



Program Governance Maturity Models: Are they solutions or barriers to Program Governance and Program Management

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ABSTRACT

The Program Governance Maturity Model is a comprehensive pattern framework that implements a plan and structure for achieving goals and distinction in program governance. It is capable of considering tactical and strategic values and contains recommendations in the form of practices, the execution of which enables the realization of the objects necessary for the progress of certain areas. The CMMS/CMMI models contain essential processes that support different facets of operations and can guide developing and improving production methods. It is divided into five levels which are the same for absolutely all industries. Surveys have demonstrated the ability to manage multiple projects through the program. In addition, the use of the software improves productivity and helps achieve organizational goals and objectives. Therefore, it is essential to mention that program management is an integral part of management practice. Although, in fact, the answers to the question also state that there are problems when applying the software, but its impact on managers' work can be assessed positively.

1. INTRODUCTION

The program management encompasses the regulations, procedures, policies, roles, and responsibilities that guide all program management activities and are used to monitor the program's implementation. The Authority offers guidance for securing data and maintaining its accuracy, consistency, availability, and completeness. When programs evolve, they need a communication tool to provide a link between the business vision and the area of focus. It should also help guide the way to the desired outcomes over the duration of the program (Boyle, n.d.). On the other hand, the instrument must maintain the

performance of the program at its potential to ensure that it delivers the declared value. In addition, other tools must supervise and manage the execution of the project (Hanford, 2005). It should assist executives in evaluating the present state of the program and in correcting design and course of action as appropriate. These must also allow the leadership to better determine success to support orderliness with the evolving corporate business plan (Proença et al., 2016). The maturity model is a model framework that implements a plan and design for achieving objectives and ensuring excellence in program management (PM) (Tomor et al., 2019) (I. Akour et

al., 2021; M. T. Nuseir et al., 2021). The model considers both tactical and strategic importance. Strategically, the model provides an objective and assesses goals and priorities, while tactically it leads and arranges enhancement efforts and announces progress. The model is subdivided under five different stages, which are considered the same for all industries (E. Khatib & M., n.d.). These five levels include crisis management, reactive leadership, program administration, data incorporation, and quality management, according to Gully.

Crisis leadership means that the organization recognizes the need for expertise in program management but does not understand what it entails (R. S. Al-Marouf, Alhumaid, et al., 2021). At this phase, there is no program control, and the activity involved is operationally separate because each institution or staff is trying to do it in its way (Al-Dmour et al., 2023; Mat Som & Kassem, 2013). In addition, program management data is not gathered and analyzed on a regular basis. The second level, reactive administration, optionally, is the starting phase of the process in which informal tasks are delineated, and the common ground around program management is accomplished (M. T. Alshurideh, Alzoubi, Ghazal, et al., 2022; Ghazal, Hasan, Alzoubi, et al., 2023; Yasir et al., 2022).

A number of processes have already been established and the PM design has been created. There is still a hint of structural separation in each organization at this step (I. A. Akour et al., 2022; A. H. Al-Kassem et al., 2022). Similarly, the necessity for program administration data has been recognized, but the evidence is gathered in an informal way (A. I. Aljumah et al., 2021a).

Level three, also called program management, is defined by official project scheduling and monitoring management (Ahmed & Nabeel Al Amiri, 2022; R. S. Al-Marouf, 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 institution has created processes and mechanisms in program management (A. Aljumah et al., 2020; M. El Khatib et al., 2022). There is a collaborative team approach in the deployment and performance of PM procedures (H. M. Alzoubi, Alshurideh, Kurdi, et al., 2022). The top management has adopted the process as applicable to the acceptance and execution of PM decisions, and more specifically,

the data is formally generated and transmitted (Al-Kassem et al., 2012; Aziz et al., 2023). Moreover, the fourth level implies the optimization of PM activities and information. Solutions are made at the portfolio or program stage to enable the institution to design and arrange a number of programs concurrently (M. Alshurideh et al., 2023). In addition, data on program management processes are analyzed, evaluated, and saved quantitatively (M. Alshurideh, Almasaeid, El Khatib, Alzoubi, et al., 2022; M. M. El Khatib & Ahmed, 2020).

Project management becomes part of the organization's experience as its designs are integrated into the business process (A. Aljumah et al., 2023; Gaytan et al., 2023; E. Khatib et al., 2021). Thus, the accumulated information is extensively utilized to provide analysis and guide forward planning. The fifth level, which is also called excellence management, is described as having a comprehensive program management organization. The processes are totally elaborated and continuously upgraded. The organization is focused on projects, agile and innovative. Executive leaders prioritize improvements and resources. Enhancement drives are collaborative, and data is streamlined and preserved.

