CONSTRUCTION PROJECT MANAGEMENT

Roles and Responsibilities of Stakeholders in Enhancing Residential Project Delivery

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Abstract

The successful delivery of residential projects is reliant on the effective collaboration between clients, consultants and contractors. However, the lack of clear roles, poor communication, changes to scope, limited budgets and poor resource control can cause issues with keeping within budget and completing on time. This study looked at the roles of clients, consultants and contractors, challenges faced due to overlapping roles and inefficiencies and how improvements can be made to improve collaboration in delivering building projects. A quantitative survey was undertaken. A total of 150 questionnaires were issued to clients, consultants and contractors and received 115 valid responses (76.7% response rate). Of these 33 clients (28.7%), 39 consultants (33.9%) and 43 contractors (37.4%) responded. Frequencies, percentages, mean scores and standard deviations were used to analyse the data. Clients were found to be heavily involved in defining project scope and attending planning meetings (Mean 1.96) however they were not always involved in decision making regarding design and estimating (Mean 2.51). Consultants identified designers making mistakes and changes to design once work has begun as problems to cost and time. Contractors usually undertook resource planning; however, they still had issues with resource shortages and with keeping within project budgets. Project delays (57.6%) and budget issues (54.5%) were the main challenge for clients. Consultants found it challenging due to constant changes in scope from clients (53.8%) and material inflation (48.7%). Contractors were challenged by material inflation (53.5%) and lack of finance from clients (41.9%). Improvements included better budgeting (36.5%) and better collaboration between stakeholders (31.3%). This study concludes that to effectively deliver projects, roles should be clearly defined between stakeholders, funding should be available on time, communication improved, monitoring should be consistent and resources should be managed well.

Keywords: Clients; consultants; contractors; stakeholder collaboration; cost management; residential building projects; project delivery

1 Introduction

The construction industry plays a vital role in economic development as it provides the infrastructure and buildings needed within a country, creating jobs and enabling other sectors to function. However there are often issues within construction projects such as exceeding budgets, late delivery and poor performance which will lead to low value from investments and affect confidence in the process (Ofori, 2015; Afolabi et al., 2019).

Building projects are delivered by several parties working together: clients who start and fund projects, setting the requirements and making key decisions. Consultants deliver professional services such as design, cost advice, documentation and management. Contractors manage the project by providing labour, materials, equipment and carrying out construction work. Each party will affect the others as decisions will be made by all parties (Doloi, 2013; PMI, 2017).

When roles aren't clear and communication isn't effective, duplication can occur within the project team, causing delays, design changes, conflict and poor cost control. Collaboration and partnering has been found to increase transparency, trust and teamwork within construction procurement (Nyström, 2005; Walker and Lloyd-Walker, 2015). In practice stakeholders may still act in their own interests.

There are still issues in Nigeria with budget increases and late project completion. Previous research has highlighted that having good coordination between stakeholders, good planning, procurement, availability of resources and good cost control are factors which can affect the project (Aibinu and Jagboro, 2002; Afolabi et al., 2019; Doloi, 2013). It is important to understand what each party's roles are in order for better coordination between stakeholders.

1.1 Research problem

Within residential building projects decisions and information must be consistently flowing between the client, professional consultants and contractors. The client will decide the requirements and funding of the project which will impact the design and planning of the project. The consultants producing documentation and managing will impact how well the contractors can carry out the work. The contractors resource planning and decision making on site will impact cost, quality and time of the project. If the roles aren't well managed there could be changes to the project scope once started, delays with information, lack of resources and conflict.

Despite knowing that each party have specific roles to play there are still issues when delivering projects due to lack of accountability, communication and coordination. To overcome this it is important to understand how each party carry out their roles, what issues they face and what practical steps can be taken to improve collaboration. This study looks into the responses from clients, consultants and contractors.

2 Literature review

2.1 Stakeholder roles in building project delivery

Stakeholders are individuals or organisations who influence or are influenced by decisions made within a project. Clients, consultants and contractors are identified as main stakeholders within the construction industry due to their control over project requirements, consultancy and construction. Stakeholder theory focuses on identifying the interests of different parties to ensure good stakeholder management (Freeman, 1984; Clarkson, 1995).

