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AN ASSESSMENT OF CLIENTS' PERFORMANCE IN HAVING AN EFFICIENT BUILDING PROCESS IN UGANDA

Henry Mwanaki Alinaitwe

Dept of Civil Engineering, Makerere University, P. O. Box 7062, Kampala, Uganda
E-mail: alinaitwe_h@tech.mak.ac.ug

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Abstract. Over the years researchers have paid little attention to the performance of the clients in the building industry. Much of the research on improvement of performance of the construction industry has mainly focused on contractors and the supply chain. The performance of a client is important because any decision made will affect project success. Failure on the part of the client might lead to stress factors causing significant problems in successive stages of the project. This research is an investigation into the roles of the client to find out whether clients in the building industry in Uganda are playing their part. Due to the non-specific nature of clients, a guided questionnaire survey was carried out among architects who normally work with different types of clients. The majority of the building clients in Uganda are individuals followed by limited liability companies. It was found out that delay by clients in paying the contractors is a major factor affecting the performance of contractors. Almost all clients do not support training of the workers in its different forms. Construction works start before the designs are completed and the majority of the variations is due to incomplete briefs and designs. Many clients or their representatives do not attend meetings as regularly as would have been necessary. This study reveals information that will help clients in their future projects for ensuring successful building project implementation.

Keywords: roles, clients, building, productivity, performance, Uganda.

1. Introduction

Over the years researchers have paid little attention to the performance of the clients in the industry. There is still a paucity of research that allows one to better understand the key roles of clients (Egbu, Ilozor 2007). Much of the research on improvement of performance of the construction industry has mainly focused on contractors and the supply chain. The performance of clients has not been adequately investigated especially in the developing countries. Research has rather focused on the construction process paying particular attention to the performance of the contractor (Adams 1997). The performance of the client is important because any decision made will affect project success. Failure on the part of the client might lead to stress factors causing significant problems in successive stages of the project. The client plays an important role in the procurement of construction activities and in the implementation of construction projects (Egbu, Ilozor 2007). Egan (1998) noted that the potential for change in construction is well informed, demanding clients who know what they want and how much they are prepared to pay for it, and they are able to specify their requirements clearly. Those clients are an essential prerequisite to the achievement of a modern, efficient, world-class house building industry.

In developing countries, attempts to improve contractors' performance have failed to yield significant results (Cattell 1994). In particular, dedicated contractor-support agencies have not succeeded (UNCHS...1996), and almost all of them have collapsed (Talukhaba 1998). The failure is partly because many clients do not properly play their roles. Alinaitwe *et al*. (2007a) identified the key factors that affect labour productivity on building sites in Uganda. These include a numbers of factors that are influenced by the client including design changes, stoppages because of disputes with owners, stoppages because of insolvency, small construction volume, adherence to regulatory requirements, inspection delays and so on.

In UK, there has been a significant decline in public sector construction activity (Fellows *et al.* 2002). There has been an increase in the importance of the private client. This situation is similar to what is happening in Uganda because of privatization trends adapted by government. It would be interesting to know if the clients who are largely from the private sector are playing their rightful roles. The objective of this paper is to find out to what extent clients are playing their roles and what affects the productivity of the workers on the site. Information revealed would help clients, architects and policy makers in ensuring successful project implementation in future projects.

2. Literature review

2.1. Who a client is

The success of the project depends as much on the client as it does on the consultants and contractors.

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A client is seen as the person or firm responsible for commissioning and paying for the design and construction of a facility and is usually the owner of the facility being commissioned (The BPF system...1983; Bryant *et al.* 1969). However, Boyd and Chinyio (2006) broaden the definition to include representatives of the owner or act with delegated authority of the owner. The broad definition of the client raises a host of issues such as the decision-making powers of the client, the level of influence the client possesses, and the requirements of the client. There is also the issue of the nature and type of clients. Another division differentiates the paying client from the end user. There is a school of thought that makes the difference between an identifiable client and a virtual client. Clients can be seen as one-off clients or repeat business/continuing clients, or sophisticated or naïve clients. Construction clients are heterogeneous and attempts have been made to differentiate them. For example, Naoum and Mustapha (1994) grouped clients into on going, on-off and one-off. Flanagan and Norman (1993) classified clients as public and private ones. Masterman and Gameson (1994) categorised clients into secondary experienced, primary experienced, secondary inexperienced and primary inexperienced. It could be argued that the nature and type of client impacts on the role and contribution a client makes. For this study the focus is on clients who pay for the works, at times referred to as employers (ASCBC...1992) irrespective of the different types of client as identified above.

