



Dr. AHMED MOHSEN MOHAMED SADEK

PhD PM, MEM, MSc, BSc, C.Eng, M.ASCE, MIEAust NER, ADM PE, PQP, NEBOSH
United Arab Emirates Golden Card Holder



EXPERIENCE

AUG 2016 - Present



Portfolio QA/QC Engineer (Construction & Facilities Management) Acting QHSE Manager
ABU DHABI GENERAL SERVICES COMPANY - MUSANADA

- A. Participate in establishing quality management system at the Section in the Department within Project Control Division by:
 - Ensure departmental / Division objectives and their related KPIs are met in the Section
 - Establishing QA/QC procedures & related templates for the Section.
 - Establishing standard operation procedures for the Section.
- B. Standardizing templates related to standard operation procedures for the section.
- C. Provide professional advice to Senior QA/QC Manager in issues related to quality.
- D. Supervise proper implementation of approved quality management system within the Section.
- E. Generate Musanada quality assurance/ quality control requirements for projects in various stages, i.e. Design, Construction and FM, review those requirements at regular intervals and update them as necessary to cope with clients' new requirements.
- F. Supervise review process of basic components of quality management system proposed by Musanada Vendors/ stakeholders for Musanada projects and review recommendations for approval/ rejection.
- G. Monitor proper implementation of approved quality management system by various Musanada Vendors/ stakeholders at Musanada projects.
- H. Manage internal projects quality auditing programs at Musanada in conjunction with other staff. Manage non-conformities, corrective and preventive actions pertaining quality management system.
- I. Supervise implementation of QA/QC Section role in vendor performance evaluation of Musanada Vendors/ stakeholders (as may be applicable).
- J. Conduct quality awareness sessions to staff from Musanada various Divisions/ departments as may be necessary.
- K. Ensure continual improvement in performance and services delivery of QA/QC Staff in PCD by identifying opportunities for improvement and report the same to Senior QA/QC Manager to get his approval for implementation.
- L. Attend internal and external meetings as required.
- M. Review quality reports for projects and portfolios he/she is in-charged off.
- N. Supervise daily activities of QA/QC Section staff who are reporting to him/her.
- O. Review individual performance of QA/QC Section staff who are reporting to him/her.
- P. Supports compliance and the Principles of Responsibility (Code of Conduct) by maintaining the privacy and confidentiality of information, protecting the assets of the organization, acting with ethics and integrity, reporting non-compliance and adhering to applicable federal, state and local laws and regulations, accreditation and client policies and procedures
- Q. Assign and manage Third Party Consultants to Consult Special Tasks:
 - Preparing the Inspection request (IR) and send it to the Third Party Consultants.
 - Receive the inspection request responses (IRR) and review the proposed rates for each facility.
 - Make the comparison analysis and choose the lowest prices for each service and send the approved IRR to the Third Party Consultants.
 - Follow up and coordinate between with Third Party Consultants and concerned stakeholders to complete the tasks.
 - Ensure receiving, reviewing and approving all deliverables from the Third Party Consultants.
 - Communicate reviewed and approved deliverables with concerned stakeholders..
 - Review the Third Party Consultants invoices to approve/ reject prior releasing them to the finance department.

FEB 2014 - AUG 2016
Abu Dhabi, UAE

Civil Engineer
ACE INTERNATIONAL CONSULTING ENGINEERS



FEB 2013 - FEB 2014
Abu Dhabi, UAE

Civil Engineer
NATIONAL PROJECTS AND CONSTRUCTION (NPC)



Profile

Egyptian

20th April 1990

Contact

+971 56 440 4594

ahmedmohsensadek@gmail.com

P.O.Box: 47543

Abu Dhabi, U.A.E

Social Media

<https://www.linkedin.com/in/dr-ahmed-mohsen-mohamed-sadek-88620b83>

<https://people.bayt.com/ahmed-mohsensadek>

<https://www.facebook.com/profile.php?id=100023494691892>

https://www.instagram.com/dr_ahmedsadek/

@Dr_AhmedSadek

Languages

Arabic

English



Skills

Leadership



Negotiation



Cost Control



Risk Management



Contract Management



Critical Thinking



Communication



Project Recovery



Coaching



Task Management



Quality Management



Meeting Management



Business Case Writing



A Sense of Humour



Technical Management



Automation



Analytical Thinking



Planning



Organizing



Delegating



Defining Scope



Scheduling



Vendor Management



Data Analysis



Benchmarking



EDUCATION

2021
Dubai, UAE

PhD in Project Management
Faculty of Business and Law
Awarded From: The British University in Dubai