Clients will generally be responsible for starting a project, defining project requirements, providing finance, making key decisions, and ensuring the project meets requirements. They have control over the project requirements, budgets and changes which can impact the design and construction timelines. Consultants will convert client requirements into co-ordinated designs, produce cost information and provide professional consultancy. Any mistakes during design or incomplete information can cause rework to occur within the project impacting the costs and time (Oladapo, 2007; Doloi, 2013).

Contractors will plan and carry out construction work to meet requirements outlined in the contracts. Contractors are responsible for procuring and managing resources such as labour, materials, plant, sub-contractors and site. Good resource planning and management will ensure

productivity and control costs (Ballard and Howell, 2003; PMI, 2017). Each role is very distinct but interrelated so it is important to have good communication and defined responsibilities.

2.2 Stakeholder management, role overlap and project delivery

Stakeholder management is about ensuring good communication, expectations and issues between stakeholders. Poor communication and unclear responsibilities can lead to conflict between stakeholders causing delays to decision making. The construction partnering literature shows good trust between parties, having common goals and working together to solve problems are key factors in creating good relationships (Nyström, 2005; Walker and Lloyd-Walker, 2015).

Role overlap can occur if there isn't clear decision making processes or stakeholders are involved in roles outside their remit. Client requirements can change impacting consultant designs and contractor procurement and construction. If information is not fully documented and there is poor consultancy this can cause confusion during construction. This could lead to rework, increased costs and longer delivery times (Chan and Kumaraswamy, 2002; Doloi, 2013).

2.3 Improvement strategies

Good communication and clarity of roles can be achieved through having clear project requirements, transparency during procurement, realistic budgets, regular project meetings, good contract management and consistency. Collaborative procurement techniques can help with communication and clarity of roles. Using new technology to help with coordination such as BIM can also improve communication between stakeholders (Eadie et al, 2013; Walker and Lloyd-Walker, 2015).

There are fundamental issues in not having enough funding, unclear requirements, poor accountability and delays to approvals. There must be good systems in place and commitment from stakeholders to have good collaboration.

3 Methodology

This study used a quantitative descriptive survey methodology to identify the roles, challenges and improvements for clients, consultants and contractors. The population were the three stakeholders involved in building projects. The cities chosen for the study were identified as Ibadan and Lagos. A total of 150 questionnaires were issued. Of these, 115 were returned and deemed suitable for analysis. This gave a response rate of 76.7%. Of the valid responses 33 clients (28.7%), 39 consultants (33.9%) and 43 contractors (37.4%) were received. The participants had a variety of backgrounds including education and professional experience.

The questionnaires gathered information on demographics, professional roles, challenges and improvements. Descriptive analysis was carried out on the data including frequency, percentage, mean and standard deviation. The results were split into the three research objectives.

4 Results and discussion

4.1 Respondent background

A total of 115 valid responses were received. Of these 37.4% were contractors, 33.9% were consultants and 28.7% were clients. The largest age group was between 20-29 (33.9%) followed by 30-39 (32.2%). Most had between 6-10 years of professional experience (53.0%). The participants came

from a range of backgrounds including private companies, government and sole clients. The full profile of the respondents is presented in Table 1. They had experience working on residential, commercial and public infrastructure.

Table 1. Demographic and professional characteristics of respondents.

Characteristic	Frequency	Percentage (%)
Age 20–29 years	39	33.9
Age 30–39 years	37	32.2
Age 40–49 years	9	7.8
Age 50 years and above	30	26.1
Male	50	43.5
Female	65	56.5
Bachelor's degree	52	45.2
Master's degree	39	33.9
Professional certification	24	20.9
Experience below 5 years	30	26.1
Experience 6–10 years	61	53.0
Experience 11–15 years	9	7.8
Experience above 15 years	15	13.0
Residential projects	36	31.3
Commercial projects	45	39.1
Public infrastructure projects	34	29.6
Private company	52	45.2
Government agency	25	21.7
Individual client	38	33.0
Small organisation (1–10 employees)	50	43.5
Medium organisation (11–50 employees)	65	56.5
Project budget below ₦50 million	9	7.8
Project budget ₦50–100 million	27	23.5
Project budget ₦101–500 million	79	68.7
Project duration 6–12 months	59	51.3
Project duration 13–24 months	43	37.4
Project duration above 24 months	13	11.3
NSE membership	63	54.8
CORBON membership	18	15.7
NIQS membership	16	13.9
NIA membership	9	7.8
No professional membership	9	7.8

