



**Evaluation of architectural work market in Iraq
in the 21st Century**

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Authorization

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Dedication

This work is dedicated to my father, Mr. Abdul Hadi Al Damook, my mother for supporting me at all times throughout my life, and my brother and sisters.

Finally, this work is dedicated to all those who believe in the importance and richness of learning and education.

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Abbreviations

Abbreviation	Meaning
3D	Three-Dimensional
4D	Four-Dimensional
5D	Five-Dimensional
6D	Six-Dimensional
7D	Seven-Dimensional
8D	Eight-Dimensional
AEC	Architecture, Engineering and Construction
BIM	Building Information Modeling
CAD	Computer Aided Design
IAWM	Iraqi architectural work market
MEP	Mechanical, Electrical and Plumbing
SPSS	Statistical Package for Social Sciences
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TSMR	Trends Smart Market Report

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Abstract

International architectural work market was studied and evaluated to identify the problems and how the lack of knowledge that affects the project. Based on this study, there are many obstacles faced by engineers of all disciplines during the design and implementing process. For that reason, recommendations were made and adapted to the Iraqi Architectural market, which was chosen to find more about these problems and find a solution for them.

International architectural work market was heading towards BIM implementation to avoid any design and implementation problems. According to that, we set the plan to implement BIM in the Iraqi architectural work market.

This study was made to introduce BIM concept to the Iraqi architectural work market. Some plans were set to discover and identify its problems and come up with the best solution possible. Also, implementing these solutions to introduce a new concept to engineers in order to make their work easier, faster, more accurate and efficient.

Questionnaires were sent out to engineers, consultants and contractors, and a clear feedback was received in return. Questionnaires were analyzed, and a full report was given with exact results. Also, interviews were conducted to acquire more information in order to make an accurate solution and implement it.

Moreover, based on previous studies of how BIM was implemented in other countries, and the conducted questionnaires and interviews, certain steps are recommended to be taken to make sure of a proper implementation of BIM concept and tools.

The main problem in the Iraqi architectural work market was the conflict between plans, which was mainly discovered in the construction phase, and the main cause was due to human error, and applying BIM to the projects will assure avoiding these errors.

To aid the implementation of BIM, a brief managerial manual was created and has taken into consideration past experiences from other countries and institutes for that lesson learned.

Keywords:

BIM, AEC, Engineering, Tools, Concept, Questionnaire, interviews, analysis, 8D.