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Effect of Stakeholders' Delay on Building Projects Success in Kaduna Metropolis

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Abstract

In terms of the development of adversarial relationships, mistrust, litigation, arbitration, cash-flow issues, and a general sense of apprehension toward one another, delay contests have a detrimental impact on clients, contractors, and consultants. The aim of the study is to investigate stakeholder causes delays on building projects success in Kaduna Metropolis. The study adopted quantitative design and data were collected through questionnaires survey from building professionals using the purposive proportionate sampling technique. Descriptive statistics was used for data analysis and the results were presented in tables. The study revealed high owner contribution to delay in building project success in the area of financial status of owner, progress payments delay by owner, unreasonable project time frame, and change orders by owner during construction and delays in decision making by owner was ranked 1st to 5th respectively. However, the moderate owner contribution to delay in building project success in the area of poor communication by owner with other construction parties and late land handover by owner ranked 10th to 11th respectively in the study area. The study reveals that consultant-related factors significantly contribute to project delays. In particular, the incompetence and insufficiency of inspectors, inflexibility, delayed inspections, and poor communication by consultants were identified as major culprits. While the study also concludes the significant impact of labor-related factors such as insufficient labor, low skill levels, and low productivity on project delays, it also acknowledges the moderate influence of interpersonal conflicts among laborers and between laborers and management.

Keys: Stakeholders, Construction Delays, Building Project, Project Success, Kaduna Metropolis

Introduction

Particularly in Nigeria, the construction sector is vital to a country's economic and overall development. It is a cyclical industry that is in line with overall economic performance and plays a crucial part in a country's socioeconomic growth (Ikenga, 2022). There cannot be much progress in national development without the provision of basic infrastructure and amenities. The Construction sector is a critical factor of competitiveness in the economy; it provides the infrastructure and buildings on which every other sector relies on. In economic terms, the importance can be assessed by the rate of investment, in Nigeria's third National Development Plan, the planned expenditure on construction activities accounts for about 40 % of the 30 billion earmarked for the whole plan period (Ikediashi & Ogwueleka, 2016).The growing rate of delays is adversely affecting the timely delivery of construction projects (Alsharef *et al.* 2021). Mathar *et al.* (2020), opines that the completion of construction projects within prescribed time scale is an important measure of project success. Right from the conception of the project by the client to the execution and completion stages, all persons involved give in their best to see that the project meets agreed cost, time, and quality targets Hanid, Ismail, Mohamed, AbdulWahab and Leman (2022) and this is vital in determining the success rate of the construction project.

However, delay challenges have a negative effect on clients, contractors, and consultants in terms of growth in adversarial relationships, mistrust, litigation, arbitration, cash-flow problems, and a general feeling of trepidation towards one other (Aliu, 2022). This problem is not unique to developed countries but is also experienced in most of the developing economies (Amoatey & Ankrah, 2017). A project may not be regarded as a successful endeavor until it satisfies the cost, time, and quality limitations applied to it. However, it is not uncommon to see a construction project failing to achieve its goal within the specified cost, time, and quality (Srinivas, 2019).

Unfortunately, one of the many challenges the industry faces is the abandonment of construction projects or delays in completion which can be attributed to a myriad of factors (Nyoni & Bonga, 2017). This single factor often results in an increase cost of completion of the final projects and distorts the ability of the project team to meet its time-related objectives and project delivery success (Cornelissen, Watson, Adam &Malefetse, 2019). Also, construction project delays often result in an increase of initial cost estimate and may cause extensive delays

which could cause a ground for disputes or lawsuits between owners and contractors, loss of productivity and revenue, and contract termination (Lessing, Thurnell &Durdyev, 2017). Delays are a recurring issue in the construction business, despite the need of timely project completion. They result in significant financial losses, compromised quality, and strained relationships among stakeholders (Rauzana & Dharma, 2022).

