

Contents available at the publisher website: GAFTIM.COM International Journal of Theory of Organization and Practice (IJTOP)



Journal homepage: https://journals.gaftim.com/index.php/ijtop/index

Organization Project Management Maturity (OPM3) Implementation, Critical Success

Factors and Challenges – Cases from UAE

Mounir El Khatib¹, Aya Yaish², Hessa Al Ali²

¹ Associate Professor, Hamdan bin Mohamad Smart University, School of Business & Quality Management, Dubai. UAE ² Graduate Business Management, Hamdan bin Mohamad Smart University, School of Business & Quality Management, Dubai. UAE.

A R T I C L E I N F O

ABSTRACT

Keywords:

Organizational Project Management Maturity Model, OPM3, Capabilities, Outcomes, Critical Success Factors, Challenges, implementation

Received: Sep, 22, 2023 Accepted: Nov, 01, 2023 Published: Dec, 22, 2023 Successful projects require appropriate tools and effective management practices. Managers need to have a clear insight into project goals and use outstanding skills to implement them accordingly. They also must maintain a balance between customer satisfaction levels and profit maximization goals. The Organizational Project Management Maturity Model (OPM3) is among the critical tools for generating standardized outcomes in organizational projects. This paper portrays research of OPM3 implementation among organizations in the UAE and spotlights the critical impact of OPM3 on organizations. The research shows that an effective adaption of OPM3 components and levels will impact the overall performance of the organization. The research is based on both primary data collected from existing surveys and secondary data that is gathered through various sources such as journal articles and research papers to illustrate the organizations using the OPM model, that is constructed to fulfil the future needs of the organizations and endorse modification if needed. The conclusion that was derived from the pieces of evidence illustrates that written policies and procedures in addition to excellent management skills can maximize the benefits of OPM3 models among the UAE organizations.

1. INTRODUCTION

Due to the evolved world bustled with new opportunities, moved by development and constantly demanding perfection. most organizations have strived to accomplish effectiveness in project management while delivering value to their businesses and processes. With the growing significance and interest in project management across all sectors for organizations to be able to measure their effectiveness in terms of project management processes and practices, it is very essential to implement project management maturity models (Desai & Corporate, 2007). As they are critical tools for practitioners since they enable individuals to focus on organizational capabilities rather than individual projects or the capabilities of project manager. Moreover, they can assess their capabilities contrary to their best practices, determine their areas for improvement and plan to continuously enhance their organizational project management performance (Machado et al., 2021). According to the Project Management Institute (PMI)'s definition of Organizational Project Management Maturity Model (OPM3), it is when organizations practice systematic management on their projects, programs and portfolios in alignment with their strategic goals, in addition to the applications of knowledge, skills, tools and techniques in the organization and project activities in order to accomplish organizational desired aims through their projects (Jaleel & Azhar K. Mansur, 2013).

What makes OPM3 challenging to execute is the changes that continuously occur such as technology evolvements. stakeholders' expectations, methodologies, and processes enhancements (Zahra Naseri et al., 2021). Therefore, organizations need to conform the framework based on their applications and needs. Many organizations have attempted to introduce OPM3 in the United Arab Emirates and it has been indicated through the analysis that the model is playing a vital role in optimizing and standardizing the outcomes of projects (Guangshe et al., 2008a) (Tariq, Alshurideh, Akour, Al-Hawary, et al., 2022). There are several challenges that entities face while adapting and implementing Organizational Project Management Maturity Model in their projects. This paper assesses the implementation of OPM3 within different government entities in the UAE.

Literature Review

1.1. The Definition of OPM3

Organizational project management maturity has been classified as an openness to the project management of the organization. Proiect management maturity models offer development structure and assessment capabilities that assists organizations to compare the performance and delivery of their project to its rivals and compare it with the best practices. As well as, offers an organized improvement path (Bento et al., 2019). Organizational Project Management Maturity Model (OPM3) is one of the most common maturity models nowadays. The OPM3 was developed in 1998 with an objective of developing a standardized maturity model (H. M. Alzoubi, Alshurideh, Kurdi, et al., 2022). Initiated in 2003, OPM3 is currently the third edition and a fourth edition is planned to be introduced in the future. It circulates about three core topics which are managing improvement, acquiring knowledge, and performing assessment (Guangshe et al., 2008b).

The Maturity model was explained as the means by which all projects in an organization are managed and executed in a regulated, disciplined, and systematic manner, using established best practices. The degree or level of capability or expertise regarding project management is referred as "maturity". An organization is mature when it can deal perfectly with its projects. The level of maturity varies from an organization to another depending on certain criteria such as strategies, objectives, scope, etc.

1.2 The Importance of OPM3

An effective implementation of OPM3 is crucial in bridging the gap between an organization's project and strategy by offering an approach to progress an organization's strategic objectives via the implementation of practices and principles of project management (Wijaksono et al., 2020). OPM3 assists in determining whether or not to conduct improvements in certain crucial areas, Portfolio's such as the domain. Project Management, Program derived on the assessment of maturity (H. Alzoubi et al., 2022; M. T. Nuseir, Aljumah, & El Refae, 2022a). An organization lacking such a model will consistently face multiple obstacles and inconsistencies in accomplishing their strategic objective of the project (Tariq, Alshurideh, Akour, & Al-Hawary, 2022).

Adopting maturity models enables an organization to compare the outcomes of the assessment of the maturity with the descriptions stated in the maturity model. Thus, an organization obtains intuitions into their weaknesses and strengths. As well as, it is able to prioritize its activities to improve.

1.3. OPM3 Main Components and Levels:

OPM3 examines the following components essential to construct the model:

1.3.1. Capabilities

A capability can be explained as a certain capacity that assists an organization to implement processes of project management and convey services and products of project management. The availability of successful outcomes is significant establish capabilities, by which capabilities can be combined to establish best practice.

Outcomes

The execution of capabilities leads to several tangible and intangible outcomes.

1.3.2. Key Performance Indicators (KPIs)

The outcomes that are generated after the implementation of capabilities might be

determined by qualitatively or quantitatively by a criterion known as Key Performance Indicators (KPIs).

1.3.3. Domain Area

As stated by the Project Management Institute (PMI), OMP can be split into three main domains: Project, Program and Portfolio.

1.3.4. Best practices

As per the definition of PMI, the term Best Practices is defined as "an optimal path that is currently detected by the organization to accomplish their identified goals or objectives (I. Akour et al., 2021; M. T. Nuseir et al., 2021). Moreover, for OPM this comprise the potentiality to deliver project's predictably, constantly and successfully in order to implement the organizational strategies (A. Aljumah et al., 2023; Gaytan et al., 2023; E. Khatib et al., 2021).

All components managed together along with the explanation, self-assessment, necessarv directions navigational that explains the aggregation of capabilities and the description of the OMP process can compose the Organizational Project Management Maturity Model in an effective way (Nadzri et al., 2023). As OMP3 is designed to help organizations evaluate the status of their organizational project management maturity done which is by assisting them in conceptualization OPM3, and how to evaluate their current OPM3 (Al-Kassem et al., 2012; Aziz et al., 2023).

The Project Management Maturity Model can be broken down into five distinctive levels (Kravtsov, 2020):

Level 1 Initial Process: Although there are processes of project management, yet there is no established standards or practices. Management comprehends the project's definition, the availability of embraced processes, and is conscious of project management's necessity (Abudaqa et al., 2021; El khatib, Mahmood, et al., 2023).

Level 2 Structured Processes and Standards: Various processes of project management are available, yet they aren't regarded as a standard for the organization (Ahmed & Nabeel Al Amiri, 2022; R. S. Al-Maroof, Alnazzawi, et al., 2021; M. T. Alshurideh, Alzoubi, El khatib, et al., 2022; H. M. Alzoubi, Alshurideh, Al Kurdi, et al., 2022; M. M. El Khatib & Ahmed, 2018). The execution of the project management is supported by the management, but they have no continuous comprehension nor conformity for all the projects. (A. Aljumah et al., 2020; M. El Khatib et al., 2022) The project schedule, track, and technical functioning can be tracked through certain metrics (Al-Dmour et al., 2023; Mat Som & Kassem, 2013). Level 3 Organizational Standards and Institutional Processes: The organization standards are based on the processes of the project management (H. M. Alzoubi, Kurdi, Alshurideh, et al., 2022; M. El Khatib, Alnaqbi, et al., 2023). Such processes include the clients as an active part of the project team and are typically automated (M. T. Alshurideh, Alzoubi, Ghazal, et al., 2022). Most projects use such processes with minimum deviations; management has standardized processes with formal documentation (R. S. Al-Maroof, Alahbabi, et al., 2022).

Level 4 Managed Process: Projects are controlled by taking into consideration the performance of the project in the past and future (H. M. Alzoubi, Ahmed, et al., 2022; M. El Khatib, Khadim, et al., 2023; M. T. Nuseir, Aljumah, & El Refae, 2022b). An effective metrics are used to take decisions concerning the project and comprehending the effects on other projects. Standards and processes are documented to assist the practice of using such metrics to take project decisions. In addition, processes are combined with other corporation processes and systems (Bawaneh et al., 2023; M. El Khatib, Ibrahim, et al., 2023).

