Stakeholders' Perception of the Success of Tertiary Education Fund Construction Projects

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Abstract

Projects funded by the Tertiary Education Trust Fund (TETfund) at the Ahmadu Bello University, Zaria, from 2009 – 2011 was assessed in this study in order to determine stakeholders' perception of the projects' satisfaction. The study utilized primary and secondary data. The secondary data were obtained from existing literature on project success and project stakeholders while the primary data was obtained through interviews with key stakeholders and, from checklist and questionnaires. Results of the study revealed that, delay in progress payment, escalation in price of materials, insufficient supply of materials and low technical skill of the project leader are the topmost factors hindering satisfaction of the projects, as most of them were discovered to be unsuccessful. However, furniture, structural stability and ventilation were the highest ranked to be satisfactory by end users. The study recommends synergy between the various stakeholders involved; from project inception stage to project completion stage.

Keywords: *End users, Project success and stakeholders.*

Introduction

Clients invest in projects to derive benefits, which might be immediate or later. Thomas and Mullaly (2008) stressed that a project can be termed successful when sponsors derive benefit from the investment made. Peters (1999) submitted that there is the need to examine whether a project is successful or not successful for the client benefit. Construction project development involves numerous parties, various processes, different phases and stages of construction, with the aim of concluding the project successfully (Takim & Akintoye, 2002). According to Wai (2002); Takim and Akintoye (2002) the traditional method of assessing construction project involves the use of time, budget and quality.

Williams (2005) argued that factors such as complexity and uncertainty of project may result in overruns of project cost and duration of completion. Mohammed *et al.,* (2008) cautioned that a construction project might be completed as scheduled, within budgeted sum and specification but might not meet users' satisfaction and requirement. A way out was proposed by Samiaah, Hamzah and Zakaria (2010) to adopt new measures such as the assessment of stakeholders satisfaction level which can bring on board the users of the projects. This agrees with Roshana and Hamimah (2008) who stressed the adoption of new criteria that can be used to measure a project success with involvement of the stakeholders to assess project satisfaction. According to Takim and Akintoye (2002) a project stakeholder is any individual or group of people that can influence the project performance. In this research, the stakeholders here are: the contractors, consultants and end users. And, the paper assessed TETfund projects at the Ahmadu Bello University, Zaria, from stakeholders' viewpoints.

Review of Literature

Project success delivery

All construction project usually have both project inception and completion phases. According to Saidu and Shakantu (2016) a building project phases encompass: project design, project planning, project construction and project completion and handing over phases. Assaf and AL-hejji (2006) submitted that challenges that might inhibit project delivery are not limited to inadequate planning and scheduling, insufficient experience, altering of the project scope, divergent views in the co-ordination and communication between stakeholders and time-consuming information flow pattern between the

stakeholders. Yang and Peng (2008) opined that client's demand for a project to be delivered as scheduled, within stipulated time and required quality should be in line with contractual duties, obligations and responsibilities.

Shehu and Akintoye (2010) found evidence in their study that the major challenges to project delivery in the construction industry are: non commitment from project management team, lack of proper coordination by relevant stakeholders, inadequate knowledge relating to portfolio and risks management technique, lack of cross-sectional communication, lack of adequate techniques to measure project success and financial constraints.

Pinto and Slevin (1987) in a study conducted on critical project factors submitted that the factors should include: mission of project, support of the key management, timeliness and schedules, clients view, user satisfaction, early resolution of glitches that arise and information flow across levels. Jugdev and Müller (2005) have a contrary view about project success factors; they believed that it should involve other stakeholders involved in the project. But Mallak *et al.* (1991) believed that various stakeholders will have different project success factors due to individuals influence.

Again, Turner and Zolin (2012) submitted that project success factors should extend beyond project completion phase, in order to have a better understanding of project from end users perspective. Bandar (2011) put forward that cost, quality, time and users satisfaction should be used to measure a project success.

The challenge of evaluating project success is obvious. Anderson *et al.* (2006) linked various perspectives on project success factors to the inherent characteristics noted with construction projects. Al-Sedairy (1994) believed that having a frosty relationship between stakeholders occurs very often. Bandar (2011) agreed with Lim and Mohamed (1999) and Al-Sedairy (1994) argued that a project can be termed successful if it completed within planned cost, time and quality of the project and benefits derived during the life cycle. Lack of proper coordination might limit the level of success to be achieved in a project life cycle. When adequate provisions are not made at any stage of a project life cycle, it might impact negatively on a project (Chan & Kumaraswamy, 1997).

This was noted to be caused by insufficient

planning at the various project stages (Lim and Mohamed, 2000). A measure to prevent overrun to cost, time, quality and satisfaction was proposed in the research conducted by Koushki *et al.,* (2005) put forward the need to employ a formidable project team who will work harmoniously in the interest of the client.

Project Stakeholders

All projects have their particular stakeholders, who`s actions have impact on the project. The Project Management Institute (2004) put forward project stakeholders to be individuals and organisations that are actively involved in the project or, whose interest may be affected as a result of project completion. There is need to measure project success from various perspectives.