2018
Edinburg, UK

MSc in Business Strategy Leadership and Change
School of Social Science
Awarded From: Heriot Watt University (HW)



2015
Al Ain, UAE

MSc in Engineering Management
Faculty of Engineering
Awarded From: United Arab Emirates University



2012
Abu Dhabi, UAE

BSc in Civil Engineering
School of Engineering and Computer Science (SECS)
Awarded From: Abu Dhabi University (ADU)



LICENSES

Apr 2019
UAE

Practicing Engineer License (PEL): 1064
Awarded From: Abu Dhabi Municipality
United Arab Emirates



Feb 2017
UAE

Qudurat Exam Certificate
Awarded From: OSHAD
United Arab Emirates



Jul 2015
UAE

Registered Civil Engineer
Awarded From: Society of Engineers
United Arab Emirates



Dec 2016
UAE

Estidama Pearl Qualified Professional - PQP
Awarded From: Abu Dhabi Urban Planning Council
United Arab Emirates



Jun 2019
Australia

MIEAust NER (EA ID: 8069096)
Awarded From: Engineers Australia
Australia



Nov 2019
USA

C.Eng, M.ASCE (ID: 11432551)
Awarded From: American Society of Civil Engineers ASCE
United States of America



May 2020
UK

NEBOSH - IGC Exam
Awarded From: NEBOSH
United Kingdom





TRAINING

Skills

Productivity Analysis

Progress Management

Change Management

Active Listening

Complexity Management

Strategic Thinking

Creativity

Flexibility

Time Management

Positivity

Reliability

Strong Vision

Recruiting

Persuasion

Strong Charisma

Team Work

Decision Making

Supplier Quality

Product Quality

Knowledge Management

Quality Procedures

Process Capability

Service-Level Agreements

Project Implementation

Evaluation

- Jul 2019 UAE ISO 45001: 20158 Lead Auditor IRCA certified: Occupational Health and Safety. Awarded From: CDULLENCE
- Jun 2019 USA Occupational Health and Safety Diploma Awarded From: National Association of Safety Professional
- Apr 2018 UAE International Commercial Arbitration Course Awarded From: Ajman Chamber
- Mar 2018 UAE UAE VAT Procurement Department Awarded From: Aurifer Training Consultant
- Mar 2018 UAE Certified VAT Expert Awarded From: Arab Institute for Accountants and Legal
- Nov 2017 UAE Negotiation and Influencing Skills Course Awarded From: Haward Technology Middle East
- Oct 2017 UAE Engineering Expert Program Awarded From: Society of Engineers
- Mar 2017 USA OSHA 60 hrs. Awarded From: OSHA
- Mar 2017 UAE ISO 14001:2015 Lead Auditor IRCA certified: Environmental Management System Awarded From: TÜV NORD Middle East
- Jan 2017 UAE BS OHSAS 18001:2007 Lead Auditor IRCA certified: Occupational Health and Safety Awarded From: TÜV NORD Middle East
- Dec 2016 UAE ISO 9001:2015 Lead Auditor IRCA certified: Quality Management System Awarded From: TÜV NORD Middle East
- Dec 2016 UAE Certified Pearl Qualified Professional Awarded From: Abu Dhabi Urban Planning Council
- Sep 2015 UAE Heterogeneity and Perception Congruence of Projects Outcomes Seminar Awarded From: The British University in Dubai
- Sep 2015 UAE Building Effective Teams for Effective Project Procurement Seminar Awarded From: The British University in Dubai
- Sep 2015 UAE Importance of Monitoring and Control of Attaining Sustainability in Buildings Seminar Awarded From: The British University in Dubai
- May 2015 UAE Project Management Professional Course Awarded From: Chicago Management Training Institute
- May 2015 UAE Cost Engineering Course Awarded From: Chicago Management Training Institute
- Mar 2010 UAE Modern Accounting Course Awarded From: Emirates Institute of Technology
- Fab 2010 UAE Financial Management & Banking Course Awarded From: Emirates Institute of Technology

