



# INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact factor: 6.078

(Volume 6, Issue 5)

Available online at: [www.ijariit.com](http://www.ijariit.com)

## Program Management Office (PMO) in UAE

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### ABSTRACT

*Managing projects can be a challenging task due to the number of activities it has and managing a group of projects can also be a harder task, and here comes the projects or program management office role. The importance of having a PMO in any organization relies on the benefits it provides to organizations such as visibility, alignment, maximizing project benefits, and enhancing control over projects through governance (Misner, 2008). The goal of conducting this research is to understand the PMO role in the government entities and highlight the challenges occurring in organizations and provide suggestions to enhance its benefits. This paper will discuss PMO definition, its advantages, its roles and types, PMO in government organizations, its challenges, and steps to strengthen its role and illustrate data gathered from interviews which will be analyzed based on literature review.*

**Keywords:** PMO, Government, Challenges, Enablers, Program Management

### 1. INTRODUCTION

Managing projects can be a challenging task due to the number of activities it has. Managing a group of projects can also be a harder task, and here comes the projects or program management office role. The importance of having a PMO in any organization relies on the benefits it provides to organizations such as visibility, alignment, maximizing project benefits, and enhancing control over projects through governance (Misner, 2008). The goal of conducting this research is to understand the PMO role in the government entities and highlight the challenges occurring in organizations and provide suggestions to enhance its benefits. This paper will discuss PMO definition, its advantages, roles and types, PMO in government organizations, its challenges, and steps to strengthen its role and illustrate data gathered from interviews, analyzed based on literature review.

### 2. LITERATURE REVIEW

#### 2.1 Project management Office (PMO)

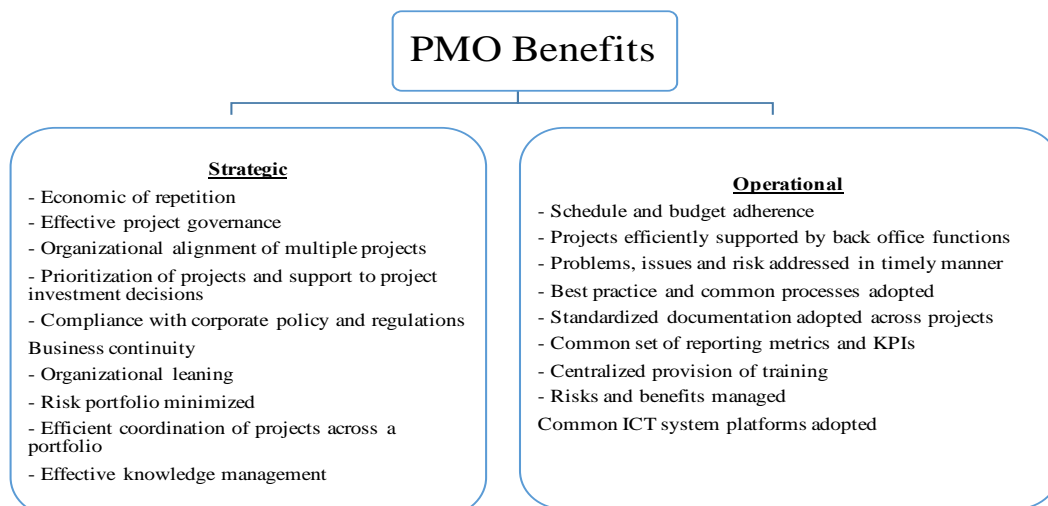


Fig. 1: PMO Advantages

**2.1.1 Definition:** The project management office (PMO) is one of the tools that facilitate the organization's strategies and improve its program and projects' delivery and enhance its projects' efficiency and accountability. According to the Project Management Institute, the PMO can be defined as following "an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain" (PMI 2008). Other researchers defined the PMO as an entity responsible for assisting project managers and teams in strategic and functional levels to implement project management principles, practices, methodologies, tools, and techniques.

**2.1.2 Advantages:** Many types of research have identified the potential advantages of using PMO. These advantages were identified in terms of corporate efficiency, stakeholder satisfaction, and team members' effectiveness. PMO is very supportive of the level of accuracy control of projects' information, as stated by Bettin et al. (2010), when PMO is used in a research organization. Another research result shows that PMO helps ensure quality assurance in the projects and maintain alignment with the organization strategy (Chen & Mo, 2008). PMO advantages can be categorized into two: Strategic and Operational (Philbin, 2016). Figure 1 identifies each type in detail.

