

# Implementation Model of Project Management Office in Real Estate Development <sup>1</sup>

**Habib Fayadh, PMP**

PMO Director, Meinhardt  
Riyadh, Saudi Arabia

## Abstract

This research proposes an implementation model for Project Management Office (PMO) in the real estate development industry. Real estate development is a heterogeneous business and can face many uncertainties due to economic conditions, regulations, financing, competition and project execution delays. It is perceived that (PMO) plays an important role in coping with such uncertainties and offers a practical methodology in managing real estate development projects efficiently. The model presented in this paper is based on literature review and the author's experience in PMO, project execution and real estate development. This study shows the position of the PMO in the organization structure together with the authorities and responsibilities assigned to it, are an integral factor of its success.

**Key words:** Project Management Office (PMO), Real Estate Development, Success Factors, Implementation Model.

## Introduction

Real estate development is a project-based business that accomplishes its goals through implementing highly diversified physical projects. Project development in the real estate industry is a complex process and has a long lifecycle from initiation to completion. The development process is multi dimensional, capital intensive, multi disciplinary, economic conditions related, public private interactive, time consuming with extremely diversified stakeholders. The development process in real estate starts with simple a concept: Land looking for use, or use looking for land to end up starting a long process that results in a major physical asset to generate profit to the shares holders. In addition, the risks and uncertainties in such an environment are high and require highly systemised methodologies to manage these endeavors.

A real estate organisation like any business is presented continuously with many challenges, opportunities and uncertainties. This requires an efficient vehicle to analyse, prioritise, align what comes in its way to decide what to work on and what to invest in and what to drop. For this reason, organisations invest heavily in developing strategies and plans. Strategies reflect an organisation's awareness of its markets, competitors, regulatory environment, economical

---

<sup>1</sup> How to cite this paper: Fayadh, H. (2020). Implementation Model of Project Management Office in Real Estate Development; *PM World Journal*, Vol. IX, Issue IV, April.

forecasts, its future trajectory, and its present capacities and potentials. It integrates and translates the vision of corporate leaders and stakeholders with the plans for making that vision a reality over time (Crawford, 2010). However, recent statistics shows that the success rate for strategy execution stands between 10% and 30% (Chuah et al., 2016). As per (Okumus, 2003), organizations fail to implement more than 70% of their new strategic initiatives. These companies are like a body whose brain is unable to tell it what to do (Crawford, 2010).

For professionals coming from real estate development, the only way to translate the real estate development corporate's vision into reality is through executing successful and efficient physical projects. Regardless of the complexity and diversified long lifecycle of real estate development projects, project management practices and methodologies is the only vehicle capable of transforming the vision and strategic plans into reality and capable of optimizing values from investment. To manage the project management, we need special vehicles like Project Management Office (PMO). Exhibit 1 conceptualises this fact.

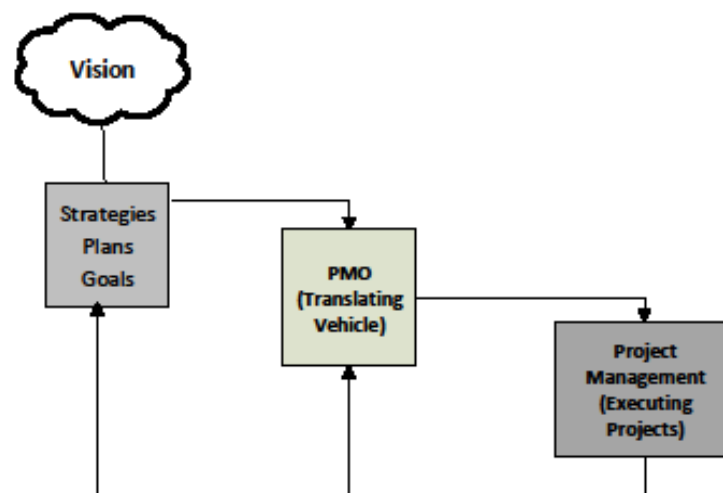


Exhibit 1. PMO bridging the Strategy and Execution

In Exhibit 1, the PMO serves as the bridge between the organisation's vision and the actual work of the project implementation. The PMO in this context is expected to provide a systematic methodology for selecting, prioritising and aligning the proper projects, and then plan, staff, execute, control and report the status of each development to the executives.

The purpose of this research is to propose and discuss an implementation model of PMO in real estate development organisation.

## What is PMO?

There are many definitions of the PMO depending on the functions assigned to it and the location of the PMO in the organisation structure. As it stands, there is no global standard or model that define and structure the PMO (Salameh 2014). The PM Institute defines the PMO: (PMI, 2013), “a PM office (PMO) is a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques. The responsibilities of a PMO can range from providing PM support functions to actually being responsible for the direct management of one or more projects”.

