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DEVELOPING A FRAMEWORK FOR MANAGING PRIVATE REAL ESTATE DEVELOPMENT PROJECTS IN ANAMBRA STATE, NIGERIA

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ABSTRACT

Private developers drive real estate delivery in Anambra State, Nigeria, yet projects are frequently hampered by informal management, regulatory inefficiency and land-related constraints. This study developed a framework for managing private real estate development projects in Awka, Onitsha and Nnewi. A mixed-method design was adopted. A questionnaire was administered to a stratified random sample of 237 developers, builders, estate surveyors and valuers, architects and quantity surveyors (223 usable responses; 94.1%), complemented by interviews with ten key informants. Data were analysed with mean item scores, the Wilcoxon signed-rank test and ordinal logistic regression. Current project management practice was weak (grand mean = 2.44) and significantly below the neutral benchmark. Regulatory effectiveness significantly predicted project delivery (OR = 1.94); lack of skilled professionals and insecurity were the significant individual challenges. Respondents strongly endorsed seven framework components (grand mean = 3.99). A three-phase, two-mechanism framework is proposed, with phased implementation recommended.

Keywords: Project management framework; Private real estate development; Regulatory effectiveness; Anambra State; Nigeria

1. INTRODUCTION

1.1 Background to the Study

Real estate development is extensively acknowledged as a catalyst for economic expansion, urban renewal, and societal progress. This sector encompasses land procurement, architectural planning, capital acquisition, building execution, commercial promotion, and asset administration, with the objective of creating and enhancing land and constructed properties (Miles, Berens, Weiss, and Roberts, 2015). Throughout both industrialised and emerging markets, commercial enterprises mobilise capital resources, foster technological advancement, and fulfil consumer requirements (Ling and Archer, 2018), rendering the administration of commercially-driven undertakings progressively essential for balanced metropolitan development. In the United States, the United Kingdom and Germany, development functions within organised frameworks of uniform methodologies, mitigation strategies, collaborative engagement approaches and legal adherence (Project Management Institute, 2021).

Anambra State demonstrates both the possibilities and the procedural obstacles confronting real estate development in Nigeria. As among the most densely populated states in the South-East geopolitical region, encompassing significant urban centres including Awka, Onitsha and Nnewi, it has experienced considerable commercial investment propelled by demographic expansion, movement from rural to metropolitan areas and international family financial support (Owotemu, Ifechi-Fred, and Faleti, 2024). These commercial activities manifest as residential communities, commercial retail facilities, hospitality establishments and integrated-use undertakings, predominantly within the state administrative centre, Awka (Thontteh, Vine, and Gbadegesin, 2023).

1.2 Statement of the Problem

Despite this surge, the sector faces challenges that undermine project efficiency, quality and sustainability (Owotemu et al., 2024). A major issue is the lack of a structured, context-specific project management framework. Many private developers rely on informal and fragmented approaches, resulting in cost overruns, delays, substandard construction and stakeholder disputes (Fagbuyi and Abuo, 2025; PMI, 2021). Land acquisition is complicated by overlapping statutory and customary systems that produce legal uncertainty and multiple claims (Okolo and Ogbuefi, 2021). Lengthy approval processes, unclear building codes and bureaucratic bottlenecks often lead to unauthorised development or abandonment (Thontteh et al., 2023), while environmental sustainability and community engagement are frequently overlooked (Owotemu et al., 2024). Many small and medium-sized developers also lack the technical and managerial expertise for effective execution (Miles et al., 2015). This study therefore addresses the absence of a practical, adaptable project management framework for private real estate development in Anambra State.

1.3 Aim, Objectives, Research Questions and Hypotheses

The aim was to develop a framework for managing private real estate development projects in Anambra State to improve project efficiency, regulatory compliance, stakeholder coordination and sustainable urban growth. The objectives were to: (i) examine current project management practices of private developers; (ii) assess the factors affecting effective project delivery; (iii) evaluate the effectiveness of regulatory and institutional bodies; (iv) examine international best practices in real estate project management; and (v) develop an adaptable framework suited to the

socio-economic and institutional realities of the study area. One research question was posed for each objective, and three null hypotheses were tested:

H_{01}: The project management practices and processes adopted by private real estate developers do not have a significant effect on the delivery of private real estate development projects in Anambra State.

H_{02}: Regulatory and institutional bodies do not have a significant influence on the effective delivery of private real estate development projects in Anambra State.

H_{03}: Factors affecting private real estate development projects do not have a significant effect on project delivery in Anambra State.

The study covers private development in the urban areas of Awka, Onitsha and Nnewi. Its findings are relevant to the Anambra State Physical Planning Board (ANSPPB), the Ministry of Lands, Urban and Regional Development, private developers, built environment professionals and their associations (NIESV, NIOB, NIA, NIQS and REDAN), and researchers.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Project management practice in real estate development

Real estate development constitutes a comprehensive undertaking encompassing planning, design, financing, construction, and management that converts land into economically productive assets, enhances gross domestic product, generates employment opportunities, and influences patterns of urban expansion (Miles et al., 2015). Its administration necessitates integrated planning, resource organization, implementation, and oversight to reconcile competing demands of schedule, expenditure, quality, scope, and risk mitigation (PMI, 2021). During the initial phase, feasibility assessments, market analysis, and site appraisals identify potential obstacles, and in contexts where customary land rights are recognized, preliminary legal examination becomes indispensable (Okolo and Ogbuefi, 2021). The planning phase establishes design specifications, financial allocations, risk evaluations, and regulatory clearances, with informal methodologies at this juncture representing a prevalent source of project failure (Fagbuyi and Abuo, 2025). Throughout the implementation phase, numerous Nigerian developers circumvent formal oversight mechanisms or engage inadequately trained staff, resulting in operational inefficiencies and structural failures (Thontteh et al., 2023).

