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Bureaucratic Constraints and Budget Passage Delays as Determinants of Prompt Delivery of Public Building Construction Projects in Delta State

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ABSTRACT

This study investigated how bureaucratic constraints and delays in budget passage affect the prompt delivery of public building construction projects in Delta State. To achieve these objectives, a descriptive survey design was employed, along with Multiple Regression Analysis (MRA), to analyze data collected from 173 respondents. The data was gathered using a structured questionnaire based on a 5-Likert point scale. Additionally, a Relative Importance Index and a mind mapping approach were utilized to evaluate strategies for managing project delivery. The results of the Multiple Regression Analysis indicated that all the identified factors significantly influenced the prompt delivery of public building projects, with bureaucratic challenges identified as the most significant constraint. In light of these findings, the study recommends the implementation of computer-based (ICT) systems to reduce bureaucratic hurdles in government administration. Such systems are expected to facilitate prompt payments to contractors, thereby ensuring the timely completion of public building projects. Ultimately, these measures aim to enhance the economic development of not only Delta State but also other states in Nigeria.

Key words: Bureaucratic Constraints, Budget Passage Delays, Prompt Delivery, Public Building Construction Projects

1. INTRODUCTION

In recent years, the demand for timely execution of public building construction projects has risen significantly, driven by urban expansion, infrastructural needs, and socio-economic development imperatives. Nonetheless, systemic inefficiencies such as bureaucratic bottlenecks and delays in budget approvals continue to pose formidable challenges to the effective delivery of these projects, particularly within the Nigerian public sector [1; 8].

One of the most persistent constraints affecting project timelines is the labyrinthine nature of governmental bureaucracy, which often results in protracted administrative procedures, overlapping responsibilities among agencies, and delayed disbursement of project funds [14]. Despite contractors achieving project milestones or even completing entire works, many still experience significant delays in receiving payment, exacerbating cash flow issues and stalling further project execution [2]. This entrenched inefficiency undermines the goals of national development plans, including the attainment of the United Nations Sustainable Development Goals (SDGs), as public infrastructure delivery becomes unpredictable and inconsistent [22].

Besides, recurrent delays in the legislative passage of government budgets have also been implicated as a critical barrier to prompt project delivery. According [20], delayed appropriation cycles disrupt planned capital spending, create uncertainty in project financing, and hinder contractors from mobilising resources on time. These fiscal uncertainties often create an environment of hesitation and risk aversion among contractors, who are forced to suspend or decelerate work while awaiting financial guarantees from government entities [27].

Corruption and rent-seeking behaviours among public officials further complicate the situation. Some studies have suggested that certain actors within the system exploit project-related delays as opportunities for illicit enrichment, diverting funds meant for infrastructural development for personal gain [14]. The consequence is a cycle of inefficiency and underperformance, wherein projects are either abandoned, grossly delayed, or delivered far beyond the scheduled completion date ultimately denying citizens access to critical public services and stalling economic growth [21]. Contractors, in response to these delays and payment uncertainties, often adopt a cautious approach by scaling down operations or delaying mobilisation until funds are confirmed. While this strategy may mitigate financial risk, it further contributes to extended delivery timelines, reduced project quality, and missed socio-economic targets [17].

Despite scholarly interventions and policy recommendations aimed at addressing these challenges, the late or failed delivery of public building projects in Nigeria particularly in Delta State remains prevalent. This persistent problem calls for a more targeted investigation into the structural and procedural factors impeding project timelines.

Therefore, this study seeks to examine the extent to which bureaucratic constraints and delays in government budget passage serve as significant determinants of the prompt

delivery of public building construction projects in Delta State. By analysing selected public building projects in the state, this research aims to contribute to improved policy formulation, project efficiency, and enhanced public sector accountability thereby promoting economic resilience and sustainable infrastructural growth.