PMI (2008) in (*OPM3*<sup>®</sup>) has defined the Organizational Project Management (OPM) as “the systematic management of projects, programs, and portfolios in alignment with the organization’s strategic business goals. The purpose of OPM is to ensure that the organization undertakes the right projects and allocates critical resources appropriately. Next, OPM helps ensure that all levels in the organization understand the relationships among the strategic vision, the initiatives that support the vision, and the objectives and deliverables.”

PMO is precisely defined by Dai and Wells (2004), who described it as an organizational unit that provides project managers, project teams and functional managers with access to the principles, practices, methodologies, tools, and techniques that are used for efficient and effective project management

The functioning of the PMO should be considered in terms of its location and position in the organizational structure and the tasks that it pursues. The most important thing, however, is the value that a PMO creates for the parent organization, Hobbs and Aubry (2008). For the purpose of this paper, PMO is defined as: an organisational unit responsible for standardising and applying the project management’s knowledge, best practice, processes, methods, and techniques to all investment projects undertaken by a real estate development organisation. The purpose of PMO is to ensure that all projects are in line with the organisation’s strategic goals and are delivered within time, budget and the expected quality. Another dimension of this definition is that the PMO is responsible for establishing a sustainable project management environment. It’s very important to exclude project execution operations from the definition of the proposed PMO definition.

Depending on its role, organisational location and assigned mission of a PMO, it performs a range of functions, from providing a standard project management methodology to be followed in all projects in an organization to coordinate resources across projects to achieve strategic business goals (Hill, 2004). In a survey performed by Hobbs and Aubry (2007), they found 27 functions usually performed by PMOs, they are listed in Table 1. As per the survey, not all functions are performed by every PMO, but all of the functions identified in the survey were found to be important.

PMO Function	% of PMOs Where Important
Report project status to upper management	83%
Develop and implement a standard methodology	76%
Monitor and control project performance	65%
Develop competency of personal, including training	65%
Implement and operate a project information system	60%
Provide advice to upper management	60%
Coordinate between projects	59%
Develop and maintain a project scoreboard	58%
Promote project management within organization	55%
Monitor and control performance of PMO	50%
Participate in strategic planning	49%
Provide mentoring for project managers	49%
Manage one or more portfolios	49%
Identify, select and prioritize new projects	48%
Manage archives of project documentation	48%
Manage one or more programs	48%
Conduct project audits	45%
Manage customer interfaces	45%
Provide a set of tools without an effort to standardise	42%
Execute specialised tasks for project managers	42%
Allocate resources between projects	40%
Conduct post-project reviews	38%
Implement and manage database of lessons learned	34%
Implement and manage risk database	29%
Benefits management	28%
Networking and environmental scanning	25%
Recruit, select, evaluate, and determine salaries for project manager	22%

**Table 1: PMO functions in decreasing order of importance (Hobbs and Aubry, 2007)**

Hobbs and Aubry (2007), found out that there is a significant variation in the structure, roles and perceived value of a PMO. This can be attributed to the diversified nature of the projects, their values to the parent organisations and to the varieties of functions assigned to PMOs. Structuring PMO in a standard way is in fact complex and experts agree that “there is no one -size –fits all” approach, (Oliveira et al., 2017). According to the PMBok Guide 5<sup>th</sup> edition, there are several types of PMO structures in organizations, each varying in the degree of control and influence they have on projects within the organization, such as: (1) **Supportive PMOs**, that provide a consultative role to projects managers by supplying templates, best practices, training, access to information and lessons learned from other projects. This type of PMO serves as a project repository. The degree of control provided by this PMO is low; (2) **Controlling PMOs**, that provide

support and require compliance through various means. Compliance may involve adopting PM frameworks or methodologies, using specific templates, forms and tools, or conformance to governance. The degree of control provided by the PMO is moderate; and (3) **Directive PMOs**, which take control of the projects by directly managing them. The degree of control provided by the PMO is high.

According to Hubbard D., Bolles D., (2015), the majority of PMOs fit into one of seven different categories or types as shown in Exhibit 2. They continue, it is usually the purpose of the PMO within the enterprise, rather than the application of any particular standard or framework, that determine what title is utilized.