2. LITERATURE REVIEW

2.1. *The Purpose of Program Governance Maturity Model in Enhancing the Performance of Administration Agencies*

Program management maturity models have many advantages for state agencies. First and foremost, they include performance realms that empower rational decision-making (M. Alzoubi et al., 2021; Mubeen et al., 2022). They also promote practices that support the full range of government programs (M. T. Alshurideh, Obeidat, Victoria, Alzoubi, et al., 2022; M. El Khatib, Al Qurashi, et al., 2021). At the same time, they facilitate oversight and management of programs. Applications specify a collection of related plans, subprograms, and record actions conducted regularly to produce privileges that would not be possible if they were administered independently (Nadzri et al., 2023). Management consists of duties, structures, and methods that monitor, control, and maintain the program to achieve vital organizational and operational purposes (A. I. Aljumah et al., 2021b; Ghazal, Al-Dmour, et al., 2023). In general, program

management guarantees that the demands of public agency stakeholders are distinguished and satisfied (I. Akour et al., 2021; M. T. Nuseir et al., 2021)(M. T. Alshurideh et al., 2023; M. T. Nuseir et al., 2020). On the whole, the central authority runs the day-to-day processes necessary to provide a broad spectrum of public services, usually in remarkably intricate conditions (Tariq, Alshurideh, Akour, & Al-Hawary, 2022)(Bawaneh et al., 2023; M. El Khatib, Ibrahim, et al., 2023). Program management enables state entities to gain multiple privileges by providing the necessary techniques and operations used to identify, sanction, observe and maintain records (Abudaqa et al., 2021; El khatib, Mahmood, et al., 2023). Ingenious structures based on maturity designs equip agencies with the most beneficial applications to make more vigorous settlements while guaranteeing conventional project administration (Al-Awamleh et al., 2022; Arshad et al., 2023; M. El Khatib, Zitar, et al., 2023).

In particular, the models execute steps that assure intentions are arranged with the organization's strategic foresight, support availability, and operational inclinations (H. M. Alzoubi, Ahmed, et al., 2022; M. El Khatib, Khadim, et al., 2023; M. T. Nuseir, Aljumah, & El Refae, 2022b). They guarantee that authority structures follow control and accountability methods and maintain approval, permission, and initiation of applications (El khatib, Beshwari, et al., 2023; Louzi, Alzoubi, El Khatib, et al., 2022). Moreover, program management grounded on maturity model proposals allows public institutions to build dismissed concessions regarding the individuals who will oversee the application and levels of independence (Project Management Institute, 2013) (A. I. Aljumah, Nuseir, et al., 2022c; Khan et al., 2022). Tactics increase stakeholder commitment because they set clear expectations for all synergies within the program (Project Management Institute, 2013) (A. H. Al-Kassem, 2017; M. M. El Khatib et al., 2023; Louzi, Alzoubi, Alshurideh, et al., 2022). They encourage an atmosphere in which stakeholders have open discussions and deal with the hazards and contingencies of the program as they occur during it (M. Alshurideh, Alzoubi, Alshurideh, Kurdi, et al., 2022). They produce a structure that joins well with corporate governance strategies and the methods used to evaluate programs for

acquiescence (M. El Khatib, Khayat, et al., 2023; M. T. Nuseir & Aljumah, 2020).

They also enable government agencies to take a thorough approach to various agencies' program management policy construction and overlooking (A. Al-Marroof et al., 2021; A. I. Aljumah, Nuseir, et al., 2022a; Ghazal, Hasan, Abdullah, et al., 2023). They assist agency administration methods to program management while determining precise positions for agency leaders and stakeholders (H. M. Alzoubi, Sahawneh, Alhamad, et al., 2022; M. El Khatib et al., 2020; Gulseven & Ahmed, 2022; M. T. Nuseir, 2020). Another benefit is ensuring effective organizational governance that encompasses multiple business purposes (H. M. Alzoubi, Ghazal, El khatib, et al., 2022; M. T. Nuseir & Aljumah, 2022).

Public agencies should guarantee that program management constructions are composed to interconnect the various project goals for the most reliable outcomes (A. Al-Kassem et al., 2013). This method will permit businesses to optimize the achievement of various project upshots (A. I. Aljumah, Nuseir, et al., 2022b; H. Alzoubi & Ahmed, 2019). This strategy will guarantee that public companies operate following the regulations set by the program administration authority (Program Management, Section 7, Slide 1) (Tariq, Alshurideh, Akour, Al-Hawary, et al., 2022). Eventually, program management policies permit public agencies to achieve organizational purposes and aspirations (H. M. Alzoubi et al., 2020; Blooshi et al., 2023; M. Nuseir & Elrefae, 2022).