2.2. Review of the role of clients

Bowen *et al.* (1997) state that the construction industry potentially has a higher proportion of dissatisfied and critical clients than any other industry. Kometa *et al.* (1994) concluded that there is an evidence to suggest that clients are largely misunderstood and dissatisfied with the performance of their consultants and contractors. If that is true, one then wonders whether the clients themselves play their roles in satisfying other stakeholders. Mbachu and Nkado (2006) argue that the construction industry's service providers have been unable to fully grasp the issue of client satisfaction largely because of the absence or unawareness of a mechanism for measuring satisfaction in the procurement process. Tindiwensi (2006) found out that shortcomings of labour management such as poor motivation, unfair wages and lack of training contributed to client dissatisfaction. Yet the clients themselves can directly influence these.

Construction clients have project needs such as timeliness of completion, aesthetics, cost of the project and safety of production (Hewitt 1987). These needs are part of project schemes and should be satisfied by building teams.

Clients' performance criteria are defined as those measures used to assess the performance of clients based on review of literature on client's responsibilities. Performance in construction has traditionally been assessed on cost, quality, schedule and resources. The client has the responsibility in selecting design consultants who are able to offer designs that are not only safe to use but also are capable of being built safely. The client must appoint a contractor who is competent and can build the project in a safe way. This may involve safety records being inspected as a qualification for selection of a tenderer (Fellows *et al.* 2002). At times, clients use nominated subcontractors to provide for specialized items. The advantages of subcontracting are that due to limited specialization the labour and plant or the goods supplied will be suitable for the work to give increased productivity and quality.

The client has a role to arrange finances for the project and make predictions of the total cost of the project and the associated fees and charges. One of the main problems faced by contractors is delay in receiving payments from the client. This, in turn, has a knock on effect on suppliers and subcontractors who may not be paid until the main contractor has received the relevant interim payment from the client. Risks that cannot be controlled by constructors should ultimately be borne by the client (Fellows *et al.* 2002). Clients pay for the insurance policies that they enter into to protect the works. The client should facilitate the contractor to obtain a joint names policy for the works (ASCBC...1992). Lack of access to finance is arguably the most critical of these constraints (Hewitt 1987). At least, it prevents contractors from satisfying the financial requirements necessary to secure projects, and procuring the other resources such as managerial and technical expertise.

Clients' needs and requirements in the development process can be categorized broadly into design, management, and construction services (Mbachu, Nkado 2006). In the UK, the client has a statutory duty to appoint a planning supervisor for the purposes of preparing a safety plan and monitoring the implementation of the plan on site (Fellows *et al.* 2002). The client needs to provide the planning supervisor with details of the project to enable him perform the work properly.

A review of the Agreement and schedule of conditions of building contract (ASCBC...1992) and Federation Internationale des Ingeniuers – Counsels conditions of contract (FIDIC Conditions...1987) reveals the roles enumerated in Table 1 below. The roles have been summarised under quality, cost, schedule and resources but many overlap in the given categories.

3. Methods

The research approach includes a review of background literature, interviews with architects on building construction projects, analysis of this information to develop findings, and extending these to present the key strategic issues that could be targeted for improving the roles of clients within Uganda building industry in order to improve workers' productivity.

The empirical data was collected through structured interviews with architects. The main topics in the questionnaire were to do with costs, quality, schedules and resources. This study adopted a positivist method, a guided questionnaire-based survey. This is a suitable approach to the research problem (Raftery *et al.* 1997). It supplements the qualitative approaches to the explanation of the on-site effectiveness in construction by clients of

Table 1. Summary of roles of clients in the building industry (ASCBC...1992; FIDIC Conditions...1987)

Quality	Cost	Schedule	Resources
Supervise the implementation of works on a timely basis. Carry out evaluation and give feedback for improvement of future projects. Attend site meetings to get to know the progress and contribute to solving problems. Determine the employment of the contractor in case of persistent default.	Approve and pay money due to the contractor as agreed. Handle claims and disputes in a timely manner. Pay incentives and bonuses, where work is completed in time within budget.	Provide adequate time for the project's completion. Provide information in time for any variations.	Provide clear roles and responsibilities of the parties involved in the project. Select suitable professionals, contractors and suppliers. Acquisition of consents and permits. Determine the securities and guarantees required for the project. Inform the stakeholders about the project. Appoint competent supervisor/clerk of works for the construction stage. Provide for health and safety of workers. Enable the contractor to arrange insurance for the works. To provide bonding/surety for work carried out by the contractor. Adequate preparation of contract documents including drawings. Engage tradesmen for executing the work not forming part of the contract.

the building industry. In most cases, the architectural profession is seen to encompass the building process up to final handing over of projects. Therefore, they are more knowledgeable than even the clients themselves. The building industry in Uganda is unique in the sense that most clients are of one-off nature. Therefore, it was found necessary to obtain responses from architects since they have dealt with many clients. Architects are involved in all the phases of formal building projects, and they are the principal consultants.