**2.1.3 PMO types**

<b>PMO Type/Functions</b>	<b>Suggested Nomenclature/Deployment</b>
<b>Project office:</b> Controls and monitors of schedule and budget functions of large and complex single project	<b>Project Admin Office (PAO):</b> -Each large/complex project has its own PAO -Reports directly to the project director.
<b>Departmental Level Office:</b> Integrates projects into one or more portfolios of projects; it may also take on some or all of the functions of the Project Office	<b>Project Management Office (PMO):</b> -One for each department maximum. -Might be shared by many departments. -Reports directly to the departmental manager <b>Program Management Office (PgMO):</b> -One PgMO per program maximum. -Reports directly to the program manager
<b>Enterprise/Strategic Office:</b> Facilitates corporate and senior management decision-making in the prioritization and strategic alignment of the projects	<b>Enterprise Project Management Office (EPMO)</b> Alternative designations: i-Portfolio Management Office, ii-Strategy Execution Office -One EP MO per enterprise maximum. -Reports directly to the executive manager

**Fig. 2: PMO types and suggested designations (Wood & Shelbourn, 2012)**

PMO is used in many terms, depend on the roles and maturity for where and how it is used. According to pm solutions (2012), PMO is called project office for low mature PMOs and Project Management Office for standard PMOs, and Program/ Portfolio Management Office or Enterprise Project Office for high-level PMOs. Table 1 shows each of the mentioned functions and their responsibility and suggested designation within the organization (Figure 2).

As mentioned, the degree which is the PMO can control and influence within the organization have been classified into three types according to the PMBOK (PMI, 2008):

- **Supportive PMO** (Project office): The PMO role is only reflected as consultative. The main deliverables are the administrative supports, which means professional expertise, templates, project management best practice, training, access to project information in addition to lessons learned from other projects. This type is practical when it is used.
- **Controlling PMO** (Departmental-level PMO): The primary role is to control the project's plan schedule and monitor all its related functions to ensure successful completion. To achieve it, many requirements need to be considered as budget auditing, continual plan revision, evaluation of progress, and the risk of delays.
- **Directive PMO** (Enterprise PMO): This type is chosen when more than one project or portfolio is integrated. It will take the main functions of the supportive and controlling the directive. The generous use of the directive PMO is that it helps the organization to standardize its methods and its ability to take similar projects and execute them successfully. PMO is strategically suitable for large organizations managing multiple projects simultaneously.

**2.1.4 PMO Role:** Many public and private entities used the PMO in their organization as part of their project management implementation. The PMO role contributed to the overall organization objectives and many as operational and strategic (Philbin, 2016). According to Desouza and Evaristo (2006), the leading PMO roles can be classified into three levels: *strategic, tactical, and operational*.

**Strategic Level:** In this level, the PMO role is to maintain good project performance according to the following key targets:

- a) **Strategic goals of the organization:** PMO needs to make sure that the projects are aligned with the organization's strategy and objectives. Moreover, project teams need to be aware and spread the importance of their organization's main goals and manage the projects accordingly.
- b) **Strategic growth of the organization:** PMO's role is to keep supporting the approved projects and ensure that they support overall organizational development.

- c) **Effective and efficient knowledge management:** PMO should always be updated in terms of policies, procedures, templates, tools, and project management techniques. Moreover, PMO can transfer this information to all projects' teams across all running projects.

**Tactical level:** PMO, at this level, need to ensure the following:

- a) **Close integration among project initiatives:** Keyway here is coordination. PMO needs to ensure that all team members are using the same technical language. This transparent communication channel is the key to project success.
- b) **Appropriate quality of the product and service delivered by the project:** PMO should always keep an eye on the deliverables' quality by closely monitoring and monitoring the project progress according to the project policies and procedures.
- c) **Knowledge sharing:** PMO's responsibility to ensure that past mistakes will not happen again, and team members are gaining new experience and are empowered to face future problems.