Construction project delays in Kaduna Metropolis have led to adversarial stakeholder relationships, mistrust, litigation, and financial strain, negatively impacting project success (Abdullahi et al., 2021; Bala et al., 2022). Despite the known consequences of delays, there is limited empirical research focusing on the specific contributions of owners, consultants, and labor-related factors to these delays within Kaduna's construction sector (Aminu et al., 2023; Olanrewaju et al., 2020). This study addresses this gap by investigating the root causes of delays attributable to key stakeholders. The primary objectives are to: (1) assess the extent to which owner-related factors contribute to project delays, (2) evaluate the role of consultants and contractors in project delay, and (3) examine labor-related challenges in hindering timely project delivery.

It is crucial that academics keep researching efficient mitigation techniques and management that are suited to the Nigerian setting as well as others, given the persistent delays in construction projects. This paper aimed to investigate the stakeholders' contribution to delays in building project success in Kaduna metropolis. The study focuses on building projects in Kaduna Metropolis, targeting professionals involved in these projects. The findings are deemed significant for both industry practice and policy because they equip stakeholders with evidence-based strategies to mitigate delays. Additionally, the study contributes to the broader discourse on construction project management in Nigeria by highlighting region-specific challenges, thereby informing regulatory frameworks and contractual standards to minimize disputes and inefficiencies.

Literature Review

Delays in Projects

Many construction projects suffer from delay. Suspension means stoppage of work directed to the contractor from the clients, while delay is the slowing down of work without stopping it entirely (Kalkani& Malek, 2016). Delay gives rise to disruption of work and loss of productivity, late completion of project increased time and costs of construction project, and third-party claims and abandonment or termination of contract. It is important that general management keep track of project progress to reduce the possibility of delay occurrence or identify it at early stages (Mishra, Bhandari & Jha, 2018). Construction planning has to be much more decentralized activity to cope with the inherently uncertain nature of task duration.

However, Ballard and Howell (1998) argued that construction planners should make only "quality assignments" where the tasks are not meeting these criteria's: (1) sufficiently well

defined (to be coordinated with other work and the inputs to be identified and assembled); (2) are ready to start (material, design, and precedent works complete); (3) have priority in the critical path for delivery to the customer; (4) are commensurate in scale with the available labour for the coming week; and (5) are carried out within a system where the causes of incomplete or poor quality assignments are investigated and identified, should be deferred. Monitoring gives early warning of the possibility of contractor's delay and help in anticipating the consequences of changes that may be needed (Burr, 2017). Ahmed (2018) explain that top management support is required and this can be defined as the willingness of top management to provide necessary resources, authority, and power.

Concept of Stakeholder

A stakeholder in an organization is any group or individual who can affect or is affected by achieving the organization's objectives''. Nevertheless, a broad stakeholder definition was presented by Reed, Vella, Challies, De Vente, Frewer, Hohenwallner-Ries and van Delden (2018); who defined stakeholders as parties contributing to and/or being affected by a decision-making process. However, other identifications went deeper, ''Stakeholders are identified by their interests in the corporation, whether the corporation has any corresponding functional interest in them (Reed et al., 2018). Here the functional interest of a corporation is with internal stakeholder as much as the external one. Furthermore, the corresponding functional interests are manifest on financial or social objectives of a company or an individual. However, the quality and accuracy of stakeholder's definition is vital for a satisfactory analysis process where relevant stakeholders are identified (Heravi, Coffey &Trigunarsyah, 2015). Managers need to remember that organizations regularly set objective as a part of their strategic planning where stakeholders are identified. The stakeholder identification is one of the stakeholder theory shortcomings (Achimugu, Selamat, Ibrahim &Mahrin, 2014). Stakeholder identification and salience based on stakeholders possessing one or more of three relationship attributes: power, legitimacy, and urgency Heravi et al., 2015).

