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Developing educational management through investment in digital governance, data-driven decision-making, and institutional accountability in South-East Nigeria.

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Abstract. Educational institutions in South-East Nigeria faced challenges in effectively managing resources, ensuring accountability, and adopting digital governance systems for data-driven decision-making. Inefficient administrative processes, lack of institutional transparency, and inadequate use of data hindered decision-making, reduced operational efficiency, and negatively impacted student outcomes. This study evaluated how digital governance and data-driven decision-making influenced institutional accountability in educational management across the region. The study adopted a descriptive survey research design using a validated questionnaire titled the "Educational Digital Governance and Accountability Scale (EDGAS)" developed in line with the research questions. Data were collected from educational administrators, school principals, and department heads. Analysis employed descriptive statistics. Empirical findings show that digital governance tools significantly enhance institutional accountability in South-East Nigerian tertiary education by curbing financial leakages and improving compliance. Concurrently, data-driven decision-making improves resource allocation, staff evaluations, and policy formulation while reducing political interference. Despite technical skill gaps among personnel, integrating automated workflows and data analytics strengthens overall administrative transparency and governance integrity. The results informed policymakers, school administrators, and other stakeholders about best practices for implementing digital governance and data-driven management strategies, ultimately contributing to sustainable improvements in the educational sector in South-East Nigeria.

Keywords: Digital governance; Data-driven decision-making; Institutional accountability; educational management

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A. INTRODUCTION

Effective integration of digital governance, data-driven decision making (DDDM), and institutional accountability are fundamental to the transformation of educational management in the context of 21st century education. The three elements are growingly seen as interconnected aspects of today's education system, especially in school management and higher education institutions. Digital technologies change the strategic landscape of leadership, governance and accountability systems, as well as administrative processes, according to research. Digital governance refers to the use of information systems and digital infrastructures to support policy making within the institution, communication with stakeholders and operational efficiency (Zahra, 2025). Digital governance tools like Learning Management Systems (LMS), Student Information Systems and e-governance platforms connect stakeholders in education with educational institutions' leaders, improving transparency, coordination and responsiveness (Artyukhova et al, 2025). Furthermore, studies on Education Management Information Systems (EMIS) show that governance plays a pivotal role in the successful implementation of EMIS, as technology cannot bring about a change without it. (Khan et al, 2026).

A further theme of studies is the role of infrastructure and the digital divide in potentially limiting the democratising potential of digital governance. A study in Lagos State, Nigeria reveals that, although innovations in e-governance can be applied to the urban schools, the rural schools have issues of limited access and capacity, which ultimately limits the quality of the overall e-governance (Dehinsilu-Isa & Amodu, 2025). So digital governance needs to be both technological and institutional, involving strategic investments in infrastructure, people and governance policies to facilitate inclusive access. Data driven decision making is very much linked to digital governance and involves the regular use of data analytics to guide strategic decisions. Research indicates that DDDM has the potential to improve policy development, student achievement efforts, and financial viability in higher education institutions (Nwakanma, Unoaku & Igwe, 2025). For instance, predictive analytics can be used to identify students who are at risk and provide them with extra support, whereas financial data analytics can assist in budgeting and resource allocation that is more sustainable (Nwakanma et al., 2025).

The conceptual frameworks that are created around DDDM highlight the need to establish governance processes that embed data practices in the decision-making process. Elugbaju, Okeke and Alabi (2024) claim that the incorporation of data analytics in governance processes can help higher education leaders move beyond intuition-based decision-making to empirical decision-making, leading to better institutional responsiveness and effectiveness. Data governance – the policies and protocols ensuring data quality, integrity, and security is a fundamental part of this integration (Elugbaju et al., 2024). Insufficient data governance can result in various challenges, such as data silos, data inaccuracies, and data that is not being used to its full potential, which can hinder institutions from effectively using data. But some academics warn of the potential problems of focusing too heavily on data and algorithms. If not tempered with ethical and contextual considerations, algorithmic decision-making can deepen power imbalances and worsen inequities, as McConvey and Guha (2024) point out. Leaders should have a critical understanding of data literacy, and a balanced perspective toward data analytics taking into account its strengths and constraints.

Institutional accountability relates to how educational institutions account to stakeholders, such as students, funders, regulators and the wider community. Digital governance and DDDM help to increase accountability by making institutional processes more transparent and measurable. For example, digital systems provide real-time monitoring

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of performance measures, decision record in audit trails, and reporting structures that are easily accessible. This contributes to external and internal monitoring, leading to trust and legitimacy. However, accountability is not just a technological result, it is also an ethical and management one. The literature suggests that accountability frameworks need to be clear in terms of leadership commitment and should be shared, or distributed, across roles and units (Nadeem et al, 2026). Collective leadership can enhance quality assurance and institutional performance, by reducing bottlenecks and increasing shared ownership of results.