Program superintendence performs an essential function because it ensures that stakeholders have their needs recognized and met by the appropriate administrative agencies (H. M. Alzoubi, Kurdi, Alshurideh, et al., 2022; M. El Khatib, Alnaqbi, et al., 2023). Sufficient public program control warrants that managers investigate all alternatives when setting equitable and generally accepted goals (H. Alzoubi et al., 2020; M. El Khatib, Ahmed, et al., 2023; Hani Al-Kassem, 2021; Sakkthivel et al., 2022). Maturity models produce powerful decision-making and prioritization methods, which increase the weight of program administration.

2.2. Obstacles with the program governance maturity pattern

Notwithstanding the hopeful benefit of the program management maturity model, it faces

numerous hurdles (I. Akour et al., 2023; M. M. El Khatib et al., 2019)(Kassem & Martinez, 2022). Prime is the organizational setting in which program governance is created (Ahmed et al., 2022; R. S. Al-Marouf, Alnazzawi, et al., 2022). Program administration does not occur in a space, so it is influenced by technology, vendors, personalities, organizational construction, and different organizational determinants (R. S. Al-Marouf, Alahbabi, et al., 2022). Consequently, it is necessary to adapt the model to meet the organization's demands (M. T. Alshurideh et al., 2023). For example, a highly mature program administration approach may not produce results in an industry requiring organizational advancement (Ten Six Consulting) (Alshawabkeh et al., 2021; Amiri et al., 2020; M. El Khatib et al., 2023). Program management must be observed in the organization's context to resolve this challenge (I. Akour et al., 2022; M. El Khatib, Yaish, et al., 2021; M. T. Nuseir, Aljumah, & El-Refae, 2022). It must match seamlessly with the organization's experience and possible sources. In addition, this model raises the problem of discerning clients (H. M. Alzoubi et al., 2019; Nuseira & Aljumahb, 2020). Stakeholders and customers are not engaged with the precise specifications of departmental services (Alhamad et al., 2021; Farrukh et al., 2023). Nevertheless, the different section leaders have service renovation concepts to enhance the client's background (Ten Six Consulting) (AlDhaheri et al., 2023; M. El Khatib, Alzoubi, et al., 2023; Ghazal, Hasan, Ahmad, et al., 2023). The hurdle is consolidating these concepts and generating a practical formation that operates for everyone (H. Alzoubi et al., 2022; M. T. Nuseir, Aljumah, & El Refae, 2022a).

2.3. SWOT Analysis

The program maturity model has powers, vulnerabilities, possibilities, and intimidations for applicants.

Strength: This pattern provides the synthesis of project management and precise administration of the range element simultaneously (M. T. Alshurideh, Alquqa, Alzoubi, Al Kurdi, & Hamadneh, 2023; H. M. Alzoubi, Kurdi, Akour, et al., 2022; M. El Khatib, Beshwari, et al., 2023). A different powerful part of this model is active time superintendence, which benefits user industries (M. T. Alshurideh, Alquqa, Alzoubi, Al Kurdi, &

Alhamad, 2023). The precise application can additionally assist in managing value quality and individual sources in a scheme (Aityassine et al., 2022; H. Al-Kassem, 2014; Almasaeid et al., 2022). The administration specialties in the design can enable government agencies to make decision-making more efficient (H. M. Alzoubi, In'airat, et al., 2022; M. El Khatib et al., 2021).

Weaknesses: The pattern does not mechanically accommodate the organization's demands, so misalignment with purposes can drive inefficient projects [62], [63]. Furthermore, a shortage of uninterrupted resource availability can cause the model's incapacity to handle the project process's implementation object (M. El Khatib et al., 2022; Lee, Nawani, et al., 2023).

Opportunity: Adjusting the scheme of the program management model with government area aims can be a great possibility to optimize multiple successes (Abudaqa et al., 2022; A. I. Aljumah, Shahroor, et al., 2022; Lee, Wong, et al., 2023). Precise arrangement with organizational culture can also provide more responsible program management in public area institutions (Elkhatib, M., Al Hosani, A., Al Hosani, I., & Albuflasa, 2022).

Threats: Tier 1 and Tier 2 organizations have intimidation to the project administration maturity pattern. Reduced infrastructure to realize the design can complicate a plan and even cause malfunction. Collapse to preserve consistency within the services of separate units can cause the model's effectiveness to be brittle.