Within Anambra State, the majority of development enterprises function without established project management frameworks and depend upon informal methodologies and insufficiently qualified personnel. Systematic protocols for feasibility investigations, engagement with stakeholders, mitigation of risks, and evaluation of environmental consequences remain substantially underdeveloped (Olotuah and Bobadoye, 2009; PMI, 2021), and the omission of Environmental Impact Assessments (EIAs) has precipitated problems including inundation, forest degradation, and soil erosion (Owotemu et al., 2024). Small and intermediate-scale enterprises infrequently adopt the Project Management Body of Knowledge (PMBOK) or PRINCE2 methodologies (Thontteh et al., 2023), and technologies including Building Information Modelling (BIM) and Geographic Information Systems (GIS) encounter constraints stemming from financial limitations, technical competency deficiencies, and organizational resistance to

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innovation (Essien and Ajayi, 2017). Insufficient attention to key participants including regulatory bodies, local populations, and capital providers has generated conflicts and project discontinuation across south-eastern Nigeria (Owotemu et al., 2024).

2.1.2 Factors affecting project delivery

In developing economies, weak institutions, inefficient land administration, poor planning and limited finance produce uncoordinated, informal sectors in which delivery is inconsistent (World Bank, 2018). In Nigeria the constraints include poor land documentation, an ambiguous dual (customary and statutory) tenure system, limited long-term finance, bureaucratic delay and weak professional capacity (Okolo and Ogbuefi, 2021; Thontteh et al., 2023). The housing deficit is estimated at over 20 million units, with urban centres expanding at over 4% annually (Federal Mortgage Bank of Nigeria [FMBN], 2021), and the private sector, being generally more efficient and able to mobilise capital (Gambo, Said, and Ismail, 2016), has become central to bridging it. In Anambra State it is the principal driver of development but is constrained by land problems, regulatory bottlenecks, limited finance and weak capacity (Fagbuyi and Abuo, 2025; Okolo and Ogbuefi, 2021).

2.1.3 Regulatory and institutional environment

The Land Use Act of 1978 allocates land ownership to state governors, who hold it as custodians for their constituents. Although designed to broaden land accessibility, the legislation has generated procedural obstacles, prolonged the titling process, and created confusion regarding the distinction between customary and statutory property rights (Okolo and Ogbuefi, 2021). The Urban and Regional Planning Law of 1992 mandates that states establish planning authorities; however, implementation remains inadequate, strategic master plans have become obsolete, and collaboration between agencies is insufficient (Ige, 2025). Within Anambra State, communal land transmitted through family lineages conflicts with statutory provisions, resulting in property disputes and unauthorized resale of identical parcels. The Anambra State Property and Physical Planning Board (ANSPPB) and the Ministry of Lands maintain overlapping responsibilities, operate with constrained budgets, and rely predominantly on non-automated procedures, consequently subjecting developers to extended waiting periods for approvals, property documentation, and environmental authorization (Anambra State Government, 2021; Thontteh et al., 2023). Adherence to construction standards and environmental impact assessment protocols remains uneven and is compounded by corrupt practices, whereas paper-based registration systems enable property fraud (Ige, 2025; Owotemu et al., 2024).

However, institutional transformation is underway. Following the implementation of a computerized unified payment portal, ANSPPB documented a substantial reduction in construction-permit approval duration from approximately 300 days to approximately 24 hours for applications meeting all requirements (Nigerian Voice, 2021). The initiative termed "Operation Show Your Permit," initiated in October 2022, obligated developers to demonstrate regulatory authorization for buildings erected during the preceding five-year interval and resulted in structural-safety evaluations of non-compliant commercial structures in Onitsha (Nigeria Info FM, 2022; This Day, 2022). The state's Business Facilitation Program has established a three-day processing standard for construction-permit determinations (Anambra State Government, 2024). The disparity between these documented improvements and the practical experiences of

developers, examined in Section 4.4, indicates a performance inconsistency between regulatory objectives and operational execution.

2.1.4 International best practices

The seventh edition of the PMBOK Guide implements a principles-based framework comprising 12 principles and eight performance domains, emphasizing value delivery, adaptability, and stakeholder engagement (PMI, 2021). PRINCE2 provides stage-gate governance, clearly defined roles, and management by exception (AXELOS, 2017). The Royal Institution of Chartered Surveyors (RICS, 2022) prioritizes standardized procurement, professional competence, and transparency; UN-Habitat (2020) connects institutional effectiveness and inclusive governance to sustainable delivery; and the World Bank (2018) advocates for digitized land registries and streamlined approvals. However, rigid adherence to such standards in contexts characterized by intricate tenure systems and constrained capacity necessitates customization; stakeholder engagement in Anambra, for instance, must consider customary authorities, informal landowners, and community gatekeepers (Okolo and Ogbuefi, 2021). A locally-developed framework should be straightforward and expandable, mitigate land, regulatory, construction, and market risks, incorporate sustainability, capacity development, and digital transformation, and be reinforced through institutional training (Fagbuyi and Abuo, 2025; Olotuah and Bobadoye, 2009; Owotemu et al., 2024).