Problem Statement

The persistent delay in the execution of public building construction projects in Nigeria, especially in Delta State—has become a systemic governance crisis, with far-reaching implications for socio-economic progress and public trust. These delays hinder the achievement of key development goals, retard economic growth, and erode public confidence in government infrastructure promises [21; 22]. While Akintoye (2015) attributes much of this dysfunction to political corruption and elite indiscipline, the reality is shaped by a complex interplay of bureaucratic inefficiencies. Political interference often gives rise to opaque administrative procedures, antiquated documentation frameworks, and sluggish budgetary approvals, all of which severely obstruct the disbursement of funds and disrupt construction timelines [8; 21]. Moreover, civil servants responsible for project administration frequently operate in an environment devoid of accountability or incentives, leading to lethargy in processing contractor payments and causing project standstills, inflated costs, and, in extreme cases, abandonment [17].

Additionally, the prevalence of political patronage in contractor selection as highlighted by [13], compounds the issue by allowing incompetent but well-connected contractors to win public bids, often without the necessary skills or capacity to deliver. Such misallocation of public resources results in poor execution standards, delays, and massive waste. Compounding this, oversight mechanisms meant to enforce accountability sometimes cause further setbacks due to prolonged audits, investigations, and withheld payments [14]. Fieldwork findings confirm that delayed contractor payments are a core barrier to project completion in Delta State, mostly due to entrenched bureaucratic red tape and fragmented fiscal roles across agencies [18; 2]. These setbacks severely demotivate contractors, disrupt cash flow, and damage the operational and social value of critical infrastructure. Ultimately, the ripple effects of these inefficiencies undermine government credibility, deprive communities of essential services, and inhibit local economic stimulation. Therefore, this study is essential in examining how bureaucratic constraints and delayed budgetary processes act as fundamental determinants of timely public project delivery in Delta State.

Objectives of the Study

i. To determine the extent to which bureaucratic processes can constrain prompt delivery of public or Government building projects.

ii. To determine whether passage of the Government budget can significantly constrain the prompt delivery of public building projects.

2. LITERATURE REVIEW

Public Construction Projects

Public construction projects, unlike their private-sector counterparts are typically initiated, funded, and executed by government bodies at the local, state, or federal level, often in collaboration with international development agencies. These projects encompass critical infrastructure such as educational facilities, healthcare centres, markets, rural electrification systems, and road networks intended to stimulate socio-economic development and improve the quality of life for citizens. In the Nigerian context, particularly within Delta State, the government has traditionally assumed a dominant role in public infrastructure development. However, the public sector's project execution capacity is often marred by inefficiency, bureaucratic inertia, and systemic corruption, resulting in a high incidence of project delays, cost overruns, and outright abandonment [15; 22]. [29] lamented that many public sector initiatives suffer from inadequate conceptualisation, poor planning, and ineffective implementation mechanisms; conditions that continue to plague most capital projects and donor-driven developments across the nation.

An additional concern lies in the discontinuity of project execution between successive administrations. New governments frequently neglect ongoing projects initiated by their predecessors, opting instead to launch new initiatives for political expediency or financial gain, thereby compounding the wastage of public funds and delaying service delivery [21]. Moreover, the role of the project manager in public construction settings is often undermined by limited authority over critical resources, making it difficult to influence project outcomes effectively; a challenge previously highlighted by [5]. These governance inefficiencies are further exacerbated by the dynamic and unpredictable environments in which such projects operate. In light of these challenges, it becomes essential for policymakers, project sponsors, and construction stakeholders to identify and evaluate the specific determinants particularly contractor competence and government payment practices that affect the prompt and successful completion of public building construction projects. Understanding these factors is particularly critical in Delta State, where delays in public infrastructure delivery have had visible socioeconomic consequences [2; 17].

a. Bureaucratic Process

Bureaucracy is the rigorous process involve in the approval of documents in an organisation. [9] warned that bureaucratic processes of government and other public institutions and agencies have been a cog in the wheel of progress of prompt action by the organisations. However, they also confirmed that bureaucratic tendencies have been held accountable for most delays experienced in construction project delivery. This is not far from the fact that bureaucratic process of approving project funds in Government owned construction projects in Nigeria has been a critical factor in an effort to successfully plan and implement projects, especially public projects [12]. This is not unconnected to the delay experienced by most Government contractors in trying to recover the funds invested in public projects.

b. Passage of Government Budget

Most times, Government budgets are approved late by the necessary Government authorities at various levels. When this happen, contractors are the most concerned due to their expectations for the release of funds to pay up their completed projects. [6] decried the economic effects of delay passage of

Government budgets on the activities of public contractors in Nigeria. She further lamented that this delay in budget passage cripple economic activities and hinder Government contractors from performing optimally in the delivery of projects as a result of tied up funds invested in those projects. Unfortunately, the effect of this budget delay on the economy does not mean anything to those responsible, therefore have become worrisome to most economic researchers in recent times. Consequently, [3], have blamed politicians and their activities for budget delays in Nigeria. Therefore, Government and its various arms should ensure speedy passage of budgets to aid the facilitation of economic activities and prompt release of the funds for the early payment for contracts executed by Government.