3. RESEARCH METHODOLOGY

Using a qualitative research methodology, this study collected data through in-depth interviews with important figures from three different organizations: the Abu Dhabi National Oil Company (ADNOC), the Dubai Electricity and Water Authority (DEWA), and the Roads and Transportation Authority (RTA). Through interaction with people from these many entities, the study sought to obtain a thorough grasp of people's viewpoints and experiences concerning the subject matter of the study. A more comprehensive and contextualized examination of the topic matter was made possible by the qualitative data gathering method, which enabled a detailed investigation of the distinctive practices, difficulties, and insights within each organization.

4. DATA ANALYSIS

It can be concluded from the evidence accumulated at the RTA that the RTA has been well managed because they have successful outreach programs, and they adhere to policies of governance, outlook, and best practices. In the words of Mr. Mohammad Abouhirra, the program and project officer, the RTA includes four control fields: coordination, communication, productivity, and danger, and it evaluates them through the screening process and the execution of the project administration strategies. In addition, he referred to the fact that concerning advanced management procedures. They encompass change control of the program, benefit criterion, problem and threat assessment management, and other things. Furthermore, the RTA evaluates leadership ripeness periodically to increase the level of sophistication, allowing for adjustment to developments that emerge in the sphere of management. RTA is trying to reconcile its organizational philosophy with goals to reinforce the concept of the model, which in turn can enable them to provide a better way to manage different projects. RTA effectively controls the performance and risk domains to provide first-class community services. The risk agility management model is used to recognize and remove potential hazards in projects to eliminate disruptions in the work. In addition, effective management in RTA is the outcome of proper coordination with project and enterprise goals, which keeps from diverging operations from the general purpose.

According to the data gathered by DEWA, the organization's project programs rigorously follow good policies and procedures. From the interview respondent, the interviewee's ripeness template is appropriately used to assess DEWA's abilities and capabilities to establish resilient foodservice improvement pathways. The supervisor noted that they regularly align their actions with the state's project execution criteria to ensure that the level of project management maturity is adaptable to the project's day-to-day operations. On the other hand, DEWA uses a well-developed maturity model framework to make more informed decisions and simultaneously control the project criteria.

This approach allows DEWA to use an integrated project management approach to track execution at the agency level. At the same time, the management project model also provides a clear

and concise allocation of roles in the project. DEWA reinforces organizational management with a program management model as it controls the various functions and operations of the organization. Utilizing program management has permitted DEWA to guarantee that stakeholders prioritize their needs by integrating them into the organization's program goals.

From the data received from ADNOC, the R&D program management at ADNOC is administration and monitoring of the program efficiently. A well-defined program management model with identified roles and liabilities for individual team members has been developed. ADNOC's program management maturity model allows the company to keep its strategic aim of generating sustainable improvements for the ADNOC group. In order to maximize recovery of hydrocarbons from reservoirs, address problematic aspects related to assets, and decrease operational expenses while developing an Emirati strong R&D workforce. The ADNOC R&D effort establishes a business five-step approach using all ADNOC R&D decision-making and consultative agencies to guide the development workflow of technologies. With the goal of standardizing R&D administration in ADNOC R&D, R&D controls aim to incorporate a "technology readiness level" (TRL) scale into ADNOC R&D to define the ripeness of each new technology.

Interview 1

1. Would you please represent yourself and the program you are working on?

I am Mohammad Abouhirra; my qualifications are as follows:

- MSC in Business Administration (MBA), University of Wollongong

- MSC in Data Science, University of Middlesex

My work experience is concentrated in project management, especially in the oil and gas and transportation fields, with broad geographical locations in the UAE, Oman, Algeria, Syria, Azerbaijan, and Iraq.

My present job is managing and supervising the Project Management Office (PMO) activities at Dubai Electricity & Water Authority (DEWA). It is a quasi-government organization that manages Dubai's largest fleet of vehicles.

Principal duties involve suggesting and identifying the best designs in line with DEWA's policy and

business priorities. My responsibility also includes a constant review of project implementation and results, reporting, and supporting projects as appropriate to guarantee their effectiveness.

Moreover, I work as a team leader on key and significant missions and on projects that have problems that jeopardize their success.

2. Have you got some project/program management in the works?

Yes, the policy of managing DEWA projects controls.

3.What is program administration for your organization?

This is determined by the policy of program management

4. How much attention does your organization pay to running programs?

RTA specializes in the field of enterprise management, where they disseminate local, regional and worldwide progress. This encompasses a strategy for property and estate administration, green energy policy, social responsibility policy, quality and safety policy, policy for the selection of external fund reviewers, and other essential policies.

The policy of managing projects is well rounded and grounded in the PMI PMBOK model; besides, it is adapted to the demands and characteristics of the RTA / DEWA.