2.2 Theoretical Framework

The study draws on three theories. Project Management Theory, represented by the PMBOK (PMI, 2021), supplies structured methods for scope, time, cost, quality, risk, communication, procurement and stakeholder management, addressing the ad hoc approaches of Anambra developers. Institutional Theory (Scott, 2001) holds that formal and informal institutions, including rules, norms, regulations and cultural expectations, shape organisational behaviour and performance, and explains how land tenure systems and regulatory bureaucracies influence project outcomes. Stakeholder Theory (Freeman, 1984) posits that effective management requires identifying, engaging and balancing the interests of landowners, investors, contractors, regulators, communities and end-users. Together they form the foundation for a framework that is practical and adaptable to local realities.

2.3 Empirical Review

Fagbuyi and Abuo (2025) surveyed 125 respondents from 89 registered real estate firms in South-East Nigeria and found low adoption of PMBOK and PRINCE2, no formal project managers in most firms, and a significant positive link between digital project management and investment performance. Unegbu, Yawas, and Dan-asabe (2022) applied structural equation modelling to 221 valid responses from construction firms in North Central Nigeria; 14 of 20 hypothesised relationships were confirmed and poorly implemented practices significantly reduced performance. Otty, Egolum, and Oladejo (2023) surveyed 595 respondents in Anambra, Enugu and Imo States and found economic factors most influential on investment decisions, followed by regulatory factors, with REDAN members citing the lack of a structured project management framework. Owotemu et al. (2024) estimated that Nigeria received about US$206 billion in diaspora remittances between 2000 and 2023, over 40% of it directed to real estate, mostly without formal project management or regulatory alignment. Ndeche, Ezeudu, and Okafor (2020), in the

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only empirical study in Awka, identified insecure land access, high costs, bureaucratic approvals, disjointed policies, weak development control and "omo-onile" harassment as key constraints. Adeyemi (2024) found in Lagos that technical failures had the largest negative effect on the property market (coefficient = −0.68), followed by regulatory non-compliance (−0.51) and inadequate financing (−0.42).

On institutional and land issues, Ige (2025) identified five challenges (insecure land rights, fragmented jurisdictions, undigitised registries, inconsistent enforcement and dual tenure) and proposed administrative consolidation, digitisation and incentive-based compliance. Okolo and Ogbuefi (2021) documented four categories of customary land ownership in Nnewi and their conflict with the Land Use Act. Thontteh et al. (2023) found three categories of developer losses from disputed, encumbered or fraudulently sold land in Lagos, with delays of 3 to 12 years. UN-Habitat (2020) concluded that institutional effectiveness is the most critical determinant of sustainable urban growth in sub-Saharan Africa, and the World Bank (2018) reported that a Nigerian building permit required over 13 procedures and an average of 116 days.

2.4 Gap in the Literature

The reviewed studies are largely diagnostic, identifying challenges without proposing an operational framework. Only Okolo and Ogbuefi (2021) and Ndeche et al. (2020) focus on Anambra State, neither addressing framework development. No study examines practices, international best practices, regulatory effectiveness, delivery constraints and framework development together in Anambra State. This study addresses that gap with primary data from Awka, Onitsha and Nnewi and a locally relevant framework.

3. METHODOLOGY

3.1 Research Design and Study Area

A mixed-method design combined a descriptive survey (a structured Likert-scale questionnaire administered to five stakeholder groups), an analytical/explanatory approach (testing the three hypotheses with the Wilcoxon signed-rank test and ordinal logistic regression) and a developmental/normative approach (synthesising the findings and international practice into a framework for Objective v).

Anambra State, in the South-East geopolitical zone, was created on 27 August 1991, covers about 4,844 km², has 21 Local Government Areas and is about 62% urbanised (Anambra State Government, 2021). Awka is the capital, Onitsha the largest commercial city and Nnewi the principal industrial city (Figure 1). Twenty-year structural plans (2009-2028) guide the three cities (ANSPPB, 2009) and are in their final phase, with enforcement constrained by weak capacity and informal development (Anambra State Government, 2021). Private development is mainly residential and mixed-use in Awka, commercial in Onitsha, and driven by industry, remittances and trading wealth in Nnewi, largely outside formal planning (Okolo and Ogbuefi, 2021).