To assure timely verification of main stakeholders during the life cycle of any endeavour, project managers need to categories significant stakeholders who govern the project's outcome Achimugu et al., 2014). This appreciates the role of power as a factor to rank stakeholders' significance. Usually, power and legitimacy coexist. For example, a powerful stakeholder can compel its legitimacy on decisions and in particular financial ones such as the case of a price variation order. However, urgency is associated with the flow of site works. Researchers noted the need to differentiate between stakeholder's identification and categorization. While the identification leads to the detection of stakeholders, categorizing them is by labelling each one. Stakeholders can be categorized as primary or secondary (Davis, 2016).

Project stakeholders

Project stakeholders are individuals, groups or entities who may possess the power to be a threat or opportunity to a project. Project stakeholders are classified as primary or secondary depending on whether they have formal or contractual agreement with the project owner and are critical or not to the project success. Kerzner (2017), suggest that stakeholders can be classified as internal (project team) or external (outside the project team) for whom the project is being provided, insiders or outsiders, contracted or not contracted, supportive, neutral, proponents, opponents, powerful, powerless, influential or non-influential, interested or not, depending on the complexity and stake. Eskerod and Jepsen (2013) argue that construction projects attract interest from various stakeholders whose expressed needs and expectations are often in conflict with each other. Stakeholders influence project decisions positively or negatively, confirming the need for stakeholders' management.

Stakeholder Management

Project Stakeholder Management entails all purposeful activities towards the stakeholders to enhance project success. Eskerod and Vaagaasar (2014) defines stakeholder management as the systematic identification, analysis, planning actions, communication, and negotiation aimed at influencing the stakeholders. The stakeholder management process is considered necessary for managing relationships due to the diverse stakeholders involved in a project and their possible conflicting interest which affects or may be affected by the project outcome (Bal, Bryde, Fearon & Ochieng, 2013). Eskerod et al. (2014) states that, Stakeholder Management can be carried out in many ways including evaluating needs and expectations of stakeholders in relation to main project goals.

Stakeholder Management involves definition, identification, mapping and analysing which is aimed at stakeholder satisfaction, a key to meeting client's objective, value, concern and success (Zarewa, 2019). It entails processes and techniques employed to effectively manage relationships between project organisation and stakeholders in action an oriented way so as to enhance the positive and reduce negative impacts of the stakeholder influence on project goals and objectives. Saad, Zahid and Muhammad (2022), as referring to the sponsor as the one who ultimately wants results, has the budget for the project execution and is involved throughout the project life cycle.

Stakeholders' contribution to delay

Stakeholders in the construction industry could include the client/owner, contractor/sub-contractors and Consultants. They can have various contributions to construction project delays (Ametepey, Gyadu-Asiedu &Assah-Kissiedu, 2018). Here are some ways in which different stakeholders can impact project timeliness.

Clients or owners may contribute to project delays through changes in project requirements, scope creep, or delayed decision-making. If clients modify their preferences or introduce new requirements during the construction process, it can lead to delays as the plans and work need to be adjusted accordingly. Additionally, if clients are slow in providing approvals or making critical decisions, it can affect the project timeline.

Contractors/Subcontractors play a crucial role in construction projects, and their actions or lack thereof can cause delays. Factors such as poor project management, inadequate resource allocation, subcontractor/supplier issues, or low productivity can lead to project delays. If contractors do not manage their resources effectively or fail to coordinate with subcontractors to face unforeseen challenges, it can impact the project timeline (Mewomo, 2016). Similarly, delays in the delivery of materials or equipment by suppliers can impact the construction schedule.

Consultants as posited by Eskerod and Vaagaasar (2014) could include; Architects, Structural, Engineers, Quantity Surveyors, Mechanical Engineers, Electrical Engineers, Project Managers and other design professionals involved in the project can also influence project delays. Inaccurate or incomplete designs, delays in producing design documents, or revisions to design plans can impact the construction timeline. It's crucial for design professionals to provide timely and accurate information to ensure smooth project progress. Other factors may include Ineffective project management, inadequate communication, or poor coordination among the consultants can lead to delays. Eskerod *et al*. (2014) observed that delays in the construction activity often results in the inability of the project team to meet time related objectives, the impact of these may result in an increase of project cost and may also contribute to low quality of the final product.

