

**ROLE OF E-PROCUREMENT AND DIGITAL PLATFORMS IN ENHANCING
TRANSPARENCY IN MATERIAL SOURCING FOR PUBLIC PROJECTS IN
ANAMBRA STATE**

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Abstract

This paper examines the role of e-procurement and digital platforms in enhancing transparency in material sourcing for public projects in Anambra State, Nigeria. It combines documentary analysis with a questionnaire survey of 117 professionals experienced in public construction procurement in the state (83.6% usable response rate). Digital tools were used far more at the tendering stage than after award: accessing tender notices online had a mean score of 3.35 (SD = 0.81), against 1.88 (SD = 0.85) for tracking material management post-award. Respondents strongly supported regular portal updating (M = 3.62, SD = 0.60), digital capture of site delivery records (M = 3.50, SD = 0.68) and linking delivery records to payments (M = 3.56, SD = 0.66). The findings indicate that the transparency value of e-procurement depends on the completeness, timeliness and continuity of information across the procurement cycle, especially after contract award. The study recommends extending digital procurement beyond contract award to cover material ordering, delivery, inspection and payment verification, while strengthening disclosure requirements, system interoperability and professional capacity.

Keywords: E-procurement, digital platforms, transparency, material sourcing, public procurement, construction materials, Anambra State, public projects

1. Introduction

When a government announces the construction of a road, school, health facility or public office, public attention usually goes to the size of the contract, the contractor and the expected completion date. The materials that eventually enter the project are rarely given the same attention. Yet cement, reinforcement steel, aggregates, bitumen, blocks, roofing materials, electrical components and other inputs can determine a large part of the final cost and quality of a public project.

Material sourcing is therefore an important part of public procurement, not a minor stage after award. A contractor may be selected competitively, yet questions remain. Was the material supplied at the approved price and grade? Was the quantity consistent with the bill of quantities? Was payment made only after the materials were verified?

These questions point to a broader governance problem: information is unevenly distributed among government, contractors, consultants, suppliers and the public, and insiders may see procurement records that ordinary citizens cannot. Research on corruption in Nigerian construction has identified bribery in contract procurement, overpricing, false claims and acceptance of substandard work as recurring concerns (Adeyemo & Amade, 2016).

Nigeria's public procurement reforms were intended to reduce some of these risks. At the federal level, the Public Procurement Act 2007 established a framework based on competition, standard procedures and oversight by the Bureau of Public Procurement. The Act applies principally to federal procurement and specified entities under section 15 (Federal Republic of Nigeria, 2007). Public procurement by Anambra State is therefore governed by the state's own Public Procurement Law of 2011, as amended in 2020, which covers works, goods and services (Anambra State Government, 2011, 2020; Anambra State Bureau of Public Procurement, 2021).

The Anambra State Bureau of Public Procurement (ANSBPP) is legally responsible for promoting transparency, fair competition and value for money. Its functions include maintaining procurement information, carrying out procurement audits and establishing a single internet portal intended to serve as the primary and definitive source of government procurement information (Anambra State Bureau of Public Procurement, n.d.-a).

These duties make Anambra a relevant setting for examining the relationship between digital procurement and transparency in public projects. The ANSBPP received the Excellence in Digital Public Procurement Award at the 2025 GovTech Awards (Anambra State Government, 2025; Foundation for Investigative Journalism [FIJ], 2026a). At the same time, investigative reporting in June 2026 documented a period in which newly awarded contract information was not regularly published on the procurement portal, with some information updated after the issue was reported (FIJ, 2026a, 2026b).

A platform can be technically capable of supporting transparency while the information on it remains incomplete, outdated or too limited for scrutiny. The issue is therefore not simply whether Anambra has e-procurement, but whether it lets the public and oversight institutions follow the procurement trail from the initial requirement for materials through supplier selection, delivery, verification and payment.

The study has four objectives: (1) to examine the e-procurement functions relevant to public

construction procurement in Anambra State; (2) to assess how digital procurement platforms can improve transparency in the sourcing and verification of construction materials; (3) to identify the factors that limit effective digital tracking of materials from procurement to project site; and (4) to propose practical measures for strengthening digital transparency in material sourcing for public projects.

