

**ADAPTATION OF THE SMART METHODOLOGY TO VALUE
MANAGEMENT OF THE UGANDA SCHOOL FACILITIES GRANT
PROGRAMME**

BY

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Abstract

In any construction project, the aim of the developer is to maximize profit at minimum cost within the context of the quality possible as per the required specifications. Therefore, loss of resources should be minimized as much as possible, especially in such a crucial project as the School Facilities Grant (SFG) project, so that there is perceived cost-effectiveness.

This dissertation considers the adaptation of the Simple Multi-Attribute Rating Technique (SMART) methodology, which is easy and useful for varied decision makers, to Value Management (VM) of the Uganda SFG primary school classroom construction programme in Mukono and Kampala districts. Application of SMART involves interacting with various stakeholders and then holding a key stakeholder workshop through which a shared understanding of the issues under consideration can be reached. This understanding is translated into an information pack developed for use in the workshop. A Value Tree is used as the tool for consideration of opinions by the stakeholders. The allocation of importance weights to the lower – order attributes of the tree provides a rational basis for determining the best-valued Design Option. Each Option is assessed against each of the identified attributes in the evaluation, the assessment being performed by a process of scoring the n Option against each attribute.

A Standard Analysis Form is used and the ratio of Aggregated Utility Rating to Estimated Capital Cost, U_i / C_i of the *i*th Design Option calculated, with the highest value of U_i / C_i providing the rational choice. The testing of the sensitivity of the outcome of the rating process to marginal changes in the key variables, or Sensitivity Analysis, is then carried out. This was applied to Value Management of the SFG school construction in the two mentioned districts. A brainstorming session was later held to generate a variety of ideas that would also enable the evaluation of the practicality of the identified Option.

The SMART methodology was found to be applicable to the SFG programme with the stakeholders being easily comfortable with the common understanding reached. They were also able to make some rational decisions/evaluations of the SFG Design Options. A new policy could be formulated for the programme and the model that has been obtained could be adapted for use for other projects.