Level 5 Optimizing Processes: Processes are used to develop the activities of project management. The lessons that are learned are consistently assessed and used to develop the processes, documentation, and standards of project management.

1.4. Elements of OPM3

OPM3 contains three primary elements: Knowledge, Improvement, and Assessment. Each element plays a critical role in accomplishing organizational maturity (M. Alshurideh et al., 2023). The knowledge element is significant as it educates the organization about the concept of organizational project management, best practices embraced of OPM3, and the organizational project management maturity (M. T. Alshurideh, Alzoubi, Ghazal, et al., 2022; Ghazal, Hasan, Alzoubi, et al.,

International Journal of Theory of Organization and Practice (IJTOP) 3(2) -2023- 69

2023; Yasir et al., 2022). The assessment elements provide the organization with a clear vision of where it stands in regards of OPM and their current status to move ahead (Kassem & Martinez, 2022). The improvement element contains of the improvement plan and the improvement action plan (I. A. Akour et al., 2022; A. H. Al-Kassem et al., 2022). It assists organizations to plan their developments derived from the outcomes of the assessments and perform an act to implement them to improve the level of maturity.

1.5. OPM3 Assessment

The assessment of OPM3 will offer organizations with a detailed level of intuitions into their current project, program, and portfolio management capabilities (M. T. Alshurideh, Obeidat, Victoria, Alzoubi, et al., 2022; M. El Khatib, Al Qurashi, et al., 2021). A properly managed OPM3 assessment will consider all project management activities that are related to project integration management, risk management, scope management, quality OPM3 management. (Organizational Project Management Maturity Model) Assessment refers to the process of evaluating an organization's project management maturity using the OPM3 framework (Amiri et al., 2020; M. T. Nuseir, 2021; Varma et al., 2023). OPM3 is a globally recognized standard developed by the Project Management Institute (PMI) that assesses an organization's capabilities and maturity in project, program, and portfolio management (H. M. Alzoubi, In'airat, et al., 2022; M. El Khatib et al., 2021). The assessment involves a systematic analysis of how well an organization's processes, practices, and capabilities align with industry best practices and standards in project management (A. I. Aljumah, Nuseir, et al., 2022b; H. Alzoubi & Ahmed, 2019) (A. I. Aljumah et al., 2021a). OPM3 assessments typically aim to identify strengths and weaknesses in an organization's project management practices, providing insights for improvement and helping organizations enhance their overall project management maturity (A. I. Aljumah, Nuseir, et al., 2022c; Khan et al., 2022). The assessment results are valuable for making informed decisions, prioritizing improvements, and optimizing project management processes to achieve organizational objectives effectively.

first challenge is understanding The the knowledge. As the concept of OPM is new, hardly discovered in literature, and is barely practiced by organizations. Thus, sufficient communication of knowledge in project management is required for it to be implemented effectively (M. T. Alshurideh, Alquqa, Alzoubi, Al Kurdi, & Alhamad, 2023). As well, the organization focus on the process and project maturity rather than the overall maturity of the domains (Project, Program, and Portfolio Management) (M. T. Alshurideh, Alguga, Alzoubi, Al Kurdi, & Hamadneh, 2023; H. M. Alzoubi, Kurdi, Akour, et al., 2022; M. El Khatib, Beshwari, et al., 2023).

The second challenge is the assessment process. As the self-assessment tool is the only tool intended in providing an approximate level of maturity (Ahmed et al., 2022; R. S. Al-Maroof, Alnazzawi, et al., 2022). However, this tool might not be effective as the assessment should be detailed (M. Alshurideh, Almasaeid, El Khatib, Alzoubi, et al., 2022; M. M. El Khatib & Ahmed, 2020). As an effective assessment is one which includes the Best Practices, measure the outcomes and the KPIs, and the capabilities (El khatib, Beshwari, et al., 2023; Louzi, Alzoubi, El Khatib, et al., 2022).

Implementing OPM3 requires a significant allocation of resources, including time, personnel, and financial investments. Many organizations find it challenging to dedicate these resources without impacting ongoing projects or day-to-day operations (M. El Khatib et al., 2022; Lee, Nawanir, et al., 2023). Resistance to change is a prevalent challenge during the implementation of any maturity model (H. M. Alzoubi, Sahawneh, Alhamad, et al., 2022; M. El Khatib et al., 2020; Gulseven & Ahmed, 2022; M. T. Nuseir, 2020). Employees and stakeholders may resist new processes and methodologies, especially if they perceive them as disruptive or time-consuming. OPM3 often necessitates a cultural shift towards a project-focused and process-oriented more mindset (Aityassine et al., 2022; H. Al-Kassem, 2014; Almasaeid et al., 2022).. Changing the organizational culture can be met with resistance, and aligning the workforce with new principles may take time (M. Alshurideh, Alzoubi, Alshurideh, Kurdi, et al., 2022) (M. Alzoubi et al., 2021; Mubeen et al., 2022).

Leadership support is crucial for the success of OPM3 implementation (M. T. Alshurideh et al.,

1.6. Challenges when Implementing OPM3

2023) (Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, 2022). If executives and senior management are not fully committed to the process, it can lead to a lack of direction, insufficient resources, and a failure to establish a culture of continuous improvement (R. S. Al-Maroof, Alhumaid, et al., 2021). OPM3 assessments require extensive data collection and analysis (Al-Awamleh et al., 2022; Arshad et al., 2023; M. El Khatib, Zitar, et al., 2023). Organizations may struggle to gather accurate and comprehensive data, leading to incomplete or biased assessments that may not reflect the true maturity level (A. I. Aljumah et al., 2021b; Ghazal, Al-Dmour, et al., 2023). Tailoring OPM3 to fit the unique characteristics and needs of an organization can be challenging (M. T. Alshurideh et al., 2023; M. T. Nuseir et al., 2020). One-size-fits-all approaches may not address specific industry nuances or organizational structures, leading to difficulties in customization (H. M. Alzoubi, Ghazal, El khatib, et al., 2022; M. T. Nuseir & Aljumah, 2022). Integrating OPM3 with existing project management processes and methodologies can be complex (A. Al-Maroof et al., 2021; A. I. Aljumah, Nuseir, et al., 2022a; Ghazal, Hasan, Abdullah, et al., 2023). Ensuring alignment with current practices and avoiding disruptions to ongoing projects is crucial for successful implementation (H. Alzoubi et al., 2020; M. El Khatib, Ahmed, et al., 2023; Hani Al-Kassem, 2021; Sakkthivel et al., 2022).

OPM3 maturity assessments often involve intangible measuring aspects such as organizational culture, leadership capabilities, and employee engagement (Abudaqa et al., 2022; A. I. Aljumah, Shahroor, et al., 2022; Lee, Wong, et al., 2023). Quantifying these elements can be challenging, and subjective assessments may introduce biases. Maintaining the momentum and to OPM3 after the commitment initial implementation phase can be difficult (M. El Khatib, Khayat, et al., 2023; M. T. Nuseir & Aljumah, 2020). Organizations may struggle to sustain the focus on continuous improvement and may revert to old habits over time. In some cases, there may be a lack of understanding or awareness of OPM3 and its benefits (A. Al-Kassem et al., 2013) (H. M. Alzoubi et al., 2020; Blooshi et al., 2023; M. Nuseir & Elrefae, 2022). This can hinder effective implementation, as key stakeholders may not fully comprehend the model or its implications for

organizational improvement (AlDhaheri et al., 2023; M. El Khatib, Alzoubi, et al., 2023; Ghazal, Hasan, Ahmad, et al., 2023). Addressing these challenges requires a thoughtful and strategic approach, involving effective change management, communication, and ongoing commitment from leadership to ensure a successful OPM3 implementation and sustained improvements in project management maturity.

1.7. Critical Success Factors for OPM3:

OPM3 uses four stages of development to the existing processes: Standardize Measure, Control, and Continuous Improvement. Organizations must adopt a process-improvement approach in organizational project management (I. Akour et al., 2022; M. El Khatib, Yaish, et al., 2021; M. T. Nuseir, Aljumah, & El-Refae, 2022). They must identify the gaps in maturity that reduce business performance then apply the suitable disciplines to achieve continuous improvement. So, an assessment of the whole processes in the organization must be conducted to identify the gaps and weak points (I. Akour et al., 2023; M. M. El Khatib et al., 2019). The second step is to measure the maturity level of the organization in terms of project management (A. H. Al-Kassem, 2017; M. M. El Khatib et al., 2023; Louzi, Alzoubi, Alshurideh, et al., 2022). Then corrective measures must be considered to eliminate all the weak points and to fill the gaps in the organization's processes. Top management must understand the value of project management and program management and align them with the corporate and business strategy (Alhamad et al., 2021; Farrukh et al., 2023). Continuous improvement programs shall be in place throughout the organization to accomplish the target maturity level (H. M. Alzoubi et al., 2019; Nuseira & Aljumahb, 2020).