The study is guided by four research questions: (1) what e-procurement functions are relevant to material sourcing for public projects in Anambra State; (2) how can digital procurement platforms improve transparency in the sourcing, delivery and verification of construction materials; (3) what factors limit the effective use of digital platforms for material traceability; and (4) what measures can strengthen the transparency value of e-procurement in Anambra State?

2. Review of Related Literature

Existing literature indicates that the use of e-procurement can improve access to procurement information and create electronic records of procurement transactions, but adoption is often uneven across the procurement cycle. Ibem et al. (2021), in a survey of 759 users in the Nigerian construction sector, reported relatively high use of e-procurement for communicating tender opportunities, tendering, and making and receiving payments, but very low use for monitoring construction progress and tracking the movement of materials. Their findings suggest that the benefits of digital procurement may be reduced when digital systems do not continue into project execution.

Research in the Nigerian public sector also shows that the adoption of e-procurement depends on users' perceptions and organizational conditions. Musa et al. (2024) found that perceived usefulness, perceived security and perceived trust were important factors in public-sector employees' intention to adopt e-procurement. Similarly, Abasilim and Esisio (2025), in a case study of the Federal Road Safety Corps in Lagos, identified inadequate funding, poor infrastructure, limited digital skills, policy gaps, resistance to change and cybersecurity concerns as barriers to digital transformation in that agency. These studies indicate that technical availability alone does not guarantee sustained and effective use.

Studies of public procurement and construction governance further show why transparency must extend beyond contract award. Adeyemo and Amade (2016) identified corruption risks across several stages of Nigerian construction procurement and project execution, while Maduekeh and Obinwa (2022), in a study of two tertiary institutions in Anambra State, noted that abuse in Nigerian public procurement has led to inflation, delay, poor quality of work and project abandonment. Together, these studies point to the importance of maintaining reliable procurement records throughout project delivery, rather than treating transparency as an issue confined to tendering and award.

International guidance points in the same direction. The OECD (2019, 2025) emphasizes integration across the procurement cycle, including links between procurement, contract management and financial systems. The literature therefore supports extending e-procurement beyond tendering. However, limited attention has been given specifically to the digital traceability of construction materials in public projects in Anambra State. This study addresses that gap by examining material sourcing, delivery, inspection and payment as connected parts of the transparency chain.

3. Conceptualizing E-Procurement and Transparency

E-procurement refers broadly to the use of information and communication technologies to conduct procurement activities electronically. It can include electronic tendering, supplier registration, bid submission, evaluation, contract award, invoicing, payment and the publication of procurement information. The Anambra procurement platform itself describes electronic government procurement (e-GP) as the use of information and communication technology, particularly the internet, in government procurement relationships for goods, works and consultancy services (Anambra State Bureau of Public Procurement, n.d.-b).

Transparency is a wider idea. A procurement process is not transparent merely because some information has been uploaded to a website. For information to contribute meaningfully to transparency, it should be available, understandable, sufficiently complete and provided at a time when it can still be used for oversight.

This distinction matters in construction procurement. A tender notice shows that a contract exists, and the contract record shows the winner, but neither tells citizens what happened to the materials once the project moved to site. Transparency must cover both the decision to procure and its implementation.

For material sourcing, transparency can therefore be understood as the ability to trace the chain linking material requirement, specification, supplier competition, quotation or bid, supplier selection, contract award, order, delivery, inspection and payment. The longer this chain remains visible and verifiable, the more difficult it becomes to conceal irregular procurement decisions.

4. Methodology

4.1 Research Design

The study adopts a mixed-methods design, combining documentary analysis with a structured questionnaire survey. The documentary component examines the statutory and institutional framework for public procurement in Anambra State, the functions of the State's e-GP platform, relevant peer-reviewed studies and recent public-domain reporting. The questionnaire component provides primary data from professionals who have direct experience of public construction procurement. This combination allows the formal procurement framework to be considered alongside the practical experience of stakeholders.

