Professor Mohammad S. El-Mashaleh

Education

Ph.D. Civil Engineering / Construction Engineering and 2003

Management

University of Florida – USA

Dissertation: Firm Performance and Information Technology Utilization in the Construction Industry: An Empirical Study

GPA: 3.9/4.0

M.Sc. Construction Engineering and Management 1998

Arizona State University - USA

Thesis: Construction Cost and Schedule Control

GPA: 3.9/4.0

B.Sc. Civil Engineering 1989

University of Jordan - Jordan

Scopus and Google Scholar Metrics

Scopus H-index: 12; number of citations: 632.

Google H-index: 17. Number of citations; 1293.

Scholar

Managerial Experiences - Academia

Feb 2023 - Vice President for Planning, Development, Quality and International

Present Outreach

The Hashemite University

Zarqa, Jordan

Sep 2020 – **Dean of Scientific Research**

Sep 2023 The Hashemite University

Zarqa, Jordan

Sep 2016 – **Dean of Faculty of Graduate Studies**

Aug 2018 The Hashemite University

Zarqa, Jordan

Sep 2013- Dean and Vice Dean of Scientific Research and Graduate Studies

Aug 2014 The Hashemite University

Zarqa, Jordan

Sep 2010 – Director of the Center for Studies, Consultations, and Community

July 2011 Service

The Hashemite University

Zarqa, Jordan

Sep 2005- Chairman of the Department of Civil Engineering

Aug 2008 Faculty of Engineering – The Hashemite University

Zarqa, Jordan

Sep 2004- Assistant Dean for Student Affairs

Aug 2005 Faculty of Engineering – The Hashemite University

Zarga, Jordan

Managerial Experiences - Government

1998-2000 **Tendering Manager**

Tendering Committee for Military Works

Royal Engineering Corps – Jordan Armed Forces

Amman, Jordan

1993 – 1996 **Manager of Construction Department**

Special Communication Commission – Jordan Armed Forces

Amman – Jordan

Academic Experiences

Feb. 2004 – **Professor (Feb. 2016 – Present)**

Present Associate Professor (Jul. 2010 – Jan. 2016)

Assistant Professor (Feb. 2004 – Jun. 2010)

Department of Civil Engineering – Faculty of Engineering

The Hashemite University

Zarqa, Jordan

Sep 2011 – **Visiting Professor**

Aug 2012 Department of Civil Engineering – Faculty of Engineering

University of Jordan

Feb 2006- Visiting Lecturer

Jun 2006 Department of Civil Engineering – Faculty of Engineering and

Technology

University of Jordan - Jordan

Aug 2000 – Research Assistant

Dec 2003 Department of Civil and Coastal Engineering – University of Florida –

USA

Jan 1997 – Research Assistant

Jul 1998 Del E. Webb School of Construction – Arizona State University – USA

<u>Undergraduate Classes Taught on Campus and Virtually for the Hashemite University</u>

Construction project management Construction contract administration

Construction planning and scheduling

Computer applications in construction engineering and management

(Primavera and MS Project)
Construction methods

Engineering economy

Technical writing for engineers

<u>Supervision of Master Students at the University of Portsmouth, United Kingdom (Master Program - Project Management for Construction)</u>

2024	The influence of BIM and its impact on quantity surveying, cost
	estimation and cost control in construction projects.

- Adoption of building information modeling in modular and relocatable construction from construction management perspective
- Implementation of strategic management in the Canadian construction industry to enhance project control.

<u>Supervision of Master Students at the University of Jordan (Master Program in Engineering Project Management)</u>

2021	Factors affecting project delivery system selection in the Jordanian
	construction Industry.

- **2019** Factors affecting cost and schedule overruns: the case of UNHCR projects in Jordan.
- Building information modeling (BIM) in the architecture, engineering, and construction (AEC) industry in Jordan: current use, perceived benefits, and barriers for adoption.

The Role of design engineers in construction workers' safety: the case of Jordan.

Reasons behind delays and cost overruns in construction projects in Jordan.

2017 Effects of training and motivation of employees on performance of Jordanian construction companies: an employees' perspective.

Factors affecting construction site safety: the case of Jordan.

.

A framework for assessing and managing the risks associated with project development projects in the Jordanian manufacturing industry.

Publications Dissertation and Thesis

2016

El-Mashaleh, M. 2003. Firm performance and information technology utilization in the construction industry: an empirical study. Ph.D. dissertation, Department of Civil and Coastal Engineering, University of Florida, Gainesville, Florida.

El-Mashaleh, M. 1998. Cost and schedule control for clean manufacturing facility projects in the semiconductor industry. Master thesis, Del E. Webb School of Construction, Arizona State University, Tempe, Arizona.

Refereed Journal Papers

Hiyassat, M., Alkasagi, F., El-Mashaleh, M., Sweis, G. 2022. Risk allocation in public construction projects: the case of Jordan. *International Journal of Construction Management*.