5. Which are the key best program management practices implemented in your organization?

Concerning leading managerial practices, RTA occasionally assesses managerial maturity to improve the quality and maturity of the management following the changes that emerge in the management area. Also, RTA values Openness to change and Innovation which are good governance principles. In addition, RTA benefits openness to improvement and modification,

postulates of valid governance.

6. Do you have a certain structure according to which management is carried out?

Yes, the RTA has a project management team; it is worth noting that it includes program and project management specialists and leading specialists of the project management department. Moreover, the business uses PMO software, which ensures the quality of all projects.

7.What disadvantages have you faced with the program maturity model?

As I worked, I realized that the main flaw in the maturity model is that it often fails to define requirements effectively. This is due to the fact that the program is not flexible in the overall management of the achievement of organizational processes. Although, on the other hand, the problem is also that there is still work to be done on the software.

8. How have you benefited from the Program Maturity Model?

The main advantage I have gained from the RTA development model is that it supports imposing and recognizing an organization's main powers and defects. It additionally encouraged us to estimate the companies that assisted in identifying potential opportunities in the primary area.

9. What changes do you think will be needed to improve the maturity model of the program?

I understand that changing the development model is connected with increasing possible practices that the most prosperous companies perform.

10. Program Governance Practices cover of RTA

Detail	Covered Y/N	How do you estimate it
Program Management Plan	Yes	Project Management Office Annual report
Program Superintendence, Concept, and Objects	Yes	Project Management Office Annual report
Program Endorsement, Permission, and Determination	Yes	Project Management Office Annual report
Program Advance Guidelines	Yes	Project Benefits Implementation Plan
Program Observing,	Yes	Project Management Office

Summarizing, and Administration		Annual report
Program Contingency and Intricacy Supervision	Yes	Project Management Office Annual report
Program Property Control	Yes	Project Management Office Annual report
Program Shift Administration	Yes	Project Management Office Annual report
Program Management Evaluations	Yes	Project Management Office Annual report
Program Annual Well-being Checks	Yes	Project Management Office Annual report
Program Segment and Introduction Development	Yes	Project Management Office Annual report
Program Cessation	Yes	Project Management Office Annual report

11. General factors to examine when optimizing and tuning application administration involve:

Object	Covered Y/N	How do you estimate it
Lawmaking conditions	Yes	It is a section of plans description, collection, and performance systems
Judging authority	Yes	As declared by PM Policy
Optimized administration	Yes	As declared by PM Policy
Arrangement with documents and organizational administration	Yes	As declared by PM Policy
Program execution	Yes	By developing weekly and periodically improved statements
Contracting	Yes	By Arrangements and Acquisition policy and practice
The danger of collapse	Yes	Consecutive determination criteria and implementation of plan administration systems
Strategic value	Yes	Consecutive determination criteria and implementation of plan administration systems
Program management office (PMO)	Yes	The responsibilities of the RTA PMO are vested in a separate company unit communicating directly to the CEO of RTA. In addition, RTA has a project

		administration team.
Program construction funding	Yes	The budget is established at the start of the year, controlled by finance, and increased regularly released.

Interview 2

1. Would you please represent yourself and the program you are working on?

My name is Abdul Mohammed, and my credentials are :

- Bachelor's qualification in Mechanical Engineering, University of Jordan
- Master of Business Administration (MBA), University of Warwick.

My expert specialization is related to project administration, and I operate as a management administrator at DEWA.

2. Do you have a project/program management background?

Yes, the project administration system association chiefly maintains DEWA projects.

3. What is program administration for your organization?

Program management is primarily the performance administration policy that your corporation aims to recognize.

4. How much attention does your organization pay to running programs?

DEWA is related to aiding the determination of outside management settings in Dubai. Our company's project administration methods serve to concentrate on project control system deliberations.

5. Which are the key best program management practices implemented in your organization?

Remarkable applications that are assigned to the implementation of organizational methods are linked to the field of curriculum administration.

10. Program Governance Practices cover for DEWA

Object	Covered Y/N	How do you estimate it
Program Management Plan	Yes	PMO Software Annual Review
Program Superintendence, Concept, and Objects	Yes	PMO Software Annual Review
Program Endorsement,	Yes	PMO Software

The maturity of authority is thought to contribute to more commendatory methods and prosecutors.

6. Do you have a certain structure according to which management is carried out?

Yes, DEWA has a meaningful level of the project administration organization, which typically consists of programs and project technicians. They are used to secure surrender and manage all plans.

7. What disadvantages have you faced with the program maturity model?

I strongly consider that the significant disadvantage correlated with the program maturity pattern is that the mess it causes cannot be defeated quickly. It is due to the fact that the crisis of the pattern is recognized to influence the extended period.