Business-Level Role	Operational Responsibility	Organizational Accountability	Requisite Authority
<b>Enterprise PMO</b> <ul style="list-style-type: none"> <li>One for enterprise</li> <li>Permanent function</li> </ul>	Strategic master planning. Tactical master planning. Project selection and prioritization.	Enterprise – reports directly to the CEO/President	Review and approve master project portfolio and budget plans. Oversee portfolios and programs.
<b>Division PMO</b> <ul style="list-style-type: none"> <li>One for each division, region, or portfolio</li> <li>Permanent function</li> </ul>	Tactical master planning. Project-portfolio management.	Division, region, or portfolio – reports directly to Division manager or Enterprise PMO.	Establish project-portfolio operational and budget plans and authorize adjustments. Manage portfolios and oversee programs
<b>Business Unit PMO</b> <ul style="list-style-type: none"> <li>One per business unit</li> <li>Permanent function</li> </ul>	Operations master planning. Project-program management.	Functional business unit or program – reports directly to Division PMO.	Develop project-program operational and budget plans and authorize adjustments. Manage programs and oversee projects.
<b>Project PMO</b> <ul style="list-style-type: none"> <li>One for each major or mission critical project</li> <li>Temporary function</li> </ul>	Project initiation, planning, execution, monitoring, control, and closing. Management of project.	Specific major project – reports directly to Business Unit PMO	Develop project operational plans and budgets and authorize adjustments. Manage, control, and report project progress.
<b>Project Office</b> <ul style="list-style-type: none"> <li>One per project</li> <li>Temporary function</li> </ul>	Project initiation, planning, execution, monitoring, control, & closing. May include management of project.	Specific project – reports to the project manager.	Prepares and maintains project documentation as directed by the project manager.
<b>Project Support Organization (PSO)</b> Normally temporary but may have permanent function	Support administratively project initiation, control, planning, execution, monitoring, and closing. Provide project controls function.	One or more Specific projects – reports to various project managers or a business unit manager	Report project progress and status
<b>Project Management Center of Excellence (PMCoE)</b> Normally permanent function	Establish, document, and promulgate project business management standards, methodology, practices, tools, training, templates, education, and PM competency.	No projects – Administrative function reports to management at the enterprise, division, or business unit level as applicable.	Maintain, update, and disseminate the project business management methodology, practices, tools, and project management communications such as status reports, intranet website, and dashboards.

Exhibit 2. PMO Roles, Responsibility, Accountability, and Authority Matrix (Hubbard D., Bolles D., 2015)

In this paper, there is no attempt to classify or typify the proposed PMO or follow the maturity model proposed by the PMI in (*OPM3*<sup>®</sup>). The reason for this, it's assumed that the PMO would receive in real estate development organisation all the needed support and be granted the required authorization from the top management that would enable it to perform and accomplish its proposed functions. An organisation working in real estate development would support any concept that will help deliver projects on time, within budget, quality and maximise the value of the investment. Atypical real estate development organisation has in its organisation structure departments for projects execution, engineering, procurements and development. These departments usually work in silos and most of the time are coordinated and managed by a Vice President.

In this paper, a set of functions will be selected for the proposed PMO model as they the most needed and missing practices in the real estate development organisations based on the practical experience of the author. Functions, high organisational structure location, authority granted and executive support, are the most important success factors of the PMO in the real estate development organisation.

## Overview of the Real Estate Development Process

Real estate development is the process of investing capital, time, material and expertise to transform a piece of raw land or changing the usage of an existing property (facility) into a usable space that meets the demand of the tenants who are then willing to pay money for using it over a specific period of time. The value creation of this process is achieved by providing a usable space that meets the market demand at competitive price while it is profitable and sustainable. The transforming and usage changing processes in real estate development are achieved through initiating and completing successful well coordinated projects within 3 parameters: 1) shortest time to market; 2) within the specified budget; and at 3) highest quality. "The development process is our most challenging manufacturing process because its sub-systems are complex and because it is the instrument of change which affects all of a community and a society" (Graaskamp, 1989).

"The most prominent characteristics of real estate are that it is tied to its location, it is heterogeneous, it is scarce and it has limited substitutability. These factors have far-reaching economic, legal and factual implications. The geographic location alone frequently determines the most likely use as well as the physical and / or structural possibilities, and the value of real estate is largely determined by external factors such as the condition and the possible uses of adjacent properties as well as the infrastructural facilities provided by the public sector" (Wiegmann, 2012).

Projects in real estate development have some unique characteristics:

1. Multidisciplinary efforts of diversified experts.
2. Long term life-cycle processes,
3. Highly dependent on regulations, and environmental requirements,
4. High risk impeded in the project development,

5. Highly dependent on economic health,
6. Diversified stakeholders,
7. High volume of capital required,
8. Operate in highly competitive market,
9. Require high level of innovation in all development phases,
10. Require intensive marketing and selling efforts to lease or sell.
11. Long terms of realising ROI,
12. Require extensive coordination, stakeholder's satisfaction, professional finance and risk planning and management.
13. Require high level of engineering, construction, financing management.

The nature of the real estate development projects requires strategic planning and sound market analysis in advance (Geschwender, 2010). Analysing, planning and delivery of each phase in the development life cycle is crucial to the success of the development and require sophisticated project management techniques and methodologies. If a delay occurs in the delivery of any phase, it is highly possible that the completed product (property/facility) delivered to the market during rescission or changed market requirements. That is in addition to cost overrun due to the delay of delivering the real estate product.