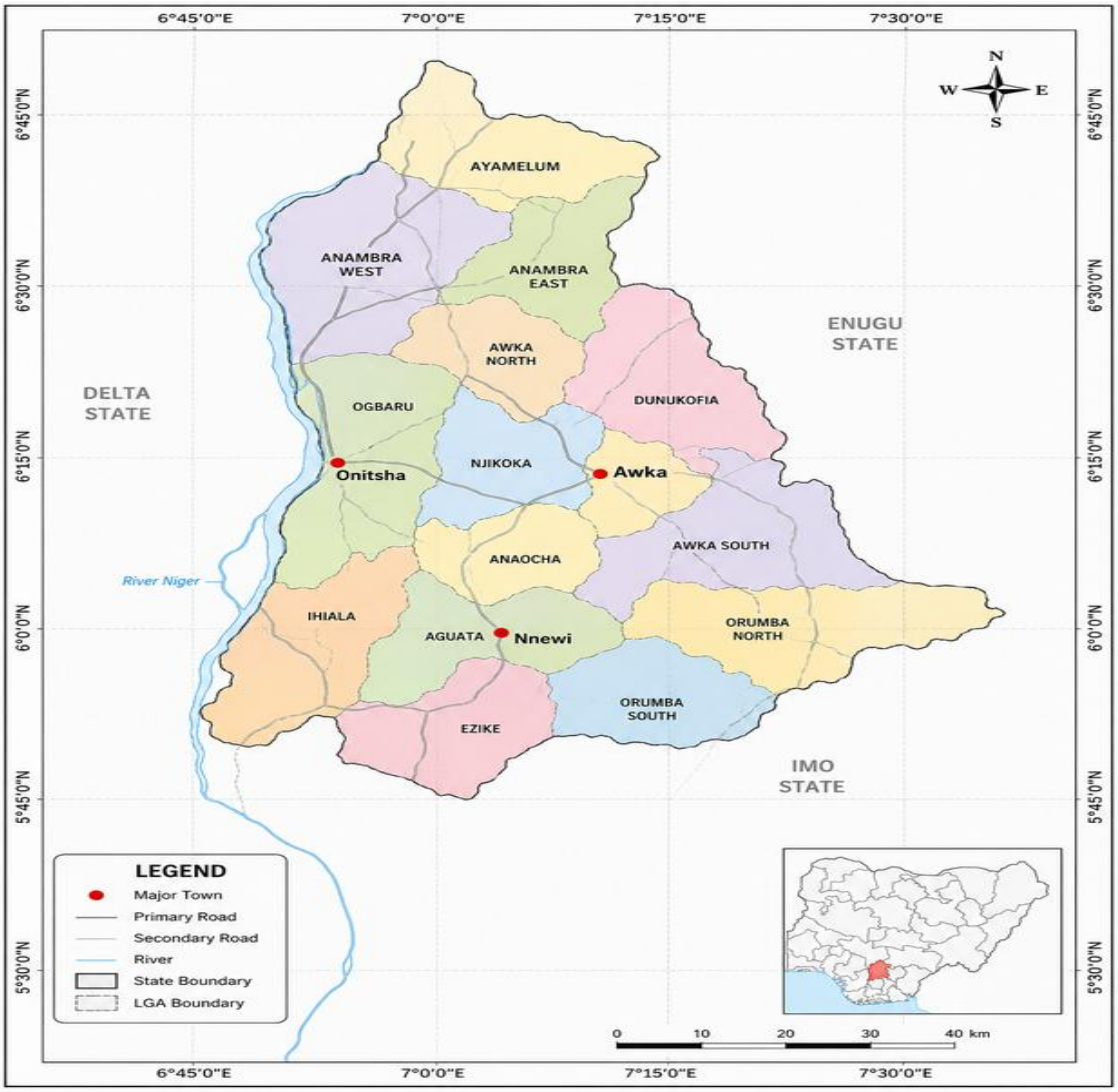

Figure 1: Map of Anambra State Showing Awka, Onitsha and Nnewi.

Source: Anambra State Ministry of Lands, Urban and Regional Development (2023)

3.2 Population, Sample Size and Sampling Technique

The population comprised 581 professionals in five strata drawn from professional-body registers: developers (REDAN, 87), builders (NIOB, 152), estate surveyors and valuers (NIESV, 172), architects (NIA, 100) and quantity surveyors (NIQS, 70). Ten key informants (three ANSPPB officials, two Ministry of Lands officials, three experienced developers and two consultants) brought the total to 591. The survey sample was determined with the Yamane (1967) formula, $n = N/[1 + N(e)^2]$, where $N = 581$ and $e = 0.05$, giving $n = 237$. It was allocated proportionally across strata, $n_i = (N_i/N)n$, and respondents were selected within each stratum by simple random sampling (balloting). The key informants were selected purposively for seniority and decision-making roles, and all were interviewed (Table 1).

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Table 1: Population, Sample and Questionnaire Retrieval

Stakeholder category	Population	Sample	Retrieved	Rate (%)
Private real estate developers	87	35	33	94.3
Builders	152	62	58	93.5
Estate surveyors and valuers	172	70	66	94.3
Architects	100	41	39	95.1
Quantity surveyors	70	29	27	93.1
Total	**581**	**237**	**223**	**94.1**

Source: Field Survey (2026)

3.3 Data Collection, Validity and Reliability

Primary data were obtained through a structured questionnaire and key informant interviews (KIIs); secondary data were sourced from academic journals, textbooks, policy documents, and agency reports. The questionnaire comprised six sections: A (demographic information), B (international best practices), C (existing practices), D (delivery factors), E (regulatory and institutional effectiveness), and F (framework components). Sections B through F employed a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The semi-structured KII guide examined institutional constraints, land acquisition and approval procedures, capacity deficiencies, and recommended enhancements.