4.2 Study Area

The study area is Anambra State, South-East Nigeria. The analysis is limited to public construction procurement within the state and focuses on the state's procurement framework, its e-GP platform and the experience of professionals involved in public construction procurement. The respondents had experience of public projects in the state, including projects in Awka, Onitsha, Nnewi and other locations.

4.3 Population of the Study

The target population comprised professionals and practitioners with direct knowledge of public construction procurement and material sourcing in Anambra State, including contractors, quantity surveyors, architects, builders, engineers, estate surveyors and valuers, procurement

officers and project managers. Because no single public register captures all these groups, no exact population figure is stated.

Table 1: Sources of evidence used in this paper

Source category	Examples used in this paper	Purpose in the analysis
Primary legal and institutional documents	Anambra State Public Procurement Law, 2011 (Anambra State Government, 2011); ANSBPP procurement manual (Anambra State Bureau of Public Procurement, 2021); ANSBPP statement of functions (Anambra State Bureau of Public Procurement, n.d.-a); Public Procurement Act, 2007 (Federal Republic of Nigeria, 2007)	Establish what the law and the institution are formally required to do
Peer-reviewed literature	Ibem et al. (2021); Musa et al. (2024); Maduekeh & Obinwa (2022); Adeyemo & Amade (2016); Abasilim & Esio (2025)	Establish how e-procurement is actually used and adopted in comparable Nigerian settings
Contemporaneous investigative and news reporting	FIJ (2026a, 2026b); TheCable (2025)	Provide documentary evidence of institutional behaviour after the law and manual were written
International good-practice benchmarks	OECD (2019, 2025, 2026)	Provide a comparative standard against which Anambra's practice is assessed

4.4 Sampling and Data Collection

The survey was conducted between July and September 2026. The questionnaire was administered purposively to respondents with direct experience of public construction procurement in Anambra State. Of 140 questionnaires administered, 117 were usable (83.6%). Respondents were drawn from professional and organizational networks, covering both procuring entities and private-sector construction professionals, and completed the questionnaire in printed or online form.

4.5 Research Instrument

The instrument was a structured questionnaire with six sections: respondent characteristics (A), frequency of use of e-procurement functions (B), contribution to transparency (C), material delivery, inspection and traceability after award (D), challenges (E), and open-ended questions (F). It was developed from the study objectives, documented e-procurement functions in Anambra State and earlier Nigerian studies, including Ibem et al. (2021) and Musa et al. (2024). The questionnaire is available from the authors on request.

4.6 Method of Data Analysis

Responses were analyzed with descriptive statistics: frequencies, percentages, means and standard deviations. Section B used a four-point frequency scale (Very Often = 4 to Never = 1), Sections C and D a four-point agreement scale (Strongly Agree = 4 to Strongly Disagree = 1), and Section E a four-point seriousness scale (Very Serious = 4 to Not a Serious Challenge = 1). Percentages are based on the 117 valid responses, and 2.50 was used as the reference midpoint for interpreting means.

4.7 Ethics Statement

Respondents were not asked for their names, were told that their answers would be confidential and used only for academic purposes, and were asked to indicate permission to participate before completing the questionnaire. Participation was voluntary. Formal ethics committee approval was not sought because this was a small-scale, anonymous survey; respondents' consent was obtained before participation.

4.8 Scope and Limitations

The study focuses on transparency in the sourcing of construction materials and does not measure the technical quality of individual materials or the financial performance of public projects. The survey involved 117 respondents and reflects the views of accessible participants, not a census of professionals in the state. Findings depend on respondents' experience and willingness to provide information, and the documentary component relies on publicly accessible sources. The results are descriptive. Frequency items were answered by all 117 respondents, including the 21 (17.9%) who had not directly used e-procurement tools.

5. Survey Findings and Discussion

The findings show a clear contrast between front-end e-procurement activities, such as access to tender notices and electronic submission, and post-award material tracking.

5.1 Respondent Profile

Table 2 profiles the respondents. Most were experienced: 80 (68.4%) had worked in the field for at least six years, and 96 (82.1%) had directly used e-procurement tools.