The development process starts with a development concept raised by market needs, society requirements or prediction of futuristic demand due to change in economy. The three pillars of the development are: 1) Capital; 2) Land and 3) Development Concept. The 3 scenarios of the development concepts are: 1) a land looking for a use, 2) a use looking for a land or 3) a capital looking for an investment opportunity in real estate development industry. From the birth of the concept to the delivery of the completed facility, is a long and complex interrelated processes and phases. Exhibit 3 shows the project life cycle process in atypical real estate development endeavour.

The development process described in Exhibit 3 consists of five interdependent phases, namely:

- Concept and due diligence
- Planning and project management
- Design
- Construction
- Handing over / operation

An organisation may follow different phasing depending on many variables such as: 1) size of the development, 2) nature of the stakeholders, 3) applicable regulations, 4) location of the development, 5) environmental requirements, and 6) capital availability. The dynamic nature of the development process requires that the phases described in any development process model are overlapping and parallel in most of the cases. For example, a developer may choose to follow design-built approach, in which the construction starts in parallel with the design

development. Another example is the sales/ lease process may start at the design or during the construction rather than waiting for completing the construction to start the sales or lease process.

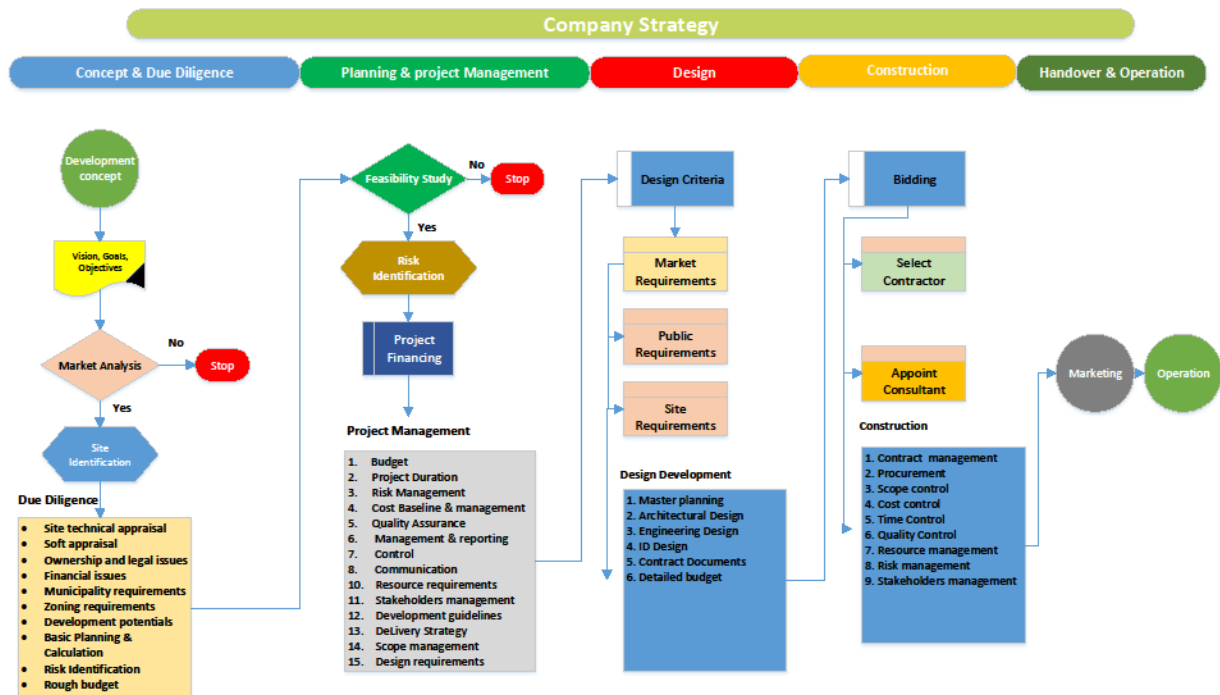


Exhibit 3. Project life cycle process model in atypical real estate development

## The PMO Implementation Model

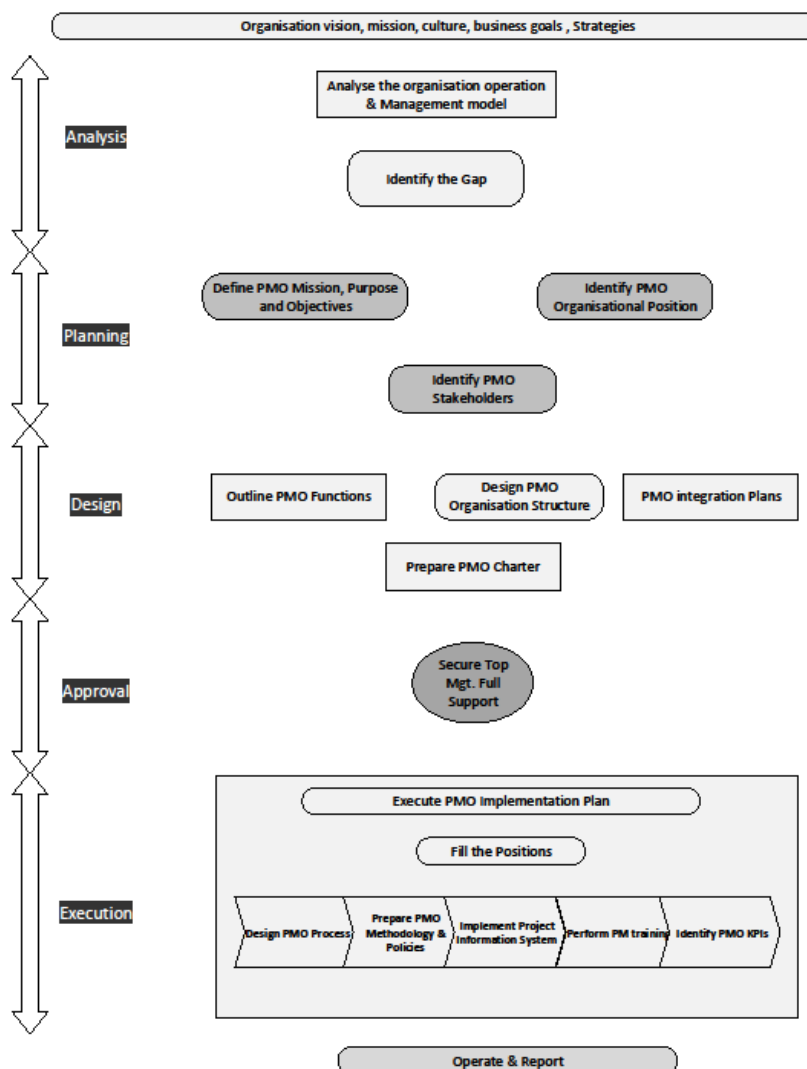
Organisations usually consider implementing PMO when they realise that their projects performance are below expectation. Symptoms are: 1) project delivery delays, 2) cost overrun, 3) bad quality, 4) unsatisfied stakeholders, 5) low quality reports, 6) unable to track projects status, 7) unpredictable cash flow, 8) untraceable scope changes, 9) absent of risk management, 10) lack of internal coordination, 11) reactive response to project execution issues, 12) inefficient resource allocation, etc. Effective PMO is perceived to eliminate all of such pitfalls.