Sweis, R., Abuhussein, R., Jandali, D., El-Mashaleh, M., Al-Debei, M. 2018. Factors affecting ERP projects from a project management perspective: A literature review. *International Journal of Business Information Systems*, 29(3), 281–296.

El-Mashaleh, M., and Horta, I. 2016. Evaluating contractors for bonding: DEA decision making model for surety underwriters. *ASCE Journal of Management in Engineering*, 32(1).

Hyari, K. Al-Daraiseh, A., and El-Mashaleh, M. 2016. Conceptual cost estimation model for engineering services in public construction projects. *ASCE Journal of Management in Engineering*, 32(1).

El-Mashaleh, M., Hyari, K., Bdour, A., and Rababeh, S. 2015. A multiattribute decision-making model for construction enterprise resource planning system selection. *International Journal of Construction Education and Research*. Published online on March 4, 2015.

Hyari, K. El-Mashaleh, M., and Rababeh, S. 2015. Framework for managing the traffic impacts of building construction projects. *Journal of Construction in Developing Countries*, 20(2), 89-105.

El-Mashaleh, M., and Minchin, E. 2014. Concessionaire selection model based on data envelopment analysis (DEA). *ASCE Journal of Management in Engineering*, 30(4), 04014013.

El-Mashaleh, M., Al-Jundi, A., Mattar, S., Abu Ali, R., and Al-Hammad, J.

- 2014. Understanding key bidding factors considered by top Jordanian contractors. *Jordan Journal of Civil Engineering*, 8(4), 455-464.
- Rababeh, S., Qublan, H., Abu Khafaja, S., and El-Mashaleh, M. 2014. Structural utilization of wooden beams as anti-seismic and stabilizing techniques in stone masonry in Qasr el-Bint, Petra, Jordan. *Construction and Building Materials*, 54, 60-69.
- El-Mashaleh, M. 2013. Empirical framework for making the bid/no-bid decision. *ASCE Journal of Management in Engineering*, 29(3), 200-205.
- Rababeh, S., Qublan, H., and El-Mashaleh, M. 2013. Utilization of tie beams for strengthening stone masonry arches in Nabataean construction. *Journal of Architectural Conservation*, 19(2), 118-130.
- Hyari, K., El-Mashaleh, M., Kandil, A. 2010. Optimal Assignment of Multiskilled Labor in Building Construction Projects. *International Journal of Construction Education and Research*, 6, 70-80.
- Rababeh, S., El-Mashaleh, M., Malabah, A. 2011. Factors determining the choice of the construction techniques in Petra, Jordan. *International Journal of Architectural Heritage*, 5(1), 60-83.
- El-Mashaleh, M. 2010. Decision to bid or not to bid: a data envelopment analysis approach. *Canadian Journal of Civil Engineering*, 37(1), 37-44.
- El-Mashaleh, M., Rababeh, S., Hyari, K. 2010. Utilizing data envelopment analysis to benchmark safety performance of construction contractors. *International Journal of Project Management*, 28 (1), 61-67.
- El-Mashaleh, M., Al-Smadi, B., Hyari, K., Rababeh, S. 2010. Safety management in the Jordanian construction industry. *Jordan Journal of Civil Engineering*, 4(1), 47-56.
- Hyari, K., El-Mashaleh, M., Kandil, A. 2010. Optimal Assignment of Multiskilled Labor in Building Construction Projects. *International Journal of Construction Education and Research*, 6, 70-80.
- El-Mashaleh, M. 2009. A construction subcontractor selection model. *Jordan Journal of Civil Engineering*, 3(4), 375-383.
- Hyari, K., El-Rayes, K., El-Mashaleh, M. 2009. Automated tradeoff between time and cost in planning repetitive construction projects. Construction *Management and Economics*, 27, 749-761.
- El-Mashaleh, M. 2007. Benchmarking information technology utilization in the construction industry in Jordan. *Journal of Information Technology in Construction (ITCon)*. Special issue: construction information technology in emerging economies, 12, 279-291.
- El-Mashaleh, M., Minchin, R., O'Brien, W. 2007. Management of

construction firm performance using benchmarking. ASCE Journal of Management in Engineering, 23(1), 10-17.

El-Mashaleh, M., O'Brien, W., Minchin, R. 2006. Firm performance and information technology utilization in the construction industry." *ASCE Journal of Construction Engineering and Management*, 132 (5), 499-507.

El-Mashaleh, M., Chasey, A. 1999. Improving the cost and schedule control system. *Cost Engineering*, American Association of Cost Engineers, July, 39-41.

EL-Mashaleh, M., Chasey, A. (1998). "Effective construction cost and schedule control." *Semiconductor Fabtech*, 9th Edition, IGC Publishing Ltd, London, Winter, 1998/99, 129-131.