A number of factors have been attributed to construction delays such as variation, low levels of construction management, errors in design and construction, low experience levels of construction team, financial causes, and poor conflict management. Karami (2021), also affirms that stakeholder management related challenges in the construction activity is rooted in poor conflict management which may result in aftermaths such as construction project delays, financial losses for all parties involved among others (Charehzehi, Chai, Md Yusof, Chong & Loo, 2017).

Project Success

Kerzner (2017) defines project as a unique and transient endeavour undertaken to achieve a desired outcome and a unique set of coordinated activities with definite starting and finishing points undertaken by individual or organisation to meet specific performance objectives with defined schedule, performance and cost parameters. According to Eskerod and Jepsen (2013), there are pre-project and post-project phases when resources are spent and project generates benefits. Projects must be seen as temporary goals created to generate benefits foran organisation. Project success however entails initiating, planning,

coordinating, design, resources procurement, construction, test and handing over of a project to the project owner or users (Luo, Zhang& He, 2020).Luo*et al.* (2020) states that a project is delivered when completed and the defined terms of specific tangible deliverables are met. Since building project success is associated with the whole-life cycle including operation and maintenance Mallawaaracchi and Senaratne (2015), delivered projects may not necessarily be considered successful until they meet the initial set criteria for completion. Project stakeholders can be beneficial or antagonistic towards achieving a project goal (Edwards, Lou, Bataw, Kamaruzzaman & Johnson, 2019).

Project Delivery Success Criteria

Project success has been widely discussed in the project management literature. Most studies in project success focus on dimensions such as how it is measured and other specific factors influencing project success. Project success means different thing to different people (Rezvani, Chang, Wiewiora, Ashkanasy, Jordan & Zolin, 2016). Rezvani et al. (2016) reported that it is difficult to assess whether the performance of a project is a success or a failure due to the fact that the concept of success remains vague among project participants. The conventional measures or the so-called iron triangle of time, cost, and quality has been the dominating performance indicator in construction projects (Jong, Sim & Lew, 2019).

Methodology

The choice of survey design for this paper is informed by the fact that the population is large and cannot be entirely covered. By adopting survey, cost will be saved, internal and external validity that allows the generalisation from sample to the vast population can be achieved. The population also includes the professionals in the construction industry in Kaduna metropolis, Nigeria. That is the Architects, Quantity Surveyors, Builders and Civil Engineers; Electrical Engineers and Mechanical Engineers. The sample size for this study was determined using Krejcie and Morgan table 1970. The sample size is (310) based on sample frame of (1,518 A structured questionnaire was used to collect primary data. The questionnaire featured close-ended questions to standardize responses and facilitate quantitative analysis. A 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) to measure stakeholders' perceptions of delay causes was employed. This scale is widely validated in construction management research (Fellows & Liu, 2021). Descriptive statistics with the aid of the Statistical Package for Social Sciences (SPSS) software was used for analysis in identifying the stakeholders' contribution to delays in building project delivery success in the study area.

Result and Discussion

Demographic Attributes of Respondents

These comprises of profession, experience, organizational type and nature of projects handled by the study respondents. The frequency and percentage analysis were carried out using the SPSS software and the results were presented in the Tables below to explore the respondents' profile.