While effective PMOs share some key traits, there is no such thing as a standard approach to PMO development (Hobbs, et al., 2008). Implementing a PMO in real estate development organisation is a project in itself with much effort in initiation, planning, execution, monitoring, and control processes. PMO is an organisational unit that requires a change in the organisational structure when it is first introduced. In its development, it is essential to identify the purpose, objectives and goals of the PMO, its stakeholders, requirements, scope, budget, resources, and timeline. Establishing early alliances and drawing a PMO charter, communication plan, and



transition and execution plans to embed the new PMO in the existing organization are also equally important, (Salameh, H., 2014).

Exhibit 4 illustrates the framework of implementing the proposed PMO in real estate development organisations. The real estate development industry as discussed earlier has unique characteristics and these characteristics should be considered carefully when introducing and implementing PMOs. The proposed PMO framework consists of 5 phases, each with processes necessary to achieve the deliverable of each phase. Each phase is executed within the organisation’s strategies, mission and vision. Each phase should achieve its deliverables as defined in the best practice of the related Phase.



**Exhibit 4. PMO implementation framework**

Introducing the PMO to an existing organisation requires readjusting its organisational structure to accommodate the PMO and its operational flow. The 5 phases of the proposed PMO are detailed hereafter:

### **1: Analysis Phase**

The main purpose of the analysis phase is to analyse and understand the organisation vision, mission, strategies, goals, relations between its business departments, its operation model and its management style. Identifying the gap between its current performance and the expected performance is critical in designing the proposed PMO. When an organisation explores the benefits of the PMO, it is mean that the organisation realises that its current executing strategies need to be optimised and improved.

Gap is the void that exists between the current practices followed in executing development projects and the optimal practices that will achieve the organisation goals. It is very important to identify the actual gap carefully, because the bridge that will fill the gap is the PMO. PMO vision, mission and goals are all designed to bridge the existing gap.