Theoretical Literature

Budgetary Theory and Ultimate Cost of Failure Theory are adopted as the theoretical justification for this study.

Budgetary Theory

The Budgetary Theory, often referred to as "Public Budgeting Theory," is a field of study that focuses on the principles and practices of government budgeting. While there are various theories and approaches within this field, one prominent framework is the "Incrementalism Theory" of budgeting.

Also, incrementalism theory, proposed by Aaron Wildavsky in his 1964 book "The Politics of the Budgetary Process," suggests that the annual government budget is primarily an incremental change from the previous year's budget. In other words, budgets are typically prepared by making small, incremental adjustments to the previous year's allocations.

Thus, budgetary theory informs the study's examination of how the passage of government budgets affects project funding and implementation. It helps in understanding the financial aspects of project delays.

Ultimate Cost of Failure Theory

The ultimate cost of failure theory, upon which this study is relied on, is of the view that failure in all its ramification attract costs from growth and economic loss. This theory was propounded by Richard Maltzman and David Shirley in 1979 [20]. It implies that project failure will also attract costs of which [24] posited that failed projects throw a nation backward through different ways and these includes: the financial loss of the failed projects, the loss of the alternative projects, and the mortgaging of future development of the nation through the servicing of the debts used in funding the project from sources other than internally generated funds. The Ultimate Cost of Failure Theory provides a valuable framework for understanding the profound and lasting impacts of project delays in Delta State's public building projects. It underscores the need for proactive measures to address the factors constraining prompt project delivery to avoid the extensive and often irreversible costs associated with failure.

Empirical Literature

[28] conducted a study on the project funding for timely implementation of construction projects in Bayelsa State. The objectives are to identify and analyse the factors so as to determine the factor that mostly affects proper funding of projects and its impact on implementation of construction projects. The study examined the opinions of Contractors, Consultants and Clients and they discovered 5 factors responsible for poor project funding of construction projects in Bayelsa State. They include problem of bureaucracy, change of governance, instability in Government policies, design changes, and inflation. When analysed with the aid of t-test analytical technique, the study revealed bureaucratic problem is the most severe cause of poor project funding which affects project success in the State. However, the study failed to analyse the collective effects of the factors on timely implementation of construction projects.

Another related study by [30] identified 12 critical factors causing delay in the delivery of construction projects in a developing economy. They include; application of wrong technique, poor monitoring of project costs, inexperienced personnel, price fluctuation, political interference, Fraudulent practices and kickbacks, High cost of transportation, economic instability, instability of policies, Incorrect planning, Previous experience of contractor, Lack of proper cost risk analysis. After ranking the factors using Relative Importance Index (RII), political interference ranked first, economic instability ranked second while instability of policies ranked third as the most important factors for delays in project delivery in a developing economy. Also, this study failed to determine the collective effects of the factors on the objective of measure.

[16] noted that fraudulent practices and kickbacks occasioned by greed are perpetuated by some major players in the construction industry which affect the project schedule and budget, especially in Nigeria with high level of corruption and indiscipline. This revelation was made based on a study conducted on the issues surrounding the Nigeria construction industry and project failures and abandonment in Nigeria. The author listed seven major factors which includes; fraudulent practices and kickbacks, Economic stability, High cost of transportation, project funding, political interference, design changes, and client's contractual negligence. They were analysed using Chi-Square. However, the study did not analyse the collective effects of the factors on project failure and abandonment.