Table 1: Demographic Attributes of Respondents

SN	Professions	Frequency	Percentage
1	Architect	31	11.1
2	Builder	20	7.4
3	Engineer	36	13.0
4	QS	188	68.5
	Total	**275**	**100.0**
	Experience	**Frequency**	**Percentage**
1	0-5 Years	66	24.1
2	6-10 Years	56	20.4
3	11-15 Years	66	24.1
4	16-20 Years	26	9.3
5	Above 20 Years	61	22.2
	Total	**275**	**100.0**
	Type of organization	**Frequency**	**Percentage**
1	Client	56	20.4
2	Contractor	76	27.8
3	Consultant	143	51.9
	Total	**275**	**100.0**
	Types of construction handled	**Frequency**	**Percentage**
1	Building Construction	127	46.3
2	Civil Construction	15	5.6
3	Both	133	48.1
	Total	**275**	**100.0**

Table 1 shows that a question regarding the profession most of the respondents are Quantity Surveyors with the percentage of 68.5%, followed by Engineers with 13.0%. This means that majority of respondents are quantity surveyors in the study area. Question regarding the working experience most of the respondents have the working experience

for almost 11-15 years with the percentage of 24.1%. This means that majority of respondents have the experience for almost 11-15 years in the study area. Question regarding the type of organization most of the respondents are consultants with the percentage of 51.7%, followed by contractors with 27.8%. This means that majority of respondents were consultants and contractors in the study area. Question regarding the types of construction handled most of the respondents are handling both projects with the percentage of 48.1%, followed by building construction with 46.3%. This means that majority of respondentsare handling both Civil and building construction in the study area.

The Stakeholders' Contribution to Delays in Building Project Success in the Study Area

The results of the stakeholders' contribution to delays in building project success showed the mean, standard deviation, and mean ranking for each item, as presented in Table 2.

Table 2: Client's Contribution to Delay in building Project success

Client Contribution to Delay in building Project success	Mean	Std. Deviation	Ranking	Decision Rule
Financial status of client	4.35	1.814	1	High Contribution
Progresspayments delay by client	4.13	1.010	2	High Contribution
Unreasonable project time frame	3.85	.979	3	High Contribution
Change orders by client during construction	3.72	1.089	4	High Contribution
Delays in decision making by client	3.67	1.259	5	High Contribution
Postponement of project by client	3.63	1.121	6	High Contribution
Late issuing of approval documents by client	3.57	1.109	7	High Contribution
Delays in decision making by client	3.54	1.059	8	High Contribution
Undefined scope of working	3.52	1.023	9	High Contribution
Poor communication by client with other construction parties	3.43	.924	10	Moderate Contribution
Late land handover by client	3.26	1.085	11	Moderate Contribution

Scale: Very low contribution (1.00 – 1.5); Low contribution (1.51 – 2.49); Moderate contribution (2.50 – 3.49); High contribution (3.50 – 4.49) and Very High contribution (4.50 – 5.00) Mijares (2022).

Table 2: shows the client's contribution to delay in building project success in Kaduna Metropolis. The results indicate high contribution to delay in building project success in the area of financial status of client, progress payments delay by client, unreasonable project time frame, change orders by client during construction and delays in decision making by client with mean values of (M= 4.35, std. deviation = 1.814), (M= 4.13, std. deviation = 1.010), (M= 3.85, std. deviation = 0.979), (M= 3.72, std. deviation = 1.089) and (M= 3.67, std. deviation = 1.259) ranked 1st to 5th respectively. However, the moderate contribution to delay in building project success in the area of poor communication by client with other construction parties and late land handover by client with mean values of (M= 3.43, std. deviation = 0.924) and (M= 3.26, std. deviation = 1.010) ranked 10th to 11th respectively. The results indicate that the identified factors significantly contribute to delays in building project success. A higher mean value signifies a greater perceived impact of the factor on project delays.Financial status of ownerwith a mean of 4.35, this factor is perceived as the most significant contributor to delays. This finding is supported with the study by Berardi (2013) who identified that financial constraints can lead to payment delays, resource shortages, and ultimately, project disruptions. When the client stops payment, their works stop and can no longer proceed due to financial incapacitation. Change orders by client during construction with mean score of 3.72 highlights the disruptive impact of frequent changes during construction. This finding is also supported by the finding revealed by Berardi (2013) who observed that changes order by client can require additional planning, resource allocation, and coordination, leading to delays.