Recent study identified four key success factors for implementing and sustaining organizational project management maturity: 1. Executive support, 2. Program management best practices, 3. Process management infrastructure, 4. Program management best practices (Alshawabkeh et al., 2021; Amiri et al., 2020; M. El Khatib et al., 2023).

1.8. Research Questions

The research questions for this report we will following:

What is definition of program and portfolio at the

organizations and the relationship between program and portfolio and OPM3?

What is the impact of program and portfolio to improve and develop strategies at the organizations?

What is the level of the OPM3 (Organization Project Management Maturity Model) of the organizations?

1.9. Research Objectives

To highlight the effect of OPM3 at the organizations.

Provision information of programs and portfolios at the companies and organizations in the UAE.

Definition of programs and portfolios on the organization.

We will evaluate the factors and tools that improve a programs and portfolios to ensure the achievement of strategic objectives at the organizations.

2. METHODOLOGY

In this section we describe how the study was conducted and discussed the method of research used in this study, the samples, the procedures and the data collection tool. Therefore, the methodology is divided into three stages (The final draft of GanttChart can be found in APPENDIX):

Stage 1:

In the first stage, we collected historical information in the field of programs and portfolios from websites, magazines, conferences and other sources available to collect this information.

Stage 2:

learner

In the second stage, first interview was conducted with 13 people with experience in the field of programs and portfolios in different organizations, which includes an interview with Dr. Ahmed Altrawnah at RTA, the consultant of PMO; and others interviews that make it from others organization. The design of the study is a descriptive cross-sectional study and the sampling method is the non-probabilistic sampling type, 2.1 Collected Data (Based on All Interviews): which is the method of snowball sampling, where the persons interviewed were identified by the organization's personnel concerned with the programs and portfolios. Similar questions and two parts were used for each interview (part one seven questions each interview and part two: seventeen questions for each interview). These questions include the definition of programs and portfolios of the organizations, why Alignment with the strategy, what and why methodology is used, different aspects in the program like CSF (critical success factors), different aspects in the program like KDF (key deficiency factors), its relationship with programs, number and complexity of programs, in which industries and which areas, what program governance is challenging and other questions that depend on organization. Second interview made by contact with concerned by a telephone with three persons from different companies like RTA, TRA and ADNOC, that include questions about Organization 10 Project Management Maturity Model OPM3 that the Key strategic challenges for project and program management in government, how can OPM3 address these issues, Steps that the OPM3 can take to strengthen project and program management across the government and other questions for OPM3.

Stage 3:

progress

For concluding the method which is by collecting as much data as possible on programs and portfolios and OPM3 of the Organization, we realized the need to make interview questions as clear as possible to the reader to answer them in order to obtain results and ensure reliability and validity. We conducted the interviews among the manager and experts in project management of the different organizations in UAE Dr. Mounire designed closeended questionnaires for our analysis it will be easy for us to present it in the form of graphs. The final draft of interviews can be referred in APPENDIX.

2.1. Collected Data (Based on All Interviews):

* 1 if available, 0 if not available ** 0 mean good, 1 means bad

Program aligned *PMO *Qualitative & *Criteria with storage – existence Quantitative measure

to *Criteria to **Key Deficiency measure Defined success

ADNOC - Jassem	0	None	Schedule. Quality. Cost Stakeholder Satisfaction	1	0
Etisalat - Samya	1	Both	Schedule	1	1
RTA - Layla	0	None	Schedule + customer satisfaction	1	1
RTA – Asagirh	1	None	Schedule	1	1
DEWA- Abdulla	0	Both	Schedule	1	1
Ajman Digital Government – Afra	1	Qualitative	Schedule	1	1
ADNOC GAS - Ahmed	1	Both	Schedule	0	0
Dubai Municipality - Alia	0	None	Schedule	1	1
Dubai Municipality – Saeed Almarzooqi	1	Both	Schedule	1	0
DHA – Hessa	1	Both	Schedule	1	1
DHA – Ayesha	0	Both	Schedule + customer satisfaction	1	1
Emirates Group - Sumaya	1	Both	None	0	1
Emirates Global Aluminum - Sumaya	1	None	Customer satisfaction	1	0

2.2 Collected Data (Group Project Questionnaire)

In order to gain better understanding of how can OPM3 address the issues and steps that OPM3 can be taken to strength project and program management across the government, we interviewed three managers across RTA, ADNOC and Etisalat company thus to get their opinion towards the method of OPM3. Therefore following questions are the main focus in the interview:

- 1. What are key strategic challenges for project and program and management in your organization?
- 2. How can OPM3 address these issues?
- 3. What are the steps can be taken to strengthen project and program

management across the government?

4. How can OPM3 handle the issue of integrated approach to the development of organization wide program management policy and oversight of agency implementation and reason we need it in organization?

Initially, we conducted our first interview with Mr. Ahmed Altarawneh, who manages projects in RTA which he mentioned the main challenges for project and program management includes alignment to strategy, contribution to strategic direction and goals, buy-in, management of change, availability of trained and certified staff, data and information capture and analytics, proper project health performance and measurements, availability of resources on financial and otherwise also end user satisfaction and acceptance. And he advised that OPM3 can address these issues since OPM3 is methodological and can govern the implementation, deployment, performance, KSF, help align and standardize thus to allocate the whole organization on one page. Also the steps mentioned by Mr. Ahmed to strengthen the project and program management across the government by showing a clear steps and process with alignment across whole organization. And with integration approach to the development and well known policy and governance, OPM3 is a mature and can significantly payoff the result. The second interview completed by Shiva Pillai who works on key focal point for ONE-ERP projects in ADNOC and he mentioned the strategic challenges for project and program from ONE-ERP project perspective, standardization of business process and its measuring KPI's against each of the business process is a big challenge. Also, Mr. Shavia advised to address these issues from the KPI's which are measured on every 2 Qtr's so that continuous improvement is taking place. Moreover, the steps of OPM3 can be followed to strengthen project and program management across the government can be as following few points: 1) greater agility, 2) greater capability to choose the right projects to enact business strategies, 4) greater capability to deliver projects successfully, consistently, and predictably, 5) increased benefit realization from programs. Also, Mr. Shavia mentioned the integration approach to the development of the organization wide program management policy

and oversight of agency implementation are needed in OPM3 since its structured discovery of their organization portfolio, program and project management practices. The third interview done with Mr. Yasser A Zaki, he is Sr. director at corporate program management of Etisalat Company, mentioned challenges of strategic as allocating to budgeting and recourses/teams for strategy execution and need to stretch the communication for strategy. Moreover, in able OPM3 to address the issues through the improvement cycle, which it is much easy to handle OPM3 if there is written policies, procedures or documented information to support solving those challenges. And steps can be taken to strengthen project and program management across the government such as improving happens within certain tier that can improved by OPM3. Also, Mr. Yasser mentioned integration approach to the development and well known policy and oversight of the agency implementation issues can be handle by OPM3 since there is currently similar set of policies and procedures for project management execution which can support for governance, meetings for progress updates, sharing and communicating strategies to the staff management and to the Group of CEO on quarterly bases.

3. DATA ANALYSIS

3.1 Data Analysis (Based on All Interviews)

• Following table demonstrate the list of elements availability and existence in different organization located in UAE allocated for program purpose:

Organization – Done by Learner	РМО	Quantitative Data	Qualitative Data	Criteria to measure progress	Criteria to measure success
ADNOC – Jassem				Х	Х
Etisalat – Samya	Х	Х	Х	Х	Х
RTA - Layla				Х	Х
RTA – Asagirh	Х			Х	Х
DEWA- Abdulla		Х	Х	Х	Х

Ajman Digital Government - Afra	Х		Х	Х	Х
ADNOC GAS - Ahmed	Х	Х	Х	Х	
Dubai Municipality - Alia				Х	Х
Dubai Municipality – Saeed Almarzooqi	Х	Х	Х	Х	
DHA – Hessa	Х	Х	Х		
DHA – Ayesha		Х	Х	Х	Х
Emirates Group - Sumaya	Х	Х	Х		
Emirates Global Aluminum - Sumaya	Х		Х		Х

• Following table shows the list of criteria used in each organization to measure the progress, and most criteria used below is schedule which used as evidence that program is met on time or delayed for some

reasons:

• (Figure 1) pie chart indicates the percentages of good and bad key deficiency factors extracted from all organization which are listed above table:

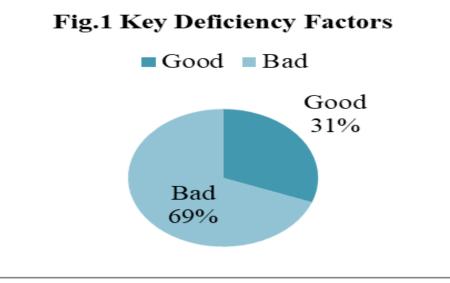


Figure (1)

3.2 SWOT Analysis Based on all interviews

Below SWOT analysis are selected for three organization supporting to define the internal factors of the organization which represented as (strength and weakness) also the external factors of the organization which are represented as (opportunities and threats) thus to support in program management.