Table 2: Demographic and Professional Profile of Respondents (n = 117)

Characteristic	Category	n (%)
Professional role	Quantity Surveyors	26 (22.2%)
Professional role	Civil/Structural Engineers	24 (20.5%)
Professional role	Architects	18 (15.4%)
Professional role	Estate Surveyors & Valuers	16 (13.7%)
Professional role	Registered Contractors	14 (12.0%)
Professional role	Public Procurement Officers	11 (9.4%)
Professional role	Builders & Project Managers	8 (6.8%)
Experience level	More than 10 years	37 (31.6%)
Experience level	6–10 years	43 (36.8%)
Experience level	3–5 years	27 (23.1%)
Experience level	Less than 3 years	10 (8.5%)
E-procurement use	Directly used e-procurement tools	96 (82.1%)
Portal familiarity	Familiar with ANSBPP e-GP portal	89 (76.1%)

Source: Authors' field survey, 2026. Percentages are based on 117 valid responses.

5.2 Use of E-Procurement Functions

Table 3 shows how often seven e-procurement functions were used. Higher means indicate more frequent use.

Table 3: Frequency of Use of E-Procurement Functions (n = 117)

Item	Survey statement / function	VO (%) n	O (%) n	R (%) n	N (%) n	Mean ($\bar{X}$)	SD
B1	Accessing public project tender notices online	62 (53.0%))	38 (32.5%))	13 (11.1%))	4 (3.4%)	3.35	0.81
B2	Registering or verifying suppliers electronically	48 (41.0%))	42 (35.9%))	21 (17.9%))	6 (5.1%)	3.13	0.89
B3	Downloading tender/bidding documents online	58 (49.6%))	39 (33.3%))	15 (12.8%))	5 (4.3%)	3.28	0.85
B4	Submitting bids/tender documents electronically	46 (39.3%))	45 (38.5%))	20 (17.1%))	6 (5.1%)	3.12	0.87
B5	Receiving clarifications electronically during tendering	31 (26.5%))	46 (39.3%))	28 (23.9%))	12 (10.3%))	2.82	0.94
B6	Accessing contract award disclosures online	18 (15.4%))	37 (31.6%))	42 (35.9%))	20 (17.1%))	2.45	0.95
B7	Tracking material management post-award	5 (4.3%))	21 (17.9%))	46 (39.3%))	45 (38.5%))	1.88	0.85

Source: Authors' field survey, 2026. VO = Very Often; O = Often; R = Rarely; N = Never.

Accessing tender notices online had the highest mean ($M = 3.35$, $SD = 0.81$), followed by downloading tender documents ($M = 3.28$, $SD = 0.85$) and electronic bid submission ($M = 3.12$, $SD = 0.87$). Accessing contract award disclosures was lower ($M = 2.45$, $SD = 0.95$), and tracking material management after award was lowest ($M = 1.88$, $SD = 0.85$): 77.8% of respondents selected Rarely or Never for it, against 22.2% who selected Very Often or Often. Digital use therefore falls sharply at the post-award material-management stage.

5.3 Transparency, Delivery and Traceability Evaluations

Table 4 reports respondents' views on transparency, delivery and traceability.

Table 4: Respondents' Views on Transparency, Delivery and Traceability (n = 117)

Item	Evaluation statement	SA (%) n	A (%) n	D (%) n	SDA (%) n	Mea n ($\bar{X}$)	SD
C1	Online tender notices broaden market access for qualified suppliers	65 (55.6%))	44 (37.6%))	6 (5.1%))	2 (1.7%)	3.47	0.68
C2	Electronic audit trails reduce document tampering risks	58 (49.6%))	46 (39.3%))	10 (8.5%))	3 (2.6%)	3.36	0.75
C9	Transparency remains incomplete if digital records stop at contract award	71 (60.7%))	37 (31.6%))	7 (6.0%))	2 (1.7%)	3.51	0.69
C10	Regular portal updating is essential for meaningful transparency	78 (66.7%))	34 (29.1%))	4 (3.4%))	1 (0.9%)	3.62	0.60
D3	Site delivery notes and material quantities should be captured digitally	68 (58.1%))	41 (35.0%))	6 (5.1%))	2 (1.7%)	3.50	0.68
D5	Linking material delivery records to payments improves accountability	74 (63.2%))	36 (30.8%))	5 (4.3%))	2 (1.7%)	3.56	0.66
D8	Current use of digital platforms for post-delivery tracking is limited	64 (54.7%))	40 (34.2%))	10 (8.5%))	3 (2.6%)	3.41	0.76

Source: Authors' field survey, 2026. SA = Strongly Agree; A = Agree; D = Disagree; SDA = Strongly Disagree; SD = standard deviation. Selected items from Sections C and D; results for the remaining items are available from the authors on request.