8. How have you benefited from the Program Maturity Model?

I was able to precisely recognize inherent vulnerabilities that may be existing in the program I began. The model has also encouraged me to enhance my production level because of the number of benefits it has provided me with.

9. What changes do you think will be needed to improve the maturity model of the program?

I consider upgrading the program maturity pattern demands concern to specifications and demands a moderately streamlined method to all phases of software improvement.

Permission, and Determination		Annual Review
Program Advance Guidelines	Yes	Use of project results Determination guidelines
Program Observing, Summarizing, and Administration	Yes	PMO Software Annual Review
Program Contingency and Intricacy Supervision	Yes	PMO Software Annual Review
Program Property Control	Yes	PMO Software Annual Review
Program Shift Administration	Yes	PMO Software Annual Review
Program Management Evaluations	Yes	PMO Software Annual Review
Program Annual Well-being Checks	Yes	PMO Software Annual Review
Program Segment and Introduction Development	Yes	PMO Software Annual Review
Program Cessation	Yes	PMO Software Annual Review

11. Prevailing determinants to contemplate when management maturity pattern involve: optimizing and accommodating the application

Object	Covered Y/N	How do you estimate it
Lawmaking conditions	Yes	Classification, adopting, and implementing the method according to the development pattern
Judging authority	Yes	In accordance with the Program management maturity pattern
Optimized administration	Yes	In accordance with the Program management maturity pattern
Arrangement with documents and organizational administration	Yes	In accordance with the Program management maturity pattern
Program execution	Yes	Reception of hebdomadal and cyclic records
Contracting	Yes	Applying an acquisition method and guarantee system
The danger of collapse	Yes	Practicing choice patterns along with the application of the PM method
Strategic value	Yes	With determination standards and implementation of program administration procedures
Program management office (PMO)	Yes	DEWA obligations are scattered across sections with an individual

		executive because DEWA has a project administration crew
Program construction	funding Yes	A statement is formed in the initial times of the year and regularly observed through periodical records

Interview 3

Foremost sections

A - Presenting the Corporation

ADNOC is among the most comprehensive oil and gasoline companies in the Middle East. It is separated into numerous firms engaged in exploration, production, refining, and marketing. ADNOC operates along with the whole hydrocarbon power connection through a system of thoroughly unified organizations whose benefits spread from oil investigation, creation, accommodation, refining, and delivery to exhibiting a broad spectrum of petrochemical commodities.

B - Program Implementation.

ADNOC's R&D plan intends to improve clearness, enhance investigation capabilities, advance technologies ready for implementation, partner with innovative organizations, and conduct R&D projects and actions through open and more effective rules and functions for all R&D management bodies.

C - Introducing the interviewee

DR Wafiq Beydoun, R&D manager, ADNOC

1 - Do you have project/program management?

Yes, ADNOC R&D performs a five-step company method with all ADNOC R&D decision-making and consultative parties to conduct the investigation and technology improvement workflow. To normalize R&D administration in ADNOC R&D, this R&D control intends to fulfill a "technology willingness level" (TRL) measure in ADNOC R&D to determine the maturity of all emerging new means.

2- What is program management for your organization

Efficient ADNOC R&D administration will demand the synthesis and efficient collaboration of various systems within the following hierarchical formation:

Decision-making organizations:

1. R&D Board (guides, supervises, estimates, and maintains ADNOC's R&D policy and documents to ADNOC EDP Director).
2. R&D Management Team (the operational unit of

the R&D Council, maintaining and optimizing ADNOC's R&D securities - relating to the R&D Council).

3. R&D Program Managers (scales numerous R&D programs within ADNOC R&D with a center on relationships - addresses to the R&D Management Team).

4. Principal Project Investigators (control specific R&D plans adopted by the R&D Board (involving deliverables, devising, and supplies) - reporting to the suitable R&D Program Manager).

Advisory Bodies.

A1. R&D Advisory Committee (gives non-binding recommendations and guidance to the R&D Management Team)

A2. Technical Committees (one specialized panel for each R&D application - leads the professional evaluation of R&D suggestions/designs and gives data and instructions to the appropriate R&D Program Manager)

Yes, ADNOC R&D implements a five-step business process involving all the decision-making and advisory bodies of ADNOC R&D to manage the research and technology development workflow. To standardize the management of research and development work across ADNOC R&D, this R&D Governance aims to Implement the 'technology readiness level' (TRL) scale across ADNOC R&D to identify the maturity of each emerging novel technology.

3. What does your company practice in business supervision?

- Following are the popular R&D applications, each of which is a professional field supported by ADNOC for further study and technology construction activity to be offered by ADNOC R&D. The latest geophysical technologies in carbonates
- Planning and construction of the collector
 - Increasing oil and gas
 - Study, observation, and management
 - Drilling and completion
 - Flow check
 - Search for new resources
 - Development of the gas processing cycle

Integrity of objects
 Environment and energy efficiency
 Provision and verification of processes

Yes

2- Can you describe this (if possible, have a model of it)

1- Do you have a functioning management structure?