Organization – Done by Learner	Schedule	Quality	Cost	Stakeholder Satisfaction
ADNOC – Jassem	Х	Х	Х	Х
Etisalat – Samya	Х			
RTA - Layla	Х			Х
RTA – Asagirh	Х			
DEWA- Abdulla	Х			
Ajman Digital Government	Х			
ADNOC GAS	Х			
Dubai Municipality – Alia	Х			
Dubai Municipality – Saeed Almarzooqi	Х			
DHA – Hessa	Х			
DHA – Ayesha	Х			
Emirates Group – Sumaya				
Emirates Global Aluminum – Sumaya				Х

3.2.1. ADNOC

STRENGTH	WEEKNESSES
 Organization is aligned with strategy of four pillars (People, Profit, Efficient and performance) We'll defined organization structure for the program such as (Steering Committee, weekly meetings and programmed head for guidance on risks and issues) Business units are clear with process and using ERP system for mature PMIS 	 Un-availably of a clear scope Un-clear list of users to be involved Un-sufficient training's to employees Un-effective organizational change management and business process engineering

OPPORTUNITIES	THREATS
Each business have subject matter expertAvailable criteria to measure the success	 Resisting to changes might cause over due to deliver latest solution and business to the market

3.2.2 Etisalat STRENGTH

STRENGTH					WEEKNESSES		
•	Required	information	are	agreed	from	•	Large number of stakeholders involved

	· · · · · · · · · · · · · · · · · · ·
 begging of program including qualitative and quantitative if any. PMI method is followed to manage program Etisalat managers have enough experience and knowledge on projects Programs in Etisalat are archived by meeting constrains (Time, Cost and Recourses) Programs are aligned with the organization 	 compared to managing an individual project which is less involvement. More accountable people leads to any changes affects another domain un-sufficient communication and updates received on time from project manager when one project is impacted
strategy	
OPPORTUNITIES	THREATS
 Give program and project managers certain power of decision making Agree on governance plan at begging of program Program manager ability to apply best and suitable techniques to the existing process of managing program. 	 Not much tools and techniques used to manage the program Un-clear idea/ benefit of the program at each activity Un-clear list of buy-in (support and signoff) to be involved in every stage of the program Un-sufficient communication through downward and upward un-clear governance structure and escalation

3.2.3 RTA

3.2.3 RIA	
STRENGTH	WEEKNESSES
 PMI method is followed to manage program Programs are aligned with strategy Required information and monitoring a specific program both available Budget are secured and divided among internal teams Available tools such as Typical Office Templates a and OPMS) Project management mature organization Project management plans are we'll developed, executed, monitored and controlled. 	 Align cross departments of the priority of the program Program mangers not always planning for contingencies and preparing we'll for worst scenario
OPPORTUNITIES	THREATS
 Clear communication plan from the beginning We'll competing on the region level with Etisalat Systematic survey completed for overall transportation and check the ratings Conduct risk assessment around critical success factors to increase project success 	 No plan for mitigation held with vendors and external customers if things didn't went right

3.3. SWOT Analysis on Group Project Questionnaire

3.3.1. ADNOC			
STRENGTH	WEEKNESSES		
 Measuring KPIs against each of the business process OPM3 avail great agility and more productivity The Program (ONE-ERP) covers organization vision and mission 	 Lack of system availability as the plan is to go for one network service Possible of miscommunication as the key personal for each activity is yet to be defined 		
OPPORTUNITIES	THREATS		
 Unify other business process such as HR across all sub-companies Integrate facilities for usage of more resources 	 Employees that resist the change System replace a role of an individual in the organization 		

3.3.2. Etisalat

STRENGTH	WEEKNESSES
Strengthen the communicationExecution	 No written policies and procedures as part of challenges Lack of employees empowerment in decision making
OPPORTUNITIES	THREATS
Go for Future certified with OPM3Avail written rules and policies	 Unclear structure Poor message deliver from management to the employee

3.3.3 RTA

STRENGTH	WEEKNESSES				
• Integration, standardized and well	• Dependence on PM as main tool to				
informed policies	execute strategy				
OPPORTUNITIES	THREATS				
Integrate more facilities	Poor reliability				

4. **RECOMMENDATION**

However, the first step that should be done for organizations that have not implemented OPM3 yest is to gather suggestions from the current organizations such as ADNOC, Etisalat and RTA that have already implemented the model in order to find the area that needs to be improved. Moreover. higher management in the consider Organization organizations should Project Management Maturity Models in their budgets. In addition, higher management need to give full support to maturity models implementations in their organizations. Initiating specific specialized training of OPM3 to enable other organizations to encounter the obstacles of the Model. Organizations in the UAE need to identify the needs behind implementing such models. Moreover, repeat the assessment after each successful project as the first assessment is a benchmark for the organization. There should be an extensive interaction between organizations that have not implemented OPM3 and that have already implemented to consistently upgrade the Model to cope up with the advancements of the Model.

5. CONCLUSION

Managing projects is a very critical and most demanding task in many organizations. It's the key engine of the executing projects, programs and portfolios. Moreover, without proper communication of the strategy into the lower functions of the organization, there will be challenges faced in obtaining the objective and goal of the strategy which has been set by executives of the organization.

When an organization implements one or more maturity models, it should have patience to realize the benefits intended from implementing such model. For organization to survive in the long run should learn from the unsuccessful it implementations so that they can achieve better results in future. Therefore, the implementation of OMP3 enhances the best practices and improves the current processes. In addition, it organizes and delivers the strategy in an effective and efficient way, this is done by aligning the organization's strategy with the projects, programs, and portfolios.

The challenges faced by the organizations in the UAE while implementing the Organization Project Management Maturity Model should be assessed in order to reform and upgrade the concept of this model so that constant improvement can be induced in the UAE's organizations. It is priority to restructure the OPM3 so that it can be exploited by the organizations from the core-level to be able to engage in the organization's performance. Certain training must be initiated to be able to encounter the obstacles of the Model. Organizations that have already implemented the OPM3 should interact with the other organizations to upgrade organization's projects in the UAE and to have an efficient maturity model for organizational project management.

REFERENCES

- Abudaqa, A., Alzahmi, R. A., Almujaini, H., & Ahmed, G. (2022). Does innovation moderate the relationship between digital facilitators, digital transformation strategies and overall performance of SMEs of UAE? *International Journal of Entrepreneurial Venturing*, 14(3), 330–350. https://doi.org/10.1504/ijev.2022.124964
- Abudaqa, A., Hilmi, M. F., Almujaini, H., Alzahmi, R. A., & Ahmed, G. (2021). Students' perception of e-Learning during the Covid Pandemic: a fresh evidence from United Arab Emirates (UAE). *Journal of E-Learning and Knowledge Society*, 17(3), 110–118. https://doi.org/10.20368/1971-8829/1135556
- Ahmed, G., Abudaqa, A., Jayachandran, C., Limbu, Y., & Alzahmi, R. (2022). Nation Branding as a Strategic Approach for Emerging Economies: The Case of UAE. In *Marketing Communications and Brand Development in Emerging Economies* (pp. 41–57). Springer. https://doi.org/10.1007/978-3-030-88678-3_3
- Ahmed, G., & Nabeel Al Amiri. (2022). the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh

Rashid Bin Saeed Al Maktoum. *International Journal of Technology, Innovation and Management (IJTIM), 2*(1), 1. https://doi.org/10.54489/ijtim.v2i1.58

