Measuring the performance of infrastructure projects through stakeholder’s perspective – A case study of ITDC.

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Abstract: Infrastructure stakeholders are individuals or groups who can affect or are affected by the performance of infrastructure assets. The satisfaction of these individuals and groups has become an important measure for the success of infrastructure projects. In the light of the extension of private sector involvement in financing, designing and constructing infrastructure, most of the previous research has focused on the satisfaction of clients and other actors participating in construction projects but has neglected infrastructure users and those stakeholders affected by these projects. In addition, a common assumption underlying prior research is that the expectations of stakeholders have to be met in order to achieve satisfaction. By using satisfaction as proxy to project success, it is argued that meeting stakeholder’s expectations and needs will favor the prospects of successful projects, while failing to do so can also cause projects to fail. Previous studies have tried to determine expectations of stakeholders (first of all customers or clients) about product and service attributes delivered in construction projects (e.g. quality of design, timeliness of service, communication, competence and reliability) and the extent to which these expectations are met.

1. Introduction

The construction industry is one of the most dynamic, risky and challenging business sectors. There is much waste and it encounters problems caused by myopic control. Previous research carried out in the field recommends that the construction sector must shift from being reactive to being more proactive and promote sustainable practices. Construction Industry forms one of the most diverse and unstable sectors within the economy and it faces wide fluctuating demand cycles, project specific product demand, uncertain productions conditions and has to combine a diverse range of specialist skills within geographically dispersed short term project environments. Considering the size and importance of the construction industry to the world economy and its contribution to environmental damage the suggestion has been made to use the emerging “sustainability” agenda as a lens through which construction performance can be measured.

Role of stakeholders in construction projects:

The term “stakeholder” is defined as “any group or individual who can affect or is affected by the achievement of the project’s objectives”. This definition is the foundation of stakeholder management, and it is characterized as being one of the broadest, in that it can include virtually anyone. Many writers described stakeholders as “individuals or organizations that are either affected by or affect the deliverables or outputs of a specific organization”, other defined stakeholders as “those who can influence the project process and/or final results, whose living environments are positively or negatively affected by the project, and who receive associated direct and indirect benefits and/or losses”.

The stakeholder “as being those who can influence the activities/final results of the project, whose lives or environment are positively or negatively affected by the project, and who receive direct and indirect benefit from it”.

There are stakeholders in construction undertakings, just as there are stakeholders in other endeavors. The checklist of stakeholders in a construction project is often large and would include the owners and users of facilities, project managers, facilities managers, designers, shareholders, legal authorities, employees, subcontractors, suppliers, process and service providers, competitors, banks, insurance companies, media, community representatives, neighbors, general public, government establishments, visitors, customers, regional development agencies, the natural environment, the press, pressure groups, civic institutions, etc. (Newcombe, 2003).
Literature Review

Title - Stakeholder Relationships and Project Success: An Examination of Sponsor Executing

Author – Debbie Tesch.

This study has been focused on the identification and/or validation of executive sponsor behaviors and their impact on project success. Project success measures have been consistent throughout all stages of this research, but sponsor behavior differs by stage in the project life cycle. This study examined empirically behavior associated with the role of a project sponsor during the executing stage of a project. Five distinct behavioral factors emerged for sponsors during the executing stage: build stakeholder relations; provide resources; ensure risk and quality; ensure communications; and ensure progress. Their findings indicate that build stakeholder relationships has a significant impact on the firm’s future and meeting agreements; ensure risk and quality has a significant impact on meeting agreements; and ensure communications has a significant impact on customer success. They offer theoretical and practical explanations for their findings.

Title - Infrastructure project performance in the South African construction sector: Perceptions from two provinces.

Author – Fidelis Emuze et al.

