سامية محمد مصطفى



شبكة المعلومات الحامعية

بسم الله الرحمن الرحيم



-Caro-

سامية محمد مصطفي



شبكة العلومات الحامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





سامية محمد مصطفى

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسو

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة يعيدا عن الغيار



سامية محمد مصطفي



شبكة المعلومات الجامعية



المسلمة عين شعور المسلمة عين شعور المسلمة عين شعور المسلمة عين شعور المسلمة ا

سامية محمد مصطفى

شبكة المعلومات الحامعية



بالرسالة صفحات لم ترد بالأصل



CAIRO UNIVERSITY FACULTY OF ENGINEERING CIVIL ENGINEERING DEPARTMENT

MASTER'S THESIS

VALUE ENGINEERING APPLICATIONS IN THE CONSTRUCTION INDUSTRY IN EGYPT

by

IHAB MOHAMMAD HAMDI SAAD

UNDER THE SUPERVISION OF

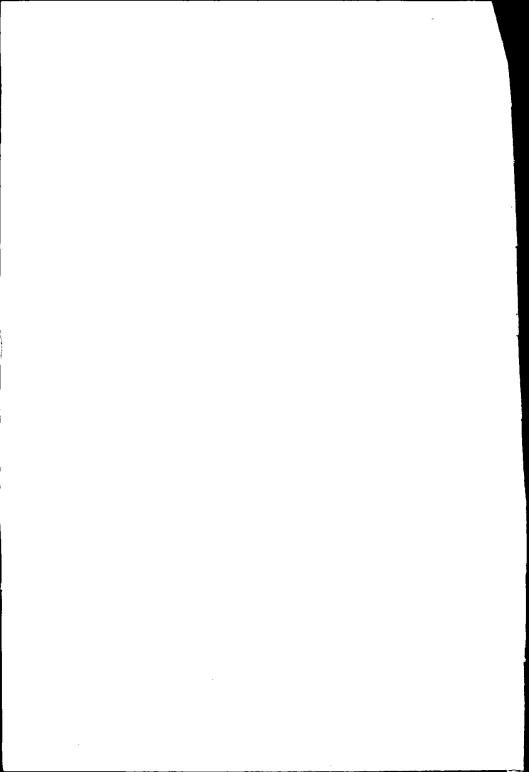
Dr. Moheeb El Said Ibrahim

Dr. Mohammad Abdel Latif Bakry

Presented in Partial Fulfilment of the Degree of Master of
Science in Civil Engineering

July 1994.

)7-4r

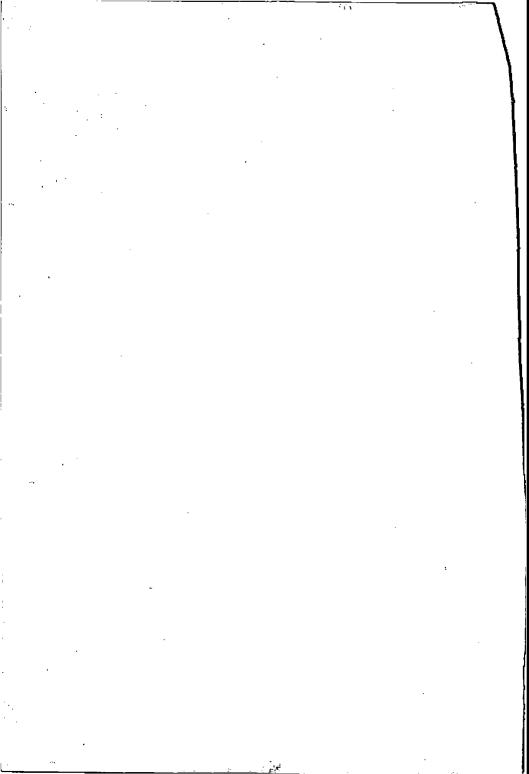


DEDICATION

TO MY PARENTS, who reared me to become a man...

TO MY WIFE, for being so patient..

TO MY CHILDREN, for the time I took from them..



Abstract

Value Engineering is a proven management technique using a systematized approach to seek out the best functional balance between the cost, reliability and performance of a project or product. It was briefly defined as "A systematic approach for obtaining optimum value for every dollar spent."

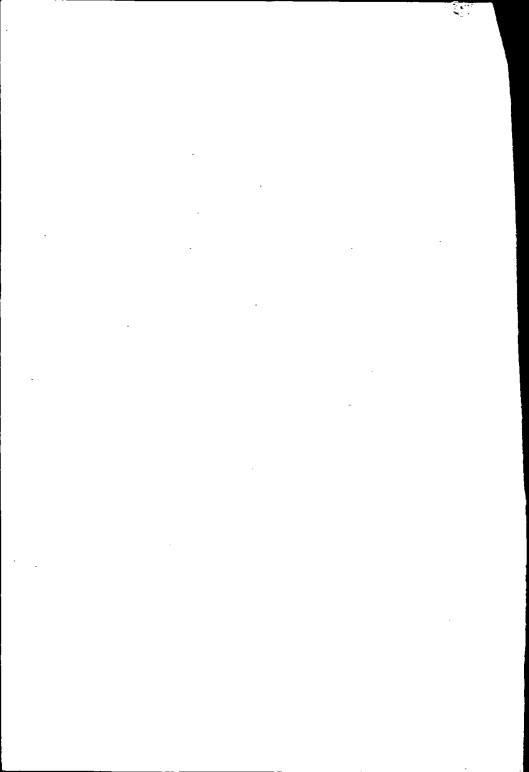
Although this technique was applied successfully over the past three decades in the manufacturing industry, it had to be modified and integrated with other new or existing approaches in order to achieve the same success in the construction industry.

