# FACTORS AFFECTING ENGINEERING PROJECT MANAGEMENT EFFICIENCIES IN PROVINCIAL COUNCILS

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Submitted in Partial Fulfillment of the Requirements of the Degree of Master of Science

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## A Study Submitted In Partial Fulfillment of the Requirements of the Degree of Master of Science in Project Management

#### Declaration

I hereby declare that this submission is my own work and that, it contains no material previously published or written by another person nor material which, to a substantial extent, has been accepted for the award of any other degree or diploma of a University or other institution of higher learning, except where an acknowledgement is made in the text.



28<sup>th</sup> February 2008.

I hereby acknowledge that Mr. **H.D.S.N. Premasiri** has followed the dissertation process set by the Department of Building Economics.

### **UOM Verified Signature**

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Date



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#### LIST OF ABBREVIATIONS

APSE	-	Association of Public Service Engineers
DD		University of Moratuwa, Sri Lanka.  Deputy Director Theses & Dissertations  www.lib.mrt.ac.lk
EE	-	Executive Engineer
LSD	-	Least Significant Difference
PPSC	-	Provincial Public Service Commission
PRDA	-	Provincial Road Development Authority
PWD	-	Public Works Department
SLES	-	Sri Lanka Engineering Services
SPSS	-	Statistical Package for the Social Sciences

#### **ABSTRACT**

Provincial Councils play major role in implementing development activities within the island. Provincial Engineering services have been established in each and every province to consult, supervise and implement those development activities. As per the 13<sup>th</sup> amendment to the constitution, provincial councils are allowed to establish Provincial Engineering Organization to suit with their territorial conditions, resulting different types of engineering organizations in provinces. Accordingly, implementing a National Development Plan within the island with the help of provincial engineering organizations took place in a different backgrounds and the final out come is with disparities. So far, no any research has been done to evaluate factors that effect to the project management efficiency of engineering organizations in provincial councils. This research study aims to provide an approach to identify factors that critically effect to the project management efficiency of four selected provinces and comparison of their effectiveness.

A brain storming session was done to identify factors that effect to the project University of Moratuwa, Sti Lanka.

management efficiency of provincial engineering organizations. A questionnaire survey is carried out with 120 experts to identify most critical factors under Delphy round one.

The Delphy round two was carried out on same set of experts to ascertain the affect of those identified factors in provincial council project implementation context.

Identified factors are grouped in to eleven categories and a comprehensive comparison was done by using SPSS Software. A parametric test one way ANOVA test, and a non parametric test, Kruskal- Wallis test, was used to test the hypothesis. A comprehensive comparison was done on the selected eleven categories and their position in provincial context was revealed. As such provincial authorities can pay their special attention to improve the factors that lay far behind the other provinces compared.