



Implementation of Value Engineering in Jordanian Public Buildings

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**This Thesis was Submitted in Partial Fulfillment of the Requirements
for The Master's Degree in Engineering Project Management**

**Faculty of Engineering
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August, 2018

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ

وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ ﴾

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DEDICATION

I would like to dedicate this research study to my father and mother, whom taught me the value of education and supported me through my educating years and their endless love, prayers and continuous sacrifices.

I also would like to thank my brothers and sisters for their continuous support in order to reach my dreams.

I pray that Allah, the most gracious, the most merciful to grant them paradise as a reward for their patience and efforts.

Nahed Zaitoun

ACKNOWLEDGEMENT

First and foremost, I would like to thank Allah for what I am and for everything I have.

Next I wish to express my deepest appreciation to Dr. Ibrahim A. Mohammad under whose supervision and advice this thesis was developed. Without his considerable efforts this thesis could not have been carried out through completion. Thanks to him for being my mentor.

Special thanks for Engineers of the Ministry of Public Works and Housing for their participation in filling-up the questionnaire.

Finally, I humbly extend my gratitude to my partner "Engineer Ahmed Al-Jbarat" who shared my joy and my sadness. He was interested about my study, and supported me throughout my journey of conducting my works.

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in Jordanian Public Buildings

(Case Study in Jordan)

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ABSRTACT

The construction projects are witnessing significant development, which requires large budgets, especially for public buildings projects, and it may be necessary to delay the delivery of the project. The need to reduce the cost of construction, while maintaining its quality by following the so-called methodology of value engineering that implement and complete the work of the project and provide alternatives to obtain the lowest costs and high quality, to find a balance between the initial costs of the building and the operating budget, thereby preserving the building's age.

The study aims to investigate factors affecting value engineering implementation in Jordan, determine the critical success factor that effect to applicate of value engineering in Jordan, and evaluation of an executed project for public buildings from the point of view of Value Engineering.

The methodology of the research was based on statistical analysis by distributing a questionnaire to the engineers of the Ministry of Public Works and Housing, which was distributed to (150)engineers, and (112)of which were retrieved.

The methodology of value engineering was applied on the Souf Primary Mixed School Project as a case study for finishing works, and it was found that applying the steps of the value management approach achieves cost savings from the total cost of the project.

The study found the important factors affecting the implementation of value engineering in Jordanian public buildings include: “Design and documentation, resources availability, management factors, and organizational strategy”, respectively.

The most important recommendations are the need to pay attention to the total costs of materials, do not exaggerate the selection of materials to give high value, and mandatory application of value engineering methodology in the projects and make it one of the stages of work to reduce costs and raise the quality of the project.

Key word: Value Engineering, Public Buildings, Value Index, Value Management.