Additionally, digital tools can improve accountability by enabling automation of compliance reporting and performance dashboards. Combined with governance mechanisms, they can generate evidence-based findings which will make departments and leaders accountable for delivering on institutional objectives. The study is needed due to the absence of the research and practice in this area of the region. Although the national studies show the potential of data analytics and digital systems to enhance institutional policy and administrative outcomes, these challenges have not been explored in depth in South-East Nigeria specifically because of infrastructure shortages, anti-establishment sentiments, and poor data governance (Nwakanma et al., 2025). Additionally, the literature tends to be general across Nigeria, without taking into account specific regional issues such as poor data systems, low uptake of ICTs in tertiary institutions, and lack of information literacy among administrators (Emere, 2025), which necessities specific empirical enquiries into the region.
The current educational management in South-East Nigeria faces major structural and informational challenges which undermine quality, equity and accountability. Although the Nigeria Education Data Initiative (NEDI) is being implemented to centralize and digitize data on more than 30 million learners and over 100,000 schools nationwide, the implementation is still not uniform and has been limited (Nigeria Education Data Initiative, 2025). The Ministries of Education in South-East State of Abia, Anambra, Ebonyi, Enugu and Imo states, in particular, have no current, accurate records of the number of schools and learners in the region. Many learners and schools are “invisible” in the official registers. This egregious lack of information prevents the appropriate planning and provision of education, the deployment of teachers and policy interventions, and can undermine governance and the creation of entrenched inequities.

In addition, lack of strong digital governance and data management means that education leaders cannot inform evidence-based decision making. The study in the South-East region of Nigeria shows that data-driven decision-making (DDDM) has been identified to play a vital role in policy formulation, financial sustainability, and student success in higher education, but it has been witnessed that implementation of DDDM is still beset by various barriers including infrastructure challenges, resistance to change, privacy concerns and more. The challenges are exacerbated in rural areas of the state such as Anambra State where access to technology and connectivity is poor, affecting the utilization of digital tools in school management (Okenwa-Fadele et al., 2025). Consequently, the bulk of educational institutions are lacking the technology and data governance systems to enable them to gather, analyse and respond to educational data effectively.

Institutional accountability is also weakened by this confluence of problems. Without integrated digital systems and efficient data analytics, tracking performance indicators such as student progression, completion and dropout rates, and institutional outcomes remains difficult if not impossible. These limitations not only affect local administrative efficiency but also hinder compliance with national educational benchmarks and broader Sustainable Development Goals (SDGs) relating to quality education. This study is therefore necessary to identify context-specific barriers, evaluate the current state of digital education management, and propose actionable strategies for strengthening educational governance in the region.

Objectives: 1.To determine the influence of digital governance on institutional accountability in educational management in South-East Nigeria. 2.To assess the influence

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of data-driven decision-making on institutional accountability in educational management in South-East Nigeria.

B. LITERATURE REVIEW

Concept of Educational Management

Educational management is the systematic process of planning, organizing, coordinating, directing and controlling human and material resources to attain certain educational objectives in an efficient and effective way in educational institutions. It is a process that combines management principles in the field of education to achieve the learning goals and institutional results by doing things together in an orderly manner (Nurcahya et al., 2023). According to scholars, educational management is an evolving field which involves strategic planning, optimizing resources and leadership activities to improve the effectiveness and quality of the educational institution (Phakamach et al., 2023). In the educational setting, management also involves decision-making, supervision and evaluation, working towards ongoing improvements of educational programmes and services (Mogea, 2023). Therefore, it is crucial that the institutions' educational management is effective, meaning that administration is made to meet the overall educational objectives, the expectations of the stakeholders and the needs of the society. This kind of management creates responsive, adaptive and enables institutions to improve their teaching, learning and organizational performance in the changing environment.

2.2 Digital Governance in Education

Digital governance in education is the systematic adoption of digital technologies, policies and administrative processes that influence the way educational institutions operate, make decisions and hold them accountable in the digital world. It includes not only technologies, but also regulatory, ethical and strategic processes that facilitate the use of digital tools to enhance management and stakeholder interaction in institutions (Zhang, 2025). Digital governance is used to embed transparency, efficiency and evidence-based policy development practices globally and thus serves as an imperative for modern educational systems, particularly when striving to enhance institutional performance and meet the requirements of the 21st century.

