APPLICABILITY OF EARN VALUE MANAGEMENT IN SRI LANKAN CONSTRUCTION PROJECTS

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Degree of Master of Business Administration in Project Management

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Dissertation submitted in partial fulfilment of the requirement for the degree of Master of Business Administration in Project Management.

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DECLARATION

I hereby declare that the research dissertation entitled "Applicability of Earn Value Management in Sri Lankan Construction Projects" submitted by me in partial fulfilment of the requirements for MBA is my own work. Further, it has not previously formed on the basis of any other academic qualification at any institution.

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The above candidate has carried out this research for the Master of Business Administration in Project Management under my supervision.

Signature of the supervisor: Date

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Abstract

Earn Value Management is a globally accepted and well established integrated planning and control methodology that combines the measurement of cost, schedule and technical performance. It enables early detection of performance issues and allows corrective actions to be implemented in a timely manner.

The objective of this study is to establish the possibility of introducing Earn Value Management as an ICTAD Condition of Contract for Major Contracts for the performance reporting and evaluation.

In literature review derived the several important benefits of the EVM as an effective performance measuring technique, the problems in implementing and commonly used practice standards in the globe. The construction industry was an early private industry adopter of EVM. EVM is commonly used in United States of America, United Kingdom, Australia and other European and Asian countries to evaluate construction projects. EVM is a flexible and universally applicable project management technique. However, in Sri Lankan construction industry there is a need of a globally established performance monitoring technique for the development of the industry and better performance. Under these circumstances, it is important to find out the feasibility of introducing EVM as an ICTAD condition for the construction industry.

The effectiveness of the ICTAD document to the industry is high. The level of acceptance is significant; the responses show that 64% of respondents accept the Time Schedule as an effective tool and 37.3% submit it on-time for all projects to fulfil the ICTAD requirement. However, Sri Lankan construction industry doesn't have a proper understanding and knowledge about the use of Time Schedule and its limitations. The lack of knowledge about the technique hinders the getting appropriate use of the technique. However, respondents believe effective performance measuring technique should not have these limitations.

The result of this study confirms the possibility of introducing the EVM in Sri Lankan construction industry for performance reporting and evaluation. Further, results highlight that the importance and necessity of Earn Value Management to enhance the efficiency and effectiveness of Sri Lankan construction industry. The majority of respondents believe the most important aspect of the EVM is, it helps projects to be completed within time and cost constraints compared to other benefits. The survey results illustrate that more than 80% of respondents believe Sri Lankan construction industry need EVM concept for effective and accurate performance management. The cost performance management is the primary concern of the Industry. The Industry's perception on the possibility of EVM implementation is satisfactory.

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LIST OF ABBREVIATIONS

Abbreviation	Description
AC	Actual Cost
ANSI	American National Standards Institute
AS	Australian Standard
BAC	Budget Cost at Completion
CPI	Cost performance Index
C/SCSC	Cost/Schedule Cost Systems Criteria
CV	Cost Varience
ECC	Estimated Cost to Completion
ETC	Estimate to Complete
EV	Earned Value
EVA	Earn Value Analysis
EVM	Earn Value Management
EVPM	Earn Value Project Management
FCC	Forecast of Project Completion Cost
ICTAD	Institute for Construction Training and Development
MS	Micro Soft
NASA	National Aeronautics and Space Administration
PC	Percentage Completed
PERT	Program Evaluation and Review Technique
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PV	Planned Value
SBD	Standard Bidding Document
SOW	Statements of Work
SPI	Schedule Performance Index
SV	Schedule Variance

UK	United Kingdom
US	United States
USA	United States of America
WBS	Work Breakdown Structure

LIST OF APPENDICES