**Operational Level:** At this level, PMO is concerned with the following:

- a) **Performing project assessments:** The projects follow the agreed baselines, and any additional cost or resources are carefully managed and monitored.
- b) **Integration of lessons learned from other projects:** Knowledge database must be accessible to all project members to ensure correct decision making.
- c) **Expert knowledge on project management:** PMO needs to be the core point where all projects can get the necessary knowledge they need.
- d) **Continuous monitoring of customers' satisfaction:** Stakeholders' satisfaction is considered the PMOs' primary role who provide feedback, complaints, and suggestions.

## **2.2 PMO in governmental organizations**

The organization structure of the public entities is usually led by the services provided, time constraints, and fund availability. Although the governmental organization is familiar with their work routine, the challenges, external and internal, require them to develop further developments. With the foundations in information technology (IT) and engineering sectors, PMOs are becoming more popular in governmental organizations (Martin et al., 2007). The demographic analysis revealed that an increasing number of Emirati project professionals are currently working in the PMO-related activities representing 62.7% of all projects' population staff (Al Ameri, 2016).

Moreover, according to the PM Solutions study, The State of the PMO 2014, PMO in the governmental sector had contributed to a 23% decrease in the number of failed projects, 35% improvement in the number of projects delivered under budget, and 20% improvement in productivity (Cabanis-Brewin, 2014). The main conventional difference between public and private entities is their ownership and lack of competition. Thus, the public sector is managing a more complicated process of guiding multiple agencies and firms. The public sector projects are often characterized as uncertain, complex, politically sensitive, and involving many partners (Santos and Varajão, 2015). As the public organization is under pressure to increase its efficiency and deliver valuable services, PMO can be a promising tool to be adopted.

## **2.3 PMO challenges in governmental organizations**

As mentioned earlier, the public sector needs to enhance its procedures when managing many projects simultaneously. Generally, Project management (PM) methodologies are well implemented in the public entities, as they sense its key importance in dealing with day-by-day progress. However, when it comes to a higher level of multi projects management, program management, PMO implementation is facing many challenges (National Academy Of Public Administration, 2015):

- 1) **Laws and policies development neglect the program management issues:** Program management aims to prepare for the upcoming challenges and align the organization processes and members toward change adoption. Any changes will require the function development of the team's higher positioned members in the public sector. So, added chief members in different areas of the organization will be the ultimate solution. While developing the senior leaders for the same purpose will not be considered. The reason for that, there is no department responsible for managing and over-sighting the full problem and set laws and policies to solve it. So, the problem will be managed at a leadership level rather than a managerial level.
- 2) **Lack of awareness of program management value:** Many governmental senior members do not recognize the importance of program management and its effect on their organization. In this case, without the upper management support, implementing the program manager will have no benefit. The decision-maker may not engage team members in planning for policy and transformation initiatives until a later stage. Moreover, career-wise, program management is not highly ranked in the public sector organizational structure.
- 3) **A vague understanding of internal and external stakeholders' roles and responsibilities:** As mentioned earlier, clear communication channels are a key point when talking about PMO, and the same goes for program management. An internal stakeholder can be executives within the authority, so they require the information to pursue their job. As well as internal customer representatives. External stakeholders can be other firms, authorities, and contractors. Stakeholders' involvement in program management is not well defined as upper management is not aware of their actual role within the intended process.
- 4) **No consistency in the development ladder of program managers:** To have successful program management, an experienced program manager would be needed. Till today, there is no clear career path for the program managers. The increase in the responsibility level for program managers is not matching the current position available resources. Nevertheless, training programs are missing from the administration agenda. Even though the individual decided to get his necessary training outside the organization, there is no guarantee that his/her investment will be paid back by the organization heads. Either in terms of career development or terms of money spent.

**5) No professional community for program managers:** As the program manager position is yet not clear in the public sector, individuals who held this position lack professional support from others with the same positions. Simply because they are not aware of them, this creates a gap in individual performances and generates repetitive mistakes in different organizations. Moreover, individuals will be unable to raise issues such as changing policies or introducing new tools to enhance program management due to a lack of collective voice.

All of the above are considered key challenges that government entities need to consider once PMO is decided to be implemented or already implemented to deliver effective outcomes.

