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The constraints of using design and build for the procurement of construction projects in South Africa

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2010-09-27
http://hdl.handle.net/10539/8800

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Abstract

Despite the numerous advantages that design and build has as a procurement method for construction projects, which have made it the procurement method of choice for construction projects in Europe and North America, not many South African construction companies are making use of it. This study investigates the constraints which are associated with design and build in South Africa. It also seeks to find out how certain performance indicators in construction fare when design and build is used. It then proposes recommendations on how the method can be improved in order to increase its use in South Africa.

Data for the study was collected from six major professions in the construction industry including contractors, engineers, quantity surveyors, project owners, project managers and architects in order to give a more balanced view of the problems. Questionnaires, emails and telephonic conversations were methods used to collect the data. Sample t-tests were then conducted on the data using the statistical package, Statistical Analysis Systems (SAS).

The results obtained show that there are numerous problems faced in all phases of construction projects when design and build is used as the procurement method of choice in South Africa. Most of the problems are around the issues of inadequate knowledge by project owners in construction, and also the unavailability of manpower to help owners with technical issues. Of the performance indicators investigated, time management and project quality are found to perform poorly. Project owners should deploy their own project managers in the construction process.