Respondents strongly supported extending digital transparency beyond tendering: 95.7% agreed or strongly agreed that regular portal updating is essential ($M = 3.62$, $SD = 0.60$), 94.0% that linking delivery records to payments improves accountability ($M = 3.56$, $SD = 0.66$), and 93.2% that site delivery notes and quantities should be captured digitally ($M = 3.50$, $SD = 0.68$). At the same time, 88.9% agreed or strongly agreed that current use of digital platforms for post-delivery tracking is limited ($M = 3.41$, $SD = 0.76$).

5.4 Operational and Implementation Constraints

Table 5 reports the constraints respondents identified. Means above 2.50 indicate a factor generally seen as a serious challenge.

Table 5: Challenges to the Use of Digital Platforms for Material Sourcing (n = 117)

Item	Challenge factor evaluated	VS (%) n	S (%) n	LS (%) n	NS (%) n	Mean (X)	SD
E1	Unreliable internet connectivity at offices/sites	56 (47.9%)	42 (35.9%)	14 (12.0%)	5 (4.3%)	3.27	0.84
E2	Power supply instabilities and hardware deficits	48 (41.0%)	44 (37.6%)	20 (17.1%)	5 (4.3%)	3.15	0.86
E3	Insufficient digital skills among site/procurement personnel	38 (32.5%)	47 (40.2%)	24 (20.5%)	8 (6.8%)	2.98	0.90
E4	System interoperability gaps (procurement vs. BOQ/payments)	52 (44.4%)	43 (36.8%)	17 (14.5%)	5 (4.3%)	3.21	0.85
E5	Incomplete or delayed uploading of procurement/contract data	68 (58.1%)	37 (31.6%)	9 (7.7%)	3 (2.6%)	3.45	0.75
E6	Cybersecurity risks and unauthorized alteration concerns	32 (27.4%)	45 (38.5%)	30 (25.6%)	10 (8.5%)	2.85	0.92
E7	Organizational resistance to moving away from manual routines	45 (38.5%)	43 (36.8%)	21 (17.9%)	8 (6.8%)	3.07	0.92
E8	Insufficient enforcement or sanctions when disclosures are omitted	63 (53.8%)	41 (35.0%)	10 (8.5%)	3 (2.6%)	3.40	0.75

Source: Authors' field survey, 2026. VS = Very Serious; S = Serious; LS = Less Serious; NS = Not a Serious Challenge.

Incomplete or delayed uploading of procurement and contract data was the most strongly reported constraint (M = 3.45, SD = 0.75), rated Serious or Very Serious by 89.7% of respondents. Weak enforcement or sanctions for omitted disclosures followed (M = 3.40, SD = 0.75; 88.9%), then unreliable internet connectivity (M = 3.27, SD = 0.84). Cybersecurity concerns had the lowest mean (M = 2.85, SD = 0.92) but still exceeded the midpoint.

5.5 Discussion of Findings

The survey supports the central argument of the study. Front-end functions were used far more than post-award material management ($M = 3.35$ for tender notices against 1.88 for post-award tracking), consistent with Ibem et al. (2021), who found much stronger use of e-procurement for tendering than for progress and material tracking in a wider Nigerian sample. The low post-award score may partly reflect the absence of a tracking function on the portal rather than a choice not to use one; the survey did not test this.

Respondents also saw the missing post-award link as important: more than nine in ten supported regular portal updating, digital delivery records and links between delivery records and payment, yet most said present use of post-delivery tracking is limited. The constraint is therefore not doubt about the value of digital traceability but a gap between what respondents consider desirable and what is used in practice. The main obstacles (delayed data uploading, weak enforcement, connectivity and interoperability) match the infrastructure, organizational and governance barriers reported in earlier work (Abasilim & Esisio, 2025; Musa et al., 2024).