This study enlightens the need to examine management strategies that could engender performance improvement in infrastructure construction from the South African perspective. The survey was conducted among general contractor (GC) members of the South African Federation of Civil Engineering Contractors (SAFCEC), consulting engineer members of Consulting Engineers South Africa (CESA), and selected public sector clients. Using inferential statistics such as Cronbach’s alpha, t test and Cohen’s d effect size measures for data analysis led to a range of findings. Such findings show that inadequate coordination between project partners may indeed result in high levels of defects, rework, and non-conformances in construction; poor interface between multidisciplinary designers could lead to delays in projects, and inefficient and unstable logistics management may, in fact, lead to haphazard processing of orders, storage of materials, and poor inventory management. In essence, it can be argued that being quality focused, managing construction logistics optimally and making sure that consultants who are working on a project are collaborating effectively offers significant scope for performance improvement in the construction of infrastructure projects in South Africa.

Title - An Evaluation of Stakeholder Management Role in GET Fund Polytechnics, Projects Delivery in Ghana.

Author – Emmanuel Eyiah-Botwe.

This study explores the role of Stakeholder Management in GET Fund projects delivery. A mixed method approach of qualitative and quantitative surveys using semi structured interviews and questionnaire was adopted. Research findings were analyzed using triangulation and descriptive analysis methods to evaluate the role of SM in project delivery. SM plays major role in project time, cost overruns, scope variation, non-completion, abandonment and poor payment schedules through poor SM process consideration and records keeping. Respondents agree that SM role should be considered during project planning, development and execution stages using SM framework.

Title - An exploratory study on the relationship between stakeholder expectations, experiences and satisfaction in road maintenance

Author – Andreas Hartmann et al.

This study has been focused on the identification and/or validation of executive sponsor behaviors and their impact on project success. Project success measures have been consistent throughout all stages of this research, but sponsor behavior differs by stage in the project life cycle. This study examined empirically behavior associated with the role of a project sponsor during the executing stage of a project. Five distinct behavioral factors emerged for sponsors during the executing stage: build stakeholder relations; provide resources; ensure risk and quality; ensure communications; and ensure progress. Their findings indicate that build stakeholder relationships has a significant impact on the firm’s future and meeting agreements; ensure risk and quality has a significant impact on meeting agreements; and ensure communications has a significant impact on customer success. They offer theoretical and practical explanations for their findings.

Title - Performance indicators for successful construction project performance.

Author – Roshana Takim et al.

This study has identified the ten Key Performance Indicators (KPIs) parameters for benchmarking projects, in order to achieve a good performance, in response to Egan’s report. These consist of seven project performance indicators, namely: construction cost, construction time, cost predictability, time
predictability, defects, client satisfaction with the product and client satisfaction with the service; and three company performance indicators, namely: safety, profitability and productivity. Most of these indicators can be regarded as having results orientation, except for predictability of design cost and time, and predictability of construction cost and time, which can be regarded as procurement orientated, and safety, which can be regarded as process orientated. It is the contention of this paper that successful construction project performance can be divided along three orientations: procurement, process and result orientations. In addition, although these indicators provide a generic framework criterion for successful construction project performance, this current paper will provide a review of measurements developed to assess project performance and propose a model that will help to identify the performance of the stakeholders involved in a construction project.

2. Scope, Methodology, Purpose.

Scope :-

The objectives of the dissertation are mentioned as below.
 a) To study the role of stakeholders in success of infrastructure projects.
 b) To measure the performance of infrastructure projects through stakeholder’s perspective.
 c) To develop a model to measure performance of infrastructure projects.
 d) To provide guidelines/ Suggestions to the stakeholders in future infrastructure projects.

Methodology:-

For carrying out the proposed work, following methodology will be adopted for data collecting and analysis.
 a) Comprehensive review of literature to understand the key performance indicators for success of infrastructure projects in concern with stakeholders’ perception.
 b) Collection of data through personal interviews with stakeholders & questionnaires devised in that regards.
 c) Analysis of data to matriculate the collected data from case study of ITDC, Ichalkaranji.
 d) Developing a model to measure performance of infrastructure projects.
 e) Validation of proposed model through case study of ITDC, Ichalkaranji.

3. References