UNITED ARAB EMIRATES
FEDERAL AUTHORITY FOR IDENTITY &
CITIZENSHIP, CUSTOMS & PORT SECURITY

Golden Card



الإمارات العربية المتحدة
الهيئة الاتحادية للهوية
والجنسية والجمارك وأمن المنافذ
بطاقة ذهبية



ID Number / رقم الهوية
784-1990-4064247-4



الإسم: احمد محسن محمد صادق

Name: Ahmed Mohsen Mohamed Sadek

Date of Birth: 20/04/1990

تاريخ الميلاد:

الجنسية: مصر

Nationality: Egypt

Issuing Date / تاريخ الاصدار

21/01/2022

Expiry Date / تاريخ الانتهاء

20/01/2032

الجنس: ذكر

Sex: M

التوقيع / Signature



رقم البطاقة / Card Number

119909278



المهنة: باحث تطوير أول

Occupation: Senior Development Researcher

مكان الإصدار: ابو ظبي

Issuing Place: Abu Dhabi



2102840436

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UAE

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SADEK<<AHMED<MOHSEN<MOHAMED<<<

الجامعة
البريطانية في
دبي



The
British University
in Dubai

We hereby certify that after having satisfied the requirements prescribed by the University,
the degree of

Doctor of Philosophy
in Project Management

is awarded to

Ahmed Mubsen Mohamed Sadek

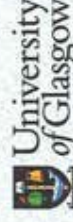
On this day, Monday 17 May 2021

Ahmed Mubsen Mohamed Sadek
Chancellor



Prof. Abdullah Mohammed Alshamsi
Vice-Chancellor

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The University operates in partnership with an Alliance of UK Universities for the purpose of strategic guidance, quality assurance, and development of research



جامعة الإمارات العربية المتحدة

United Arab Emirates University

UAEU



استناداً إلى قرار مجلس كلية الهندسة مرقم (14) والمتخذ بتاريخ 2015/03/12م ولاستكمال

الطالب/احمد محسن محمد صادق

المولد في الامارات سنة 1990م

لجميع متطلبات التخرج. بقرار من مجلس الجامعة بتاريخ 2015/03/25م،
منحه درجة ماجستير في الإدارة الهندسية.

الرئيس الأعلى للجامعة
Chancellor

مدير الجامعة
Vice Chancellor

المسجل العام
University Registrar



2x123603

تلفون: 037210144
الرقم: 442

Abu Dhabi University

By Authority of the Board of Trustees and upon recommendation of the Faculty
hereby confers upon

Ahmed Flohzen Flohamed Sadek

the degree of
**Bachelor of Science
In Civil Engineering**

With all rights, privileges, honors and responsibilities pertaining thereto.
Awarded in Abu Dhabi, UAE this 05th July, 2012



Eli Shared in Kharmal El Bhabheri

Chairman



جامعة أبوظبي



Nabil A. Ybrahim

Chancellor

SYSTEM DYNAMICS APPROACH FOR WHOLE LIFE CYCLE COST MODELLING OF RESIDENTIAL BUILDING PROJECTS IN UNITED ARAB EMIRATES

Ahmed Sadek

The British University in Dubai

2015132021@student.buid.ac.ae

Abstract

Purpose – Project management field is experiencing many challenges to maintain its performance within planned budget. Latest research focused on cost modelling and estimation. The significance of cost modelling comes from the forecasted information value. It is needed in the United Arab Emirates to satisfy the future vision and strategies.

Methodology – This article aims to model project's whole life cycle costs of residential buildings in UAE at the preconstruction stage, choosing VENSIM system dynamics approach. The objective is to simulate dynamically cost over time for all outputs. The approach of this research is pure quantitative. It requires mapping diagrams and mathematical computation systems. DEMO simulation and real data verification modelling are used to ensure the outputs' validity. The mean absolute deviation and mean square error are used for measuring the estimation accuracy.

