An Evaluation of Impacts on Resource Levelling Practices and Performance by Construction Firms' in Kenya

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 Abstract

The construction industry is a highly dynamic sector and one of the most unique industries globally. It utilizes resources that have multiplier effect in the performance of any economy. In construction like in any other business, profitability fluctuates according to the efficient use of the resource input.

Under performance by construction firms' has been a major issue in project delivery in Kenya. The problem of construction projects not being completed within the stipulated time, budgeted cost, quality specifications and judicious use of resources has remained un-resolved for construction firms. Poor planning and scheduling by construction firms has resulted in inefficient utilization of resources notably labour, plant, materials, finance and technology on construction sites. The purpose of the study was to evaluate the effectiveness of resource levelling practices on overall performance of construction firms' in Kenya.

In the study, key performance indicators (KPIs) were established objectively through a comprehensive literature search and a pilot study. The limitations of the suggested KPIs were discussed and a benchmark for measuring the performance of construction projects was set with a view of establishing a prioritized list of project performance evaluation for the construction firms in Kenya.

The study employed the mixed approach design. It used Stratified sampling technique for quantitative data collection and purposive sampling for qualitative interviews. The study targeted 143 participants from National Construction Authority (NCA) registered contractors. The data analysis procedure adopted was: the descriptive statistics, correlation analysis, multiple regression analysis, statistical package for social sciences (SPSS) version 21 and Microsoft Excel 2010 software.

The findings from the study revealed three principal management tools that contribute towards the enhancement of construction firms' performance in Kenya namely: construction planning, financial control and resource control. It was found that these three management tools are associated with a number of key project characteristics, in particular, project cost, project time and quality Performance.

The result of this study is expected to ignite a paradigm shift for construction firms with respect to how prioritize construction planning and scheduling of resources during project implementation practice. Further, this paper has provided a prioritized list of relative importance for project performance evaluation which can be used by the top management in construction firms as a tool for enhancing construction project performance.