#### **2.4 Steps to strengthen project and program management in government organizations**

There are many steps or initiatives that the PMO can take to strengthen project management and program management across the government entity or organization, and the following are some of them:

- a) Awareness programs to senior officials about the value of PMO and gaining the support of those senior officials.
- b) Developing Program management career paths.
- c) Designation of a Program Management Officer in each governmental entity or organization.
- d) Creation of Program Management Policy Council or Association.

Marshall et al. (2015) introduced the following positive governance input:

- a) Creating a job series with a career path for program managers would begin to a critical point of failure, which is the government's lack of experienced program managers.
- b) The designation of a Program Management Officer at each entity or organization. The role of this officer includes training, mentoring, and supporting program managers.
- c) Creating a Program Management Policy Council that shall act as the principal interagency forum to improve program management practices.

#### **2.5 Organizational Enablers**

According to Martinelli et al. (2014), nine organizational enablers will help PMO flourish, and they are as the following:

- To start with, the organization needs to be structured appropriately to enhance cross-organization collaboration.
- A systematic management approach should be in a place that aligns the execution output to business strategies and goals. This obviously cannot be achieved without senior management support and the approval of new governance.
- Program managers must be empowered by VIP stakeholders and senior management with the necessary level of authority and decision-making responsibility.
- The modification of the existing processes, policies, and procedures in the organization is needed. Once again, this can only be achieved with the support of senior management.
- The use of technology, such as online communications and collaboration tools.
- A formal escalation process must be in place to elevate barriers and provide the Program managers with necessary support from senior management in a timely manner.
- The importance of program managers' career development has been addressed in other parts of this paper.
- As mentioned by the author, the importance of reward and recognition can be through enhanced human resources policies.
- The last enabler mentioned is the importance of face to face investment meetings between program managers and senior management. These face to face meetings will build trust among members and will have many positive impacts on relations and building team chemistry, among others.

#### **2.6 Organization Executives and VIP stakeholder's Governance Role**

For us to get the appropriate required support from Senior Executives and VIP stakeholders, those individuals should have a clear understanding of how programs are derived from strategies and how they are responsible for delivering strategy benefits. According to Martinelli et al. (2014), program managers' role in organizations is to help achieve the strategic organizational objectives to help achieve and realize the benefits. Therefore, senior executives and VIP stakeholders need to be aware of this role of program management. Another important role of senior executives in their support to PMO is ensuring alignment between the organization's business strategy and the PMO's execution plan. According to Martinelli et al. (2014), alignment is when the program reflects the entities' strategies' priorities, an essential element in project and program management. An additional important role by senior executives in their support to PMO is to ensure that the PMO's office is given enough authority and support to act as a business unit manager's proxy to deliver anticipated business results. Martinelli et al. (2014) also mention that Program managers are seen as the proxy and controller of retrieving the business's ROI. Having all the points mentioned above, senior executives have an important governing role in facilitating PMO's introduction in agencies and its success.

### **3. DATA GATHERING**

Interviews had been conducted with various organizations to realize the understanding and maturity of their program management. These organizations are:

- DTP - Ajman Digital Transformation Program
- ADNOC - Abu Dhabi National Oil Company
- DHA - Dubai Health Authority, IT
- RTA - Dubai roads and transport authority
- DEWA - Dubai Electricity and Water Authority
- DFF - Dubai Future Foundation

### 3.1 Program Management and organization strategy

From the interviews, it was observed that program management is being established to function its purpose differently. For example, DTP is strategically directed by the government to manage a digitization program to cover government services in the emirate. These projects have been decomposed from the primary strategy, which provides a roadmap for reaching a fully smart government through a single gateway. In ADNOC program management, projects are being decomposed from the strategy and assigned to the concerned company to work on program or project lifecycle thru prefeed, feed study, execution, and closing.

DHA as well as receiving the strategy from Dubai Government to digitize the healthcare services. Moreover, they are treated as programs because they are big, achieving Dubai strategy, and their impact is enormous on the stakeholders. The programs and most projects are mainly formulated through:

- DHA Strategy Department.
- Centralized Demand management.

RTA demonstrated another example of managing programs. Nol program projects were developed through the Nol strategy in specific. In Nol strategy, there were four main pillars: Nol Products, Nol partnerships, Nol Organization, and Nol Technology. Hence, ten projects are under the Nol Strategy umbrella. Whereas, there is no single person responsible for all the projects and managing the program. Each department has a Director who reports to the sector CEO.