2.2.1 ICT in Educational Administration

In the context of education, Information and Communication Technology (ICT) has emerged as a major force, transforming the way educational administration is conducted.Information and Communication Technology (ICT) has become a major player in the landscape of education, impacting the administration of education in a number of ways. The results of the research indicated that the implementation of ICT in school administration could improve the efficiency of school routines such as attendance, records management, and communication with stakeholders so that administrators could be more effective in strategic planning and decision making (Liu, 2025). In addition, ICT can provide timely access to information, enhance information accuracy and boost responsiveness to stakeholder needs (Liu, 2025). However, several barriers remain after the ICT integration, such as digital divides, lack of infrastructure, and privacy concerns.

2.2.2 Education Management Information Systems (EMIS)

Education Management Information Systems (EMIS) are specialized computer systems used to gather, store, manage and analyze educational information for administration and strategic decision making. Integrated databases, using the information collected with EMIS as a backbone, enable the collection of information

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from the various institutions to be integrated in a single database that facilitates evidence based decision making and institutional accountability (Taufik et al, 2025). Research done on EMIS has revealed that it can improve transparency and efficiency in educational planning, increase the accessibility of educational data, and boost the general management of schools (Taufik et al, 2025). The critical factors for the success and implementation of EMIS, however, are the adequate infrastructure, skilled personnel and supportive governance structures which focus on data security, interoperability and continuous capacity building.

2.3 Data-Driven Decision-Making in Education

Data Driven Decision Making (DDDM) in education involves the systematic and consistent application of data, including student achievement data, enrollment numbers, academic trends, and administrative data, to inform strategic decisions, leadership, and operational decisions within the educational system. Through DDDM, educational leaders can shift from gut feelings to evidence-based practices that enhance student outcomes, resource usage, and institutional effectiveness (Nwakanma et al., 2025). The subsequent studies on DDDM in Nigeria demonstrate its benefits to the education sector, such as enhancing policy-making, increasing the effectiveness of student success strategies and driving financial sustainability by linking financial resources to policy goals (Nwakanma et al., 2025). However, there are challenges that still need to be addressed, including infrastructure gaps, digital literacy and data privacy concerns, and require robust data governance frameworks that can enable reliable data gathering and application.

2.3.1 Data Collection and Analysis

The first phase of DDDM is data collection, which entails the systematic collection of quantitative and qualitative educational data from various sources, including Learning Management Systems (LMS), attendance data, standardized tests, and demographic profiles (Taylor et al., 2023). Good data collection means that schools possess data that are accurate, up-to-date and all-encompassing, providing the opportunity to identify patterns and trends. Strong application of statistical tools, dashboards and visualization practices that enables administrators to make sense of the complex data and understand their strengths, weaknesses and opportunities within the educational system (Taylor et al., 2023). For instance, analytics data might show patterns of attendance that correlate to academic outcomes, or identify inefficiencies in resource use, which can guide school leaders to make decisions for targeted interventions and enhance service delivery.

2.3.2 Predictive Analytics in Educational Planning

An advanced data analysis approach that leverages historical and real time educational data to predict future events, like those that involve students at risk of failure or dropout, is called predictive analytics. According to the research, machine learning algorithms and predictive models can help identify potential performance issues early, enabling institutions to take necessary action in a timely manner (Gul et al., 2025). The models utilize demographic, engagement and academic data to predict outcomes and facilitate a more proactive approach to teaching, planning strategies and resource allocation.

In the educational sector, predictive analytics can aid in tailoring learning experiences, predict student dropout rates, and create a more efficient school system. Outside of that, however, effective use of predictive tools depends on firm data governance, ethical questions of student privacy, and the ability of administrators to understand and use the predictions to take effective action.

2.4 Institutional Accountability

Institutional accountability in education is the duty that educational institutions bear towards their stakeholders, such as students, their parents, governments and

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communities, for their activities, decisions and results. Accountability refers to responsibility for the use of resources, compliance with standards, and attaining educational outcomes in institutions. (Gbadrive, 2025). Trust is essential in education systems because greater transparency in reporting and the compliance of education systems to regulatory standards foster confidence of stakeholders in the education system's ability to fulfil its mandate (Pattaro et al, 2022). Accountability frameworks are used to track, assess and enhance, and can help identify inefficiencies, and make decisions for corrective measures in educational management.