- Aityassine, F., Soumadi, M., Aldiabat, B., Al-Shorman, H., Akour, I., Alshurideh, M., & Al-Hawary, S. (2022). The effect of supply chain resilience on supply chain performance of chemical industrial companies. *Uncertain Supply Chain Management*, 10(4), 1271–1278.
- Akour, I. A., Al-Maroof, R. S., Alfaisal, R., & Salloum, S. A. (2022). A conceptual framework for determining metaverse adoption in higher institutions of gulf area: An empirical study using hybrid SEM-ANN approach. *Computers and Education: Artificial Intelligence*, 3(10005), 2. https://doi.org/10.1016/j.caeai.2022.100052
- Akour, I., Alnazzawi, N., Alshurideh, M., Almaiah, M. A., Al Kurdi, B., Alfaisal, R. M., & Salloum, S. (2022). A Conceptual Model for Investigating the Effect of Privacy Concerns on E-Commerce Adoption: A Study on United Arab Emirates Consumers. *Electronics (Switzerland)*, *11*(22), 3648. https://doi.org/10.3390/electronics11223648
- Akour, I., Alshurideh, M., Al Kurdi, B., Al Ali, A., & Salloum, S. (2021). Using Machine Learning Algorithms to Predict People's Intention to Use Mobile Learning Platforms During the COVID-19 Pandemic: Machine Learning Approach. *JMIR Medical Education*, 7(1), 1–17.
- Akour, I., Rahamneh, A. A. L., Al Kurdi, B., Alhamad, A., Al-Makhariz, I., Alshurideh, M., & Al-Hawary, S. (2023). Using the Canonical Correlation Analysis Method to Study Students' Levels in Face-to-Face and Online Education in Jordan. *Information Sciences Letters*, 12(2), 901–910.
- Al-Awamleh, H. K., Alhalalmeh, M. I., Alatyat, Z. A., Saraireh, S., Akour, I., Alneimat, S., Alathamneh, F. F., Abu-Farha, Y. S., & Al-Hawary, S. I. S. (2022). The effect of green supply chain on sustainability: Evidence from the pharmaceutical industry. *Uncertain Supply Chain Management*, 10(4), 1261–1270. https://doi.org/10.5267/j.uscm.2022.8.002
- Al-Dmour, N. A., Ali, L., Salahat, M., Alshurideh, M., Alzoubi, H. M., Ghazal, T. M., & Chabani, Z. (2023). Information Systems Solutions for the Database Problems. *Studies in Computational Intelligence*, 2023(1056), 703–715.
- Al-Kassem, A., Bakri, A., & In'airat, M. (2013). Evaluation Tools of Total Quality Management in Business Organizations. *European Journal of Business and Management*, 5, 41–51.
- Al-Kassem, A. H. (2017). Recruitment and Selection Practices in Business Process Outsourcing Industry. Archives of Business Research, 5(3), 40–52. https://doi.org/10.14738/abr.53.2180
- Al-Kassem, A. H., Aguenza, B. B., & Alghurabli, Z. E. (2022). Accreditation of Academic Programs : Implications on Quality Governance and Administrationof Taguig City University. *Journal of Positive School Psychology*, 6(4), 3908–3923.

https://journalppw.com/index.php/jpsp/article/view/ 3992/2625

- Al-Kassem, Aguenza, B. B., Hami, A., & Som, A. P. M. (2012). Social Media and Productivity in the Workplace: Challenges and Constraints. *Interdisciplinary Journal of Research in Business*, 2(2), 22–26. http://www.idjrb.com/articlepdf/article223.pdf
- Al-Kassem, H. (2014). Determinants of employee's overall

satisfaction toward training and development programs. International Journal of Economics, Finance and Management, 3(3), 129–135. http://www.ejournalofbusiness.org

- Al-Maroof, A., Salloum, A., Al-Maroof, R. S., Akour, I., Aljanada, R., Alfaisal, A. M., Alfaisal, R. M., Aburayya, A., & Salloum, S. A. (2021). Acceptance determinants of 5G services Title Acceptance determinants of 5G services International Journal of Data and Network Science Acceptance determinants of 5G services. *Canada. International Journal of Data and Network Science*, 5(4), 613–628. http://usir.salford.ac.uk/id/eprint/61985/
- Al-Maroof, R. S., Alahbabi, N. M. N., Akour, I., Alhumaid, K., Ayoubi, K., Alnnaimi, M., Thabit, S., Alfaisal, R., Aburayya, A., & Salloum, S. (2022). Students' perception towards behavioral intention of audio and video teaching styles: An acceptance study. *International Journal of Data and Network* Science, 6(2), 603–618. https://doi.org/10.5267/j.ijdns.2021.11.004
- Al-Maroof, R. S., Alhumaid, K., Akour, I., & Salloum, S. (2021). Factors that affect e-learning platforms after the spread of covid-19: Post acceptance study. *Data*, 6(5). https://doi.org/10.3390/data6050049
- Al-Maroof, R. S., Alnazzawi, N., Akour, I. A., Ayoubi, K., Alhumaid, K., Alahbabi, N. M., Alnnaimi, M., Thabit, S., Alfaisal, R., Aburayya, A., & Salloum, S. (2021). The effectiveness of online platforms after the pandemic: Will face-to-face classes affect students' perception of their behavioural intention (BIU) to use online platforms? *Informatics*, 8(4), 4. https://doi.org/10.3390/informatics8040083
- Al-Maroof, R. S., Alnazzawi, N., Akour, I., Ayoubi, K., Alhumaid, K., Nasser, N. M., Alaraimi, S., Al-Bulushi, A. A., Thabit, S., Alfaisal, R., Aburayya, A., & Salloum, S. (2022). Students' perception towards using electronic feedback after the pandemic: Post-acceptance study. *International Journal* of Data and Network Science, 6(4), 1233–1248. https://doi.org/10.5267/j.ijdns.2022.6.010
- AlDhaheri, H., Hilmi, M. F., Abudaqa, A., Alzahmi, R. A., & Ahmed, G. (2023). The relationship between HRM practices, innovation, and employee productivity in UAE public sector: a structural equation modelling approach. *International Journal of Process Management and Benchmarking*, 13(2), 157–176.
- Alhamad, A. Q. M., Akour, I., Alshurideh, M., Al-Hamad, A. Q., Kurdi, B. Al, & Alzoubi, H. (2021). Predicting the intention to use google glass: A comparative approach using machine learning models and PLS-SEM. *International Journal of Data and Network Science*, 5(3), 311–320. https://doi.org/10.5267/j.ijdns.2021.6.002
- Aljumah, A. I., Nuseir, M. T., & Alam, M. M. (2021a). Organizational performance and capabilities to analyze big data: do the ambidexterity and business value of big data analytics matter? *Business Process Management Journal*, 27(4), 1088–1107.
- Aljumah, A. I., Nuseir, M. T., & Alam, M. M. (2021b). Traditional marketing analytics, big data analytics and big data system quality and the success of new product development. *Business Process Management Journal*, 27(4), 1108–1125.
- Aljumah, A. I., Nuseir, M. T., & El Refae, G. A. (2022a). Business Analytics and Competitive Advantage for SMEs in UAE:

A Mediating Role of Technology Assets. In 2022 International Arab Conference on Information Technology (ACIT), 1–9.

- Aljumah, A. I., Nuseir, M. T., & El Refae, G. A. (2022b). Exploring the Effect of Social Media Marketing and Destination image on Destination Loyalty in Covid-19 Times: Sequential Mediating Role of Brand Love and Brand Loyalty. *In 2022 International Arab Conference on Information Technology (ACIT)*, 1–8.
- Aljumah, A. I., Nuseir, M. T., & El Refae, G. A. (2022c). The effect of sensory marketing factors on customer loyalty during Covid 19: Exploring the mediating role of customer satisfaction. *International Journal of Data and Network Science*, 6(4), 1359–1368. https://doi.org/10.5267/j.ijdns.2022.5.015
- Aljumah, A. I., Shahroor, H., Nuseir, M. T., & El Refae, G. A. (2022). The effects of employee commitment and environment uncertainty on product quality: The mediating role of supply chain integration. Uncertain Supply Chain Management, 10(4), 1379–1386. https://doi.org/10.5267/j.uscm.2022.7.001
- Aljumah, A., Nuseir, M., & Refae, G. (2023). Examining the effect of social media interaction, E-WOM, and public relations: Assessing the mediating role of brand awareness. *International Journal of Data and Network Science*, 7(1), 467–476.
- Aljumah, A., Nuseir, M. T., & Islam, A. (2020). Impacts of service quality, satisfaction and trust on the loyalty of foreign patients in Malaysian medical tourism. International journal of innovation. *Creativity and Change*, *11*(2), 451–467.
- Almasaeid, T., Alzoubi, H., El Khatib, M., Ghazal, T., Alshurideh, M., Al-Dmour, N., Sattar, O., & Ae. (2022). Futuristic Design & Development of Learning Management System including Psychological Factors Resolution. *Journal for ReAttach Therapy and Developmental Diversities*, 5, 176– 188.
- Alshawabkeh, A., Nuseir, M. T., & Aljumah, A. (2021). Impacts of social media on the buying intention of the consumers in Edinburgh, UK. *International Journal of Procurement Management*, 14(4), 470–486. https://doi.org/10.1504/IJPM.2021.116036
- Alshurideh, M., Al Kurdi, B. H., Alzoubi, H. M., & Salloum, S. (2023). The Effect of Information Technology on Business and Marketing Intelligence Systems (Vol. 1056). Springer Nature.
- Alshurideh, M., Almasaeid, T., El Khatib, M., Alzoubi, H., Ghazal, T., Hamadneh, S., Al-Dmour, N., & Sattar, O. (2022). Components Determining the Behavior and Psychological impact of Entrepreneurship among Higher Vocational Students. *Journal for ReAttach Therapy and Developmental Diversities*, *5*, 189–200.
- Alshurideh, M., Alzoubi, H., Alshurideh, M., Kurdi, B., Obeidat, B., Hamadneh, S., & Ahmad, A. (2022). The influence of supply chain partners' integrations on organizational performance: The moderating role of trust. *Uncertain Supply Chain Management*, *10*(4), 1191–1202.
- Alshurideh, M. T., Al-Hadrami, A., Alquqa, E. K., Alzoubi, H. M., Hamadneh, S., & Al Kurdi, B. (2023). The effect of lean and agile operations strategy on improving orderwinners: Empirical evidence from the UAE food service industry. *Uncertain Supply Chain Management*, 11(1),