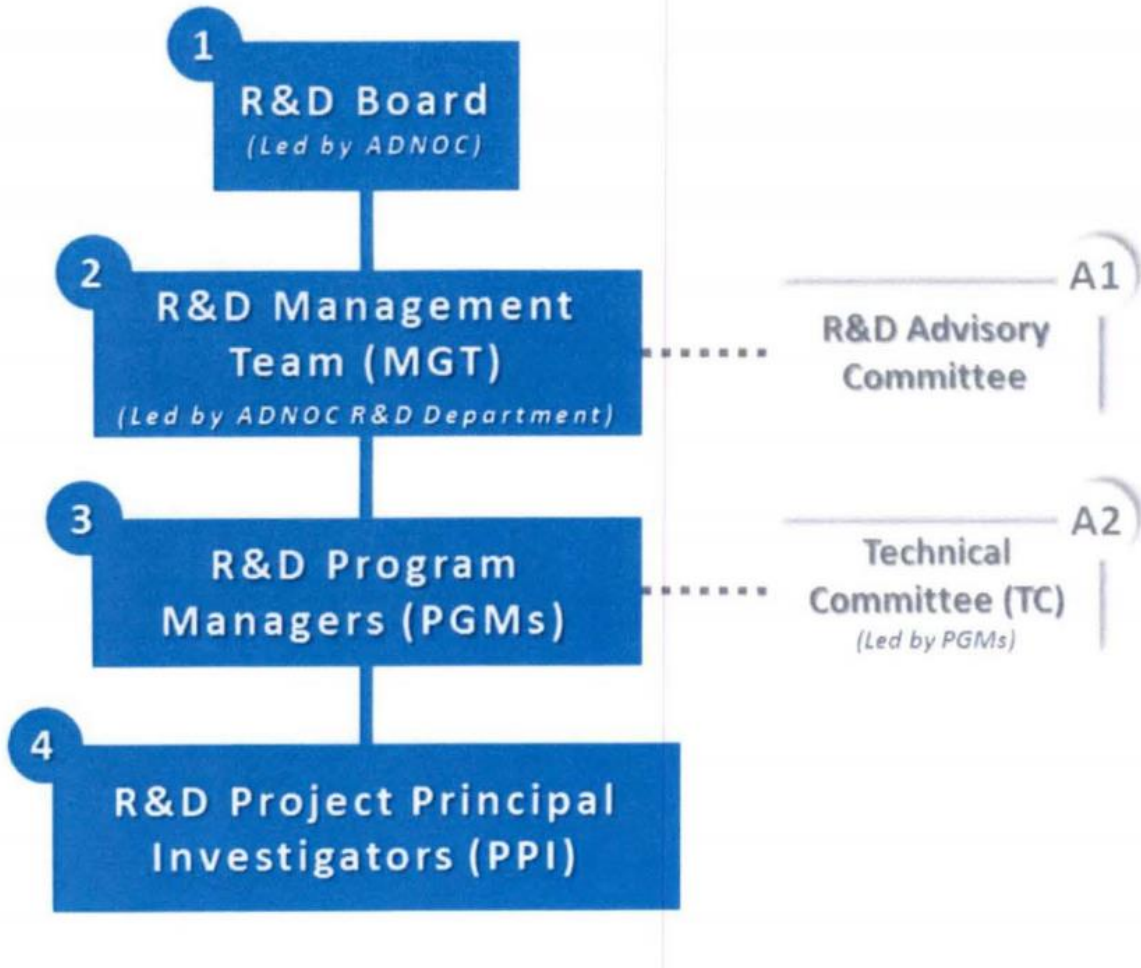


Figure (1)

ADNOC's R&D function is to manage and organize efficient technology analysis and construction to produce sustainable reform for the ADNOC group of businesses to maximize composition from hydrocarbon reservoirs, resolve doubtful asset investments and decrease operating expenses while drawing powers. R&D staff in the UAE. ... Important benefits include liability, clarity, alertness, consensus-drivenness, dedication, passion, honor, collaboration and distribution, alliance, and performance.

Bodies responsible for decision-making

1.R&D Council

R&D Council is the highest body that deals with

study and investigation. However, it is useful for the administration, oversight, evaluation, and approval of MGT recommendations, including the research and development strategy, budget expenditures, and the ADNOC research and growing portfolio. The Research and Development Board reports directly to the EDP Director. The Research and Development Board holds its controls, including the right to empower expenses, from the Director of EDP.

