

**BARRIERS IN USAGE OF PROJECT MANAGEMENT
TOOLS/ TECHNIQUES IN
COST MONITORING AND CONTROLLING**

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University of Moratuwa, Sri Lanka.
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Degree of Master of Science in Project Management

Department of Building Economics

University of Moratuwa
Sri Lanka

March 2013

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Dissertation submitted in partial fulfillment of the requirements for the degree of
Master of Science in Project Management

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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.

.....
Dr.Gayani Karunasena
Dissertation Supervisor

.....
Date

DEDICATION.....



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TO MY BELOVED BROTHER AND HUSBAND...

Acknowledgement

This research is accomplished owes much devotion and admiration to many people who have contributed in numerous ways. Although it is difficult to mention all of them, it is my duty to extend my gratitude to all of them who endeavor.

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Abstract

From recent past it is evident that Sri Lankan construction industry has inflated in to a distinct level along with the elevation of foremost human needs due to globalization and open economy. Owing to the unique nature of the industry, professionals are keen to find more sustainable approaches to bring out an enhanced end product. Project Management is one of the critical approaches in this regard. Concerning the immense finance investing in construction projects, all clients would seek on value enhancing to acquire added worth for their money, whereas cost monitoring and controlling along with project management tools/ techniques utilize to achieve these objectives becomes a foremost concern.

Hence, the empirical study was carried out based on the research problem of “What are the practical barriers that the Sri Lankan contractors faced in usage of project management tools/ techniques by manual methods for their post contract cost monitoring and controlling practices in the way of achieving effective construction project cost management?”


Primary data collected through interviews were analyzed using content analysis qualitative research technique. Interviews were carried out with expert and experienced contractors’ professionals who were proven in Sri Lankan construction industry to identify their experience and perception on use of project management tools/ techniques in cost monitoring and controlling in Sri Lankan construction industry. The study was concluded through the interviews of twenty nine respondents whilst limiting the scope to post contract construction companies as their contribution to the cost monitoring and controlling is excessive.

According to the research findings; though there are numerous project management tools/ techniques available for post contract cost monitoring and controlling, Sri Lankan professionals are utilizing only a few of tools/ techniques such as Earned Value Analysis and Budget Monitoring. There are frequent confines for the applicability of these tools/ techniques followed by knowledge deficiencies, less commitment and unconstructive attitude of employees, and difficulties of obtaining data on time are momentous. Raising the awareness and using standardized formats/ procedures are the most effective and common corrective actions practiced by the current industry. Importance of maintaining a standardized practice, involvement of the established professional bodies and maintaining a database/ library on completed projects are the professional’s opinion for future improvement in this regard within Sri Lankan context.

Key words: *Project Management, Tools/ Techniques, Contractor’s Professionals, Cost Monitoring, Cost Controlling*

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Abbreviations

ACWP	-	Actual Cost of Work Performed
BOQ	-	Bills of Quantities
CMP	-	Critical Path Method
CPI	-	Cost Performance Index
CV	-	Cost Variance
CWP	-	Control Work Packages
EVM	-	Earned Value Management
FF	-	Finish to Finish
FS	-	Finish to Starting
GPCS	-	Global Project Control Specification
ICTAD	-	Institute for Construction Training and Development
IESL	-	Institution of Engineers Sri Lanka
IQSSL	-	Institute of Quantity Surveyors Sri Lanka
IRR	-	Internal Rate of Return
IT	-	Information Technology
LOB	-	Line of Balance
MPCS	-	Multidimensional Project Control System
NFV	-	Net Future Value
NPV	-	Net Present Value
OPA	-	Organisation of Professional Associations
PERT	-	Program Evaluation and Review Technique
PMI	-	Project Management Institute
PPA	-	Post Project Analysis
SS	-	Start to Start
SPI	-	Schedule Performance Index
SV	-	Schedule Variance
TOC	-	Theory of Constraints
US	-	United States
WBS	-	Work Breakdown Structure
WP	-	Work Packages



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