2.4.1 Transparency and Reporting

Transparency in educational accountability means that information about the institution – such as financial statements, student achievement, and administrative decisions – is made publicly available and accessible to stakeholders that can be understood and evaluated. Honest reporting allows external monitoring of the governance process, thus building public trust and enhancing ethical governance practices (Pattaro, 2022; Gbadrive, 2025). Where financial systems are linked up and visible, for instance, the differences between budgeting and spending can be seen and addressed more easily, minimising the risk of resources being misused (Karim, 2025). Data asymmetries can undermine trust, reduce stakeholder participation and undermine institutional legitimacy if there is not openness in reporting.

2.4.2 Compliance with Regulatory Standards

The third dimension of institutional accountability is compliance with regulatory standards. Accreditation, quality assurance, and statutory reporting are among the regulatory frameworks in education that set standards for schools and universities to adhere to, ensuring their legitimacy and safeguarding educational quality (Ilawagbon, 2025). Compliance means that institutions are running within the boundaries of the law and ethical guidelines that protect learners' rights, the integrity of the institution and learning outcomes. It also facilitates continuous improvement by ensuring that institutional practices are in line with national and international quality frameworks. Those that do not comply face sanctions, loss of accreditation, and loss of public trust. Compliance is used as a means of accountability because it provides a way to ensure that the institution is operating in a performance/compliant manner.

2.5 Theoretical Framework

Theoretical basis for this research is based on the IT Governance Theory of Weill and Ross in 2004, and the Principal-Agent Theory of Jensen and Meckling in 2000. These theories form the basis for this study to explain the impact of digital governance and data-driven decision making on institutional accountability in educational management in South-East Nigeria.

In IT Governance Theory, the focus lies on “strategic IT alignment with business goals.” Weill and Ross (2004) say the theory is based on several principles: IT systems must be aligned to institutional objectives, decision rights and responsibilities must be clearly defined in relation to IT, resources and risk must be allocated effectively, and systems need to measure performance and hold people accountable for the use of IT. In terms of educational management, this theory can be used to understand how to implement digital governance and Education Management Information Systems (EMIS) in order for the institutions to have a goal. They link digital tools and processes with the goals of schools, making resources efficient, improving decision making transparency, and increasing accountability. The transparency of responsibilities and IT policies helps in evidence-based decision-making that enhances the performance of South-East Nigerian educational institutions.

The Principal-Agent Theory that was suggested by Jensen and Meckling (2000) offers workable ideas about how to manage accountability in hierarchical organisations. The

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theory suggests that agents (educators and administrators) act for principals (school boards, government authorities, or stakeholders); however, agents' interests do not necessarily match up with those of principals. Principals and agents may have information asymmetry which can lead to risk of mismanagement. Jensen and Meckling (2000) point out that principal-agency problems can be controlled by monitoring, reporting, and providing incentives for agents to fulfil principal objectives. In education, this theory helps to understand how data-driven decision-making and clear information reporting serve as tools for tracking educational leaders, closing information gaps, and strengthening institutional accountability.

The IT Governance theory & Principal-Agent theory sets digital governance and data-based decision making as independent variables that affect the dependent variable, institutional accountability. IT Governance Theory offers the technological and strategic point of view of aligning digital tools with institutional objectives, whereas Principal-Agent Theory deals with the way that oversight, responsibility and compliance must be established to ensure accountability. These theories provide a comprehensive framework for comprehending the potential for digital governance and data-driven decision-making to reshape educational management in South-East Nigeria, promoting transparency, efficiency, and institutional accountability.

C. RESEARCH METHODOLOGY

The study used descriptive survey research design and South-east region of Nigeria as the study area. The target group involved the educational administrators, department heads and policy implementers in the region's public educational institutions. The data was obtained from the administration of a structured questionnaire, which was administered to a sample of educational administrators and institutional staff. The researchers created the questionnaire, which they named the “Educational Digital Governance and Accountability Scale (EDGAS)”, based on a 4-point Likert scale to capture perceptions and practices with regard to digital governance, decision-making based on data, and institutional accountability. To ensure uniformity and accuracy in data collection, research assistants (including postgraduate students and lecturers from participating institutions) were trained. A pilot study was held to test the reliability of the questionnaire before it was administered to all respondents. The study used descriptive and inferential statistics (including multivariate regression analysis) to analyze the data. Data were analysed using Microsoft Excel (Microsoft Office 2016) and Statistical Package for the Social Sciences (SPSS) version 25.