2.R&D Management Team (MGT)

MGT is the operational department of the R&D Board and advances support to the R&D Board when needed. MGT leads the R&D office and asks for new R&D events arranged with the R&D

Strategy. MGT is effective for improving and achieving the R&D Policy.

The MGT relates to the R&D Board undeviatingly.

3.R&D Program Managers (PGMs)

PGMs organize and explore collaborations of ten plans within their R&D Program and guarantee a stable portfolio of designs that improve pilot-ready technologies. PMGs performance as the professional manager and focal position for their R&D Program and the corresponding Technical Committees. PGMs communicate undeviatingly to the MGT.

4. R&D Project Principal Investigators (PPIs)

PPIs offer and support R & R&D programs. If passed, direct scientific investigation through an R&D project to create autonomous, high class, and reproducible outcomes (deliverables) on the support of their entities, such as analysis

3: Business administration practice covers

Object	Covered Y/N	How do you rate it
Program Management Plan	Yes	Systems and methods are well organized
Program Superintendence, Concept, and Objects	Yes	Concepts and Objects are pronounced, followed by cooperating goals and policies
Program Endorsement, Permission, and Determination	Yes	Obviously distinguished
Program Advance Guidelines	Yes	The success measures are assessed and analyzed
Program Observing, Summarizing, and Administration	Yes	Well-controlled and managed
Program Contingency and Intricacy Supervision	Yes	Hazards are classified and completely documented
Program Property Control	Yes	Performance Excellence Governance is well controlled
Program Shift Administration	No	
Program Management Evaluations	Yes	Well interpreted
Program Annual Well-being Checks	Yes	Cyclic health examinations are carried
Program Segment Introduction and Development	Yes	Well recognized
Program Cessation	No	

colleges/institutes, assistance providers or co-operation providers, or analysis markets. PPIs are responsible for their R&D plan, and they communicate to their related R&D Program's PGM. CONSULTING BODIES

A1. Research and Development Advisory Committee (ADVC)

At the invitation of the MGT, the ADVC gives voluntary regulation and guidance and necessary addition to increase the MGT's support to the Research and Development Board.

A2. Technical Committees (TC)

Each R&D Program's TC begins a professional evaluation of R&D projects/plans and implements its data and instructions to the PGM m assessment of the appropriate R&D Agenda.

1: Basic circumstances to examine when optimizing and tailoring business governance involve:

1- Object	Covered	How do you
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	Y/N	estimate it
Lawmaking conditions	Yes	

Judging authority	Yes	Definitely classified
Optimized administration	No	
Arrangement with documents and organizational administration	Yes	R&D program is aligned with cooperate objective and strategy
Program execution	No	R&D business is followed with cooperate purpose and policy
Contracting	No	
The danger of collapse	Yes	Well examined
Strategic value	Yes	Well examined
Program management office (PMO)	Yes	Definitely classified
Program funding construction	Yes	Definitely classified

5. CONCLUSION AND RECOMMENDATION

This research has considered the program management maturity pattern to determine whether it can be a resolution or a query for application management in state agencies. After a comprehensive review and investigation of the data obtained, it can be reasoned that the program administration capability pattern is a resolution in itself and is extremely beneficial for regulation offices to enhance their production. Applying the design promotes decision-making in general and enables state agencies to synchronize the activities of separate agencies to direct them to a shared minimum object. DEWA and RTA are two UAE state agencies surveyed about practicing their organization's program management and maturity pattern. Judging by the responses, they both explained this as a preceding answer to accomplishing programs in day-to-day actions. To make application of the program management maturity model, more conventional state agencies

can do the following to use it as a resolution rather than difficulty,

- To begin operating applications, the focus should be on demand for the precise arrangement with organizational objects.
- Duties and structures should be completely furnished to observe and guide the administration of imperative organizational intentions.
- State agencies should concentrate on creating a well-designed maturity model structure in accordance with organizational inclinations to get sustainable help in reaching knowledgeable judgments.
- Program administration must be cultivated in the organizational setting to keep alignment with the culture and possible means to guarantee high-grade governance through adopting the maturity pattern framework.
- *Limitations*

The maturity pattern has some preliminary limitations that can challenge the process of being the resolution for state agencies. For example, a highly mature application approach may not be useful for an organization that already lacks maturity at such a low level that the program management model cannot provide. At the same time, the organizational experience must encourage open conversation and information distribution, or the core means of the maturity model will break in program management because of the lack of data and integration for judgment making. The matrix structure of the organization and the authoritarian administration style can also be a limitation for program management, as there will be problems with consolidating approaches to develop a practical operations construction.

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