Characteristic	Frequency	Percentage (%)
Client	33	28.7
Consultant	39	33.9
Contractor	43	37.4

Source: Field survey.

Table 2 summarises the responsibilities of clients, consultants and contractors by age group, as derived from the survey responses.

Table 2. Responsibilities of clients, consultants and contractors by age group.

Age group	Clients	Consultants	Contractors
20–29 years	Clients within this age group tend to be uncertain about what they want in terms of result of their project, thereby resulting in a lot of timely changes, corrections and input, which affects the project cost, timeline and general project life cycle	Consultants within this age group, from the result of the research tends to accept jobs and engage them without proper feasibility studies, to be sure the project they are about to work on will reach the desired result, they are mostly hasty to get on the job, which mostly result in back and forth and corrections in the course of the project which generally affects the project planning and delivery.	Contractors within this age group are mostly without adequate experience of engaging a project, they tend to get on a job without having proper planning on cost of running the projects, they get on the job and the lack of proper planning affect the project life cycle and delivery timeline
30–39 years	Clients within this age group, mostly have a drive and a plan of what they want, but the need for shelter of their own mostly clouds their judgement which brings them to hasty decision making during planning, which in the course of the project, they usually want to have a different result from the project, this tends to slow down project delivery, change cost and affect the general project life cycle	Consultants within this age group, mostly have some level of experience and a plan of the result of the project they want to engage, but the need to build client base mostly clouds their judgement which makes them accept the clients' interest even when they are sure those interests might not work according to the ethics of the profession, which in the course of the project, they usually want to make changes, this tends to slow down project delivery, change cost and affect the general project life cycle	Contractors within this age group, mostly have some experience in project delivery, but have issues with cost planning, they tend to engage a job without adequately planning for the cost to completion, they get to a point and realise the need to work on cost, this tends to slow down project delivery, change cost and affect the general project life cycle

Age group	Clients	Consultants	Contractors
40–49 years	Clients within this age group, mostly know what they want in their project, they have well planned choices and cost expectations, but usually have issues due to family acceptance of the said project, in the course of engaging the project, the need for changes to suit the interest of a member of the family and issues in that regard they usually want to have a different result from the project, this tends to slow down project delivery, change cost and affect the general project life cycle	Consultants within this age group, mostly make firm decisions during the project planning, they tend to adhere to the ethics of their profession, which mostly give them an edge, but brings issues with the clients, sometimes resulting in delays in the course of the project, they usually want to have the exact result as planned, this tends to slow down project delivery, change cost and affect the general project life cycle	Contractors within this age group, mostly have all necessary plans for any project they want to engage, they tend to have equipment and tools of their own, which makes project planning and execution easier, they usually don't want anything to affect the plan that was made from the start of the project, sometimes resulting in delays in the course of the project, due to changes from the client or economic issues that can't be avoided, this tends to slow down project delivery, change cost and affect the general project life cycle
50 years and above	Clients within this age group mostly have everything put together, they have mature interest, and know exactly what they want from the project, they usually do not have as many issues as the other age groups, due to the fact that their interest mostly align with proper planning for cost and timeline in the course of the project, they usually want to have the exact result as planned, which mostly helps the project life cycle and swift delivery.	Consultants within this age group mostly have adequate experience and solid portfolio, they know exactly what the ethics of their profession demands and they usually do not have as many issues as the other age groups, due to the fact that their interest mostly align with that of the clients, they usually want to have the exact result as planned, which mostly helps the project life cycle and swift delivery.	Contractors within this age group mostly have adequate experience and solid portfolio, they have equipment, proper labour team and generally have all it takes to deliver a project, they usually do not have as many issues as the other age groups, which mostly helps the project life cycle and swift delivery.

