شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

بعض الوثائق الأصلية تالفة

شبكة المعلومات الجامعية

بالرسالة صفحات
لم ترد بالأصل

Application of Computer Integrated Construction (CIC) in the Egyptian Construction Industry

By
Akram Hammam Mohamed

A Thesis Submitted to the Faculty of Engineering at Cairo University in Partial Fulfillment of the requirements for the Degree of

Master of Science
In
Structural Engineering
(Construction Management)

Under the Supervision of

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FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
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I dedicate this thesis to my parents, sisters, and my wife who have labored patiently with my anguish and hard working days and nights to finalize this work.

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Abstract

In today's competitive world especially in an industry such as the construction industry where the competition increases each day there comes a need more than ever for effective and efficient project management. Achieving such a goal needs a reevaluation and reengineering of how Egyptian construction companies operates for its engineering process, this objective is achieved by utilizing the use of computers in the Egyptian construction industry. Although, computers spread widely in the whole world during the last decade and are now used in the majority of construction companies in Egypt, unfortunately this wide spread didn't accompany an understanding of the capabilities the computers yet has to offer. The computer usage in the majority of construction companies is mainly to aid the employees in performing their tasks and enhance the output such as CAD, word processing, etc..., but this doesn't enhance the project management process.

Computer Integrated Construction (CIC) is a strategy for linking construction participants and computer technologies in order to optimize planning, design, accounting, engineering, procurement, contracting, management, and eventually achieve a highly integrated construction system. CIC enhances the project management process by enhancing the information transfer throughout the construction process, between sectors of the company and lifecycle stage

This research describes the development of an engineering data-management system that integrates different project phases and processes under one central database. This database can be accessed through a number of computer terminals distributed geographically over the company under a local area network. This network electronically links the project participants and ensures that all participants have access to the same project data by restructuring the company's data and flow information. A Relational Data Management System (RDBMS) will be utilized for this purpose. This system is capable of storing retrieving, and manipulating data in a simple way.