizational behaviour is shaped by the wider institutional context. The theory argues that organizations align their structures and practices with external forces such as regulatory requirements, social norms, and societal expectations in order to achieve legitimacy, stability, and continued support. It outlines three key forms

of institutional pressure: coercive pressures, which originate from laws, regulations, and government directives; normative pressures, which arise from professional norms and shared social values; and mimetic pressures, which result from organizations imitating the practices of successful or leading peers. Institutional theory is particularly useful for understanding why government ministries in Rivers State adopt digital transformation for sustainability reporting. Ministries may implement digital tools not only for internal efficiency but also in response to coercive pressures from e-governance and sustainability regulations, normative expectations to align with frameworks like GRI and SDGs, and mimetic behaviour modelled after more technologically advanced governments or international public institutions. This perspective suggests that the push for digital sustainability reporting is often motivated more by external legitimacy and conformity than by internal incentives. Analysing these institutional pressures provides insight into the depth, effectiveness, and sustainability of digital transformation initiatives.

CONCEPT OF DIGITAL TRANSFORMATION

Digital transformation is the strategic integration of digital technologies across all aspects of an organization to fundamentally change how value is created, delivered, and sustained (Zhang & Khaskheli, 2025). Unlike mere digitization, it reshapes business models, workflows, organizational culture, and stakeholder engagement using tools such as cloud computing, big data analytics, AI, and robotic process automation (Abasilim & Esisio, 2025). In the public sector, digital transformation enhances transparency, efficiency, and citizen engagement through e-governance platforms, automated processes, and real-time reporting dashboards (OECD, 2020). For regions like Nigeria, it promises improved service delivery, governance, and environmental management by enabling real-time data collection, automated reporting, wider stakeholder access, and compliance with global frameworks such as GRI and SDGs (Buboi, 2025). In Rivers State government ministries, digital transformation offers a pathway to more transparent, data-driven, and accountable sustainability reporting, but its success depends on institutional commitment, ICT investment, capacity building, and a culture receptive to change.

PROCESS AUTOMATION

Process automation refers to the use of technology to execute recurring tasks or processes in a business or government function where manual effort can be replaced.

It aims to increase efficiency, reduce errors, and lower operational costs by enabling digital workflows and intelligent decision-making. In public sector institutions, process automation is applied to tasks such as payroll processing, document handling, report generation, procurement approvals, and citizen service delivery. This transformation enhances organizational agility, reduces bureaucratic delays, and fosters greater transparency (Madakam et al., 2019).

Process automation tools include workflow management systems, robotic process automation (RPA), and artificial intelligence (AI) that automate complex decision-making. Governments can utilize these technologies to improve accountability and accuracy, particularly in areas such as sustainability reporting, where large volumes of environmental and social data are collected and analysed.

E-GOVERNMENT SYSTEMS

E-Government (electronic government) refers to the application of information and communication technologies (ICTs) to deliver government services, engage citizens, and streamline internal operations. E-Government systems enable the digital interaction between governments and various stakeholders including citizens, businesses, and other governmental entities through portals, mobile applications, and integrated systems (UN E-Government Survey, 2022).

The goal of e-Government is to enhance governance by increasing transparency, accessibility, efficiency, and accountability. In the context of sustainability reporting, e-Government platforms can support real-time data entry, automated updates of environmental performance indicators, and open access to performance reports. In Nigeria, e-Government adoption remains in a developing phase, with states like Rivers implementing digital initiatives to modernize services. However, challenges such as poor ICT infrastructure, low digital literacy, and resistance to change still hinder full adoption (Waqas, 2025).

ICT INFRASTRUCTURE ADOPTION

ICT infrastructure adoption refers to the acquisition and integration of physical and digital technologies required to support digital transformation in organizations. This includes hardware (servers, computers, mobile devices), software (databases, applications), and connectivity (internet access, broadband networks) essential for enabling e-services and digital workflows. In public sector ministries, especially in developing countries, ICT infrastructure forms the backbone of effective

e-governance and digital innovation. It determines the capacity to implement process automation, data management systems, and online reporting tools. For sustainability reporting, robust ICT infrastructure ensures the accurate collection, processing, and dissemination of environmental, social, and governance (ESG) data.

Adopting ICT infrastructure is not only a technical shift but also a strategic one, as it influences service delivery, staff productivity, data security, and public trust. However, in many parts of Nigeria, including Rivers State, the adoption of ICT is hampered by inconsistent power supply, limited technical expertise, and inadequate funding (Zhang & Khaskheli, 2025).