87-94. https://doi.org/10.5267/j.uscm.2022.11.007

- Alshurideh, M. T., Al Kurdi, B., Alhamad, A., Hamadneh, S., Alzoubi, H. M., & Ahmad, A. (2023). Does social customer relationship management (SCRM) affect customers' happiness and retention? A service perspective. *Uncertain Supply Chain Management*, *11*(1), 277–288. https://doi.org/10.5267/j.uscm.2022.9.015
- Alshurideh, M. T., Alquqa, E. K., Alzoubi, H. M., Al Kurdi, B., & Alhamad, A. (2023). The impact of cyber resilience and robustness on supply chain performance: Evidence from the UAE chemical industry. *Uncertain Supply Chain Management*, *11*(1), 187–194. https://doi.org/10.5267/j.uscm.2022.10.008
- Alshurideh, M. T., Alquqa, E. K., Alzoubi, H. M., Al Kurdi, B., & Hamadneh, S. (2023). The effect of information security on e-supply chain in the UAE logistics and distribution industry. *Uncertain Supply Chain Management*, *11*(1), 145–152. https://doi.org/10.5267/j.uscm.2022.11.001
- Alshurideh, M. T., Alzoubi, H. M., El khatib, M., Ghazal, T. M., Al-Dmour, N. A., Sattar, O., & Kukunuru, S. (2022). An Experimental Evaluation on Resource Attribute, Internal Risks and Regime Structure of R&D Association-Including Exploration of Moderating Effect of Association Management Capability, Psychological. Journal for ReAttach Therapy and Developmental Diversities, 5(2), 201–215.
- Alshurideh, M. T., Alzoubi, H. M., Ghazal, T. M., Alami, R., & Al Masaeid, T. (2022). Risk Management Model for Telecom Enterprises Based on Variables (RM, SO, RC, SI) with Nature, Sense and Positive Psychology Hypothesis. *Journal for ReAttach Therapy and Developmental Diversities*, 2022, 5.
- Alshurideh, M. T., Obeidat, B. Y., Victoria, V., Alzoubi, H. M., Fatima, A., Ilyas, A., & Rustam, I. (2022). A Systematic Literature Review of Security in 5G based Social Networks. International Conference on Cyber Resilience, ICCR 2022. https://doi.org/10.1109/ICCR56254.2022.9996068
- Alzoubi, H., & Ahmed, G. (2019). Do TQM practices improve organisational success? A case study of electronics industry in the UAE. International Journal of Economics and Business Research, 17(4), 459–472. https://doi.org/10.1504/IJEBR.2019.099975
- Alzoubi, H., Alshurideh, M., Gasaymeh, A., Ahmed, G., & Kurd, B. Al. (2020). Loyalty program effectiveness: Theoretical reviews and practical proofs. *Uncertain Supply Chain Management*, 8(3), 599–612. https://doi.org/10.5267/j.uscm.2020.2.003
- Alzoubi, H., Alshurideh, M., Kurdi, B. Al, Akour, I., & Aziz, R. (2022). Does BLE technology contribute towards improving marketing strategies, customers' satisfaction and loyalty? The role of open innovation. *International Journal of Data and Network Science*, 6(2), 449–460. https://doi.org/10.5267/j.ijdns.2021.12.009
- Alzoubi, H. M., Ahmed, G., Al-Gasaymeh, A., & Al Kurdi, B. (2020). Empirical study on sustainable supply chain strategies and its impact on competitive priorities: The mediating role of supply chain collaboration. *Management Science Letters*, 10(3), 703–708. https://doi.org/10.5267/j.msl.2019.9.008
- Alzoubi, H. M., Ahmed, G., & Alshurideh, M. (2022). An empirical investigation into the impact of product

quality dimensions on improving the order-winners and customer satisfaction. *International Journal of Productivity and Quality Management*, *36*(2), 169–186. https://doi.org/10.1504/IJPQM.2021.10037887

- Alzoubi, H. M., Alshurideh, M., Kurdi, B. Al, Akour, I., Obeidat, B., & Alhamad, A. (2022). The role of digital marketing channels on consumer buying decisions through eWOM in the Jordanian markets. *International Journal of Data and Network Science*, 6(4), 1175–1185. https://doi.org/10.5267/j.ijdns.2022.7.002
- Alzoubi, H. M., Alshurideh, M. T., Al Kurdi, B., Ghazal, T. M., Said, R. A., AlHamad, A. Q., Hamadneh, S., Sahawneh, N., & Alkassem, A. H. (2022). Fuzzy assisted human resource management for supply chain management issues. *Annals of Operations Research*, 2(308), 617–629. https://doi.org/10.1007/s10479-021-04472-8
- Alzoubi, H. M., Ghazal, T. M., El khatib, M., Alshurideh, M. T., Alami, R., & Al Masaeid, T. (2022). Creation of Indicator System for Quality Estimation of Safety Management of Personnel and it's Psychological impact on Industrial Enterprises. *Journal for ReAttach Therapy and Developmental Diversities*, 5(SpecialIssue2), 143–151.
- Alzoubi, H. M., In'airat, M., & Ahmed, G. (2022). Investigating the impact of total quality management practices and Six Sigma processes to enhance the quality and reduce the cost of quality: the case of Dubai. *International Journal of Business Excellence*, 27(1), 94–109. https://doi.org/10.1504/IJBEX.2022.123036
- Alzoubi, H. M., Kurdi, B. Al, Akour, I., & Alshurideh, M. T. (2022). The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry. Uncertain Supply Chain Management, 10(4), 1111–1116. https://doi.org/10.5267/j.uscm.2022.9.001
- Alzoubi, H. M., Kurdi, B. Al, Alshurideh, M., Akour, I., Tariq, E., & Alhamad, A. (2022). The effect of social media influencers' characteristics on consumer intention and attitude toward Keto products purchase intention. *International Journal of Data and Network Science*, 6(4), 1135–1146.

https://doi.org/10.5267/j.ijdns.2022.7.006

- Alzoubi, H. M., Mehmood, T., Alshurideh, M., Al-Gasaymeh, A., & Ahmed, G. (2019). Schumpeterian entrepreneurship theory: Evolution and relevance. *Academy of Entrepreneurship Journal*, *25*(4), 1–10.
- Alzoubi, H. M., Sahawneh, N., Alhamad, A. Q., Ghazal., T. M., Malik, U., Majid, A., & Atta, A. (2022). Analysis Of Cost Prediction In Medical Insurance Using Modern Regression Models. International Conference on Cyber Resilience, ICCR 2022. https://doi.org/10.1109/ICCR56254.2022.9995926
- Amiri, N. Al, Rahim, R. E. A., & Ahmed, G. (2020). Leadership styles and organizational knowledge management activities: A systematic review. *Gadjah Mada International Journal of Business*, 22(3), 250–275. https://doi.org/10.22146/gamaijb.49903
- Arshad, M., Brohi, M., Soomro, T., Ghazal, T., Alzoubi, H., & Alshurideh, M. (2023). NoSQL: Future of BigData Analytics Characteristics and Comparison with RDBMS (pp. 1927–1951). https://doi.org/10.1007/978-3-031-12382-5_106
- Aziz, A., Brohi, M. N., Soomro, T. R., Alzoubi, H. M., Ghazal, T. M.,

& Alshurideh, M. (2023). Aircraft Turnaround Manager (ATM): A Solution to Airport Operations. *Studies in Computational Intelligence*, *2023*(1056), 679–702.