D. RESULTS AND DISCUSSION

Demographic statistics

Table 1: Demographic and Institutional Profile of Respondents

Category	Variable / Response Option	Frequency (f)	Valid Percent (%)	Cumulative Percent (%)
Gender	Male	40	40.0	40.0
	Female	60	60.0	100.0
	Total	**100**	**100.0**	
Institution Category	Federal Tertiary	30	30.0	30.0

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(Business Size)	Institution			
	State Tertiary Institution	70	70.0	100.0
	Total	**100**	**100.0**	
State Location of Institution	Abia	18	18.0	18.0
	Anambra	32	32.0	50.0
	Ebonyi	12	12.0	62.0
	Enugu	22	22.0	84.0
	Imo	16	16.0	100.0
	Total	**100**	**100.0**	

The demographic profile of the one hundred surveyed academic participants in Table 1 reveals a female majority comprising sixty percent alongside male respondents representing forty percent. Institutional affiliation data demonstrates that seventy percent of participants operate within state tertiary settings while thirty percent belong to federal tertiary institutions. Geographic distribution covers all five states across the targeted territory. Anambra State registers the highest participation rate at thirty two percent followed closely by Enugu State at twenty two percent. Abia State records eighteen percent whereas Imo State and Ebonyi State account for sixteen percent and twelve percent respectively.

Influence of digital governance on institutional accountability in educational management in South-East Nigeria.

Table 2: Descriptive Statistics and Frequencies for Objective 1 (Digital Governance and Institutional Accountability)

S/N	Item Statement	SD (1)f (%)	D (2)f (%)	A (3)f (%)	SA (4)f (%)	Mean	Std. Dev.	Decision
1	Online fee collection portals reduce financial leakages and promote administrative transparency.	20 (20.0%)	10 (10.0%)	32 (32.0%)	38 (38.0%)	**2.88**	**1.131**	**Agreed**
2	Electronic document management systems prevent record tampering in educational management.	36 (36.0%)	6 (6.0%)	24 (24.0%)	34 (34.0%)	**2.56**	**1.290**	**Agreed**
3	Automated result processing platforms eliminate mark manipulation and enhance grading integrity.	24 (24.0%)	6 (6.0%)	36 (36.0%)	34 (34.0%)	**2.80**	**1.155**	**Agreed**
4	Official digital communication channels improve staff	16 (16.0%)	6 (6.0%)	40 (40.0%)	38 (38.0%)	**3.00**	**1.044**	**Agreed**

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	compliance with institutional policies.							
5	Inadequate digital infrastructure hampers effective implementation of digital governance mechanisms.	42 (42.0%)	10 (10.0%)	16 (16.0%)	32 (32.0%)	**2.38**	**1.316**	**Disagreed**

Data presented in Table 2 evaluates the influence of digital governance on institutional accountability across tertiary educational management structures. Four out of five measured indicators surpassed the theoretical benchmark decision mean score of 2.50, demonstrating general consensus regarding the positive impacts of administrative digitization. Official digital communication channels recorded the highest overall mean rating of 3.00, with seventy eight percent of respondents agreeing that automated outreach strengthens policy compliance among staff. Online fee collection platforms followed with a mean score of 2.88, while automated result processing platforms recorded a mean of 2.80, confirming that electronic financial and academic tracking minimizes manual tampering. Electronic document management systems also received an affirmative decision with a mean score of 2.56. Conversely, item five yielded a mean score of 2.38, indicating disagreement among participants that inadequate digital infrastructure acts as an absolute barrier to governance mechanisms.

Influence of data-driven decision-making on institutional accountability in educational management in South-East Nigeria.

Table 3: Descriptive Statistics and Frequencies for Objective 2 (Data-Driven Decision-Making and Institutional Accountability)

S/N	Item Statement	SD (1)f (%)	D (2)f (%)	A (3)f (%)	SA (4)f (%)	Mean	Std. Dev.	Decision
6	Educational Management Information Systems improve accurate and fair resource allocation.	16 (16.0%)	6 (6.0%)	36 (36.0%)	42 (42.0%)	**3.04**	**1.063**	**Agreed**
7	Data-driven tracking enables objective and transparent performance evaluations of staff.	28 (28.0%)	6 (6.0%)	22 (22.0%)	44 (44.0%)	**2.82**	**1.266**	**Agreed**
8	Analyzing student enrolment data enhances transparency in institutional policy	34 (34.0%)	6 (6.0%)	26 (26.0%)	34 (34.0%)	**2.60**	**1.271**	**Agreed**

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	formulation.							
9	Reliance on data analytics reduces political interference in educational leadership decisions.	34 (34.0%)	6 (6.0%)	26 (26.0%)	34 (34.0%)	**2.60**	**1.271**	**Agreed**
10	Poor data management skills among administrators limit effective decision-making processes.	34 (34.0%)	6 (6.0%)	16 (16.0%)	44 (44.0%)	**2.70**	**1.337**	**Agreed**