Table 3: Contractor's Contribution to Delay in building Project Success

Contractor's Contribution to Delay in building Project Success	Mean	Std. Deviation	Ranking	Decision Rule
Poor site supervision by contractor	3.80	.979	1	High Contribution
Improper construction method	3.76	.989	2	High Contribution
Poor qualification of the contractor's technical staff	3.74	1.102	3	High Contribution
Poor resource management	3.72	.878	4	High Contribution
Rework due to errors during construction	3.57	.964	5	High Contribution
Difficulties in financing project by contractor	3.57	1.268	6	High Contribution
Ineffective scheduling of project by contractor	3.56	.861	7	High Contribution
Delay in commencement	3.46	.966	9	Moderate Contribution
Conflict between contractor and other parties	3.35	1.012	10	Moderate Contribution
Poor communication by contractor with other construction parties	3.17	1.060	11	Moderate Contribution

Scale: Very low contribution (1.00 – 1.5); Low contribution (1.51 – 2.49); Moderate contribution (2.50 – 3.49); High contribution (3.50 – 4.49) and Very High contribution (4.50 – 5.00) Mijares (2022).

Table 3 shows the contractor's contribution to delay in building project success in Kaduna Metropolis. The results indicates high contribution to delay in building project success in the area of poor site supervision by contractor, improper construction method, poor qualification of the contractor's technical staff, poor resource management and rework due to errors during construction with mean values of (M= 3.80, std. deviation = 0.979), (M= 3.76, std. deviation = 0.989), (M= 3.74, std. deviation = 1.102), (M= 3.72, std. deviation = 0.878) and (M= 3.57, std. deviation = 0.964) ranked 1st to 5th respectively. However, the moderate contribution to delay in building project success in the area of conflict between contractor and other parties and poor communication by contractor with other construction parties with mean values of (M= 3.35, std. deviation = 1.012) and (M= 3.17, std. deviation = 1.060) ranked 10th to 11th respectively. The provided results indicates that specific factors significantly contribute to delays in building projects. These factors, primarily related to contractor performance and project execution, have a substantial impact on project timelines. Poor site supervision by contractor revealed a mean score of 3.80; this factor is perceived as the most significant contributor to delays. Doloi (2013) supported the finding by observing that inadequate supervision can lead to inefficiencies, errors, and safety issues, all of which can delay project progress. Poor resource management revealed a mean score of 3.72 highlights the importance of effective resource allocation and management. This result is supported by the work of Kerzner (2017) who revealed that inefficient resource utilisation can lead to delays and disruptions in the project schedule.

Table 4: Consultant's Contribution to Delay in building Project Success

Consultants' Contribution to Delay building Project Success	**Mean**	**Std. Deviation**	**Ranking**	**Decisional Rule**
Inexperienced Team of Consultants	4.43	1.602	1	High Contribution
Irregular Observance of Site Meeting Inspections	3.67	1.149	2	High Contribution
Lack of Coordination Meetings Betwee Consultants	3.57	1.002	3	High Contribution
Delay in issuance of valuation certificate	3.54	1.161	4	High Contribution
Conflict Between Consultants and Client	3.52	.906	5	High Contribution

Scale: Very low contribution (1.00 – 1.5); Low contribution (1.51 – 2.49); Moderate contribution (2.50 – 3.49); High contribution (3.50 – 4.49) and Very High contribution (4.50 – 5.00) Mijares (2022).