- Bawaneh, A., Massadeh, D., Akour, I., Abu haija, A., & Alshurideh, M. (2023). The Impact of Green Auditing on Organizational Performance in Jordan: the Moderating Effect of the Auditor's Opinion. *Information Sciences Letters*, 12, 1505–1512. https://doi.org/10.18576/isl/120338
- Bento, I., Gomes, J., & Romão, M. (2019). The relationship between OPM3 and Project Performance: A multiple case study. *Journal of Modern Project Management*, 6(3), 46–57. https://doi.org/10.19255/JMPM01803
- Blooshi, I., Alamim, A., Said, R., Taleb, N., Ghazal, T., Ahmad, M., Alzoubi, H., & Alshurideh, M. (2023). *IT Governance and Control: Mitigation and Disaster Preparedness of Organizations in the UAE* (pp. 661–677). https://doi.org/10.1007/978-3-031-12382-5_35
- Desai, S., & Corporate, G. E. (2007). Organizational Project Management Maturity Model (OPM3): A Case Study. 1305–1308.
- El Khatib, M., Ahmed, G., Alshurideh, M., & Al-Nakeeb, A. (2023). Interdependencies and Integration of Smart Buildings and Smart Cities: A Case of Dubai. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1637–1656). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_89
- El Khatib, M., Al Qurashi, F., & Al Brieki, S. (2021). Challenges of Design and Implementation of Program Governance
—Cases from Government Bodies in UAE. *American Journal of Industrial and Business Management*, 11(05), 566–581. https://doi.org/10.4236/ajibm.2021.115036
- El Khatib, M., Alabdooli, K., AlKaabi, A., & Al Harmoodi, S. (2020). Sustainable Project Management: Trends and Alignment. *Theoretical Economics Letters*, 10(06), 1276– 1291. https://doi.org/10.4236/tel.2020.106078
- El Khatib, M., Alnaqbi, A., Alnaqbi, A., Alsuwaidi, H., Marri, M., & Ankit, A. (2023). Implementing IOT in Effective Project Management. *International Journal of Computers and Their Applications*, 30, 192–200.
- El Khatib, M., Alzoubi, H., Hamidi, S., Alshurideh, M., Baydoun, A., & Al-Nakeeb, A. (2023). Impact of Using the Internet of Medical Things on e-Healthcare Performance: Blockchain Assist in Improving Smart Contract. *ClinicoEconomics and Outcomes Research : CEOR, 2023*, 397–411. https://doi.org/10.2147/CEOR.S407778
- El khatib, M., Beshwari, F., Beshwari, M., Beshwari, A., Alzoubi, H. M., & Alshurideh, M. (2023). Covid19 Unknown Risks---Using AI for Disaster Recovery. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 2113–2137). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_116
- El Khatib, M., Beshwari, F., Beshwari, M., Beshwari, A., Alzoubi, H. M., & Alshurideh, M. (2023). Can Better Capabilities Lead to Better Project and Program Governance? Cases from Dubai. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of*

Information Technology on Business and Marketing Intelligence Systems (pp. 1295–1313). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_71

- El Khatib, M., Hamidi, S., Ameeri, I., Zaabi, H., & Marqab, R. (2022). Digital Disruption and Big Data in Healthcare -Opportunities and Challenges. *ClinicoEconomics and Outcomes Research*, 14, 563–574. https://doi.org/10.2147/CEOR.S369553
- El Khatib, M., Ibrahim, A., Blooshi, S., Almansoori, S., & El Khatib, A. (2023). *Digital Transformation and Disruptive Technologies: Effect of 3D Printing on Managing Projects*. 1–13.

https://doi.org/10.1109/ICCR56254.2022.9996011

- El Khatib, M., Khadim, S., Ketbi, W., Kuwaiti, N., & El Khatib, A. (2023). Digital Transformation and Disruptive Technologies: Effect of Blockchain on Managing Construction Projects. 1–9. https://doi.org/10.1109/ICCR56254.2022.9995756
- El Khatib, M., Khayat, A., Mansoori, S., Alzaabi, A., & Ankit, A. (2023). Metaverse Skills for Executives and Senior Managers: The Pros and Cons. 1–7. https://doi.org/10.1109/ICBATS57792.2023.1011148 3
- El Khatib, M. M., Abidi, N., Al-Nakeeb, A., Alshurideh, M., & Ahmed, G. (2023). Dubai Smart City as a Knowledge Based Economy. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1657–1672). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_90
- El Khatib, M. M., & Ahmed, G. (2018). Improving Efficiency in IBM Asset Management Software System "Maximo": A Case Study of Dubai Airports and Abu Dhabi National Energy Company. *Theoretical Economics Letters*, 08(10), 1816–1829. https://doi.org/10.4236/tel.2018.810119
- El Khatib, M. M., & Ahmed, G. (2020). Robotic pharmacies potential and limitations of artificial intelligence: A case study. *International Journal of Business Innovation and Research*, 23(3), 298–312. https://doi.org/10.1504/IJBIR.2020.110972
- El Khatib, M. M., Al-Nakeeb, A., & Ahmed, G. (2019). Integration of Cloud Computing with Artificial Intelligence and Its Impact on Telecom Sector—A Case Study. *IBusiness*, 11(01), 1–10. https://doi.org/10.4236/ib.2019.111001
- El khatib, M., Mahmood, A., Al Azizi, A., Al Marzooqi, A., Al Abdooli, K., Al Marzooqi, S., Al Jasmi, S., Alzoubi, H. M., & Alshurideh, M. (2023). A Trial to Improve Program Management in Government Bodies Through Focusing on Program Resource Management: Cases from UAE. In M. Alshurideh, A. K. B. Hikmat, R. Masa'deh, A. H. M., & S. Salloum (Eds.), *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1315–1340). Springer International Publishing. https://doi.org/10.1007/978-3-031-12382-5_72
- El Khatib, M., Yaish, A., & Ali, H. (2021). Implementation Challenges of Data Quality Management -Cases from UAE Public Sector. *IBusiness*, *13*, 144–153. https://doi.org/10.4236/ib.2021.133009
- El Khatib, M., Zitar, R., Alnaqbi, K., Alnaqbi, W., Alharmoodi, S., & Baydoun, A. (2023). Effect of Big Data and Analytics on

Managing Projects. *International Journal of Computers* and *Their Applications*, *30*, 173–182.

- Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, K. (2022). Agile Project Management and Project Risks Improvements: Pros and Cons. *Modern Economy*, *13*(9), 1157–1176.
- Farrukh, M., Soomro, T. R., Ghazal, T. M., Alzoubi, H. M., & Alshurideh, M. (2023). Perspectives of Online Education in Pakistan: Post-covid Scenario. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 519–550). Springer.
- Gaytan, J. C. T., Rafiuddin, A., Sisodia, G. S., Ahmed, G., & Paramaiah, C. (2023). Pass-through Effects of Oil Prices on LATAM Emerging Stocks before and during COVID-19: An Evidence from a Wavelet -VAR Analysis. *International Journal of Energy Economics and Policy*, 13(1), 529–543.
- Ghazal, T. M., Al-Dmour, N. A., Said, R. A., Moubayed, A., Ali, L., Alzoubi, H. M., & Alshurideh, M. (2023). DDoS Intrusion Detection with Ensemble Stream Mining for IoT Smart Sensing Devices. *Studies in Computational Intelligence*, 2023(1056), 1987–2012.
- Ghazal, T. M., Hasan, M. K., Abdullah, S. N. H. S., Alzoubi, H. M., & Alshurideh, M. (2023). An Integrated Cloud and Blockchain Enabled Platforms for Biomedical Research. *Studies in Computational Intelligence*, 2023(1056), 2037–2053.
- Ghazal, T. M., Hasan, M. K., Ahmad, M., Alzoubi, H. M., & Alshurideh, M. (2023). Machine Learning Approaches for Sustainable Cities Using Internet of Things. *Studies in Computational Intelligence*, 2023(1056), 1969–1986. https://doi.org/10.1007/978-3-031-12382-5_108
- Ghazal, T. M., Hasan, M. K., Alzoubi, H. M., Alshurideh, M., Ahmad, M., & Akbar, S. S. (2023). Internet of Things Connected Wireless Sensor Networks for Smart Cities. *Studies in Computational Intelligence, 2023*(1056), 1953–1968.
- Guangshe, J., Li, C., Jianguo, C., Shuisen, Z., & Jin, W. (2008a). Application of organizational project management maturity model (OPM3) to construction in China: An empirical study. Proceedings of the International Conference on Information ManagementProceedings of the International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2008. 56-62. 2. https://doi.org/10.1109/ICIII.2008.182
- Guangshe, J., Li, C., Jianguo, C., Shuisen, Z., & Jin, W. (2008b). Application of organizational project management maturity model (OPM3) to construction in China: An empirical study. Proceedings of the International Conference on Information ManagementProceedings of the International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2008. 56-62. 2. https://doi.org/10.1109/ICIII.2008.182
- Gulseven, O., & Ahmed, G. (2022). The State of Life on Land (SDG 15) in the United Arab Emirates. *International Journal of Social Ecology and Sustainable Development*, 13(1), 1–15. https://doi.org/10.4018/ijsesd.306264
- Hani Al-Kassem, A. (2021). Significance of Human Resources Training and Development on Organizational Achievement. *PalArch's Journal of Archaeology of Egypt*

/ Egyptology, 18(7), 693–707.