The profile indicates that the study captured views from all three stakeholder groups and included respondents with varying levels of professional experience. More than half of the respondents had 6–10 years of experience, while the distribution across organisational types and project categories suggests that participants were drawn from different construction settings. It should be noted that respondents reported experience with residential, commercial and public infrastructure projects; therefore, the findings reflect stakeholder experiences across these project types rather than residential projects exclusively.

4.2 Responsibilities of clients, consultants and contractors

The findings show that the three stakeholder groups undertook different but interconnected responsibilities in project planning, design and resource management (Table 3). Among clients, involvement in defining project scope recorded a mean of 1.96 (SD = 0.83), while participation in planning meetings recorded a mean of 1.95 (SD = 0.56). Clarity of project objectives had a mean of 2.27 (SD = 0.85). However, client input into design and cost-estimation decisions recorded a higher mean of 2.51 (SD = 1.15), suggesting that involvement in these technical and financial decisions was less consistent. Communication with consultants during planning recorded a mean of 2.60 (SD = 0.63), while communication with contractors recorded 1.60 (SD = 0.69).

For consultants, involvement in preparing design documentation recorded a mean of 3.04 (SD = 1.59). Collaboration with clients during the design stage recorded a mean of 2.25 (SD = 0.63), while perceived design-documentation accuracy recorded 2.61 (SD = 1.54). Design errors contributing to cost overruns recorded a mean of 2.34 (SD = 0.74), and design errors contributing to delays recorded 3.04 (SD = 1.07). Design changes after project commencement had a mean of 1.83 (SD = 0.94), indicating that such changes were reported as a recurring issue. These results highlight the importance of coordinated design development and timely resolution of client requirements.

Contractors reported regular preparation of resource allocation plans (mean = 1.59; SD = 0.79). Resource management in supporting timely delivery recorded a mean of 1.39 (SD = 0.75), whereas its effectiveness in controlling project costs recorded a higher mean of 3.40 (SD = 1.38). Resource shortages had a mean of 1.11 (SD = 0.31), and material price fluctuations recorded 2.66 (SD = 0.85). The results suggest that, although contractors engaged in resource planning, shortages and cost-control difficulties remained important concerns.

Table 3. Selected indicators of stakeholder responsibilities.

Stakeholder	Responsibility indicator	Mean	SD
Client	Defining project scope before execution	1.96	0.83
Client	Participation in project planning meetings	1.95	0.56
Client	Clarity of project objectives	2.27	0.85
Client	Input into design and cost-estimation decisions	2.51	1.15
Client	Communication with consultants during planning	2.60	0.63
Client	Communication with contractors during planning	1.60	0.69
Client	Conflicts or disagreements during planning	3.01	0.96
Consultant	Preparation of design documentation	3.04	1.59
Consultant	Collaboration with clients during design	2.25	0.63
Consultant	Accuracy of design documentation	2.61	1.54
Consultant	Design errors contributing to cost overruns	2.34	0.74
Consultant	Design errors contributing to project delays	3.04	1.07
Consultant	Design changes after project commencement	1.83	0.94
Consultant	Communication with clients during design	1.82	0.85
Consultant	Communication with contractors during design	1.96	0.91
Contractor	Preparation of resource allocation plans	1.59	0.79
Contractor	Involvement of clients/consultants in resource planning	2.10	0.89
Contractor	Resource management for timely delivery	1.39	0.75
Contractor	Resource management for cost control	3.40	1.38
Contractor	Resource shortages affecting progress	1.11	0.31
Contractor	Labour shortages affecting delivery	1.86	0.52
Contractor	Material price fluctuations affecting delivery	2.66	0.85

Source: Field survey.