DEWA programs are being formulated by considering the Smart Dubai strategy, which focuses on minimizing the environmental impact and make a sustainable city. The company has a policy to serve society by contributing to the development of Dubai. The interview has been found that the programs have been initiated by coordinating with the partners and stakeholders. The green charger program was demonstrated as an example. Its complement by installing around 200 EV green charger stations because of the emergence of electric cars in Dubai. At present, the Project Management Office (PMO) has become the central hub of DEWA as it provides the right tools for the project, portfolio, and resource management (PPM).

Dubai Future Foundation (DFF) is almost a program serving the government strategy of living and experiencing Dubai's future. Then, The Museum of Future (MOTF) is one of 24 different initiatives housed under the Dubai Future Foundation. **Program formulation approach**

ADNOC response to this subject was as both approaches are valid in such a colossal organization. The strategy is decomposed to objectives and objectives to programs. Whereas most programs are formulated from projects and needs, then the strategy is formulated. In Ajman DTP, the strategy is decomposed into the following five objectives; first, digitally transform all of the government's services by 2018. Second, digitally transform all of the government's shared services by the end of 2018. Third, reduce government expenditure by 20% by 2021. Fourth, digitally transform 30 of the government's services every 100 days. Fifth, 80% adoption of digital services by the end of 2018. This approach divides the strategy into smaller and manageable components.

DHA programs come from the need of the business, and these needs are part of the strategy. DHA uses this approach to achieve the strategies put by the government and the organization. RTA strategy is the central pillar that the rest is building from. For example, one of the RTA strategies is "Nol to be the leading ticketing technology," which is broad. Then further objectives and programs being defined. However, in DEWA, the strategy is formulated based on the organizational objectives because it generates electricity and can provide the electric vehicles' EV green charger. On the other hand, most DFF projects and programs (80%) are developed from the strategy, whereas some projects are formulated from the needs and requirements.

### 3.2 Program Management difficulties & Key Strategic Challenges

All the interviewed organizations experienced challenges, and the following table summarizes some of the difficulties.

**Table 1: Interviewed Organizations**

Organization	Difficulties & Key strategic challenges
Ajman DTP	<ul style="list-style-type: none"> <li>➤ Underestimating the complexity of programs.</li> <li>➤ Poor requirements management.</li> <li>➤ Misaligned stakeholder expectations.</li> <li>➤ Lack of cross-functional communication.</li> <li>➤ Fulfilling all the needs of citizens.</li> <li>➤ Lack of skilled &amp; experienced employees.</li> <li>➤ Predicting the technology future.</li> </ul>
ADNOC	<ul style="list-style-type: none"> <li>➤ Managing external risks.</li> <li>➤ Lack of experience and skills.</li> <li>➤ Precise decision making.</li> <li>➤ Stakeholders expectation.</li> <li>➤ Aligning upstream and downstream benefits.</li> </ul>
DHA - Dubai Health Authority, IT	<ul style="list-style-type: none"> <li>➤ Lack of communication.</li> <li>➤ Lack of understanding change management.</li> <li>➤ Lack of consistency.</li> <li>➤ Absence of standardized project strategy.</li> </ul>
RTA	<ul style="list-style-type: none"> <li>➤ Communication.</li> </ul>

	➤ Aligning the priorities.
DEWA	➤ Wide of the geographical band. ➤ R&D- research and development. ➤ Instability Economic.
DDF	➤ Proper planning. ➤ Defining clear Rules and Responsibilities. ➤ Tracking and measuring program and project progress.

### 3.3 Program’s Progress and Success Measuring Criteria

The progress of the different projects in the **Ajman Digital Transformation Program** in the following ways:

- Determining the completed activities.
- Documenting the mini-milestones achieved after completing each activity.
- Capturing the starting and finishing points for smaller tasks that do not generate deliverables.
- Using the cost ratio to determine whether the earning value equal to the portion of the completed project.
- Relying on the Program Manager’s experience and opinion to determine the program’s progress

Meanwhile, the success of a program is being measured by the following five metrics:

- Checking whether the milestones are achieved on the agreed dates.
- Confirming whether the deliverables meet the standards set in the quality plan.
- Determining the differences between the actual spend and the budgeted cost.
- Involving all the stakeholders to determine how they feel about the projects' status. It also involves getting feedback and opinions on what can be done to improve the projects.
- Comparing the projects to the business cases to determine whether they are achieving the agreed-upon deliverables.