6. Material Sourcing in Public Construction and the Transparency Problem

Material sourcing is especially sensitive because construction materials are consumed on site. Unlike office equipment, cement, aggregates, steel and bitumen may be delivered in stages, mixed with other inputs or incorporated permanently into the structure.

This creates several points of vulnerability. Specifications can be written to favour a particular supplier; supplier selection can be influenced through restricted information; contract prices may differ from market prices; the quantity or quality delivered may differ from what was approved; and payment documents may be hard to reconcile with what is on site.

These concerns match wider evidence on corruption risks in public construction (Adeyemo & Amade, 2016) and on the inflation, delay, poor quality and abandonment linked to abuse in Nigerian public procurement, as discussed in a study of two tertiary institutions in Anambra State (Maduekeh & Obinwa, 2022).

The transparency challenge is therefore not solved when the contractor's name is published. What matters is whether the procurement record can continue to tell the story after the award.

7. How E-Procurement Can Improve Transparency in Material Sourcing

7.1 Making procurement opportunities more visible

Traditional procurement systems can make access to procurement information dependent on physical notices, personal contacts or awareness within professional networks. Digital platforms reduce this dependence by making invitations, procurement plans and tender information accessible through a central platform.

This widens the pool of potential suppliers and makes it harder for opportunities to circulate only within a small group. Anambra's procurement law requires invitations to bid to be advertised, including on official websites (Anambra State Government, 2011, s. 27), and the e-GP portal provides an online channel for doing so (Anambra State Bureau of Public Procurement, n.d.-b). Wider visibility also makes it difficult to favour the same supplier repeatedly without leaving a record.

7.2 Creating an electronic audit trail

A major advantage of digital procurement is that actions can be recorded electronically. Tender publication, bid submission, evaluation, award, invoicing and payment can potentially be connected through an identifiable electronic trail. This is valuable where the procurement process is later questioned: instead of relying entirely on physical files, investigators or auditors can compare dates, suppliers, prices, approvals and transaction histories.

The OECD notes that digital procurement systems can generate more consistent and up-to-date procurement information while reducing duplication and supporting integration with financial systems (OECD, 2025). For construction materials, the audit trail becomes especially useful where a purchase order, delivery record and payment entry can all be linked to the same contract item.

7.3 Reducing opportunities for informal interference

Digitization does not remove human discretion, but it reduces the points at which procurement decisions depend on undocumented personal interaction. A supplier need not visit an office to obtain tender documents published online, and electronic submission records when a bid was received. The less procurement information is controlled informally, the easier it is for suppliers to compete on comparable terms.

7.4 Supporting price comparison

Material prices change frequently, especially for cement, steel, aggregates, imported components, fuel and transport. A procurement database lets agencies keep historical records and compare prices across projects. Anambra's framework also assigns the Bureau responsibility for monitoring tendered-item prices and maintaining a state database of standard prices (Anambra State Government, 2011, s. 7). Such a database is more useful when records are complete and structured, so that unusual price differences can be identified for investigation.

7.5 Improving access for citizens and oversight actors

Online platforms let journalists, professional bodies, civil society organizations, researchers and the public examine procurement without requesting physical files. Oversight can then happen while procurement is still under way rather than years later, though this depends heavily on the accuracy and currency of published information.

8. The Missing Link: Material Delivery and Construction-Site Verification

The greatest weakness in the transparency argument is that e-procurement is often strongest before a contract is awarded and weaker once the contractor reaches site. Ibem et al. (2021) found the same pattern and linked users' experience to internet infrastructure, ease of use, operational conditions, change management and interoperability.

Consider a hypothetical public road project in Anambra. The electronic system may show that a contractor won through an advertised procedure at a stated price. That is useful, but transparency remains incomplete if the public cannot tell how much bitumen, aggregate or reinforcement was delivered, whether it met specification, and whether payment matched verified deliveries.