3.1. Data collection and analysis

A list of all the architects was obtained from the Uganda Society of Architects. Each of the architects was asked to provide information based on one project that has just been completed and for which they were the lead architects. The list consisted of 98 architects and an attempt was made to contact every single one of whom 66 responded, thus giving a response rate of 67 %.

The analysis of the data was through the SSPS 10.0 packages. The data collected from the survey was coded and entered into the software that calculated all the required statistics.

4. Results and discussion

The architects involved have varying experience in the building industry with a mean of 8.08 years. Some have experience of 30 years, while others are just a few years in the field. This can be explained by the fact that architectural courses are relatively new in the country and that is where most architects have studied. The projects have varying sizes of cost. The smallest being worth 0.7 million Uganda shillings (approximately 400 United States dollars) and the largest 51.2 billion shillings (USD 29.2 million). The mean is 2.308 billions (USD 1.3 million). The majority of the clients at 45.5 % are individuals followed by limited liability companies (Table 2). The majority of the buildings were residences. The main source of finance for individual and limited liability companies was through private arrangement. Government projects both local and central accounted for 7.6 % of the clients within the sample projects. The rest of the projects were carried out by NGOs and parastatals.

Table 2. Distribution of clients of recently concluded building projects

Type of Client	Frequency	Percent
Central government	4	6.1
Local Government	1	1.5
Limited Liability Companies	22	33.3
Individuals	30	45.5
Others (NGOs, Parastatals)	9	13.6
Total	66	100.0

The majority of the clients do not attend the scheduled meetings regularly as on average they attended about 40 % of those scheduled. Lack of regular attendance at meetings implies that the clients do not always keep track of the project developments. This might lead to variations for which the client might not have a clear background.

The majority of the contractors were paid within less than 21 days from the date of certification. However, more than 33 % were paid in a period beyond one month. ASCBC provides that payment be made within 14 days from presentation. Therefore on a number of occasions, contractors are paid beyond the time stipulated in the conditions of contract. This leads to low morale on the part of contractors. Delay in payment also leads to delay in other activities due to the knock-on effect. It is ironic

that even as the Government is taking measures to improve the performance of contractors, the public clients are seldom good clients. There is poor financial planning and management (Tindiwensi 2006).

The survey also found out that most of the clients do not provide any advance payment to the contractors, as provided in FIDIC (1987). The majority of contractors are small and medium sized enterprises (SMEs) that might be facing problems with accessing finances from lending institutions. Lack of advance payment leads to poor cash flow for the contractors. At the same time, the survey found that 89 % of the clients did not provide any bonus to the contractor where work was promptly completed, as provided in FIDIC (1987). Payment of bonus is one of the incentives clients can use to motivate contractors so that they can complete in time.

The average cost of variations as a percentage of the contract sum was about 30 %. Incomplete briefs, incomplete designs and changes in design cause the majority of the variations. These account for 27, 21 and 14 % of the variations respectively. Although most of the architectural and structural designs are complete by the time the contract is placed, most of the mechanical and electrical designs are incomplete. The tendency to start work even when the designs are incomplete is a major source of variations.

More than 90 % of the clients do not support training. Lack of training has a big bearing on the quality of skills available in the market. Lack of skills was found to be a major factor affecting productivity in Uganda (Alinaitwe *et al*. 2007). In this country, contribution to the training programmes is not mandatory for contractors like in the UK, where there is a levy for Construction Industry Development Boards. The industry is comprised of many small- and medium-size enterprises (SMEs) that do not want to invest in training. The SMEs seize the opportunity of undertaking the relatively unattractive construction contracts on unattractive markets and the rural communities (Eyiah, Cook 2003).

Clients successfully handled the disputes and claims, whenever they arose between the contractor and the supervisors as more than 80 % were resolved. Although there are many problems in the industry, it looks as if the contractors are reluctant to present their grievances. This attitude might be due to the fact that contractors do not want to be blacklisted by the clients and therefore loose out on future jobs.

The survey revealed that most clients do not provide for insurance of the building works as on average less than 20 % of the value of the works is insured. Lack of insurance has an effect on progress of works, especially when hazards do occur. The client should facilitate the contractor to insure the works.

The survey found out that clients advised the contractors about the milestones in order to develop a work programme that meets those dates. In addition, the clients provide ample time for the contractors to complete the projects. However, most of the projects are phased out. Many projects are discontinuous and temporary and there are often no linkages between the projects and construction business processes.