The critical success factors in Ajman DTP are as following:

- Effective leadership, which involves influencing the subordinates to perform more than expected.
- Having the right people and continuously developing them to ensure they deliver the expected results.
- Design and foster effective processes to ensure that the personnel delivers results quickly and the lowest cost.
- Open communication to ensure that all the team members are on the right page.
- Careful risk management to alleviate the issues that may prevent the program from going on as planned.
- Proper financial management ensures that the program is completed successfully, and the client earns a return on investment.

In **ADNOC**, the progress is being measured thru VAP committee board meetings along with five gates which are:

- Gate 0 (G0): Project kick-off
- Gate 1 (G1): Feasibility gate
- Gate 2 (G2): Concept Approval gate
- Gate 3 (G3): Project Sanction / Final Investment Decision (FID) gate
- Gate 4 (G4): Project close-out gate

**DHA** measures the progress through:

- Weekly status updates run by the program level PMO through a governance structure.
- Program Goals and objectives set in the program charter drive the program, and interim level measures on the goals and objectives provide the program's view/health.

While their CSF are:

- Achieving strategic Focus (Leadership, Management, Planning)
- Investing in Human resources (Personnel, Staff, Learning, Development)
- Improving Operations (Processes, Work)
- Marketing (Customer Relations, Sales, Responsiveness)
- Finances (Assets, Facilities, Equipment)

**Dewa** CSF summarized in the adoption of technology, employee training, enhancement of skill set, monthly progress of the station, customer's feedback for further improvement, and employers' supportive behavior towards employees.

**DDF** Progress is measured through trackers that are updated regularly and reviewed weekly by management. CSF is based on specific KPI's that are defined yearly and are required to be achieved. For example, the completion date of the project, Revenue targets, or the number of visitors.

### 3.4 Strengthen Project and Program Management

**ADNOC**, through their VAP, introduces the process that helps strengthen the project and program management by:

- Compiling, screening, and updating the guideline based on the stakeholders’ improvement proposals.
- Releasing periodical revisions based on the comments received.
- Ensuring a common understanding of VAP across the Business Line Directorates and Group Companies.
- Providing support in implementing VAP.

- Providing a proper forum to address VAP concerns and facilitate the resolution of disputes.
- Maximizing value potential of projects through facilitating (but not owning) quality assurance reviews.
- Vetting and assuring gate submissions.

**Ajman DTP** highlighted that the project management offices could combine up with the government to be one thing. The ADG management should stop to deliberate the major outside the governmental barricade. Besides, the management is supposed to ensure that the employees running the firm are of high skill so that they may give quality work to the clients or the customers.

**DHA** provided the following process in order to strengthen program management:

- Put standardized methodologies to manage projects and programs.
- Align project goals with strategic and governmental objectives.
- Provide transparency of roles and responsibilities of departments and key people.
- Assign people to manage and monitor projects internally to make it easier for the PMO to manage programs.

**DEWA's** leadership had discovered that exceptional growth turned out to be a challenge for the organization. Therefore, DEWA had addressed this matter by establishing more PMI certification holders to abide by the proven project. Project Management Institute (PMI) offers programs that have proven to help improve the development projects' efficiency.

## **4. DATA ANALYSIS**

### **4.1 Program Management and Organization Strategy**

Program management is an essential part of any organization. In developing program management, the organization depends on every organization's specific strategy (Marshall, Chenok, and Wholey, 2015). As stated by DHA, the programs are designed based on the directions of the DHA Strategy Department. In most cases, the programs are handled at a higher management level, and in this case, the Director-General is usually the sponsor. In contrast, the program manager becomes a department director. Besides, DHA stated that programs are usually aligned with strategy. From the interview with DFF, it was clear that they build immersive experiences that make it possible to imagine the future. According to RTA, program management is a collective responsibility and is usually based on RTA strategy. This involves contacting all the stakeholders who provide their views about the most appropriate organizational strategy.