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The impacts of data-driven decision making on institutional accountability in tertiary educational management in South-East Nigeria was assessed from an empirical perspective as seen in Table 3. For every item that was assessed, the mean score was higher than the fixed criterion mean score of 2.50, which indicates high agreement among the respondents that data analytics has a positive impact on promoting administrative integrity and institutional oversight. The highest overall score was obtained in item 6, which had 78% of the respondents agree that Educational Management Information Systems improve the allocation of resources to be accurate and equitable with a mean score of 3.04 and standard deviation of 1.063. This was followed by Item 7 with a mean score of 2.82, which supports the fact that data-driven tracking gives us an objective way of evaluating staff performance transparently. In addition, the mean for Item 10 was 2.70, indicating that technical skill deficits in administrative staff are a significant limitation to effective decision-making. Both item 8 (Mean score = 2.60) and item 9 (Mean score = 2.60) registered mean scores of 2.60, thus implying that systematic analysis of student enrolment patterns and reliance on empirical data analytics are effective tools in minimising political interference in student enrolment and enhancing transparency in policy formulation.

Discussion

The data presented in Table 2, confirm that there is a significant effect of the digital governance mechanisms on the institutional accountability in tertiary educational institutions in South-East Nigeria. Official digital communication channels scored the highest mean score, recording 3.00, indicating that electronic administrative tools help to maximize employee adherence. Ughamadu et al. (2025) confirmed in another study that there is a direct relationship between structured administrative communication channels and staff operational performance and adherence to policy. Online fee collection portals came in second with an average score of 2.88 and validated that automated financial systems reduce revenue leakage. This finding was consistent with Abdallah et al. (2025) whose study found that digital corporate governance improves financial transparency and mitigates institutional misconduct. In the same way, automated result processing systems (2.80) and electronic result management systems (2.56) were given positive mean evaluations and thus highlighted the fact that digital recording does not allow academic manipulation. This finding was in line with Noorjahan (2025) who claimed that digital governance infrastructures create strong administrative audit trails. On the other hand, respondents disagreed with Item 5 (2.38), on the question of whether infrastructural weaknesses prevent the implementation of Digital Governance completely. Contrary to this, Ikegbusi et al. (2021) noted that inadequate ICT infrastructure poses a significant challenge to the implementation of education in Nigerian public schools after the COVID-19 pandemic, and Egwu and Mbonu (2023) noted

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that the lack of resources is a high hurdle for sustainable educational management in Nigerian public schools.

The findings presented in Table 3 show that the use of data for decision-making improves administrative control and institutional accountability. The Educational Management Information Systems (EMIS) have shown the highest mean score of 3.04 in Item 6 which indicates that the use of EMIS promotes equitable distribution of resources. This is in line with Egwu (2022a) who highlighted that the modernization of educational management instruments helps to optimise the use of resources in educational institutions. Data-driven performance tracking (2.82) showed that objective empirical measures lead to good staff assessment. Similarly, Egwuh (2022b) noted that standardised internal audit system brings up administrative quality assurance. In item 10 (2.70), it was confirmed that the lack of data literacy skills of administrators does affect effective decisions. The result agreed with the report by Onuh et al. (2024) that revealed a great deal of technological and skill-based constraints that are constraining the efficiency of administrative tasks. Both items 8 and 9 (2.60) revealed that examining enrolment trends and using data analysis reduce political influence over administrative policies. This finding corroborates Mou (2026) who showed that data analytics raises the level of administrative legitimacy and softens off the brink of arbitrary decision-making. Likewise, Ezugoh et al. (2023) found evidence-based quality assurance to be the key tool for governance and Egwu and Ekwe (2024) highlighted strategic data-driven management as vital tool for institutional accountability. Lastly, this result supported Ikegbusi and Egwu (2024) who established that systematic data tracking positively relates to academic and administrative achievement.