Findings – This research proved that VENSIM system dynamics approach can model and estimate residential building project's cost and cash flow dynamically through time, with high accuracy, in the United Arab Emirates.

Unique contribution to theory, practice and policy – This research provides the first cost estimation modelling for residential projects' whole life cycle using VENSIM system dynamics approach. It is opening new research opportunities in cost modelling and estimating fields. The theoretical-implications, practical-implications, and limitations are presented in the conclusion for future research.

Keywords: *Cost Modelling, System Dynamics, Project's WLC, CAPEX, OPEX, NPV, TOTEX, Estimation.*

1. INTRODUCTION

This article introduces the first system dynamics approach for project's whole life cycle cost modelling. First, a detailed literature review to logically build a comprehensive understanding of the problem. Then, the Research problem, aim, objective, and questions are stated clearly. After that, system dynamics cost model development, validation, and verification process is detailed and analyzed. Finally, the originality of this research is presented along with its theoretical implication, practice implication, and limitations for future research.

2. LITERATURE REVIEW

Literature review of this article is covering (1) cost modelling and estimating in residential project's whole lifecycle industry, (2) the status of building projects and investments economy, (3) future

MONTE-CARLO APPROACH FOR MEASURING ADJUSTING COST RISKS VALUES OF RESIDENTIAL BUILDING PROJECT'S WHOLE LIFE CYCLE FROM CLIENTS' PERSPECTIVE IN THE UNITED ARAB EMIRATES

Ahmed Sadek

The British University in Dubai
2015132021@student.buid.ac.ae

Abstract

Purpose – Although projects' experts always take into consideration the related cost-risks. They are experiencing the challenge of not being able to finish the project within the estimated budget. Latest cost-risks studies concentrated on modelling and estimating risks at the preconstruction stage. This article aims to approach Monte-Carlo simulation using stochastic mathematical modelling to measure cost-risks error (i.e., adjusting cost-risks).

Methodology – The approach of this research is solely quantitative. It is using statistical modelling and simulations to ensure the accuracy and precision of the developed Monte-Carlo model. However, this study is utilizing Microsoft Office Excel Software Mersenne twister algorithm to generate random numbers to ensure most accurate Monte-Carlo approach. The mathematical equations system is built into Excel.

Findings – The research outputs are considered significant in project management body of knowledge. This is because of the resulted evidence that is proving the applicability to measure cost risks error using Monte-Carlo simulation. This study presented cost risks and differentiated between contractors' and clients' views.

Unique contribution to theory, practice and policy – The originality of this article comes from providing the first Monte-Carlo approach for measuring projects' cost-risks error from client's perspective. The theoretical-implications, practical-implications, and limitations are presented in the conclusion for future research.

Keywords: *Adjusting Cost-Risks, Monte-Carlo, Probability, Normal Distribution, Residential Buildings, Project's WLC, Mathematical Modeling, Relativity Change.*

1. INTRODUCTION

In this article, the process of computing accurate risks' errors will be detailed. This research will conduct Monte-Carlo Simulation to compute the adjusted and adjusting risks used in the cost estimation modelling. Therefore, this article Monte-Carlo simulation will be based on taking 10,000 random measures for each risk factor (i.e., 117 final validated risks) to provide accurate cost estimation results.

It is important to know about the Monte Carlo approach's history to understand its value and importance (Jackel, 2002). In the 1940s, the Monte Carlo method for mathematical computation started by three American mathematicians (i.e., Nicholas Metropolis, John von Neumann, and Stanislaw Ulam) during the entrance programable computers for the first time (Jackel, 2002). The approach did not have a name until Nicholas Metropolis, and Stanislaw Ulam scientists used it to conduct a multi-dimensional statistical calculation analysis in 1949 and called it the Monte Carlo method (Jackel, 2002). Monte Carlo analysis is based on a computer algorithm to generate sufficiently random numbers to support mathematical

COST RISK'S RELIABILITY AND VALIDITY OF RESIDENTIAL BUILDING PROJECT'S WHOLE LIFE CYCLE IN THE UNITED ARAB EMIRATES

Ahmed Sadek

The British University in Dubai
2015132021@student.buid.ac.ae

Abstract

Purpose – Project management cost and risk modelling is experiencing the challenge of identifying cost risks values to maintain accurate modelling, estimating, and assessment. Latest research focused on cost and risk modelling and estimation. The significance of cost risks numerical values come from its ability to be used in many different analysis and approaches. This article aims to identify residential building projects' whole life cycle cost risks numerical values in UAE at the preconstruction stage and ensure its reliability and validity.

