

DESIGN PHASE STAKEHOLDERS' INVOLVEMENT FOR SUCCESS OF BUILDING PROJECTS

Deshapriya C. Weerakkody

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Department of Civil Engineering

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Yakdehige Deshapriya Chithrananda Weerakkody

09/8891



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The Dissertation submitted in partial fulfilment of the requirement for the degree
Master of Science in Construction Project Management

Department of Civil Engineering

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DECLARATION

I declare that this is my own work and this dissertation 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 the 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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The above candidate has carried out research for the Masters Dissertation under my supervision.

..... Date:

Dr. (Mrs.) W B M Thoradeniya

Research Supervisor

ABSTRACT

Success of a building project is conventionally judged in terms of, completion within the scheduled time, completion within the budget, and fully complying to the clients' satisfaction with minimum subsequent modifications and reworks. Several researchers worldwide have highlighted the contribution of the building design phase for achieving the success of a building project.

Irrespective of this awareness, instances are not rare to find, where clients are facing various difficulties in completing/operating their buildings. Research and many case studies from the industry have provided evidences for cost overruns, delay in completion, mismatch between the delivered product and the clients' expectations, and high cost and time expenditure on variations and modifications in building projects.

Literature review also indicates the comparatively low attention given by previous researchers for stakeholder management during design phase within design management as well as in overall project management.

The objective of this research study is to develop an understanding on significance of timely participation of design phase stakeholders and effective coordination amongst them during the design phase of a building project for better achieving the project objectives. This broad objective was studied under four sub-objectives, in addition to the two hypothesis framed for testing.

The study utilized an expert opinion survey conducted among the experts of building industry. Data collected through the survey were analysed using both descriptive and statistical analysis techniques.

The findings of the survey validated the two research hypothesis. In addition, this study proposes two novel concepts.

- a) Division of Design Phase, based on the particular deliverables, for managing the involvement of stakeholders.
- b) 'Design Teams Diagram' which is a Process Diagram, proposed as a tool for managing the involvement of design phase stakeholders.

Based on the findings it is recommended to form and maintain dedicated design teams from the beginning of design phase to the completion of a building project.

Keywords: Design phase, Design stakeholders, Timely participation, Effective coordination, Success of building project.

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Inspired by the career experiences, my interest was in the topic of Design Management. This research would have been limited to a mere proposal if not for the warm acceptance from Prof. Asoka Perera, Head, Construction Management Division of the Department of Civil Engineering of University of Moratuwa, to continue in the same topic, irrespective of the fact that it is remote to Construction Project Management. I owe sincere and earnest gratitude to Prof. Asoka Perera, for the confidence placed on me by giving this opportunity. I also would like to record my gratitude to Dr. Rangika Halwatura and Dr. Lesly Ekenayake, of Construction Management Division, for the valuable suggestions and comments given.

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LIST OF ABBREVIATIONS

AEC	-	Architectural, Engineering and Construction
TFV	-	Transformation, Flow and Value Generation
PMBOK	-	Project Management Body of Knowledge
ASQ	-	American Society for Quality
PM	-	Project Manager
AR	-	Architect
SE	-	Structure Engineer
SDE	-	Services Design Engineer
CL	-	Clients
DV	-	Developers
QS	-	Quantity Surveyor
SC	-	Specialized Contractors
FM	-	Facilities Manager/ Maintenance Engineer
ETU	-	End user/ tenant
IL	-	Importance Levels



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