E. CONCLUSIONS AND SUGGESTIONS

Key elements for the metamorphosis of educational management in tertiary institutions in South-East Nigeria revolve around strategic investment in digital governance, data-driven decision making and robust institutional accountability frameworks. The empirical evidence collected during the course of this study shows that the process of digitization of administrative procedures like the implementation of online fee portals, electronic document management and automated result processing platforms are able to significantly curb financial leakages, reduce the opportunities for manipulation of records and restore the integrity of administrative procedures. Besides, the implementation of centralized Educational Management Information Systems (EMIS) and data analytics would give administrators firm and accurate data to guide fair resource distribution, fair staff appraisal, and evidence-based policymaking, and reduce political interference in institutional leadership. Even with these clear prospects, the potential of digital governance and data analytics to bring about a transformative effect will not be realised without addressing issues of system-wide operational constraints. Potential obstacles, such as lack of administrative capabilities, institutional inertia to adopting new technology, and fundamental digital infrastructure requirements, should be addressed with specific capacity training initiatives and investment in infrastructure. Automated workflows combined with regular data audits foster a proactive environment of institutional compliance and enhance the public trust and confidence of all educational institutions in South-East Nigeria. Finally, by combining digital governance instruments and data-based decisions, an administrative ecosystem can be created that can contribute to the development of sustainable education and institutional excellence.

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REFERENCES

Abdallah, A., Al Methen, W.D.S., Fathy Shehata Diab, M., Sayed Khalifa Mohamed, G., Falah Alsarhan, M., Eisa Hamed Aleisa, H., Alshammari, M.D.M. and Bader Alazzam, M., 2025. Corporate governance and digital accountability: A framework for enhancing transparency in the digital era. EDPACS, pp.1-17.

Artyukhova, N., Churikanova, O., & Bliumska-Danko, K. (2024). University Leadership: Transparency in Communication with External Stakeholders. Business Ethics and Leadership, 8(4), 16-36.

Dehinsilu-Isa, M., & Amodu, A. (2025). E-Governance and Transformation of Education: Bridging the Digital Divide in Lagos State. Journal of Contemporary Education Research.

Egwu, J. U. (2022a). Impact of educational management on the 21st century education pedagogy in Imo State public secondary schools. Journal of Educational Research and Development, 5(2), 109-119.

Egwu, J. U., & Ekwe, N. I. (2024). Creating effective roadmaps towards managing colleges of education for promoting students' employability in a competitive society in Delta State. NAEAP Journal of Studies in Educational Administration and Management, 3(1), 70-85.

Egwu, J., & Mbonu, O. A. (2023). Managing secondary education for sustainable development in Anambra State through adequate resources mobilisation: Challenges and strategies for improvement. Journal of Education in Developing Areas, 31(2), 415-428.

Egwu, J. U. (2022b). Assessment of internal mechanisms for quality assurance in the management of public primary schools in Delta State. UNIZIK Journal of Educational Research and Policy Studies, 13(1), 111-125.

Elugbaju, W. K., Okeke, N. I., & Alabi, O. A. (2024). Conceptual framework for enhancing decision-making in higher education through data-driven governance. Global Journal of Advanced Research and Reviews, 2(02), 016-030.

Emere, O. N. (2025). The Role of Technological Transformation in Enhancing Management and Administrative Decision-making in Tertiary Institutions in Anambra and Imo States. Journal of Education, Teaching and Learning Research, 1(4), 103-114.

Ezugoh, T. C., Agu, A. N., & Egwu, J. U. (2023). Quality assurance issues in the management of basic education in Nigeria. Emerging perspectives on universal basic education, 259.

Gbadrive, S. W. (2025). Enhancing Financial Transparency and Accountability in Public Education: Lessons from Internal Control Interventions in Developing Countries. International Journal of Scientific Research and Modern Technology, 4(9), 19-28.

Gul, M. N., Abbasi, W., & Wani, M. Y. (2025). Revolutionizing educational decision-making: a robust machine learning mechanism for predicting student performance. Journal of Electrical Systems and Information Technology, 12(1), 1-25.

Ikegbusi, N. G., & Egwu, J. U. (2024). Impact of project-based learning and student creativity on academic achievement of public secondary school students in Abia State. Int'l Journal of Education Research and Scientific Development, 5(5), 14-14.

Ikegbusi, N. G., Egwu, J. U., & Iheanacho, R. (2021). Students' perception of utilization of ICT in teaching and learning in post-COVID-19 era in Nigeria. ANSU Journal of Arts and Social Sciences, 8(2), 127-138.

Ilawagbon, O. O. (2025). The Role of Regulatory Bodies in Sustaining Educational Development in Nigeria: An Assessment of the National Universities Commission. International Journal of Research and Innovation in Social Science, 9(4), 2664-2681.

ISSN (*online*) : 2963-5896 & ISSN (*print*) : 2964-0482

Jensen, M. C., & Meckling, W. H. (2000). Theory of the firm: Managerial behavior, agency costs and ownership structure. In Corporate governance (pp. 77-132). Gower. https://www.taylorfrancis.com/chapters/edit/10.4324/9781315191157-9/theory-firm-managerial-behavior-agency-costs-ownership-structure-michael-jensen-william-meckling

Karim, H. A. (2025). Accountability and Transparency In Education Financing Management. ICMIE Proceedings, 2, 256-263.