Refereed Conference Papers

El-Mashaleh, M. 2022. A conceptual DEA model for assessing the viability of BOT infrastructure projects. Proceedings of the 14th International Conference on Computational Structural Technology, Montpellier, France, 23-25 August. 6 pages.

El-Mashaleh, M. 2015. A conceptual framework for evaluating sustainability of infrastructure projects. Proceedings of the 7th International Conference on Sustainable Development in Building and Environment (SuDBE), Reading, United Kingdom, 27-29 July. 10 pages.

El-Mashaleh, M. 2011. Subcontractor selection based on data envelopment analysis. Proceedings of the CIB International Conference on Management and Innovation for Sustainable Built Environment, Amsterdam, The Netherlands, 20-23 June. 11 pages.

El-Mashaleh, M., Al-Momani, A, Al-Sayyed, F., Saleh, N. 2006. A survey on IT usage in the construction, architecture and engineering, and consulting industry in Jordan. Proceedings of the *Joint International Conference on Computing and Decision Making in Civil and Building Engineering*, Montreal, Canada, 14-16 June, 11 pages.

El-Mashaleh, M., Minchin, R., O'Brien, W. 2005. Benchmarking construction firm performance. Proceedings of the *11th Joint CIB International Symposium*, Helsinki, Finland, 13-16 June, 376-389.

El-Mashaleh, M., O'Brien, W., Minchin, R. 2005. Construction firm performance and IT utilization. Proceedings of the *Construction Research Congress*, SanDiego, CA, USA, 5-7 April, 642-646.

El-Mashaleh, M., O'Brien, W. 2004. An Empirical study relating construction firm performance and IT utilization. Proceedings of the *10th International Conference on Computing in Civil and Building Engineering*, Bauhaus-Universität Weimar, Weimar, Germany, 2-4 June, 10 pages.

El-Mashaleh, M., O'Brien, W., London, K. 2001. An envelopment methodology to measure and compare subcontractor productivity at the firm level." Proceedings of the 9th Annual Conference of the International Group for Lean Construction, National University of Singapore, Singapore, 6-8 August, 17 pages.

Reports

El-Mashaleh, M., O'Brien, W., Kang, Y. 2006. The impact of IT use at the firm level: an empirical study of contractor performance. Center for Construction Industry Studies (CCIS), Report No. 34, The University of Texas at Austin.

Training Conducted

2006 – 2013 Tens of workshops in areas of contract administration and FIDIC conditions of contract in Bahrain, Egypt, Jordan, Lebanon, Qatar, Saudi Arabia, Turkey, and United Arab Emirates.

Referee of International Journals

Journal of Construction Engineering and Management (ASCE)

Journal of Management in Engineering (ASCE)

International Journal of Project Management (Outstanding reviewer)

Automation in Construction (Outstanding reviewer)

Construction Management and Economics

Journal of Information Technology in Construction (ITcon)

European Journal of Operational Research (Recognized reviewer)

International Journal of Production Economics (Recognized reviewer)

Journal of Information Technology and Decision making

Socio-Economic Planning Sciences (Recognized reviewer)

International Journal of Disaster Risk Reduction (Recognized reviewer)

Awards

Graduate Tuition Scholarship 2000-2003

University of Florida

PhD Scholarship Award 2000-2003

Hashemite University, Jordan

Graduate Tuition Scholarship Arizona State University

1996-1998

Hashemite Royal Court Scholarship Award

1984-1989

Research Interests

Deployment and utilization of information technology in construction

Decision support systems in construction

Performance measurement and benchmarking

Committees

Abroad university

Appointed as a member of the National University Achievement Exam by the Ministry of Higher Education and Scientific Research.

Assigned as a committee member by the Higher Education Accreditation and Quality Assurance Commission to assess accreditation requirements for civil engineering and project management programs at Middle East University, Philadelphia University, Balqa University, Yarmouk University, Al al-Bayt University, and Al-Hussein University.

Assigned as a committee member by Petra University to write a proposal for starting a new civil engineering program.

Appointed by Jordan Engineers Association as a chair/committee member for accreditation of civil engineering degrees.

Appointed by the Higher Education Accreditation and Quality Assurance Commission as a member of trustees at Zarqa Technical College.

University level

HU Deans Council (member)

HU University Council (member)

HU Scientific Research Council (Chair)

HU Graduate Studies Council (Chair)

HU Strategic Plan (Chair)

College and department level

Tens of committees as a chair and as a member including program curriculum, courses schedule, graduate studies, scientific research, and strategic plan.

Membership

Jordan Engineers Association since 1989.

Computer Skills

Windows and Microsoft office suite.

Internet and e-mail.

Statistical software packages: Minitab and SPSS.

Project management software packages: MS Project, Primavera, and

Navisworks.

Educational management platforms: Blackboard, Moodle, and MS

Teams.

Meeting platforms: Zoom and Webex.

Languages

Native speaker of Arabic.

Excellent command of written and spoken English.

References

Available upon request.