All real estate development organisations have their own strategies and methodologies for executing their development projects. The level of maturity of these methodologies varies from one organisation to another. Analysing the existing methodology will help in identifying the gap in the organisation's performance and help in tailoring the proposed functions of the PMO. The functions of the PMO shall align the projects performance with the organisational strategies and goals. Most PMOs mistakenly focus only on defining methodology, processes, and templates without first focusing on understanding the organization's vision, strategic goals, business objectives, culture, and departmental interdependencies and relationships (Millhollan, 2009). Aligning project-management methodologies and processes to organizational strategic objectives is not only important to ensure PMO policy effectiveness, but also is crucial in ensuring vital senior-management support for those policies and procedures (Salameh, H., 2014).

A well-defined gap in the project's performance with detailed needs to improvement will be the output of this phase and will be the input to the next phase "planning phase".

### **2: Planning Phase**

Planning the PMO development requires understanding the PMO's vision, mission and objectives, it also includes proposing the location of PMO in the organisational structure, and identifying and detailing the relationships with the internal and the external stakeholders. The input to the planning phase is the gap and needs which are determined in the analysis phase. This process is very important in developing an effective and successful PMO. It's extremely important during the planning phase to fully understand the organisation vision, mission, and strategic objectives. Understanding the internal and external communication and interactions of the different department and business units is an important input to formalise the PMO mission, vision and objectives. An example of PMO mission statement is: "To deliver the development

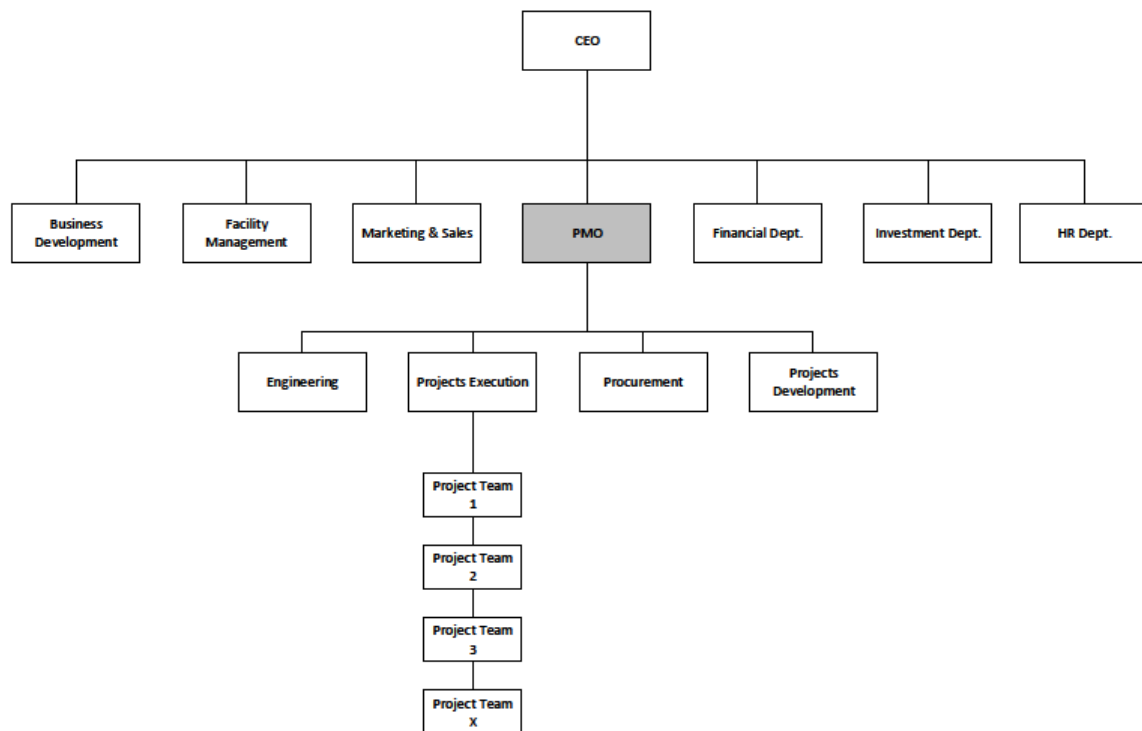
projects on time within budget at higher than expected quality". To achieve this mission, a detailed strategy needs to be formulated. In defining its mission, vision, and strategy, the PMO should focus on short-term tactical objectives and on long-term strategic objectives.

Short-term objectives should be attainable within relatively short periods of time to ensure quick triumphs and success stories to increase PMO support in the organization and encourage its value in the future, (Salameh, H., 2014). Examples of short-term objectives: 1) preparing informative project dashboards and project periodic reports, 2) standardising the project methodologies, 3) performing training to projects teams, 4) satisfying some of the stakeholders' requirements and 5) preparing detailed projects status evaluation. It is imperative to plan simple and easy to achieve goals at the start of the PMO.

Organisations working in real estate development have diversified external stakeholders each with his own strategies, interests and goals. Stakeholders like governmental departments, construction contractors, engineering offices, financial institutions, material suppliers, public, end users or clients, private investors, and the capital markets are quite usual stakeholders in real estate development. Managing stakeholder's requirements effectively should be one main goal of the PMO. Identifying and understanding the influence and relationships with the external and internal stakeholders is very important in the planning of the PMO development.