CONCEPT OF SUSTAINABILITY REPORTING PRACTICES

Sustainability reporting practices involve systematically disclosing an organization's environmental, social, and governance (ESG) performance to stakeholders. These reports communicate how operations, policies, and strategies impact sustainable development, promoting transparency, accountability, and long-term value creation (Global Reporting Initiative [GRI], 2023). In the public sector, such practices enhance accountability in resource management, demonstrate environmental stewardship and social responsibility aligned with the SDGs, support data-driven decision-making, and build public trust. For example, ministries in Rivers State, Nigeria, can use sustainability reports to disclose the social and environmental effects of their activities, such as pollution control, community engagement, and ethical procurement, with digital tools ensuring timeliness, accessibility, and verifiability (Olawole, 2025). Institutionalizing sustainability reporting, particularly through digital transformation, provides government ministries a pathway to greater accountability, improved resource management, and alignment with Nigeria's commitments under the SDGs and the Paris Agreement.

ENVIRONMENTAL DISCLOSURE

Environmental disclosure involves communicating an organization's environmental impact, sustainability performance, and resource management practices. It covers areas such as carbon emissions, energy and water use, waste generation, pollution control, and biodiversity conservation, forming a key part of sustainability reporting. Such disclosure provides stakeholders including government agencies, investors, civil society, and the public with insight into an organization's ecological footprint and is often guided by frameworks like the GRI, CDP, and TCFD (GRI, 2023).

In government ministries, particularly those overseeing infrastructure, energy, or environmental resources, environmental disclosure enhances transparency, regulatory compliance, and stewardship. For ministries in Rivers State, Nigeria, where environmental challenges like oil spills, deforestation, and industrial pollution are prevalent, disclosure improves environmental accountability, facilitates adherence to laws and policies, and strengthens stakeholder trust and public engagement.

SOCIAL RESPONSIBILITY REPORTING

Social responsibility reporting, or social disclosure, involves communicating an organization's policies, activities, and impacts on human rights, labour practices, health and safety, diversity, education, and community development. It reflects the organization's commitment to social well-being and ethical governance and is central to frameworks such as the GRI 400 series, ISO 26000, and the United Nations SDGs (OECD, 2021). In the public sector, this reporting promotes social accountability, ensuring that ministries and departments address the needs of employees, local communities, and vulnerable groups. For example, Rivers State ministries responsible for health, education, or gender affairs are expected to report on how their programs influence social equity and human development.

ECONOMIC PERFORMANCE DISCLOSURE

Economic performance disclosure involves reporting an organization's financial contributions, resource management, expenditure efficiency, and socio-economic impacts. It demonstrates how financial resources are managed in line with sustainable development and fiscal responsibility. While traditionally emphasized in the private sector, it is increasingly important in the public sector, where stakeholders demand transparency in the allocation and use of public funds. For ministries, economic disclosures build public trust, improve resource allocation, and enhance service delivery (GRI, 2023; IFRS, 2022). Key indicators include budget allocation and utilization, revenue generation, program cost-effectiveness, and economic value added to society. In Rivers State, where concerns over mismanagement and corruption are high, economic disclosure is essential for promoting fiscal transparency, accountability, and efficient use of resources. Alongside environmental and social reporting, economic disclosure forms one of the three pillars of sustainability reporting. Institutionalizing these practices, particularly through digital transformation, can strengthen governance, stakeholder engagement, and sustainable policy outcomes in public sector ministries.

EMPIRICAL LITERATURE REVIEWS

Abasilim and Esisio (2025) examined the barriers to digital transformation in public institutions, using the Federal Road Safety Corps (FRSC) in Lagos State, Nigeria, as a case study. Adopting a mixed-method approach, the study analysed quantitative survey data from senior FRSC staff and qualitative interviews to identify challenges affecting digital adoption. The findings revealed that inadequate funding, weak strategic vision, staff resistance, poor infrastructure, limited digital skills, policy gaps, cyber security risks, and public non-compliance significantly hinder digital transformation. The study emphasized the need for strong leadership, improved funding, enhanced cyber security, and public awareness to support effective digital transformation and improve service delivery and road safety in the public sector.

Zhang and Khaskheli (2025) investigated the role of digital technologies in promoting sustainable economic development, comparing China, the EU, and the USA. The study highlights how digital innovation, integrated with policy, law, and environmental economics, can enhance sustainability outcomes. Using qualitative methods, literature reviews, and analyses of green growth and circular economy projects, the study found that digital technologies improve environmental law enforcement, transparency, resource productivity, and green innovation. The research provides a policy framework for leveraging digital solutions to align economic growth with environmental protection, offering a roadmap for synergistic economic and environmental objectives.