Methodology – The approach of this research is pure quantitative. The methodology of this research is to collect data through conducting face-to-face interviews quantitatively (i.e., cost risks values). The survey is using PMBOK risk matrix (i.e., probability vs. impact). Finally, data correlation and regression modelling were done to ensure the reliability and validity of each cost risk value.

Findings – This paper was able to deliver reliable and valid residential project's whole life cycle cost risks values (i.e., 117 cost risks) for direct use in future research or practical professional cost analysis.

Unique contribution to theory, practice and policy – This article contribution to the project management body of knowledge is to collect all relevant cost risks (i.e., 117 cost risks) and obtain their values from UAE field experts for the first time. The provided values are for residential project in UAE only. The perspective of how to look to cost risks values in this article (i.e., contractors' and clients' views) should be considered at the time of using the data. The consultancy services organizations will have different cost risks because they do not deal with delivering the final product, but they provide supporting services (i.e., design and supervision) to facilitate delivering the project.

Keywords: *Cost Risks, Correlation, Regression, Experts, Building, Reliability, Validity, Project's WLC.*

1. INTRODUCTION

This article introduces the first numerical values of residential project's whole life cycle cost risks in the United Arab Emirates. The implementation of data collection and validation procedures will be detailed following the explained and justified research methodology design of this research. The literature review, problem statement, and research methodology will be presented and detailed in the beginning. Then, in this article, there are four main arguments related to data collection and analysis, including (1) data collection strategy, (2) experts' competencies, (3) data correlation analysis, and (4) data regression analysis. Finally, the originality of this research is presented along with its theoretical implication, practice implication, and limitations for future research.

CONSTRUCTION CASH FLOW AND RISK S-CURVES DEVELOPMENT APPROACH, AND AREA METHOD ANALYSIS AT THE PRECONSTRUCTION STAGE FROM CLIENT PERSPECTIVE IN THE UNITED ARAB EMIRATES

Ahmed Sadek

The British University in Dubai
2015132021@student.buid.ac.ae

Abstract

Purpose – Understanding construction cash flow estimation is crucial for project success. Experts are concerned about project’s cash-flow and risk estimation and control. Latest construction studies concentrated on modelling and estimating construction costs and risks.

Methodology – This article aims to approach pure quantitative mathematical modelling to develop the S-Curves (i.e., cash-flow and risks) and to develop the cash-flow simple area method. This research referred to the mathematical definitions of construction cash-flow and risks, integrating a clear systematic approach to develop the s-curves and to build the simple-area-method.

Findings – This research paper revealed that construction cash-flow and risk s-curves can be developed at the preconstruction stage, mathematically, without the need for having cost historical data of similar completed projects. In addition, this article has provided a simple area method approach mathematically, for construction cash flow analysis, using the basic developed cash-flow s-curve and the actual cost data of, at least, 2 completed similar projects. The simple area method is proved effective to provide a better understanding of cash-flow behaviour of the analysed projects’ type. However, the s-curves development can be generalised to cover construction cost and risk simple s-curves, while the area method is restricted with the projects’ characteristics (i.e., type, size, location, etc.) used in developing the simple area.

Unique contribution to theory, practice and policy – The significance of this study is to provide an S-Curve development approach for both cashflow and risk percentages from client perspective at the preconstruction stage, using solely the tender contract value. And to provide a simpler stochastic area method approach for project management professionals/researchers, who do not have large amount of historical similar projects’ cost data. Originality, theoretical-implications, practical-implications, and limitations are presented in the conclusion for future research.

Keywords: *Construction, Cash Flow, Risk, S-Curve, Area Method Approach, Cost Estimation.*

1. INTRODUCTION

In this article, construction cash flow and risk s-curves will be developed at the pre-construction stage following simple logistic s-curve requirements and guidelines. Then, it will develop a new construction cash flow area-method approach. This is important due to its extreme need for modelling and analysing