Khan, A. N., Shahzad, K., & Khan, N. A. (2024). Fostering accountability through digital transformation: Leadership's role in enhancing techno-work engagement in public sector. Public Money & Management, 1-8.

Liu, T., Luo, Y. T., Pang, P. C. I., & Kan, H. Y. (2025). Exploring the impact of information and communication technology on educational administration: A systematic scoping review. Education Sciences, 15(9), 1114.

McConvey, K., & Guha, S. (2024, May). " This is not a data problem": Algorithms and Power in Public Higher Education in Canada. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (pp. 1-14).

Mogea, T. (2023). Education Management Concept. Jurnal Ilmu Sosial, Pendidikan dan Humaniora (JISPENDIORA), 2(1), 59-67.

Mou, D. (2026). From Algorithmic Decision-Making to Administrative Legitimacy: Rethinking Legal Accountability in Digital Governance. Journal of Law and Governance, 2(1), 1-10.

Nadeem, A., Iram, S., & Akhtar, H. (2026). The Impact of Educational Leadership Styles on Teacher Productivity: A Comprehensive Review. Inverge Journal of Social Sciences, 5(1), 28-41.

Nigeria Education Data Initiative. (2025). About NEDI. https://nedi.education.gov.ng/about/

Noorjahan, M. (2025). Digital Governance and Democratic Accountability: An International Legal Perspective. Law and Democracy Insight, 3(1), 12-27.

Nurcahya, A., Zohriah, A., & Firdaos, R. (2024). Basic concepts of educational management. J-MIND (Jurnal Manajemen Indonesia), 9(1), 9-20.

Nwakanma, L. O., Agu, U. V., & Igwe, J. A. (2025). DATA-DRIVEN DECISION-MAKING IN HIGHER EDUCATION GOVERNANCE. Int'l Academic Research Journals of Education and Digital inclusion, 1(2), 220-235.

Okenwa-Fadele, I., Oyeyemi, A. A., Akutaekwe, E. C., Felix, G. C., & Ibrahim, B. D. (2025). Digital Divide Challenges and Their Impact on Teaching and Learning in Secondary Schools in Anambra State. Journal of Research in Education and Pedagogy, 2(3), 447-453.

Onuh, U. B., Egwu, J. U., & Ozokwere, H. (2024). Challenges in artificial intelligence utilization for job management efficiency among academic staff in colleges of education in Anambra state. Journal of Association of Educational Management and Policy Practitioners, 6(1), 244-256.

Pattaro, A. F., Moura e Sá, P., & de Kruijf, J. A. (2022). Transparency and accountability in Higher Education as a response to External stakeholders and rules: A comparison between Three Country-Case studies. In Governance and performance management in public universities: Current research and practice (pp. 15-47). Cham: Springer International Publishing.

Phakamach, P., PANJARATTANAKORN, D., RATCHAVIENG, A., & SENARITH, P. (2023). Integrated educational management: Meaning, objectives, scope, functions, and new directions for educational organizations. Asian Education and Learning Review, 1(1), 19-34.

Taufik, O. A., Pamungkas, O. Y., Ahmad, A. K., Andini, D. W., & Cahyandaru, P. (2025). Mapping Determinants of Success through Information Systems in Higher Education: A Structural Equation Modeling Approach. Educational Process: International Journal, 14, e2025067.

ISSN (*online*) : 2963-5896 & ISSN (*print*) : 2964-0482

Taylor, Z. W., Charran, C., & Childs, J. (2023). Using big data for educational decisions: lessons from the literature for developing nations. Education Sciences, 13(5), 439.

Ughamadu, U., Okwuanaso, J. O., & Egwu, J. U. (2025). Principal's communication skill's as predictors of teacher'sjob performance in public secondary schools in Anambra state, Nigeria. Journal of Educational Research & Development, 8(2).

Weill, P., & Ross, J. W. (2004). IT governance: How top performers manage IT decision rights for superior results. Harvard Business Press.

Zahra, F. (2025). Analysis of Digital Governance Framework Implementation to Enhance Digital Transformation. SITEKNIK: Sistem Informasi, Teknik dan Teknologi Terapan, 2(3), 115-126.

Zhang, C. (2025). Digital Governance in Education: Theoretical Foundations and Global Trends. Education Insights, 2(4), 121-131.