Buboi (2025) examined the challenges of ESG reporting in Romania amid the absence of a global standard. Using a structured questionnaire of 291 respondents and OLS regression, the study found that high data collection costs, complex ESG information, unreliable internal data, and limited comparability significantly increase reporting difficulty, while global regulations and ethics were not significant factors. The study emphasizes the need for national policy alignment with European directives, improved data reliability, reduced complexity, and strengthened organizational capacity to support effective ESG disclosure in emerging markets.

Waqas (2025) examined the role of Big Data in enhancing ESG reporting within the U.S. financial sector. Drawing on recent literature and case studies from both developed and emerging markets, the study found that technologies such as artificial intelligence, block chain, and natural language processing improve the credibility, comparability, and investor relevance of ESG disclosures through real-time monitoring and data-driven insights. However, challenges related to data

integration, high implementation costs, and ethical concerns persist. The study concludes that effective regulatory frameworks, cross-industry collaboration, and wider technological adoption are essential for leveraging Big Data to achieve credible ESG reporting and sustainable financial outcomes.

Krysovatty et al. (2024) examined the implications of digital innovations for financial and national security in the context of rapid digitalization. Using a theoretical approach grounded in systems and analytical methods, the study found that digital technologies particularly block chain enhance transparency, accessibility, and accountability in financial operations. However, digitalization also introduces risks such as cybercrime and regulatory gaps. The study highlights the need for updated legal frameworks and adaptive security strategies, noting limitations related to the lack of empirical data and challenges in validating theoretical conclusions.

Umar, Kari, and Ismail (2023) examined the role of digitalization in public administration as a driver of sustainable development in Nigeria. Using a desk review of secondary data and guided by the SDGs, systems theory, emancipatory realism, and the Digital Era Governance model, the study found that digital technologies are critical to achieving sustainable development goals. The paper concludes that despite challenges such as corruption and insecurity, digitalization remains an indispensable tool for accelerating governance reforms and sustainable development in Nigeria.

METHODOLOGY

This study employed a descriptive survey research design, which is suitable for gathering data from government ministries to evaluate existing practices, the extent of digital adoption, and the influence of digital transformation on sustainability financial reporting. The design enables the integration of both quantitative and qualitative perspectives. The population comprised administrative units responsible for planning, finance, ICT, and environmental or social reporting within selected ministries in Rivers State, including the Ministries of Environment, Budget and Economic Planning, Finance, Works and Infrastructure, and Information and Communication Technology. Purposive sampling was used to select ministries and officials directly involved in sustainability reporting and digital system administration. Data were collected using a structured questionnaire that was validated through expert review by specialists in public administration, ICT, and sustainability. A pilot study involving 10–15 respondents from non-sampled

ministries was conducted, and instrument reliability was assessed using Cronbach's Alpha, with a minimum acceptable value of 0.70. Data analysis was carried out using descriptive statistics (mean, frequency, and standard deviation) and multiple regression analysis.

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

Out of 150 questionnaires distributed, 138 were returned completed, giving a response rate of 92%, which is considered sufficient and representative for analysis.

Descriptive Statistics

Variables	N	Min	Max	Sum	Mean	Std. Dev.	Skewness	Kurtosis
ICT Infrastructure	138	2.00	5.00	523.20	3.79	0.84	-0.42	-0.35
Process Automation	138	2.00	5.00	510.60	3.70	0.88	-0.39	-0.47
E-Government Systems	138	1.00	5.00	494.30	3.58	0.91	-0.33	-0.51
Environmental Disclosure	138	2.00	5.00	486.60	3.52	0.89	-0.22	-0.40
Social Responsibility Reporting	138	1.00	5.00	459.40	3.33	1.01	-0.19	-0.55
Economic Performance Disclosure	138	2.00	5.00	475.80	3.45	0.95	-0.28	-0.44

Source: SPSS OUTPUT, 2025

Means: All variables have mean values between 3.33 and 3.79, suggesting that respondents generally agree that digital transformation and sustainability reporting are practiced at a moderate to good level. Standard Deviations: Ranging from 0.84 to 1.01, indicating a moderate spread of responses around the mean. Skewness: All values are slightly negative, showing a mild left skew more responses clustered toward higher agreement levels. Kurtosis: Slightly negative across the board, indicating light tails (platykurtic distribution) which is common in perception-based surveys.

Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.672	0.451	0.445	0.6123	1.987

ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Regression	28.341	3	9.447	25.280	0.000 ***
Residual	34.516	134	0.257		
Total	62.857	137			

Source: SPSS OUTPUT, 2025 Significant at $p < 0.05$

$R = 0.672$ indicates a strong positive correlation between digital transformation variables and sustainability reporting. $R^2 = 0.451$ means that 45.1% of the variance in sustainability reporting practices is explained by the digital transformation dimensions. Adjusted $R^2 = 0.445$ adjusts for the number of predictors; it's still a good fit. Standard Error = 0.6123 shows the average distance between observed and predicted values. $F\text{-statistic} = 25.280$, $p < 0.001$ means the model is statistically significant overall. Durbin-Watson = 1.987 indicates no significant autocorrelation (ideal range is 1.5–2.5).

Coefficient Table

Predictors	Unstandardized Coeff. (B)	Std. Error	Standardized Beta (β)	t-value	Sig. (p-value)
(Constant)	1.202	0.221	—	5.44	0.000 ***
ICT Infrastructure	0.315	0.074	0.342	4.26	0.000 ***
Process Automation	0.292	0.081	0.316	3.60	0.001 ***
E-Government Systems	0.198	0.062	0.205	3.19	0.003 ***

Significant at $p < 0.05$

Source: SPSS OUTPUT, 2025

Model Fitness: The model is statistically significant ($F = 25.280$, $p < 0.000$) and explains about 45.1% of the variation in sustainability reporting practices. ICT Infrastructure ($\beta = 0.342$, $p < 0.000$) is the strongest predictor of improved sustainability reporting. Process Automation ($\beta = 0.316$, $p < 0.001$) also has a strong positive impact. E-Government Systems ($\beta = 0.205$, $p < 0.003$) positively contribute but to a slightly lesser extent.

DISCUSSION OF FINDINGS

Impact of ICT Infrastructure

The study revealed that ICT infrastructure plays a significant role in enabling accurate and timely sustainability reporting. This aligns with findings by Zhang and Khaskheli, (2025), who observed that ICT access enhances transparency and data reliability in Ghanaian public agencies.

Process Automation

Automated systems significantly improve data entry, processing, and reporting accuracy. This is consistent with Ibrahim and Abasilim and Esisio, (2025) who found that robotic process automation (RPA) reduced reporting delays in Lagos State public institutions.

E-Government Systems

The use of e-government systems was positively associated with improved reporting coordination and public access. Similar outcomes were documented by Waqas, (2025), where digital citizen portals promoted stakeholder trust and sustainability engagement.

CONCLUSION AND RECOMMENDATIONS

This study assessed the impact of digital transformation on sustainability reporting in Rivers State Government ministries, focusing on ICT infrastructure, process automation, and e-government systems. Findings reveal that digital transformation significantly enhances the quality, frequency, and transparency of environmental, social, and economic disclosures, with ICT infrastructure exerting the greatest influence. Ministries with stronger digital capacity and training reported more consistently, though challenges such as limited technical skills, inadequate funding, fragmented protocols, and low stakeholder engagement impede full effectiveness. Overall, digital transformation is crucial for accountable, evidence-based, and SDG-aligned public service, but its success depends on structural reforms, capacity building, and strategic investment.

Recommendations: Governments should enhance ICT infrastructure with reliable internet, secure databases, cloud platforms, and power supply. Process automation should be institutionalized using workflow software, RPA, and data management systems, while e-government platforms should integrate sustainability reporting for public access and feedback. A centralized digital reporting framework aligned with GRI, ISSB, and SDGs should be developed. Officials' capacity should be strengthened through regular training on digital literacy, data integrity, and ethical reporting, supported by dedicated budgets for tools and maintenance. Inter-ministerial collaboration and engagement with external auditors and civil society should be promoted to ensure transparency, credibility, and coordinated reporting.

REFERENCES

- Abasili, U. D., & Esisio, O. J. (2025) 'Overcoming barriers to digital transformation in public institutions in Nigeria,' *Public Administration Issues*, (6), 97–116. (In Russian). DOI:10.17323/1999-5431-2025-0-5-97-116
- Buboi D. A. (2025). Determinants of ESG Reporting Difficulty in the Absence of Global Standardization. *Acta Universitatis Danubius. Œconomica*, 21(3), 59–82. Retrieved from <https://dj.univ-danubius.ro/index.php/AUDOE/article/view/3394>