The findings demonstrate that stakeholders were involved in their respective areas of responsibility, but the effectiveness of this involvement varied. Clients were more engaged in general planning than in technical and cost-estimation decisions. Consultants' design responsibilities were affected by design errors and changes after project commencement, while contractors' resource planning did not remove the difficulties associated with shortages and cost control. This supports the view that project delivery depends not only on the existence of stakeholder roles but also on how effectively those roles are carried out and coordinated (Doloi, 2013; Project Management Institute, 2017).

4.3 Challenges arising from role overlaps, conflicts and inefficiencies

The challenges differed across the three stakeholder groups (Table 4). For clients, project delays were the most frequently selected challenge, reported by 19 respondents (57.6%), followed by cost overruns, and reported by 18 respondents (54.5%). Poor communication with contractors was reported by 45.5%, while weak monitoring practices were reported by 42.4%. The mean score for the frequency of cost overruns was 1.76 (SD = 0.43), while project delays recorded 2.08 (SD = 0.84).

Among consultants, frequent client scope changes were the leading challenge, selected by 21 respondents (53.8%). Inflationary pressures on materials followed at 48.7%, while poor communication with contractors was reported by 43.6%. In addition, client scope changes disrupting consultants' work recorded a mean of 2.90 (SD = 1.15), and financial constraints from clients recorded 2.91 (SD = 1.14).

For contractors, inflationary pressures on materials were the most frequently selected challenge, reported by 23 respondents (53.5%). Inadequate financing from clients followed at 41.9%, while inadequate supervision or unclear specifications were reported by 37.2%. Financing issues disrupting project execution recorded a mean of 2.34 (SD = 0.87), and material price fluctuations recorded 1.86 (SD = 0.53). These results show that project delivery constraints were experienced differently by each group, reflecting their respective positions in the project process.

Table 4. Major challenges reported by stakeholder groups.

Stakeholder	Challenge	Frequency	Percentage (%)
Clients	Project delays	19	57.6
Clients	Cost overruns	18	54.5
Clients	Poor communication with contractors	15	45.5
Clients	Weak monitoring practices	14	42.4
Clients	Poor communication with consultants	13	39.4
Clients	Inadequate financing	12	36.4
Consultants	Frequent client scope changes	21	53.8
Consultants	Inflationary pressures on materials	19	48.7
Consultants	Poor communication with contractors	17	43.6
Consultants	Poor communication with clients	16	41.0
Consultants	Inadequate stakeholder documentation	14	35.9
Consultants	Regulatory or approval delays	12	30.8
Contractors	Inflationary pressures on materials	23	53.5

Stakeholder	Challenge	Frequency	Percentage (%)
Contractors	Inadequate financing from clients	18	41.9
Contractors	Inadequate supervision/unclear specifications	16	37.2
Contractors	Poor communication with consultants	15	34.9
Contractors	Poor communication with clients	14	32.6
Contractors	Labour shortages	13	30.2
Contractors	Regulatory delays	12	27.9

Source: Field survey.

The results indicate that project delays and cost overruns were particularly visible to clients, while consultants were affected by changing client requirements and contractors by material price instability and financing constraints. These findings are consistent with construction research identifying scope changes, communication breakdowns, financial constraints and resource-price fluctuations as sources of project disruption (Aibinu and Jagboro, 2002; Doloi, 2013). They also show that the challenges are interrelated: changes in scope may require redesign and additional resources, while delayed funding and inflation can affect procurement and construction progress.

4.4 Strategies for improving stakeholder collaboration

The respondents identified financial planning, transparent procurement, stakeholder collaboration, progress monitoring, professional accountability and timely funding as important improvement measures (Table 5). Better financial planning was the leading measure for improving cost efficiency, selected 42 times (36.5%), and followed by transparent procurement processes at 28.7%. For improving timely delivery, stronger collaboration among stakeholders was the leading measure at 31.3%, followed by regular progress reviews at 27.8%.

For consultants, stronger professional accountability frameworks (29.6%), collaboration with clients and contractors (27.8%) and continuous professional development (27.0%) were among the leading measures for improving efficiency. For contractors, stronger enforcement of contracts (29.6%) and better collaboration with clients and consultants (27.0%) were prominent. Timely provision of funds was the leading measure for improving contractor resource management and scheduling, selected by 37 respondents (32.2%).