Table 4: shows the consultants' contribution to delay in building project success in Kaduna Metropolis. The results indicate high consultants' contribution to delay in building project success in the area of Inexperienced Team of Consultants, Irregular Observance of Site Meetings/ Inspections, Lack of Coordination Meetings Between Consultants, Delay in issuance of valuation certificate and Conflict Between Consultants and Owner/Client with mean values of(M= 4.43, std. deviation = 1.602), (M= 3.67, std. deviation = 1.149), (M= 3.57, std. deviation = 1.002), (M= 3.54, std. deviation = 1.161) and (M= 3.52, std. deviation = 0.906) ranked 1st to 5th respectively. The provided results indicate that inexperienced team of consultants with a mean score of 4.43 significantly contribute to delays in building projects. The survey suggests that Inexperienced Team of Consultants is perceived as the most significant contributor to delays. This result is supported by the work of Kerzner (2017) who revealed that incompetent inspectors can lead to incorrect decisions, delays in issuing inspection certificates, and ultimately, project disruptions. Also, Saad, Zahid and Muhammad (2022) revealed that insufficient inspectors and a shortage of inspectors can lead to delays in inspection processes, which can hinder project progress.

Table 5: Labours' Contribution to Delay in building Project Success

Labours' Contribution to Delay in building Project Success	**Mean**	**Std. Deviation**	**Ranking**	**Decision Rule**
Low level of equipment-operator's skill	3.78	.925	2	High Contribution
Insufficient laborers	3.76	1.063	1	High Contribution
Low productivity of laborers	3.70	1.093	3	High Contribution
Personal conflict between laborers and management team	3.13	.933	4	Moderate Contribution
Personal conflicts among laborers	3.11	1.040	5	Moderate Contribution

Scale: Very low contribution (1.00 – 1.5); Low contribution (1.51 – 2.49); Moderate contribution (2.50 – 3.49); High contribution (3.50 – 4.49) and Very High contribution (4.50 – 5.00) Mijares (2022).

Table 5: shows the labours' contribution to delay in building project success in Kaduna Metropolis. The results indicate high contribution to delay in building project success in the area of insufficient labourers, low level of equipment-operator's skill and low productivity of labourers with mean values of (M= 3.78, std. deviation = 0.925), (M= 3.76,

std. deviation = 1.063) and (M= 3.70, std. deviation = 1.093) ranked 1st to 3rd respectively. However, the moderate labours contribution to delay in building project success in the area of personal conflict between labourers and management team and personal conflicts among labourers with mean values of (M= 3.13, std. deviation = 0.933) and (M= 3.11, std. deviation = 1.040) ranked 4th to 5th respectively. The provided results indicate that specific factors related to labour and equipment operation significantly contribute to delays in building projects. These factors, primarily related to the quantity, quality, and productivity of labour and equipment, have a substantial impact on project timelines. Insufficient labourers revealed a mean score of 3.78; this factor is perceived as the most significant contributor to delays. This result is supported by the study of Echebima and Echetama (2018) who revealed that shortage of labour can lead to delays in construction activities, which can impact the overall project schedule. Low productivity of labourers revealed a mean score of 3.70 indicates that low productivity among labourers can significantly impact project timelines. This result is supported by the study of Pillay and Mafini (2017) who revealed that factors such as poor motivation, inadequate training, and unfavourable working conditions can contribute to low productivity.

Conclusion and Recommendations

The study concludes that the client's contribution and decisions significantly impact the success of building projects in the study area. Specifically, the client's financial status, payment delays, unrealistic timelines, frequent change orders, and indecisiveness are major contributors to project delays while the client's communication and land handover practices have a moderate impact on project delays, they are still important factors to consider. Effective communication and timely land handover can significantly contribute to smoother project execution and reduced delays. The study reveals that consultant-related factors significantly contribute to project delays. In particular, the Inexperienced Team of Consultants, Irregular Observance of Site Meetings/ Inspections and Lack of Coordination Meetings between Consultants were identified as major culprits. The study's findings conclude that labour-related factors significantly contribute to project delays. Insufficient labor, low skill levels among equipment operators, and low overall labour productivity were identified as the primary causes. Project stakeholders in Kaduna Metropolis should improve the success of building projects by reducing delays, cost overruns and quality issues. Project stakeholders in Kaduna Metropolis should ensure adequate financial resources to avoid delays and quality compromises. Project stakeholders in Kaduna Metropolis should implement strong site supervision to ensure quality and efficiency.

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