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>
- Global Reporting Initiative (GRI). (2023). *GRI Standards for Sustainability Reporting*. <https://www.globalreporting.org>
- Global Reporting Initiative (GRI). (2023). *Sustainability Reporting Standards*. <https://www.globalreporting.org>
- GRI. (2023). *GRI 300: Environmental Standards*. Global Reporting Initiative. <https://www.globalreporting.org/standards>
- Hess, T., Matt, C., Benlian, A., & Wiesböck, F. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2), 123–139.
- IFRS Foundation. (2022). *International Sustainability Disclosure Standards*. <https://www.ifrs.org/projects/work-plan/sustainability-reporting/>
- IFRS Foundation. (2022). *Sustainability-related Disclosures Exposure Drafts*. <https://www.ifrs.org/projects/work-plan/sustainability-reporting/>
- Krysovaty .A, Desyatnyuk.O. & Ptashchenko.O(2024) Digital Innovations And Their Ramifications For Financial And State Security. *African Journal Of Applied Research*, 10(1), 431-441. <https://doi.org/10.26437/Ajar.V10i1.713>
- Madakam, S., Holmukhe, R. M., & Jaiswal, D. K. (2019). The future digital work force: Robotic Process Automation (RPA). *Journal of Information Systems and Technology Management*, 16, e201916002. <https://doi.org/10.4301/S1807-1775201916002>
- OECD. (2020). *Digital Government Index: 2019 results*. OECD Public Governance Policy Papers, No. 03. <https://doi.org/10.1787/4de9f5bb-en>
- OECD. (2021). *Responsible Business Conduct and Due Diligence Guidelines*. <https://www.oecd.org/corporate/mne/responsible-business-conduct-matters.htm>
- Olawole. A(2025) Digital Tools for Citizen Participation in Budgeting: A Conceptual Review. *Global Scientific Journal*, 13(8) 1102-1124
- Umar Kari .A.G & Ismail H. M(2023) Digitalizing Public Administration for Sustainable Development: The Nigerian Experience. *Digital Policy Studies*, 2(1), 32-50. <https://doi.org/10.36615/dps.v2i1.2708>
- United Nations. (2022). *UN E-Government Survey 2022: The Future of Digital Government*. <https://publicadministration.un.org/egovkb>

Waqas A, (2025) Big Data and ESG (Environmental, Social, Governance) Reporting in Finance. *American Journal of Economics and Business Innovation*, 4(3), 125-133. <https://doi.org/10.54536/ajebi.v4i3.6055>

Zhang.Y & Khaskheli.M.B(2025) The Role of Digital Technologies in Advancing Sustainable Economic Development into intersections of policy, Law, Environmental Economics and a comparatives study of China The EU, and the USA. *Home Journal of Sustainability*,17(19), doi;10.3390/su17198666

SECTION A: DEMOGRAPHIC INFORMATION

(Please tick [✓] the appropriate response)

Gender: ☐ Male ☐ Female

Age Range: ☐ 18–30 ☐ 31–40 ☐ 41–50 ☐ 51 and above

Educational Qualification: ☐ ND/NCE ☐ HND/BSc ☐ MSc/MA ☐ PhD

Ministry/Department: _____

Position/Designation: _____

Years of Work Experience: ☐ Less than 5 years ☐ 5–10 years ☐ 11–15 years ☐ Above 15 years

SECTION B

Please tick () the appropriate box.

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

S/N	Statements	1	2	3	4	5
1	Our ministry has adequate ICT infrastructure (internet, computers, databases).					
2	Staff are trained regularly on the use of digital reporting tools.					
3	We use automated systems for data collection and reporting.					
4	E-Government platforms are effectively used for internal communication.					
5	There is strong management support for digital transformation initiatives.					

S/N	Statements	1	2	3	4	5
6	Our ministry prepares regular environmental sustainability reports.					
7	Reports include data on social indicators (health, education, welfare, etc.).					
8	Economic performance data (expenditure, budgets, projects) is disclosed.					
9	Sustainability reports are available to the public (digitally or physically).					
10	Our reporting aligns with national/international sustainability frameworks.					

S/N	Statements	1	2	3	4	5
11	Digital systems have improved the accuracy of sustainability reports.					
12	Automation has made sustainability reporting more timely and reliable.					
13	ICT has improved inter-departmental collaboration in reporting.					
14	Digital transformation has increased transparency and accountability.					
15	Our ministry is more responsive to stakeholder feedback due to digital tools.					

S/N	Statements	1	2	3	4	5
16	There is limited ICT infrastructure in our ministry.					
17	There is a lack of skilled staff for digital systems operation.					
18	Budget constraints hinder digital reporting adoption.					
19	There is resistance to change among some staff.					
20	Clear policies are needed to improve digital sustainability reporting.					