[26], in a review of developing countries such as Rwanda identified some factors causing of delay in delivery of railway construction projects. The study identified eight (8) factors causing delay in the railway construction project, which include; Consultant's Negligence, Client's Contractual Negligence, bureaucratic processes, instability of policies, Lack of continuity in government, Lack of proper project management, Political instability and Inexperience personnel. The two most important factors agreed by the respondents after analysis with ANOVA are management bureaucratic processes, and inflation which affects all the aspect of the economy. [26] concluded by suggesting the adoption of improved technology in the management of projects, especially, big and complex projects that require numerous payments for contractors and subcontractors in order to facilitate the realisation of the projects objectives for improved economic development of the country and other developing countries of African.

Furthermore, a study of the relative weight of ten major causes of project failure in the India revealed late payment of contractors as a major contributing factor to project failure in India [7]. Payment of contractors are subject to milestone completion. Unfortunately, most clients in India including the

Government delay in the release of these funds even after the completion of the milestone. This are related to supply and demand and is affected by many other things, including time, cost and quality of completed construction projects. Other factors causing delay in public projects according to [19], include: currency exchange, bureaucratic problems, design change order, inflation pressure and delay in approving Government projects. The authors complained that these factors that affect the public project delivery also affect the realization of the economic objectives for such project.

Literature Gaps

The literature on prompt building project delivery, particularly concerning public or Government construction projects, is notably scarce in the context of Delta State. Existing literature in this field is limited and fails to address the specific challenges and delays experienced by building projects under the Delta State Government.

Furthermore, the issue of delayed delivery of building construction projects and its associated factors remains largely unexplored within the region of Delta State, Nigeria, and its neighboring areas. To the best of my knowledge, previous authors have not employed a multiple regression analysis model to examine the problem of delayed delivery in the context of public construction projects. This approach would allow for an in-depth assessment of the combined impact of various factors on the project's overall success.

Therefore, this study aims to fill these existing research gaps by specifically focusing on the Delta State Government and its payment practices concerning contractors. It seeks to contribute valuable insights into the challenges of prompt project delivery in this specific context and enhance our understanding of the associated factors through the application of a comprehensive multiple regression analysis.

3. METHODOLOGY

Research Design

Research design refers to the overall strategy and structured framework used to integrate the various components of a study in a coherent and logical way to effectively address the research problem [10]. Descriptive survey research design is adopted for this study. However, the following steps were adopted.

The Study Population

The population of the study estimated to be three hundred and fifty (350) consisting of those involved in Government construction projects. They are architects, project/estate managers, civil engineers, contractors and staff of Delta State Ministry of works and urban development.

Sampling Procedure

Since all the target population cannot be reached, it is important to sample a fraction of the population in order to gather the relevant data from those involved and have experience in the area under study. Using Yaro Yamane sample size formula ($n = N/1+Ne^2$) where; n is the sample size, N is population size, e is the error margin which is estimated at 5%,

Sample size (n) = $350/1+350(0.05^2) = 187$.

Based on this, the study sampled one hundred and eighty-seven (187) respondents to assess the questionnaire developed for data collection. This was done using stratified random sampling technique.

Method of Data Collection

Two sets of data were identified as being relevant to the effective conduct of this research namely primary and secondary. The primary data which refers to field data were obtained through the use of well-structured questionnaire developed from the initial identification of likely factors affecting prompt delivery of public construction projects in Delta State, Nigeria and solutions to minimizing same. Other relevant data were obtained from the project management textbooks, journals, internet, and research project reports. Also, efforts were made to collect data from workshops/conferences and seminar presentations. To a large extent, these formed the major sources of most of the literature evidences used as the basis for the analysis carried out in this study.

Also, in this research, "a 5-point scale" was used to design the questionnaire. For each statement, respondents were requested to select any one position from among a scale that has five categories as follows: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), Strongly Agree (SA). Each category was assigned a numerical value, for example, Strongly Agree =5, Agree =4, Neutral =3, Disagree =2, Strongly Disagree=1.

Multiple Regression Analysis (MRA)

The main multi-variety statistical technique applied in analyzing collected data was Multiple Regression Analysis (MRA) model involving coefficient of multiple correlation (R), coefficient of determination (R^2), the F-test and the t-test. The regression analysis is aimed at analyzing the effect of the identified factors on the prompt delivery of public building construction projects. The test of significance of the derived model is carried out using F – test.