Procurement therefore needs to move from an award-centred model, in which the trail runs from tender to contract award, to a traceability model that continues through purchase order, delivery, inspection, payment and completion. This is more demanding, but much closer to what transparency in material sourcing requires.

9. Anambra State: Digital Capacity Versus Institutional Practice

Anambra provides an unusually useful case because the state has developed a formal institutional and digital framework for public procurement. The Anambra State Public Procurement Law provides for a Bureau responsible for transparency, accountability, fair competition and value for money. The Bureau is also charged with maintaining procurement information, conducting procurement audits and maintaining a single internet portal as the primary and definitive source of public procurement information (Anambra State Government, 2011, ss. 6–7). The procurement portal is consequently not merely a convenience; it forms part of the state's accountability architecture.

This makes the events of 2025 and 2026 particularly revealing. In October 2025, ANSBPP received the Excellence in Digital Public Procurement Award at the 2025 GovTech Awards (Anambra State Government, 2025; FIJ, 2026a), with the recognition specifically associated with digital and transparent public procurement practices. However, by June 2026, FIJ reported that the Bureau had stopped publishing details of newly awarded contracts on the procurement portal. According to the report, the portal's contract pages had last been updated around October 2025, leaving subsequent procurement activity unavailable to the public (FIJ, 2026a).

The omission was later addressed in part. On 29 June 2026, FIJ reported that the portal had been updated with details of some contracts awarded since November 2025, although it also observed that the information remained incomplete compared with the number of projects reportedly approved (FIJ, 2026b).

This episode matters for two reasons. It shows the difference between technical capacity and institutional performance: the state had the portal and the legal basis for disclosure, but the information was not consistently maintained. It also shows that transparency should be judged by the quality and continuity of information, not by the existence of a website.

10. Digital Platforms and the Problem of Trust

The effectiveness of digital platforms also depends on whether users trust them and can use them. Musa et al. (2024) found that perceived usefulness, security and trust shaped public-sector employees' willingness to adopt e-procurement, and Abasilim and Esisio (2025), in their Federal Road Safety Corps case study, identified infrastructure deficiencies, inadequate funding, limited digital skills, policy gaps, staff resistance and cybersecurity concerns as barriers to digital adoption.

This has practical consequences in Anambra. A portal can be online while staff maintain parallel paper processes; site supervisors may have no practical means of updating delivery information from remote locations, suppliers with weak digital capacity may struggle with complex procedures, and poor connectivity can discourage timely uploads. The result is a system that exists formally but does not replace manual practice.

11. A Proposed Transparency Model for Anambra Public Construction Projects

For Anambra, the next stage of reform should not be another procurement portal developed in isolation. The more useful approach would be to connect existing procurement information with the actual movement of materials and project expenditure. A practical digital material-traceability model could operate as set out in Table 6.

Table 6: Proposed material-traceability model

Procurement stage	Information to be captured digitally	Transparency value
Planning	Project description, estimated cost, material categories and procurement plan	Shows what government intends to buy
Specification	Material type, grade, quantity and technical requirements	Makes requirements visible and discourages hidden specification changes
Tendering	Notice, participating suppliers, bid dates and tender documents	Supports competition and equal access
Evaluation	Evaluation outcome and approved reasons for selection	Makes supplier selection easier to scrutinize
Award	Contractor/supplier, contract value, date and duration	Establishes the public contract record
Ordering	Purchase order, quantity and agreed unit price	Connects procurement award to actual material procurement
Delivery	Date, quantity, supplier, delivery note and site location	Makes material movement traceable
Inspection	Inspection results, photographs and approval by authorized professionals	Provides evidence of quality and quantity
Payment	Invoice, certification and payment date	Allows financial records to be compared with deliveries
Completion	Final quantities, variations and completion certification	Shows whether the project ultimately matched the approved procurement

The delivery and inspection stages address the part of the procurement cycle that Nigerian construction research identifies as comparatively weak. A mobile delivery-verification system could let authorized site personnel upload photographs, quantities, delivery notes and dates against the relevant contract. It need not be complicated; its purpose is to link what the government agreed to buy with what reached the site.