The questionnaire was administered in person and via an equivalent Google Forms version distributed through professional associations, with assistance from two trained research assistants, across a four-week period with two reminder contacts per location. Interviews were conducted face-to-face, ranged from 40 to 60 minutes in duration, and were audio-recorded with participant consent and subsequently transcribed. Bias mitigation strategies included pilot testing, guaranteed confidentiality, impartial administration, cross-group triangulation, and open-ended KII questions. The response rate achieved was 94.1%. Face validity and content validity were confirmed by the academic supervisor and two specialists in estate management and project management, and a preliminary test involving 20 respondents (excluded from the primary analysis) identified and removed unclear items. Internal consistency was evaluated using Cronbach's alpha coefficient on the pilot dataset, with $\alpha \geq 0.70$ established as the minimum acceptable standard.

3.4 Method of Data Analysis

Descriptive statistics (frequencies, percentages, means and standard deviations) summarised the data. Mean item scores were interpreted against a criterion mean of 3.00: scores at or above it indicate agreement and those below it disagreement. For H_{01}, because the Section C composite is ordinal and normality could not be confirmed, a one-sample Wilcoxon signed-rank test compared its median with the neutral midpoint of 3.00. For H_{02} and H_{03}, delivery effectiveness was treated as an ordinal outcome (low, moderate and high, from tertile splits of the Section C composite) and analysed with ordinal logistic regression (proportional-odds model); in H_{02} the Section E mean was the sole predictor, and in H_{03} the seven challenge items (D1-D7) were entered simultaneously.

SPSS was used at the 5% significance level. Interview transcripts were analysed thematically following Braun and Clarke (2006), with informants coded R1-R10.

4. RESULTS AND DISCUSSION

4.1 Response Rate and Profile of Respondents

Of 237 questionnaires distributed, 223 (94.1%) were returned and usable (Table 1). Respondents comprised estate surveyors and valuers (29.6%), builders (26.0%), architects (17.5%), developers (14.8%) and quantity surveyors (12.1%), broadly mirroring the proportional sample. Most (57.4%) had one to ten years of experience, and most held an HND/BSc (43.9%) or MSc/MBA/PGD (37.2%) degree, indicating a well-educated pool of informed respondents. They were spread across Awka (39.5%), Onitsha (35.0%) and Nnewi (25.6%).

4.2 Current Project Management Practices (Objective i) and Hypothesis One

Respondents disagreed that structured practices are widely adopted by private developers (grand mean = 2.44; Table 2). Only consistent engagement of professional consultants (3.06) exceeded the criterion mean; digital tools (2.10) and EIAs (2.15) scored lowest.

Table 2: Mean Item Scores for Current Project Management Practices

Statement	Mean	SD	Decision
Use of standard PM methodologies (PMBOK, PRINCE2)	2.31	0.91	Disagree
Formally documented project plan/feasibility study	2.48	0.92	Disagree
Detailed risk assessment and due diligence	2.61	0.97	Disagree
Consistent engagement of professional consultants	3.06	0.91	Agree
Routine project monitoring and quality control	2.35	0.97	Disagree
Regular Environmental Impact Assessments	2.15	0.84	Disagree
Use of digital PM tools (BIM, GIS, software)	2.10	0.83	Disagree
Grand mean	**2.44**	**0.47**	**Disagree**

Source: Field Survey (2026). Criterion mean = 3.00.

Hypothesis One

The one-sample Wilcoxon signed-rank test showed that the median of the practices composite (2.43; mean = 2.44, SD = 0.68, N = 223) was significantly below the test value of 3.00 ($Z = -9.560$, $p < 0.001$; sum of positive ranks = 2,471.50, negative ranks = 18,849.50). The level of practice is therefore significantly below an acceptable benchmark and does not amount to a structured level of adoption capable of supporting effective delivery. H_{01} is accepted: current practices do not have a significant (positive) effect on delivery because they fall significantly short of a structured standard.

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Discussion

This answers the first research question and was expected. It is consistent with Fagbuyi and Abuo (2025) and Unegbu et al. (2022), who found low adoption of PMBOK and PRINCE2, and with Thontteh et al. (2023) and Olotuah and Bobadoye (2009), who attributed poor outcomes to the absence of structured frameworks.

4.3 Factors Affecting Project Delivery (Objective ii) and Hypothesis Three

Respondents agreed that all listed factors significantly affect delivery (grand mean = 3.83; Table 3). Limited mortgage financing (4.25), land acquisition (4.01) and high construction costs (3.97) were rated most severe, in line with Ugonabo and Emoh (2013) and Tijani and Ajagbe (2016).

Table 3: Mean Item Scores for Factors Affecting Project Delivery

Statement	Mean	SD	Decision
Land acquisition challenges (tenure disputes, multiple sales)	4.01	0.82	Agree
Limited access to mortgage financing/credit	4.25	0.74	Agree
High construction costs causing overruns	3.97	0.80	Agree
Community opposition/stakeholder conflicts	3.43	0.93	Agree
Lack of skilled professionals/qualified project managers	3.76	0.82	Agree
Environmental/drainage challenges	3.87	0.90	Agree
Insecurity and political instability	3.52	0.89	Agree
Grand mean	**3.83**	**0.42**	**Agree**

Source: Field Survey (2026). Criterion mean = 3.00.