Information obtained from Ajman Digital Transformation Program (DTP) showed that they align their program with the strategy to offer the roadmap. It might become hard to manage programs, especially where there is a lack of cross-functional communication. According to information obtained from DEWA, all its programs are designed to minimize the environmental impact. As such, it has focused on programs that support green chargers. Companies have the social responsibility of ensuring that the environment is kept clean. In this regard, organizations such as DEWA have their strategies aligned to reduce their products' environmental impacts. Program management is a continuous process, and as stated by ADNOC, the organization has a system to manage programs known as the VAP.

Organizational strategy is essential in a company as it is used by the company to fulfill its goals. According to Marshall, Chenok, and Wholey (2015), the organizational strategy is developed by the top management and implemented by middle and lower management. This information was confirmed by the interviews from DEWA, ADNOC, and DTP, who also mentioned organizational strategy as an essential factor for an organization's success.

### **4.2 Program Formulation Approach**

Every organization has a specific approach to formulating programs. The programs are essential to an organization because they show the company's milestones (Marshall, Chenok, and Wholey, 2015). According to DHA, their approach involves decomposing the strategy to objectives and then decomposing the programs' objectives. DHA follows approach A, where strategy is decomposed into objectives and then to programs. The other approach involves formulating programs from projects and needs, then developing a strategy. DFF utilizes the two approaches with the dominating one being where the objectives are decomposed from strategy and then to objectives and, finally, programs. DTP's approach is the decomposition of strategy into objectives and then decomposing the objectives into programs. ADNOC insists that companies need to realize that the approach used is always subject to change in terms of program formulation approach.

### **4.3 Program Management Challenges**

Program management has several challenges that it can encounter. Based on the literature review and data gathered from interviews, the main and obvious challenge is the lack of understanding of nature, complexity, and program management role. As discussed previously under point 2 in the program challenges section, the lack of understanding of the benefits program management can provide a significant challenge due to the lack of management support in making decisions. Lack of understanding of each member's roles and responsibilities in a program can also go under the understanding of the program management nature. Program management can be a supportive and directive methodology toward achieving organizational objectives if it can get the support it needed and realize its benefits.

The second challenge is the lack of communication. As mentioned by the interviewees from DHA and RTA, communication can be a barrier to hardening program management. Effective communication is an essential part of projects, and it can lead to project failure if handled poorly (Čulo & Skendrović, 2010). Since programs are based on projects, it is very important to develop a proper communication plan to deliver the right information to the right individuals. Otherwise, project and program stakeholders will keep wondering where things are standing, affecting decision-making, and project activities and programs' progress overall.

Another main challenge is inconsistency and poor project alignment and planning. Interviewees in ADNOC, RTA, DHA, and DFF all agreed that one of the significant challenges in program management is the poor planning and projects inconsistency and to be able to plan better projects, experienced and skilled individuals are required which makes another challenge for projects and program management which is the lack of skilled people to handle programs and projects as identified by ADNOC and Ajman Government.

Based on the above-discussed challenges, an overall challenge is program governance. Most of the program difficulties are coming because there is no strong program and project governance. Ajman Digital Government, ADNOC, and DHA interviewees highlighted a number of difficulties arising from lack of governance like the poor planning and executions of programs on big scales. It makes it hard to keep stakeholders up to date with program progress and meet their expectations. Program risk management and its interdependencies associated with other projects are also challenges where risk logs must be maintained and updated with mitigation plans, adapt to changes through the workforce, and budget approvals. All of these issues require an effective program governance strategy to be able to overcome and control them.

#### **4.4 Program's Progress & Success Measuring Criteria**

Among the governmental entities interviewed, the program progress is mostly measured through progress reports, top management meetings in ADNOC, or trackers, according to the Dubai Future Foundation statement. These reports or status meetings help leaders keep them up to date on the status of the program and projects progress to make assumptions of any future issues or complications that can or might occur during execution and make decisions accordingly. It also helps them to foresee the results and provides expectations of the program output. On the other hand, success is measured differently from one entity based on the program objectives. However, all programs measure success by checking if the goals and milestones are achieved if deliverables and KPI's are met, checking if the average spending matches the planned budget or not, and finally measuring stakeholders' satisfaction with the results.