Table 5. Selected measures for improving stakeholder performance and collaboration.

Improvement area	Proposed measure	Frequency	Percentage (%)
Cost efficiency	Better financial planning	42	36.5
Cost efficiency	Transparent procurement processes	33	28.7
Cost efficiency	Stronger consultant accountability	21	18.3
Cost efficiency	Improved contractor resource management	19	16.5
Timely delivery	Stronger collaboration among stakeholders	36	31.3
Timely delivery	Regular progress reviews	32	27.8
Timely delivery	Clearer project scope definition	27	23.5

Improvement area	Proposed measure	Frequency	Percentage (%)
Timely delivery	Modern project management tools	20	17.4
Consultant efficiency	Stronger professional accountability	34	29.6
Consultant efficiency	Better collaboration with clients and contractors	32	27.8
Consultant efficiency	Continuous professional development and training	31	27.0
Consultant efficiency	Modern project management tools/software	18	15.7
Consultant cost advice/ supervision	Stronger enforcement of industry standards	34	29.6
Consultant cost advice/ supervision	Adoption of digital cost-estimation tools	29	25.2
Consultant cost advice/ supervision	Improved communication channels	28	24.3
Consultant cost advice/ supervision	Regular training on emerging practices	24	20.9
Contractor efficiency	Stronger enforcement of contracts	34	29.6
Contractor efficiency	Better collaboration with clients and consultants	31	27.0
Contractor efficiency	Improved access to financing	28	24.3
Contractor efficiency	Modern project management tools/software	22	19.1
Contractor resource management	Timely provision of funds	37	32.2
Contractor resource management	Clearer project scope definition by clients	29	25.2
Contractor resource management	Adoption of digital scheduling tools	25	21.7
Contractor resource management	Stronger consultant supervision and support	24	20.9

Source: Field survey.

The findings suggest that respondents prioritised practical management measures that address funding, coordination, monitoring and accountability. Better financial planning can help align project scope with available resources, while transparent procurement can strengthen cost control. Regular progress reviews and stronger collaboration can improve the flow of information and support early identification of delivery problems. The emphasis on accountability and contract enforcement also indicates the need for each stakeholder to fulfil agreed responsibilities. These findings are consistent with the collaborative principles discussed by Nyström (2005) and Walker and Lloyd-Walker (2015).

5 Conclusion and recommendations

5.1 Conclusion

The study examined the responsibilities of clients, consultants and contractors, the challenges affecting their performance and the strategies that could improve collaboration in building project delivery. The findings showed that the three stakeholder groups performed important but interdependent functions. Clients were involved in defining project scope and planning, consultants

contributed to design and professional coordination, and contractors undertook resource planning and construction execution. However, gaps remained in client participation in technical and cost decisions, the management of design changes, contractor cost control and the availability of project resources.

The challenges were stakeholder-specific but interconnected. Clients identified project delays and cost overruns as leading concerns; consultants were particularly affected by frequent scope changes and inflationary material costs; and contractors faced material price increases and inadequate client financing. Respondents identified better financial planning, transparent procurement, stronger collaboration, regular progress reviews, professional accountability and timely funding as important improvement measures. Effective residential project delivery therefore requires clear responsibilities and sustained coordination throughout planning, design and construction.

5.2 Recommendations

1. Clients, consultants and contractors should agree on clearly defined roles, responsibilities, decision-making authority and communication procedures before project execution. These arrangements should be reflected in project briefs and contract documents.
2. Clients should strengthen financial planning and ensure that project funds are made available in accordance with agreed cash-flow and payment schedules. Transparent procurement and timely approval of variations should also be prioritised.
3. Consultants should improve the coordination and checking of design documentation, communicate design changes promptly and maintain effective channels of communication with clients and contractors throughout the project.
4. Contractors should strengthen resource allocation, cost monitoring and work scheduling, while all stakeholders should hold regular progress meetings to identify and resolve delivery problems before they escalate.

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