Hypothesis Three

The ordinal logistic regression with the seven challenges as predictors was highly significant, $\chi^2(7) = 84.03$, $p < 0.001$, McFadden $R^2 = 0.174$ (Table 4). Lack of skilled professionals (B = -1.048, Exp(B) = 0.351, $p < 0.001$) and insecurity (B = -0.969, Exp(B) = 0.379, $p < 0.001$) were significant negative predictors; higher levels of either substantially reduce the odds of a higher delivery-effectiveness category. The other five factors were not significant once the rest were controlled. H_{03} is therefore rejected: the identified factors, particularly capacity- and security-related challenges, significantly affect delivery.

Table 4: Ordinal Logistic Regression of Delivery Effectiveness on Identified Challenges

Predictor	B	Std. error	z	p-value	Exp(B)	Decision
D1 - Land acquisition challenges	0.056	0.223	0.25	0.803	1.057	NS
D2 - Limited mortgage financing	0.024	0.241	0.10	0.920	1.025	NS
D3 - High construction costs	-0.149	0.212	-0.70	0.482	0.861	NS
D4 - Community opposition	-0.291	0.195	-1.50	0.135	0.747	NS
D5 - Lack of skilled professionals	-1.048	0.190	-5.52	0.000	0.351	Sig.
D6 - Environmental/drainage	-0.022	0.190	-0.12	0.908	0.978	NS
D7 - Insecurity/instability	-0.969	0.174	-5.57	0.000	0.379	Sig.

Model fit: -2LL (null) = 483.90; -2LL (model) = 399.88; $\chi^2(7) = 84.03$, $p < 0.001$; McFadden $R^2 = 0.174$. NS = not significant; Sig. = significant at 5%.

Source: SPSS output (2026)

Discussion

This answers the second research question. Perceived severity (financing, land and cost) diverged from independent statistical effect (capacity and insecurity), which was somewhat unexpected. A likely explanation is that financing, cost and land challenges overlap in practice and so dilute one another's unique contribution, whereas capacity and insecurity operate more independently. The result is consistent with Adeyemi (2024), who found technical failures to carry the largest negative coefficient in Lagos, and with Ndeche et al. (2020), who identified insecurity-related harassment of developers in Awka.

4.4 Regulatory and Institutional Effectiveness (Objective iii) and Hypothesis Two

Table 5 presents a mixed picture (grand mean = 3.32). Respondents disagreed that ANSPPB and the Ministry of Lands effectively facilitate approvals (2.27) or consistently enforce building codes (2.37), but agreed that overlapping mandates (3.89), corruption (3.93) and the Land Use Act (3.74) hinder development, and that digitisation would improve efficiency (4.04).

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Table 5: Mean Item Scores for Regulatory and Institutional Effectiveness

Statement	Mean	SD	Decision
ANSPPB/Ministry of Lands effectively facilitate approvals	2.27	0.85	Disagree
Consistent enforcement of building codes	2.37	0.86	Disagree
Overlapping mandates create delays/confusion	3.89	0.79	Agree
Corruption/rent-seeking hinders development	3.93	0.82	Agree
Land Use Act 1978 presents title challenges	3.74	0.91	Agree
Professional associations play effective supporting roles	3.03	0.90	Agree
Digitisation of registries/permitting would improve efficiency	4.04	0.81	Agree
Grand mean	3.32	0.41	Agree

Source: Field Survey (2026). Criterion mean = 3.00.

Hypothesis Two

Regulatory and institutional effectiveness was a significant positive predictor of delivery effectiveness: $\chi^2(1) = 10.75$, $p = 0.001$; $B = 0.661$, $SE = 0.205$, Wald = 10.37, $p = 0.001$, $Exp(B) = 1.94$ ($-2LL$ null = 483.90, model = 473.16; McFadden $R^2 = 0.022$; $N = 223$). For each one-unit increase in perceived regulatory effectiveness, the odds of a higher delivery-effectiveness category rise by about 94%. H_{02} is rejected: regulatory and institutional bodies significantly influence delivery.

Discussion

This answers the third research question and was expected. It agrees with UN-Habitat (2020), which identifies institutional effectiveness as the most critical factor in sustainable urban growth in sub-Saharan Africa, with the World Bank (2018), which links bureaucratic inefficiency to poor permitting outcomes, and with Okolo and Ogbuefi (2021) and Ige (2025), who attribute delays in Anambra to fragmented, undigitised land administration. The picture is not purely negative, however: the reforms reported by ANSPPB (Section 2.1.3) show that improvement is achievable, and the gap between those reports and respondents' low procedural ratings suggests a communication and consistency deficit.

4.5 International Best Practices (Objective iv)

Respondents agreed that international best practices are relevant and adaptable (grand mean = 3.72; Table 6), with every item above the criterion mean. Training and capacity building (4.08) and formal stakeholder engagement protocols (3.96) were rated highest, and digital-tool adoption within five years lowest (3.43).