In doing this, we apply a regression model of the form:

$$Y=b_0 + b_1x_1 + b_2x_2 + e_0 \quad \ldots\ldots\ldots\ldots\ldots\ldots \quad (3.1)$$

Where: Y = prompt delivery of public building projects (Dependent variable).

X_1, X_2 = major factors that affect prompt delivery of public building construction projects (Independent variables).

b_0, b_1, b_2 . . . bn = coefficients to be estimated. e_0 = Error margin in the estimation.

4. RESULTS AND DISCUSSIONS

Analysis and Presentation of Data Results

The data collected from questionnaire administration were presented and analysed in the sections below:

Factor Analysis Result for Factor Identification

From Table 1, a total of two (2) component factors were extracted. The study selected the major component factor from each component thus identifying 2 major component factor that constrain delivery of public building construction projects in Delta State for further analysis. The identified two (2) major constraining factors include; bureaucratic process (X_1) and passage of Government budget (X_2). These 2 factors form the basis for designing the PART B of the questionnaire for analysis on the individual and collective effects of the factors on prompt delivery of Government building projects in Delta State.

Table 1: Rotated Component Matrix[(a)]

	Component	
	1	2
F1	.719	.259
F2	.680	.119
F3	.671	.019
F4	-.114	.390
F5	.670	-.202
F6	.175	.311
F7	.037	.181
F8	-.340	-.145
F9	.050	.361
F10	.042	.042
F11	.436	.212
F12	.207	.287
F13	.048	.380
F14	-.206	.083
F15	.344	.448
F16	.346	-.027
F17	-.096	-.147
F18	-.142	.077
F19	.212	.135
F20	.427	.008
F21	-.619	.259
F22	-.662	.062
F23	.671	.019
F24	.625	-.100
F25	.374	.414
F26	.022	-.033
F27	.422	-.300
F28	.367	.042
F29	.274	.429
F30	.171	.696
F31	.165	.550
F32	.013	-.466
F33	.387	-.029

Extraction Method: Principal Component Analysis
a 5 components extracted.
Source: Survey Research, 2025 (Factor Analysis Result)

Statistics of Questionnaires Distribution

A total of 187 questionnaire was distributed to the selected respondents in Delta State. However, the researcher was able to retrieve one hundred and seventy-seven (177) out of which four (4) were not properly filled by the respondents. So, one hundred and seventy-three (173) returned questionnaire were used for analysis in this study. They represent 92.5% response rate and this is considered scientifically appropriate as a true representation of the study population. The maximum responses from each respondent group are shown in Table 2.

Table 2: Questionnaire Distribution Response Rate

Category of Respondent	**Number Distributed**	**Number Retrieved**	**Number not returned**
Architects	47	44	3
Estate/Project Managers	45	42	3
Contractors	30	30	0
Civil Engineers	30	26	4
Staff of Delta State Ministry of works and urban development	35	31	4
Total	**187**	**173**	**14**

Source: Survey Research, 2025

The Scores of Respondents

Data presentation and Analysis involve the organization and summarization of raw data, which are presented in tables and charts and converted into useable information. Analysis is concerned with breaking the data apart and examining the parts critically so as to order, arrange, refine and structure it to produce insight, information and knowledge.

Table 3 presents the summary of the one hundred and seventy-three respondents, on their assessment of the contributions or effects of the two major constraining factors (X_1 to X_5) on the prompt delivery of public building construction projects. Tables 3 below illustrates how table 2, which summarizes the scores of 173 respondents, were derived.

Table 3: Scores for X_1 to X_5 from the First Respondent

FACTORS	**1**	**2**	**3**	**4**	**5**	**TOTAL**
X1	5	4	3	2	3	17.00
X5	5	5	4	4	3	21.00

Source: Survey Research, 2025

The table outlines the level of agreement by the first respondent across five statements each for two independent variables:

- X1: Bureaucratic Processes
- X2: Passage of the Government Budget

Each response was measured on a 5-point Likert scale, where higher scores indicate stronger agreement or greater perceived influence on the prompt delivery of public building construction projects.

For X1 (Bureaucratic Processes), the total score is 17 out of a maximum of 25. This indicates a moderate level of agreement, suggesting that the respondent perceives bureaucratic procedures as somewhat influential in delaying the timely execution of public building construction projects. The mid-range score implies that while bureaucratic hurdles are recognised, they may not be the most dominant factor in causing project delays.