#### **4.5 Strengthen Project and Program Management**

To overcome the challenges and strengthen the program management area, some steps can be adopted. According to the literature review and interviews, the first step is to get top management support. Having leaders support can ensure programs alignment with organizational goals and backing for critical cases that require the involvement of VIP stakeholders. According to DEWA's interviewee, DEWA's experience in achieving business excellence and improvement came from strong leadership support. Moreover, those leaders sought to invest in their employees by training them to get PM certification to gain knowledge in the area and improve organizational performance.

Also, and as recommended by the ADNOC interviewee, it is essential to set guidelines that can help stakeholders' improvement and policy developments to have an integrated program management framework. Secondly, it is important to disseminate the program's understanding and objectives to all stakeholders, which again falls under communication management to keep them aware of the required criteria and enforce them to improve their performances. This can be done by developing a program management council. Another point to strengthen program management has an integrated approach to align programs with organizational strategies. As recommended by the DHA interviewee, it is best to align programs with organizational objectives. According to the article by Marshall et al. (2015), including programs with strategic planning of an organization is an effective way to improve and strengthen program management through important stakeholders' involvement to understand the requirements early and accordingly evaluate performance.

Most importantly, above all, it has program governance. According to Crown (2007), program governance helps direct programs toward achieving defined goals, emphasizes accountability and responsibilities, provide a proper framework for program planning, provide best practices, and act as an issue's resolutions base. Having program governance in an organization will help ensure program outcomes aligned with strategies, transparency of ownership, effective engagement with stakeholders, availability of skilled resources, and achieved (Crown, 2007). It can be observed that most of the program and project management issues come from a lack of control and governance over them. Therefore, if there is a strong governance approach, it is most likely the issues will decrease.

Finally, the interviewees recommended some approaches to help in managing programs. Dubai Future Foundation has recommended emphasizing on communicating issues and changes in projects and programs to stakeholders and utilizing technologies for better and faster management. Ajman Digital Government recommended engaging and encouraging project teams' participation in the decision-making process and praising them for achievements as this will motivate them to learn and improve themselves, resulting in having skilled and knowledgeable staff. It was also recommended to start programs and project governance for better planning. RTA emphasized the lessons learned as a base of information for future references to avoid the same issues.

## **5. CONCLUSION AND RECOMMENDATIONS**

In conclusion, program management is necessary for every organization as it helps the organization define its direction and prospects. PMO is also equally important, and it is considered one of the tools that help organizations keep track of their projects against their intended strategies. According to the organization size and scope of work, PMO specific level can be identified and implemented. As PMO has been recognized by the public sector, implementing it faced many difficulties. This paper relied on collecting data from both primary and secondary sources where interviews were conducted and readings from articles. As evidenced by the interviews' data, the majority of the organizations depend on the strategy where the formulated strategy is decomposed into objectives, and then the objectives decomposed into programs. Most organizations prefer this approach since it



is direct and does not have unclear twists. From challenges perspectives, most organizations shared somewhat the same issues, and the top ones were lack of understanding of program management, lack of communication, and lack of project alignment. Interviewees have recommended some tips to overcome these challenges and, most importantly is to set projects and program guidelines by integrating approaches.

### 5.1 Recommendations

- Future research is recommended to identify the current designation used in UAE's governmental entities for the program manager and establish a survey to identify mutual challenges.
- Start adopting program and project governance will help organizations to have specific guidelines and methodologies to be followed.
- Organizations that make products that affect the environment embrace an approach that supports the care for the environment.
- Organizations to develop strategies that support other areas of the organization, such as program management. This is because these aspects are interrelated, and the failure of one results in the failure of the others.
- Since these organizations belong to the government where there is no competition, it is recommended to regularly gather the organizations' PMOs to share the best practices and experiences in projects and program management.
- It is recommended to introduce a central program or project management authority (Federal PMO council) to ensure that all government organizations' projects align with the government strategies.
- The top management should believe the necessity and value of PMO.

## 6. ACKNOWLEDGMENTS

This report cannot be completed without the support and encouragement of the supervisor:

**Dr. Mounir Elkhatib:** Who helped us a lot in preparing our research and gave us useful tips. We also, would like to express our gratitude and appreciation to our colleagues at work to support and support us. Moreover, acknowledge the support I received from our teachers and colleagues at Hamdan Bin Mohammed Smart University.

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