Table 6: Mean Item Scores for International Best Practices and Their Adaptability

Statement	Mean	SD	Decision
PMBOK/PRINCE2 can be meaningfully adapted	3.73	0.77	Agree
Formal stakeholder engagement protocols would improve relations	3.96	0.79	Agree
International sustainability standards are applicable	3.60	0.79	Agree
Digital tools are adoptable within five years	3.43	0.84	Agree
Training/capacity building would improve outcomes	4.08	0.78	Agree
PPP models are applicable	3.55	0.75	Agree
Grand mean	3.72	0.34	Agree

Source: Field Survey (2026). Criterion mean = 3.00.

Discussion

This answers the fourth research question. Respondents regard PMBOK and PRINCE2 as adaptable with localisation, particularly through capacity building, which aligns with PMI (2021) and UN-Habitat (2020) and supports the study's combination of Project Management, Institutional and Stakeholder Theory: international principles must be filtered through local realities rather than adopted wholesale.

4.6 Framework Components (Objective v) and Key Informant Interviews

Table 7 indicates strong consensus (grand mean = 3.99) that all seven components should be included in the framework, with clear stakeholder roles (4.17) and financing access (4.13) rated highest. Because the components derive from the challenges tested earlier, the result was expected; it is consistent with calls for integrated, locally adapted frameworks rather than further diagnostic studies (Ige, 2025; Olotuah and Bobadoye, 2009).

Table 7: Mean Item Scores for Components of the Proposed Framework

Component	Mean	SD	Decision
F1 Structured land due diligence/acquisition protocol	4.03	0.82	Agree
F2 Clear roles/responsibilities for all stakeholders	4.17	0.78	Agree
F3 Mandatory EIA as pre-development requirement	3.83	0.85	Agree
F4 Regulatory harmonisation mechanism	4.01	0.81	Agree
F5 Financing access (mortgage, REITs, government funds)	4.13	0.79	Agree
F6 Community engagement/conflict resolution protocol	3.87	0.76	Agree
F7 Digitisation of land title, permits and monitoring	3.87	0.86	Agree
Grand mean	3.99	0.32	Agree

Source: Field Survey (2026). Criterion mean = 3.00.

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Five themes emerged from the ten KIIs (Table 8) and triangulate the survey. Weak informal practice (Theme 1) corroborates the low Section C mean and the Wilcoxon result; financing, land, capacity and security constraints (Theme 2) mirror the highest-rated challenges and the significant regression predictors; officials' acknowledgement of historical weakness alongside recent digitisation (Theme 3) reflects both the low procedural ratings and the reform record; qualified endorsement of international standards (Theme 4) shows that support depends on capacity building; and near-unanimous support for a structured framework (Theme 5) corroborates the seven components.

Table 8: Themes Emerging from the Key Informant Interviews

Theme	Illustrative excerpt	Informants citing
1. Weak, informal project management	"Most of our clients don't come with a project plan…" (R7, Developer)	9 of 10
2. Persistent constraints (finance, land, capacity, insecurity)	"Financing is still our biggest headache…" (R6, Developer)	10 of 10
3. Regulatory bottlenecks with emerging reform	"The online portal has cut our processing time drastically…" (R2, ANSPPB)	8 of 10
4. International practices relevant but capacity-constrained	"The standards are good, the problem is capacity." (R9, Consultant)	7 of 10
5. Support for a structured framework	"If there is a clear, simple framework that ANSPPB itself adopts… it will help." (R4, Ministry of Lands)	10 of 10

Source: Field Survey, thematic analysis of KII transcripts (2026)

4.7 The Proposed Framework

The framework was built from the seven components validated in Table 7, the constraints identified under Objectives i to iii, and the international standards judged adaptable under Objective iv. It adapts the process groups of the PMBOK Guide (PMI, 2021), re-labelled with real-estate-specific activities, and is a three-phase lifecycle supported by two cross-cutting mechanisms (Figure 2).