This would also create opportunities for data analysis. Repeated unusually high material prices, frequent contract variations, repeated awards to the same supplier, or large differences between approved and delivered quantities could be flagged for further review. The OECD has increasingly emphasized this type of risk-based use of procurement data, noting that digital data analytics can help governments identify unusual procurement patterns and direct oversight towards higher-risk transactions (OECD, 2026).

12. Challenges to the Use of Digital Platforms in Anambra

Digital procurement faces several challenges. The first is infrastructure: reliable internet, electricity, hardware and maintenance are basic requirements, and where they are weak, electronic procurement may revert to manual processes. Staff capability is a second challenge: procurement officers, project managers, quantity surveyors, engineers and contractors need competence in both procurement and construction.

Third, digital systems reduce informal discretion, so staff used to manual processes may resist change; a study of a Nigerian federal agency identifies resistance, inadequate funding and lack of strategic direction as barriers (Abasilim & Esiio, 2025). Fourth, publishing inaccurate information creates a false impression of transparency, so data quality matters. Fifth, a system holding supplier information, procurement documents and financial records must be protected from unauthorized access and manipulation.

Finally, digital transparency can fail because of weak enforcement. If officials are not required to publish information within clearly defined periods, or if failure to publish has no consequence, disclosure can come to depend on individual administrative decisions. The recent Anambra portal episode illustrates why this final issue deserves attention (FIJ, 2026a, 2026b).

13. Recommendations

13.1 Make publication deadlines mandatory

The state should establish clear deadlines for publishing procurement plans, tender notices, contract awards, variations and other relevant records. The existing legal responsibility to maintain procurement information should be supported with identifiable officers and consequences for unjustified non-compliance.

13.2 Extend digitization beyond contract award

The e-GP system should capture delivery and inspection information for major construction materials. The greatest transparency gain will come from connecting procurement records to actual project execution rather than stopping at contract award.

13.3 Link payment to verifiable delivery records

For relevant material purchases, payment approval should be digitally linked to delivery documentation and professional certification, making it more difficult to create a financial record for materials that cannot be shown to have been delivered.

13.4 Improve interoperability

The procurement platform should, where legally and technically appropriate, connect with financial management, budgeting, contract management and project-monitoring systems. The

OECD recommends integrated digital procurement solutions because information becomes more useful when systems can exchange data across the procurement cycle (OECD, 2025).

13.5 Provide structured access to procurement data

Citizens, journalists, professional bodies and researchers should be able to access procurement information in a form that is searchable and understandable. Transparency is much less useful when the data exist but cannot easily be examined.

13.6 Develop procurement risk indicators

Anambra can gradually use existing procurement data to identify unusual patterns such as repeated single-supplier success, abnormal prices, low competition or frequent contract modifications. Such indicators should not automatically establish wrongdoing, but they can help auditors decide where closer investigation is justified (OECD, 2026).

13.7 Strengthen the capacity of project professionals

Quantity surveyors, estate surveyors and valuers, architects, engineers, procurement officers and other professionals involved in public construction should receive practical training on digital procurement systems, electronic documentation, material traceability and data verification. Digital transparency cannot work properly when the professionals responsible for generating and validating the underlying information are insufficiently trained.

14. Conclusion

E-procurement has the potential to change how public construction procurement is monitored in Anambra State. The survey shows where that potential is already used and where it is not: online tender notices had a mean of 3.35 and electronic bid submission 3.12, while post-award material management had the lowest mean, 1.88, consistent with Ibem et al. (2021). Respondents also strongly supported regular portal updating ($M = 3.62$).

The state has a legal procurement framework, a dedicated Bureau of Public Procurement and an electronic platform, yet the interruption in publishing contract information in 2025 and 2026 showed that a portal does not guarantee continuous disclosure. For construction projects the key questions often arise after award: what was ordered, what was delivered, whether it met the specification, how much was paid, and whether final quantities matched the approved documents.

The main gap is therefore not a lack of support for digital transparency but weak use of digital tools after contract award. A complete system should let a material item be followed from specification to supplier, from supplier to delivery, and from delivery to certification and payment. That is where e-procurement moves beyond being an electronic filing system and becomes a transparency tool.

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