Although PMOs are seen taking as many as functions and forms, the PMOs that have the greatest impact on their companies, also have an influential structural position within the organisation, and present them selves as an executive-level management business function (Hubbard and Bolles, 2015). It is very true to conclude that the higher is location of the PMO in the organisational structure, the higher is the success rate of PMO.

Exhibit 5 proposes a high-level position of the PMO within the organisational structure of a typical real estate development organisation. The PMO in this model is reporting to the CEO (top management) of the organisation. This will give the PMO the authority required to fulfill the functions assigned to it. In the proposed organisational position, The PMO will in fact manage the complete project development life cycle. The effective project development life cycle depends highly on the functions the PMO will do together with the required authority to perform such functions. As indicated in the organisational structure, the PMO controls and manages 4 important business unit, namely: 1) project execution, 2) procurement, (3 engineering and 4) projects development. In real world, these 4 departments are heart of projects development in real estate development industry. The proposed position requires careful selection of the PMO functions with enough expertise to run the PMO in the operation.



**Exhibit 5. Proposed organisational location of the PMO**

### 3: Design Phase

Aubry et al. (2010), found that many organisations implement PMOs without a clear direction and vision of what role they want the PMO to play; they simply adopt existing PMO archetypes without considering organisational needs. The functions and purposes of PMOs are varied to the extent that there is no single scheme that can describe the ideal set of functions and purposes of the PMO (Hobbs, 2012). It's true to conclude from the literature review that the functions of PMOs are industry specific and organisation specific with no fit-all set of functions and roles. The proposed functions of the PMO in the real estate development organisations may include:

1. Monitor and control project performance
2. Report project status to upper management
3. Develop and implement a standard methodology
4. Project financing
5. Feasibility analysis and studies
6. Selecting the project delivery method
7. Implement and operate a project information system
8. Provide advice to upper management
9. Coordinate between projects

10. Ensure due diligence on projects development
11. Prepare budget for projects
12. Perform cost benefit analysis
13. Risk management
14. Cost and time control
15. Manage the quality system
16. Manage internal and external stakeholders
17. Allocate resources between projects
18. Participate in strategic planning
19. Manage archives of project documentation
20. Conduct project audits
21. Recruit, train, select and evaluate project managers and project teams

The efficiency and success of a PMO depends on the choice of functions to be performed by the PMO and their relevance to the organisation operation and goals (Oliveira et al., 2017). In designing the proposed PMO, there is no attempt to select a type for the PMO, its function assigned to it that counts, not a specific type. The PMO in the proposed model will be responsible for managing the projects development life cycle and delivering the real estate projects on time, within budget at the expected quality. In this regard, other projects or initiations performed by the organisation, such as IT projects or marketing campaigns may be executed without the interference of the proposed PMO. The scope of the PMO is to manage and deliver the real estate projects through the complete life cycle of the development processes.

It's essential to staff the PMO with enough expertise to manage and run the PMO successfully. The PMO organisational structure design depends on several factors, such as: 1) real estate sector (hospitality, housing, commercial, retail, entertainment, and logistics development), 2) geographic coverage, 3) stakeholders size and diversity, 4) environmental and regulations requirements, 5) projects delivery strategies, 6) exit strategy, and 7) number of projects under development. PMO organisational structure may include the following specialities:

1. Planning and time control manager
2. Cost control manager
3. Quality assurance manager
4. HSF manager
5. Feasibility manger
6. Risk manger
7. Document control manager
8. Procurement control manager
9. Reporting manager
10. Commercial manager
11. Stakeholders manager
12. Business analyst

The PMO organisational structure shall be designed to provide effective management and consultancy to the complete spectrum of the project development life cycle with its diversified phases and stakeholders.

An important process that usually omitted in the PMO development process is the PMO integration within the organisation's operations. PMO Integration requires careful design and well-planned integration approach. An elaborate communication and interaction channels with internal and external stakeholders must be developed and implemented during the PMO operation. To avoid resistance, PMO should be introduced as a gap filler rather than a police agent of the organisation. Its operational strategy shall be based on a cooperative approach.

PMO charter can be considered as a sale document that will sell the PMO to the organisation. It shall contain the PMO vision, mission, objectives, success criteria, scope, time frame, budget, stakeholders, performance gap with the strategies to bridge the gap, expected challenges and integration process. This document is very important as it defines the product (PMO) to be created within the organisation. Once approved by the stakeholders, the PMO implementation process is started.

#### **4: Approval Phase**

Once the PMO charter is completed, it's important to secure clear approval and support from top management (Board members, Chairman and CEO), without this, the PMO success is not guaranteed. All literature emphasises the importance of the approval and support of the top management.