The survey indicated on a five-point scale where 1 represents "strongly agree", 3 represents "neutral" and 5 represents "strongly disagree" that the clients:

- Appointed competent supervisors to supervise the construction works ($\mu = 1.95$).
- Consulted the relevant stakeholders before commencing construction works ($\mu = 2.22$).
- Appointed a competent main contractor ($\mu = 2.45$).
- Nominated suitable suppliers ($\mu = 2.63$).
- Selected suitable consultants for the work ($\mu = 1.75$).
- Respected the consultants' advice ($\mu = 1.98$).
- Appointed the design team to carry on with the construction ($\mu = 1.39$).
- Were involved in the design process ($\mu = 1.90$).
- Acquired the permits to enable the works to proceed smoothly ($\mu = 2.40$).
- Provided clear roles and responsibilities ($\mu = 2.78$) to those brought onto the project.
- Appointed competent nominated subcontractors for the works ($\mu = 2.46$).

Architects are not sure whether clients provide adequate support to the contractors in ensuring the health and safety of workers ($\mu = 2.97$). This partly explains the reason why there are many accidents in the building industry in Uganda (Alinaitwe *et al.* 2007b). The majority of the architects believe that the productivity of the workers is influenced by the way the client plays their roles ($\mu = 2.78$). When asked to give one role that the clients should improve in order to increase the productivity of the workers, the majority (40 %) would like to see the payments made on time. Others would like to see more respect to the consultants, while others would like to see more involvement in the design process and quick decision-making.

5. Conclusion

The objective of this research was to review the roles of clients in the building industry and to find out whether the clients are carrying out those roles in order to have an efficient construction process.

The survey carried out on architects has indicated that clients carry out many of their roles in the context of the building industry in Uganda. However, clients do not perform well in the areas of paying the contractors as agreed, training the workforce, and insuring the work. These areas have a direct bearing on the productivity of the labour force and should therefore be addressed for improvement. A survey on major clients in the UK indicated that one the most important changes to improve the general efficiency and productivity of the industry was the choice of simple contracts (Latham 1994). The choice of the conditions of contract is a matter for the client, who arranges the funding for the project and pays for it. When both main parties to the contract – client and contractor – equally are matched, the choice of the contract

conditions should be mutually agreed and the parties should as much as possible fulfill what is agreed upon.

The other area that is lacking is in the incomplete designs at the commencement of construction works. The survey found out that although architectural designs and structural designs are usually substantially complete at works commencement, mechanical and electrical works are far from completion. Using incomplete designs at construction commencement inevitably leads to variations and at times rework. Clients should work on the identified areas in order to have a more efficient building process.

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UŽSAKOVO DALYVAVIMO EFEKTYVIAME STATYBOS PROCESE ĮVERTINIMAS UGANDOJE

H. M. Alinaitwe

Santrauka

Daug metų mokslininkai mažai kreipė dėmesio į užsakovų dalyvavimą statybos pramonėje. Dauguma atliktų mokslinių tyrimų, susijusių su statybos pramonės darbų kokybės gerinimu, yra orientuoti į rangovus ir tiekimo grandinę. Užsakovo dalyvavimas yra svarbus todėl, kad kiekvienas priimtas sprendimas gali daryti įtaką projekto sėkmei. Užsakovų žlugimas gali sudaryti įtampą, kuri gali kliudyti sėkmingai vykdyti projekto stadijas. Straipsnyje buvo nagrinėjamas užsakovų vaidmuo, norint nustatyti, ar užsakovai Ugandoje aktyviai dalyvauja statybos pramonėje. Buvo atlikta apklausa architektų, kurie dirba su įvairiais užsakovais. Dauguma statybos užsakovų Ugandoje yra ribotos atsakomybės įmonės. Taip pat buvo pastebėta, kad užsakovo delsimas sumokėti rangovams yra vienas iš svarbiausių veiksnių, darančių įtaką rangovų darbui. Beveik visi užsakovai nepritaria darbuotojų kvalifikacijos tobulinimui įvairiais būdais. Dažniausiai statybos darbai yra pradedami dar nebaigus projektavimo darbų ir dauguma nukrypimų yra dėl neparengtos techninės dokumentacijos. Dauguma užsakovų ar jų atstovų nereguliariai dalyvauja svarbiuose susitikimuose. Šis tyrimas pateikia informaciją, kuri padės užsakovams ateities projektuose ir užtikrins sėkmingą statybos projektų vykdymą.

Reikšminiai žodžiai: vaidmuo, užsakovai, statyba, produktyvumas, dalyvavimas, Uganda.

Henry Mwanaki ALINAITWE has been carrying out research on productivity and performance improvement in the construction industry. He has authored several papers that have been published in international peer reviewed journals and conferences. He has a PhD and a Licentiate Degree from Lund University (Sweden), an MSc in Construction Management from Loughborough University (UK) and a Master's degree in Civil Engineering from the University of Sydney (Australia).