Davis (2014) argued that a good method to measure a project success is by assessing project success from various stakeholders involved in a project by assessing time, cost, quality using stakeholders' satisfaction level, collaboration, similarity in objectives, finished project, capabilities of the project manager, accrued benefits from the project and top management inputs. In a study carried out by Alaghbari *et al*. (2007) on project performance and success, they concluded that inadequate level of dedication and dexterity of the project stakeholders affects the level of project success. A large project might be completed and commissioned as programmed and estimated but might fail in the eye of a key stakeholder. Brady and Davies (2010) in their study believed that the Heathrow Terminal 5 project was not successful, due to the glitches experienced after the project was commissioned.

They further stressed that the public who happens to be a key stakeholder, were faced with a lot of challenge immediately the facility was put in use even though the project was completed in good time and within the contract cost. Emuze (2012) proposed that adequate system for decision making between stakeholders project success. Randolph (2012) noted that working harmoniously with the host, regular information flow, reviewing project events and systems and providing avenue to strike out grievances that might arise will enable various stakeholders work harmoniously.

End users

Soliciting end user opinion when evaluating project performance has often been done in developed economies, unlike in the

underdeveloped world where awareness is still low (Amaratunga & Baldry, 2002). Emuze (2012) suggested the following criteria to assess user satisfaction of a project; functionality, accessibility, productivity, aesthetics, cost effectiveness, security and health safety. The inclusion of end users in the planning and designing stage is import for project success. Pinto and Pinto (1991) promoted the use of user's satisfaction through satisfaction with their interpersonal relations with project team members. Chan. and Chan (2004) advocated for a further study on the various levels at which the end users are satisfied with the project.

Komet, Olomolaiye and Harris (1995 suggested the use of safety, time and flexibility of project to assess project success. Songer and Molenaar (1997) noted the need the following criteria to be used to measure a project success: user's aspiration, specifications and the quality of work carried. Some projects evaluation efforts might not see the need for the inclusion of end users.

Leaman (2004) attributed this to apprehension to the project delivery team for them not be held accountable in case of eventuality. Sadeh, Dvir and Shenhar (2000) argued that when a project meets an end user`s need in terms of task enhancement and time of project completion it can be termed successful.

Research Methodology

The study used interview and questionnaire for data collection from consultant, contractors and end users of the projects. Purposive sampling was adopted in distributing questionnaires. Clients representatives here were the unit heads in architecture, quantity surveying and civil engineering departments. A total number of twenty-five (25) questionnaires were administered to various consultants, client`s representatives and contractors. Interviews were conducted with end users, which were majorly the head of department in faculties that presently occupy completed project sponsored by the Tertiary Education Trust Fund.

The project reviewed were those completed between 2009 and 2011, this was because the university main financier the TETfund has not been disbursing funds. A 5-point Likert scale was adopted to seek information from respondents where: 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly agree.

The Likert scale was transformed to Mean Item Score (MIS).

Findings and Discussion

Stakeholders Satisfaction

Table 1: Stakeholders criteria for project satisfaction

S/no		(MIS)	Rank
1.	**Contractual Relationship**		
i.	Communication between project stakeholders	3.6	1st
ii.	Communication system between project participants	3.1	2nd
iii.	Control mechanism of project activities	2.8	3rd
2.	**Consultants Related Factors**		
i.	Consultant co-operation to solve problem	3.6	1st
ii.	Consultants commitment to ensure construction works are done according to specification	3.2	2nd
iii.	Consultant commitment to monitor project progress	2.8	3rd
3.	**Contractor Related Factors**		
i.	Technical skills of the project team leader	3.4	1st
ii.	Project team leader capability to adapt to changes in project	3.2	2nd
iii.	Project team leader early and continuous involvement in the project	3.0	4th
iv.	Motivating skills of the project team leader	2.8	5th
4.	**Client Related Factors**		
i.	Client ability to brief on the project	3.4	1st
ii.	Client emphasis on low construction cost	3.2	2nd
iii.	Client interference during construction	3.2	2nd
iv.	Client ability to brief the project objective	2.8	4th

Table 1 shows stakeholders criteria for project satisfaction. For contractual relationship that respondents ranked communication between the project stakeholders as 1st with a mean score of 3.6. Regarding consultant related factors, consultant cooperation to solve problem and consultant commitment to ensure the construction work are done according to specification were ranked 1st and 2nd respectively with a mean score of 3.6 and 3.2 respectively. In contractors related factors, technical skills of the project team leader was ranked first with a mean of 3.4 while motivating skills of the project team leader was ranked 5th with a mean of 2.8. For client related factors, client ability to brief project objective was ranked 1st with a mean of 3.4 while client ability to make project decision was ranked 4th with a mean score of 2.8.