In this research, many of these proposed approaches are discussed in fair detail to illustrate their intertwining effect with Value Engineering in order to reach the optimum value for a construction project.

Some of the proposed approaches are: Constructibility Analysis, or simply Constructibility, Partnering, and artificial intelligence through the application of an expert system developed specially for trhis purpose.

A field study was conducted in the form of a questionnaire addredded to different project parties in different project stages, in order to assess their main functions and interests in the project.

Two case studies related to the tourism development industry were also included to show the effect of the application of Value Engineering principles and techniques on the final outcome of the construction project.



AKNOWLEDGEMENT

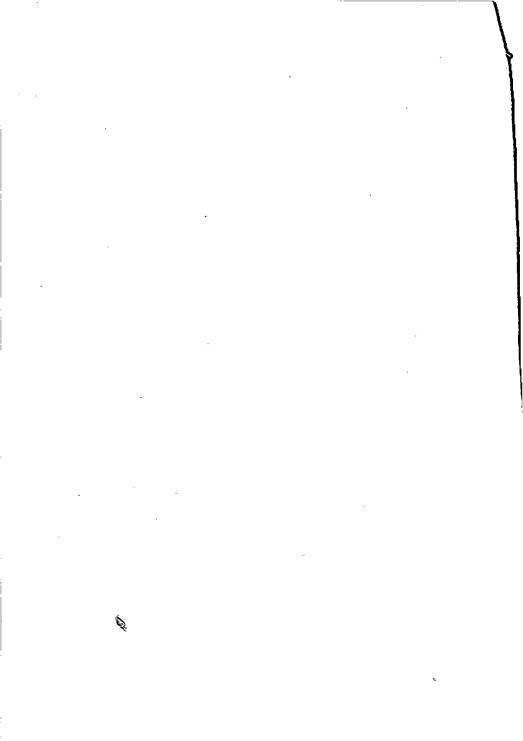
I wish to address—my deepest feelings of gratitude to the persons who helped me accomplish this research, and without whose help this could have been impossible.

I would like to thank both my respected supervisors. Dr. Mohammad Bakey and Dr. Mohaeb of Suged for their help and guidance, and care even for the finest details.

I would like to thank Dr. Donn E. Hancher, chairman of the Civil Engineering Dept., University of Eentucky at Lexingon, for the new horizons he opened to me and for his valuable time and advice he dedicated to me

I would like to thank my dear brother and friend, Mr. Taher Abdel MONEIM, who was the first to guide my steps towards the field of construction management, for his continuous support and encouragement, and his sincere advice.

I would like to thank my parents and my family for their patience, love, endurance and support in every step of my life.



CURRICULUM VITAE

NAME: Ihab Mohammad Hamdi

DATE OF BIRTH :

3.01762

ADDRESS: #65 road 1002, new maadi, Cairo, Egypt

PHONE NUMBER: 3640407 - 3534298

DEGREES: Higher Diploma in Construction Management, Ain Shams University, 1989

B.Sc. Civil Engineering, Cairo University, 1984

Professional Affiliations: Égyptian Syndicate of Engineers

Management Engineering Society (MES), Egypt

American Society of Civil Engineers (ASCE) Project Management Institute (PMII), USA

International Project Management Organization (INTERNET), Switzerland

Past Experience:

June 1993 todate :

Teaching Assistant - Dept. of Civil Engineering, University of Kentucky, KY, USA. Currently studying for a Ph.D. in Construction Engineering and Management.

February 1993 - June 1993 :

Semior Planner - Soures Da Costa Construction Co., Cairo - Egypt

October 1991 - February 1993 :

Senior Planning Engineer - Dar al Handasah Consultants, Shair & Partners, Cairo - Egypt

September 1989 - January 1993 :

Teaching Assistant - Construction Unit, American University in Cairo

July 1988 - October 1991 :

Scheduling and Cost Control Engineer - Ummah Management Center, Cairo - Fyypt

January 1987 - July 1988 :

Site Engineer: Site Manager: Cost Control and Planning Engineer - Urban Development Construction Co., Cairo - Egypt.

October 1985 - January 1987 :

Egyptian Airtorce, Airport Engineers Section.

July 1981 - October 1985 :

Soletanche-Bachy Construction, Greater Cairo Regional Metro, Cairo - Egypt.