For X2 (Passage of the Government Budget), the respondent gave a total score of 21, which is significantly close to the maximum possible score of 25. This reflects a strong level of agreement that delays in the passage of the government budget are a critical constraint on the prompt delivery of public building projects. It suggests the respondent views budgetary approval timing as a major determinant of project efficiency and completion.

This respondent considers both bureaucratic processes and delayed budget passage as relevant challenges but attributes greater influence to the timing of government budget approval in affecting the successful and timely delivery of public infrastructure projects in Delta State.

Analysis of Multiple Correlation Matrix

The analysis of the Correlation matrix was done from Table 4 below. The result reveals the degree of association between prompt delivery of public or Government building construction projects and each of the two major constraining factors. The matrix also shows the coefficient of simple correlation between each pair of variables.

Table 4: Correlation Matrix for Prompt Delivery of Public Building Construction Projects and the Major Constraining Factors

		Y	X1	X2
Pearson Correlation	Y	1.000	.502	.070
	X1	.502	1.000	.079
	X5	.070	.079	1.000
Sig. (1-tailed)	Y	.000	.000	.179
	X1	.000	.000	
	X5	.179	.152	.000
N	Y	173	173	173
	X1	173	173	173
	X5	173	173	173

Source: Research Output, 2025

There is moderate-high degree of association between the prompt delivery of public building construction projects and each of identified constraining factors; bureaucratic process (X_1), passage of Government budget (X_2). However, the highest correlation exists between bureaucratic process (X_1) and prompt delivery of public building projects (Y). The implication is that government bureaucratic bottleneck may have been so high that it delayed timely delivery of building projects.

Analysis of Multiple Correlation Coefficient (r) and Multiple Coefficient of Determination (r^2)

This measures the level of relationship existing between the identified payment delay factors and the level of explained variations in the study analysis. This is shown in Table 5 below;

Table 5: Model Summary of the Multiple Regressions Analysis on Prompt Delivery of Public Building Projects

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.867(a)	.728	.601	.48088	3.097

a Predictors: (Constant), X1, X2
b Dependent Variable: Y

Source: Research Output, 2025

The multiple correlation coefficients (r) of 0.867 means a very high positive relationship between prompt delivery of public building projects and the two identified major constraining factors.

However, the multiple coefficients of determination (r^2) of 0.728 shows the proportion of the variance in the level of prompt delivery of public building projects (Y) in Delta State explained by all the independent (explanatory) variables. An r^2 value of 0.728 indicates that all the independent variables collectively explained 72.8% of the variance in the prompt delivery of public building construction projects. Only 27.2% of the variance were not explained. This implies that most of the delays experience by Government building construction contractors are caused by the two identified constraining

factors to prompt delivery of public sector building projects in Delta State, Nigeria.

Regression Model of Prompt Delivery of Government Construction Building Projects on the Two identified Factors

Table 6, shows the result of multiple regression that was used to form a model or equation to predict the prompt delivery of public building construction projects while considering the two identified major constraining factors as shown below;

Table 6: Coefficients of Multiple Regression of Prompt Delivery of Government Construction Projects on X_1 and X_2

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	33.	3.501		9.653	.00
	X1	.45	.086	.142	7.523	.00
	X2	.29	.100	.077	1.957	.03

a Dependent Variable: Y
The model derived from Table 4.7:
$Y = 33.796 + 0.450X_1 + 0.295X_2$

Source: Research Output, 2025

Based on the above, we can predict the prompt delivery of public building construction projects (Y) given the values of the two major constraining variables. The coefficients in the equation indicate the marginal effect of each of the constraining factors on prompt delivery of public building projects, when all the other factors are held constant.

Testing the Significance of the derived Model.

The F-statistic provided by the analysis of variance (ANOVA) in multiple regression analysis is suitable for such test, and was used to test the collective significance of all the independent or explanatory variables (X_1 and X_2) in the model (4.1) statistically generated. Hence, this is to test the significance of the collective effects of the constraining factors on prompt delivery of public building projects in Delta State and other neighboring states in South-south geopolitical zone of Nigeria. That is testing of hypothesis six;

Research Objective: The collective effect of bureaucratic constraints and budget passage delays on prompt delivery of building projects are not significant.