User Satisfaction

Table 2: End user's satisfaction of the projects

S/no	Elements of works in the projects	(MIS)	Rank
1	Furniture	4.6	1st
2	Structural stability	4.6	1st
3	Ventilation	4.6	1st
4	Toilets facilities	4.4	4th
5	Floor tiling	4.4	4th
6	Electrical fittings	4.4	4th
7	Doors and windows	3.8	7th
8	Painting	3.2	8th
9	Spatial environment	2.2	9th

Table 2 brings forward the level of user satisfaction with the various elements of the projects executed. From the table above, structural stability, ventilation and furnishing were ranked 1st having a mean score of 4.6. Toilet facilities, floor tiling and electrical fittings were ranked 4th by the respondents with a mean score of 4.4. Doors and windows were ranked as 7th with a mean score of 3.8 while end users ranked panting as 8th, with a mean score of 3.2. It can be said that, the users are mostly satisfied with the structural stability, ventilation and furnishing.

Factors militating against the success of the projects

Table 3: Factors militating the success of the projects

S/no	Factors	(MIS)	Rank
1.	Escalation of materials price	4.6	1st
2.	Insufficient supply of materials	4.6	1st
3	Delay in progress payment	4.6	1st
4	Technical skill of the project team leader	4.5	3rd
5	Project team leader experience	4.4	4th
6	Overall management actions	4.4	4th
7.	Economic environment	4.4	4th
8	Consultant commitment to ensure that construction work is done according to specification	3.8	5th
9	Motivating skills of the project team leader	3.6	6th
10	Quality control of materials	3.2	7th

Table 3 depicts the factors that mitigate the success of the projects. The respondents' ranked delay in progress payment, escalation in materials price and insufficient supply of materials as 1st with a mean of 4.6. Again, quality control of construction materials was ranked 8th as least militating factor against success of the project.

Projects evaluation result

Table 4: Projects Evaluation Results

S/No	Project	Status	Remarks
1	A	Completed within planned cost, time and quality	Successful
2	B	Completed within planned cost, time and quality	Successful
3	C	Completed within planned cost, time and quality	Successful
4	D	Completed within planned cost, time and quality	Successful
5	E	Not completed within planned cost, time and quality	Unsuccessful
6	F	Not completed within planned cost, time and quality	Unsuccessful
7	G	Completed within planned cost, time and quality	Successful
8	H	Completed within planned cost, time and quality	Successful
9	I	Not completed within planned cost, time and quality	Unsuccessful
10	J	Not completed within planned cost, time and quality	Unsuccessful
11	K	Not completed within planned cost, time and quality	Unsuccessful
12	L	Completed within planned cost, time and quality	Successful
13	M	Not completed within planned cost, time and quality	Unsuccessful
14	N	Not completed within planned cost, time and quality	Unsuccessful
15	O	Completed within planned cost, time and quality	Successful
16	P	Not completed within planned cost, time and quality	Unsuccessful
17	Q	Not completed within planned cost, time and quality	Unsuccessful
18	R	Completed within planned cost, time and quality	Successful
19	S	Not completed within planned cost, time and quality	Unsuccessful
20	T	Not completed within planned cost, time and quality	Unsuccessful
21	U	Not completed within planned cost, time and quality	Unsuccessful
22	V	Completed within planned cost, time and quality	Successful
23	W	Completed within planned cost, time and quality	Successful
24	X	Completed within planned cost, time and quality	Successful
25	Y	Not completed within planned cost, time and quality	Unsuccessful
26	Z	Not completed within planned cost, time and quality	Unsuccessful
27	A1	Not completed within planned cost, time and quality	Unsuccessful
28	A2	Not completed within planned cost, time and quality	Unsuccessful

Table 4 depicts the projects evaluation result based on cost of the project, time of project completion and quality of work delivered. It could be seen from the table above that majority of the project (43%) were not completed within planned cost, time and quality.

Interview conducted with end users

The interviews questions were designed to assess the satisfaction of end users on completed projects which was financed by tertiary education trust fund. The interviews carried out centered around structural stability of the project, satisfaction with the furniture's, mechanical and electrical services.

Structural stability: The study sought to understand what the respondents feel about the project structural stability through visual observaion. The end users were very satisfied regarding the structural stability. They felt confident occupy the facilities provided.

Satisfaction with furniture's: Majority of the respondents affirmed that they are satisfied with types of furniture's provided for them. It further enhanced their work performance.

Satisfaction with mechanical and electrical services: Information was sought regarding the satisfaction regarding mechanical and electrical services. The respondents affirmed that they are not satisfied regarding the toilet and electrical facilities provided at the project they occupy. They further stated that, no attempt was made to get their opinion before carrying out the project.

Conclusion

The study evaluated the tertiary education trust funds construction projects success from a stakeholders' viewpoints. The research sought the input of the project consultants, clients and end users regarding the project success. Results emanating from the study pointed out that, the delay in progress payment, escalation in price of materials, insufficient supply of materials and level of technical skill of the project leader are the topmost factors hindering projects success.

Again, furniture, structural stability and ventilation were the highest ranked to be satisfactory by end users. Furthermore, most of the project were discovered not be successful. The study recommends that there should be a synergy between the various stakeholders involved from project inception stage to project completion stage.

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