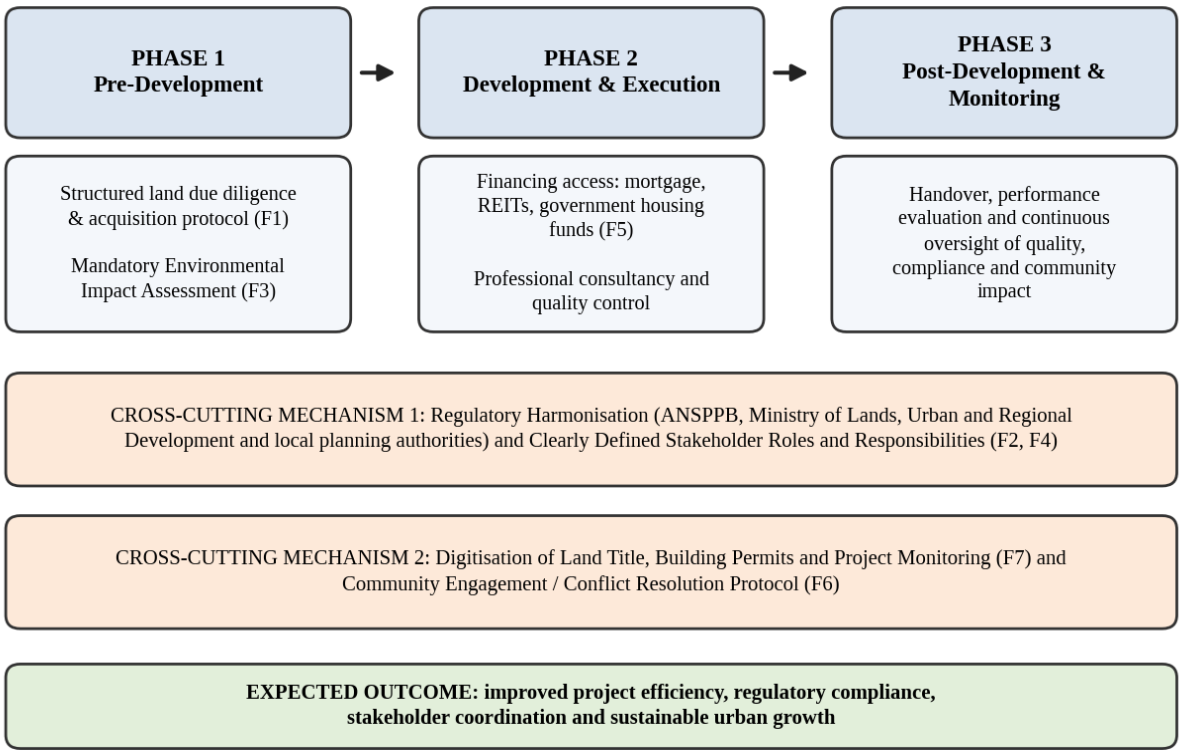

Figure 2: Proposed Framework for Managing Private Real Estate Development Projects in Anambra State.

Source: Researcher's development (2026)

Phase 1: Pre-Development implements a structured land due diligence and acquisition protocol and mandates an EIA before development begins, addressing land disputes and environmental and drainage problems.

Phase 2: Development and Execution integrates financing access, linking developers with mortgage institutions, Real Estate Investment Trusts (REITs) and government housing funds, and incorporates the professional consultancy and quality-control practices found to be inadequate.

Phase 3: Post-Development and Monitoring establishes handover protocols, performance evaluation and ongoing oversight, so that projects are monitored for quality, compliance and community impact beyond physical completion.

The first cross-cutting mechanism, regulatory harmonisation and stakeholder roles, is a standing coordination arrangement linking ANSPPB, the Ministry of Lands and local planning authorities, paired with clearly defined roles for developers, regulators, financiers and communities. The second, digitisation and community engagement, covers digitisation of land titles, permits and project monitoring alongside a community engagement and conflict resolution protocol. Together they are expected to improve project efficiency, regulatory compliance, stakeholder coordination and sustainable urban growth.

Implementation should be phased: first presentation of the framework to ANSPPB, the Ministry of Lands and the professional bodies (NIESV, NIOB, NIA, NIQS and REDAN) for validation and endorsement; pilot projects with capacity building for developers, builders and regulatory staff;

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progressive adoption into ANSPPB and Ministry operating procedures; and periodic review before state-wide roll-out.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Private real estate development initiatives in Anambra State function predominantly within an informal project management framework (grand mean = 2.44), constrained by procedurally inadequate regulatory mechanisms and compounded by obstacles related to financing, land acquisition, organizational capacity, and security concerns. Enhanced regulatory effectiveness substantially improves the likelihood of superior project delivery outcomes, and the seven identified challenges collectively account for approximately 17.4% of the variation in delivery effectiveness (McFadden $R^2 = 0.174$), with the scarcity of qualified professionals and security instability representing the most significant individual contributing factors. Despite these challenges, stakeholders demonstrate robust endorsement of international standards (grand mean = 3.72) and a systematic, context-responsive governance framework (grand mean = 3.99) grounded in comprehensive land due diligence, well-defined stakeholder responsibilities, mandatory environmental impact assessments, regulatory standardization, improved financing accessibility, active community participation, and technological digitalization.

5.2 Recommendations

1. Private developers should adopt structured practices, including recognised methodologies such as PMBOK and PRINCE2, documented feasibility studies, regular monitoring and EIAs, supported by targeted training.
2. ANSPPB and the Ministry of Lands should harmonise their mandates, strengthen enforcement of building codes and expedite digitisation of land registries and permitting.
3. Government and financial institutions should broaden access to mortgage financing and alternative funding, including REITs, for private developers.
4. Developers and professional bodies (NIESV, NIA, NIQS, NIOB and REDAN) should collaborate to address the shortage of skilled professionals and qualified project managers.
5. Stakeholders should implement the proposed seven-component framework, starting with pilot projects in Awka, Onitsha and Nnewi.

5.3 Contribution to Knowledge and Further Research

Prior research predominantly offered descriptive characterizations of obstacles encountered (for instance, Thontteh et al., 2023; Ugonabo and Emoh, 2013). The present investigation progresses beyond mere identification toward an empirically validated three-phase, dual-mechanism model applicable to Anambra State. The conclusions are predicated upon participant perspectives and warrant cautious application to broader contexts. Subsequent investigations could examine the model through longitudinal analysis following implementation, undertake comparative analysis between Anambra and alternative South-East states or more established governance frameworks,

and establish validity for a specialized multi-dimensional instrument measuring project delivery performance.

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