

**CONSTRAINTS OF DESIGN AND BUILD SYSTEM IN  
DIFFERENT PHASES OF BUILDING PROJECTS  
IN SRI LANKA**

Mary Anitra

(158802V)

Degree of Master of Science

Department of Building Economics

University of Moratuwa

Sri Lanka

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## DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to best of my knowledge and belief, it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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Mary Anitra

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Date

The above candidate has carried out research for the Masters dissertation under my supervision.

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Dr. Kapila Devapriya

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Date

Dissertation Supervisor

## **ABSTRACT**

### **Constraints of design and build system in different phases of building projects in Sri Lanka**

Design and build has become the most popular method of procuring construction work and it gives more benefits and confidence to clients. Most researchers around the world have found that the design and build procurement method have more advantages than other procurement methods.

In Sri Lanka design and build procurement method has not widely using as expected. So it is important to find out the challenges or drawbacks of the design and build systems. This study investigates the constraints which are associated with the design and build specially in tender preparation and evaluation phase, design phase and construction phase. It then proposes recommendations on how the method can be improved in order to increase its use in Sri Lanka.

Survey data was collected from 54 respondents from the construction industry, including contractors, engineers, quantity surveyors, project owners, project managers, construction managers and architects in order to give a more balanced view of the problems. Questionnaires were the only method used to collect data from the respondents. Descriptive statistical analyses, hypothesis testing; using the Pearson correlation and outputs for regression analysis were conducted under the statistical analysis.

It is found that all three phases of building projects have numerous constraints when design and build system is used in building projects in Sri Lanka. Most of the impediments occurred due to inadequate knowledge of project owners, lack of manpower to help clients with technical issues and additionally there is insufficient knowledge to evaluate tenders. At the end of this research recommendation given on how to maximize the use of design and build procurement system in Sri Lanka building projects and detailed client's request for proposal was the most emphasized recommendation from respondent's results.

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## **LIST OF ABBREVIATIONS**

<b>Abbreviation</b>	<b>Description</b>
D&B	Design and Build
BOQ	Bills of Quantities
SLIA	Sri Lanka Institute of Architects
IQSSL	Institute of Quantity Surveyors Sri Lanka
QS	Quantity Surveyors
RICS	Royal Institute of Chartered Surveyors
SL	Sri Lanka