Table 7: ANOVA Table for Multiple Regression of Prompt Delivery of Public Building Projects

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	964.120	5	192.824	9.604	.000(a)
	Residual	3353.071	167	20.078		
	Total	3449.191	172			

a Predictors: (Constant), X1, X2,
b Dependent Variable: Y
Source: Research Output, 2025

The Analysis of Variance (ANOVA) in Table 7 above, show the F-ratio value of 9.604 which is significant at 0.000 levels of significance. This implies rejection of the null hypothesis and acceptance of the alternative hypothesis. So, at a level of significance of 5%, we can conclude that the collective effect of constraining factors on prompt delivery of building projects is significant. As a result, the model (4.1) is significant in predicting the prompt delivery of public building projects in Delta State. Therefore, prompt delivery of public construction building projects are significantly related to bureaucratic process (X_1), and delay in passage of Government budget (X_5).

Test of Hypothesis

The t-test values in Table 8 were of relevance in order to test the formulated hypotheses. Therefore, Table 7 will be converted to Table 8 for this purpose.

Table 8: Multiple Regression of Prompt Delivery of Government Building Projects on X_1 and X_2

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	p-value
1	(Constant)	33.7	3.5		9.7	.00
	X1	.4	.09	.142	7.5	.00
	X5	.3	.100	.1	1.9	.0

a Dependent Variable: Y
Source: Research Output, 2025

Hypothesis I

H_{01}: Bureaucratic process does not significantly constrain prompt delivery of public building projects in Delta State, Nigeria.

The computer printout, Appendix table 4.8, shows that the t-cal value of 7.523 is significant in the prediction of Y. We therefore reject H_{01} with a conclusion that bureaucratic process can significantly constrain prompt delivery of public building projects in Delta State, Nigeria.

Hypothesis II

H_{02}: Passage of Government budget cannot significantly constrain prompt delivery of public building projects.

The computer printout, Appendix table 8, shows that the t-cal value of 1.957 is significant in the prediction of Y. We therefore reject H_{05} with a conclusion that Passage of Government budget can significantly constrain prompt delivery of public building projects.

Table 9 Mind Mapping Approach Showing the Public Building Management Strategies and the Constraining Factors

Management Strategies for Building Projects	**Constraining Factors**		
	Bureaucratic processes	Passage of Govt. budget	**Outcome**
Timely release of project funds	XXX		Prompt Delivery of Public Building Projects
Reduction in the level bureaucracy	XXX		
Avoid elite capture (political hijacking)		XXX	
Proper documentation and record keeping.			
Early passage of Government budget and proper implementation	XXX		
Procurement dates must be accurate to ensure availability of proper materials and equipment		XXX	

Source: Survey Research, 2025

The result of this mind mapping matrix (Table 4.9), is a good strategy for adequate management of public building projects to ensure prompt delivery and economic development in Delta State, Nigeria.

Illustrating the matrix; from row one, late payment of contractors and passage of budget as factors can be minimized and/or avoided by timely release of project funds. Also, reduction in the level of bureaucracy can assist in tackling the problem of late in payment of Contractors, political interference, and delay in the passage of Government budget for prompt delivery public building projects in Delta State. The same line of direction can be made regarding to the remaining identified factors.

Discussion of Result

The analyses and findings above revealed the following;

The model developed (table 4.1) shows that all the constraining factors are positively related to the prompt delivery of construction projects, specifically, building projects in Delta State with high level Government bureaucracy having the highest contribution to the problem late delivery of public building construction projects. (see Table 4.6). This view is supported by [12; 11], that bureaucratic bottleneck in the activities of government is responsible for low level of performance achieved in the implementation of public sector projects in Niger Delta states and Nigeria in general. There is no doubt that this bureaucratic problem not only delayed payment but also affected the rate of success achieved in the implementation of public sector building construction projects in Delta State. Also, system of record keeping and documentation appear to be the analogue type which played significant role by contributing to level of delays in the payment of Government owned construction projects. Analogue system of documentation makes it difficult to locate files for payment and this coupled with the government bureaucracy poses high level frustration of contractors with regards to payment for contracts and delivery of projects. Consequent upon this, [13] in his study of the contributing factors to low level of performance of World Bank Projects in Imo State, commented that late release of project funds was as a result poor record keeping and documentation related factors.