- Jaleel, F., & Azhar K. Mansur. (2013). Project Management Maturity Models and Organizational Project Management Maturity Model (OPM3®): A Critical Morphological Evaluation. *World Academy of Science, Engineering and Technology,* 77(May), 60–63. https://www.researchgate.net/publication/31688202 2
- Kassem, A., & Martinez, E. B. (2022). Operationalization of Negosyo Center as an Entrepreneurial Strategy to Selected Micro, Small, and Medium Enterprises in Taguig City. *Global Business and Management Research*, 14(2), 88–104.
- Khan, A., Hasana, M. K., Ghazal, T. M., Islam, S., Alzoubi, H. M., Mokhtar, U. A., Alam, R., & Ahmad, M. (2022). Collaborative Learning Assessment via Information and Communication Technology. *Proceedings - 2022 RIVF International Conference on Computing and Communication Technologies, RIVF 2022*, 311–316. https://doi.org/10.1109/RIVF55975.2022.10013841
- Khatib, E., M., Z., A., R., & Al-Nakeeb, A. (2021). The effect of AI on project and risk management in health care industry projects in the United Arab Emirates (UAE). *International Journal of Applied Engineering Research* (*Netherlands*), 6, 1.
- Khatib, M. El, Alzoubi, H. M., Mulla, A. Al, & Ketbi, W. Al. (2022). The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management. *Advances in Internet of Things*, *12*(03), 88–109. https://doi.org/10.4236/ait.2022.123006
- Khatib, M. El, Beshwari, F., Beshwari, M., & Beshwari, A. (2021). The impact of blockchain on project management. *ICIC Express Letters*, *15*(5), 467–474. https://doi.org/10.24507/icicel.15.05.467
- Khatib, M. El, Shehhi, H. Al, & Nuaimi, M. Al. (2023). How Big Data and Big Data Analytics Mediate Organizational Risk Management. *Journal of Financial Risk Management*, *12*(01), 1–14. https://doi.org/10.4236/jfrm.2023.121001
- Lee, K. L., Nawanir, G., Cheng, J., Alzoubi, H., & Alshurideh, M. (2023). Educational Supply Chain Management: A View on Professional Development Success in Malaysia (pp. 2473–2490). https://doi.org/10.1007/978-3-031-12382-5_136
- Lee, K. L., Wong, S., Alzoubi, H., Al Kurdi, B., Alshurideh, M., & El Khatib, M. (2023). Adopting smart supply chain and smart technologies to improve operational performance in manufacturing industry. *International Journal of Engineering Business Management*, 15, 1–14. https://doi.org/10.1177/18479790231200614
- Louzi, N., Alzoubi, H. M., Alshurideh, M. T., El khatib, M., Ghazal, T. M., & Kukunuru, S. (2022). Psychological & Prototypical Model of Execution Management evaluation for the framework Development. *Journal for ReAttach Therapy and Developmental Diversities*, 5(SpecialIssue2), 216–223.
- Louzi, N., Alzoubi, H. M., El Khatib, M., Ghazal, T. M., Alshurideh, M., & Kukunuru, S. (2022). Psychological Health and Environmental Effect of using Green Recycled Amassed Concrete on Construction. *Journal for ReAttach Therapy and Developmental Diversities*, 5(SpecialIssue2), 163– 175.

- M. Alzoubi, H., Ghazal, T., Hasan, M., Alshurideh, M., Ahmad, M., Akbar, S., Al Kurdi, B., & Akour, I. (2021). IoT for Smart Cities: Machine Learning Approaches in Smart Healthcare-A Review. *Future Internet, 13*(8), 218. https://doi.org/10.3390/fi13080218
- Machado, F., Duarte, N., Amaral, A., & Barros, T. (2021). Project Management Maturity Models for Construction Firms. *Journal of Risk and Financial Management*, 14(12). https://doi.org/10.3390/jrfm14120571
- Mat Som, A. P., & Kassem, H. Al. (2013). Domestic Tourism Development in Asir Region, Saudi Arabia. *Journal of Tourism & Hospitality, 02.* https://doi.org/10.4172/2167-0269.S5-001
- Mubeen, S., Shahid, M. H., Sahawneh, N., Al-Kassem, A. H., Ahmad, A., & Naseer, I. (2022). Education, Employment and Women Empowerment in an Agrarian Economy: A Case Study. 1–9. https://doi.org/10.1109/icbats54253.2022.9759025
- Nadzri, W., Hashim, A., Majid, M., Jalil, N., Alzoubi, H., & Alshurideh, M. (2023). Share Your Beautiful Journey: Investigating User Generated Content (UGC) and Webrooming Among Malaysian Online Shoppers (pp. 2265–2285). https://doi.org/10.1007/978-3-031-12382-5_124
- Nuseir, M., & Elrefae, G. (2022). The effects of facilitating conditions. Customer Experience and Brand Loyalty on Customer-Based Brand Equity through Social Media Marketing, 6(3), 875–884.
- Nuseir, M. T. (2020). Potential impacts of blockchain technology on business practices of bricks and mortar (B&M) grocery stores. Business Process Management Journal, 27(4), 1256–1274. https://doi.org/10.1108/BPMJ-06-2020-0267
- Nuseir, M. T. (2021). Assessing the impact of brand equity and customer experience on brand loyalty in the United Arab Emirates' hotel industry. *International Journal of Business Excellence*, 25(4), 459–473. https://doi.org/10.1504/IJBEX.2021.119753
- Nuseir, M. T., & Aljumah, A. (2020). The role of digital marketing in business performance with the moderating effect of environment factors among SMEs of UAE. *International Journal of Innovation, Creativity and Change*, *3*, 310–324.
- Nuseir, M. T., & Aljumah, A. (2022). The impact of entrepreneur orientation on sustainable entrepreneurship among SMEs in the UAE: mediating effects of the sustainability orientation and bricolage behaviours of entrepreneurs. *International Journal of Trade and Global Markets*, *16*(1– 3), 250–264. https://doi.org/10.1504/ijtgm.2022.128134
- Nuseir, M. T., Aljumah, A. I., & El-Refae, G. A. (2022). Digital marketing and public relations: A way to promote public relations value. *International Journal of Data and Network Science*, 6(4), 1331–1340. https://doi.org/10.5267/j.ijdns.2022.6.002
- Nuseir, M. T., Aljumah, A. I., & El Refae, G. A. (2022a). The Influence of E-learning M-learning. And D-Learning on the Student Performance: Moderating Role of Institutional Support, 1–9.
- Nuseir, M. T., Aljumah, A. I., & El Refae, G. A. (2022b). Trust in Adoption of Internet of Things: Role of Perceived Ease of Use and Security. *In 2022 International Arab Conference*

on Information Technology (ACIT), 1–7.

Nuseir, M. T., Basheer, M. F., & Aljumah, A. (2020). Antecedents of entrepreneurial intentions in smart city of Neom Saudi Arabia: Does the entrepreneurial education on artificial intelligence matter? *Cogent Business and Management*, 7(1).

https://doi.org/10.1080/23311975.2020.1825041

- Nuseir, M. T., El-Refae, G. A., & Aljumah, A. (2021). The e-Learning of Students and University's Brand Image (Post COVID-19): How Successfully Al-Ain University Have Embraced the Paradigm Shift in Digital Learning. In *Studies in Systems, Decision and Control* (Vol. 334, Issue April). Springer International Publishing. https://doi.org/10.1007/978-3-030-67151-8_10
- Nuseira, M. T., & Aljumahb, A. (2020). Digital marketing adoption influenced by relative advantage and competitive industry: a UAE tourism case study. *International Journal of Innovation, Creativity and Change, 2020*(11), 617–631.
- Sakkthivel, A. M., Ahmed, G., Amponsah, C. T., & Muuka, G. N. (2022). The influence of price and brand on the purchasing intensions of Arab women: an empirical study. *International Journal of Business Innovation and Research*, 28(2), 141–161. https://doi.org/10.1504/IJBIR.2022.123260
- Tariq, E., Alshurideh, M., Akour, I., & Al-Hawary, S. (2022). The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector. *International Journal of Data and Network Science*, 6(2), 401–408. https://doi.org/10.5267/j.ijdns.2021.12.014
- Tariq, E., Alshurideh, M., Akour, I., Al-Hawary, S., & Kurdi, B. Al. (2022). The role of digital marketing, CSR policy and green marketing in brand development. *International Journal of Data and Network Science*, 6(3), 995–1004. https://doi.org/10.5267/j.ijdns.2022.1.012
- Varma, A. J., Taleb, N., Said, R. A., Ghazal., T. M., Alzoubi, H. M., & Alshurideh, M. (2023). A Roadmap for SMEs to Adopt an AI Based Cyber Threat Intelligence. *Studies in Computational Intelligence*, 2023(1056), 1903–1926.
- Wijaksono, F. A., Pratami, D., & Bay, A. F. (2020). Measurement of risk project maturity using organizational project management maturity model (OPM3): Study case of construction project in bandung. *IOP Conference Series: Materials Science and Engineering*, 852(1). https://doi.org/10.1088/1757-899X/852/1/012098
- Yasir, A., Ahmad, A., Abbas, S., Inairat, M., Al-Kassem, A. H., & Rasool, A. (2022). How Artificial Intelligence Is Promoting Financial Inclusion? A Study On Barriers Of Financial Inclusion. 2022 International Conference on Business Analytics for Technology and Security (ICBATS), 1–6.
 - https://doi.org/10.1109/ICBATS54253.2022.9759038
- Zahra Naseri, S., Ghaderi, B., & Aliakbari, F. (2021). Challenges and Solutions forImplementation of OPM3 in the Iranian Petrochemical Industry. *Turkish Journal of Computer and Mathematics Education*, *12*(13), 2799–2806.