Findings from the first objective revealed that the government bureaucratic process significantly constrained prompt delivery of public or Government building projects in Delta State, Nigeria. This is evident in Table 4.8. This result depicts reality as bureaucracy has always been the bane of development due to the lateness of government at all levels to facilitate development by improving on the delays that characterized most Government offices, thereby delaying the rate of economic development through timely project realization. This is because economic development is dependent on successful project delivery [23].

Findings from the second objective revealed that passage of government budget has significantly constrained prompt delivery of public building construction projects, especially, building projects. It is evident that in most developing countries, Nigeria inclusive, making Government payments or expenses can only be effective if budgets are passed and funds appropriated to various Government sectors. This is the case in this study as most construction project contractors have to wait until the late passage of budgets as recently witnessed in Delta State and Nigeria in general.

Based on the priority ranking result in Table 4.9 above, the following observations were made; bureaucratic process is the most constraining factor that affected prompt delivery of public or Government building projects. This is followed by Government budget as the least constraining factor to prompt delivery of Government building construction projects witnessed in Delta State, Nigeria. This ranking supports the findings made in this study and can be used as the basis for conclusion and recommendations

This study and its findings to this end, have empirically justified the call for prompt delivery of public building construction projects in Delta State for sustainable economic development. To do this, Government bureaucracy, delayed release of project funds which delay timely payment of Government contractors, political instability and delay in passage of Government budgets must be critically considered and managed Government at all levels.

5.CONCLUSION

Based on the findings of this study and discussions made, the study emphasized that effort must be placed on persisting government bureaucratic bottleneck which has always been a continuous problem in Government related activities/business. The t-calculated value of 7.523 from Appendix IV is significant in predicting Y, therefore, the null hypothesis is rejected, and it can be concluded that bureaucratic process can significantly constrain prompt delivery of public building projects in Delta State, Nigeria.

The study reveals that payment of contractors is a significant factor in constraining prompt delivery of public building projects, as indicated by its p-value of 0.001 which is less than the 0.05 level of significance. This leads to the acceptance of the alternative hypothesis, and the conclusion that payment of contractors significantly constrains prompt delivery of public building construction projects. As a result, there is urgent need to adopt modern technology of record keeping and documentation which will facilitates the Government activities and make Government contractors' payments promptly thereby encouraging contractors of Government to deliver successful construction projects, specifically, building projects. This will trigger a multiplier effect which enhances economic development through improvement in economic activities. It will also assist in upgrading the standard of living of the citizens make Government functional and effective.

Passage of Government budget should be made early to enable effective planning and release of funds for the payment of Government contractors and smooth administration of government activities, as the t-cal value of 1.957 is significant in the prediction of Y, indicating that the passage of the Government budget can significantly constrain the prompt delivery of public building projects. Since economic planning depends mainly on Government budget, there is need to facilitate the passage of this budget to aid economic planning and development. With this, payments for Government construction projects will be prompt and economic development will be realized through successful delivery of projects for economic activities.

6. RECOMMENDATIONS

The study recommends several management approaches to address the challenges of delayed delivery of public sector building projects in Delta State.

I. The first approach suggests the need for dedicated staff to handle government activities and efficient contract payment arrangements to reduce bureaucratic issues and motivate contractors.

II. The second approach emphasizes the need to strengthen project monitoring and evaluation teams through training and the adoption of modern technology.

III. The third approach highlights the need for early budget passage to enable the government to meet its contractual financial obligations promptly.

The study identified high levels of bureaucratic processes, delays in payment of government contractors, and delays in budget passage as major challenges to prompt delivery of public sector building construction projects. The study recommends the adoption of computer-based systems (ICT) for documentation and record-keeping and continuity in government administration to facilitate prompt project delivery and enhance economic development.

7. CONTRIBUTIONS TO KNOWLEDGE

The study has been able to make the following contributions to the academic body of knowledge;

a. Hence, this study was able to identify bureaucratic bottleneck as the major factor affecting the prompt payment of Government building construction projects in Delta State, Nigeria.

b. the collective and individual effects of the identified factors were also established for decisive purposes.

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