#### **5: Execution Phase**

After guaranteeing the top management approval and support for the PMO. The execution phase of the PMO development is a straight forward process and includes: 1) recruiting the PMO staff as in the organisational structure, 2) design and implement the PMO process, 3) preparing project management methodologies and policies, 4) implement the project information system and 5) identify KPIs.

PMI's "the Standard for Project Management and A Guide to the Project Management Body of Knowledge" (**PMBOK**<sup>®</sup> Guide) is the base for designing and implementing the PMO processes and in preparing the project management methodologies, policies, standards and tools. It's very important in this process to consider that the flexibility is highly required in projects execution. Restrict compliance with the standards may cause project delay or confusion to the project teams. Dynamic nature of real estate development requires always flexibility and adaptability to the ever-changing environment. Methodologies, standards, policies and tools should add value to the concerning departments / project teams and facilitate their operation. According to Daptive (2012), implementing a methodology without a framework that defines how to integrate with existing processes and methods is one of the main pitfalls of PMOs.

Projects information system is an important step towards the automation of the PMO processes, it is a project by itself and requires utilising highly skilled programmers for designing and writing the algorithm of the projects information system. There are plenty of firms specialised in papering the program and can be subcontracted to do the job. However, the PMO shall design the processes and tailor the functions and outputs generated from the system to the PMO mission and management strategies.

Some KPIs or performance metrics for the proposed PMO are:

1. Projects delivery vs. schedule,
2. Stakeholders satisfaction,
3. Turning risks to opportunities,
4. Precise cash flow forecasting,
5. Cost performance vs. budget,
6. Timely availabilities of projects updated information,
7. Minimising change requests
8. Earned Value,
9. End users' feedback.

The execution phase of the PMO development requires a well planned and well implemented a change management campaign to introduce the PMO to the whole organisation and present it as problems solver of the project development processes.

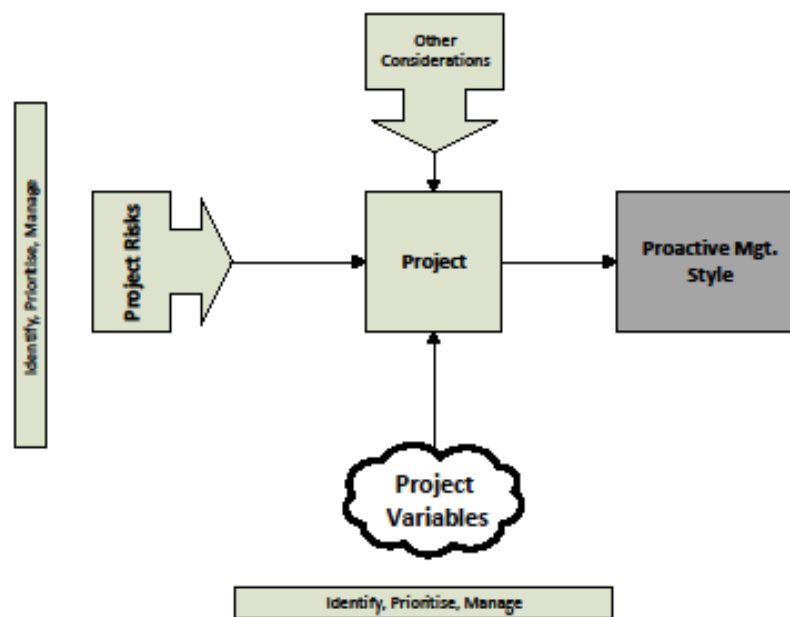
## **PMO Operation**

Usually, PMO initiated in an effort to enhance project development efficiency and bridge the gap that exists in the actual performance. The PMO mission is to deliver real estate projects on time, within budget at the expected quality, which require proactive strategies in managing the projects development lifecycle. Being proactive requires highly flexible project management methodologies, policies and standards together with efficient risk and stakeholder's management.

Proactive management style is essential in managing successfully the long lifecycle of project development in real estate development. One effective strategy to adapt the proactive management style is to assign variables to each development project. Each development project is unique and it has its own characteristics that differentiate it from other projects. Development project's variables, may be identified through the following:

1. Location,
2. Financing scheme
3. Environmental requirements
4. Regulations
5. Construction strategy

6. Time span of development
7. Development cost
8. Nature of stakeholders
9. Delivery approach
10. Competitors
11. End users / tenants
12. Importance to the society and the organisation



**Exhibit 6. Proactive concept in Real Estate Project development**

Exhibit 6 shows the proactive concept that PMO may follow in managing the project development life cycle. By carefully identifying, prioritising, and managing project’s risks and variables, The PMO team will be able to setup and follow a proactive strategy that departs away from reactive project management styles usually exists in real estate development industry.

PMO operation involves continues measures of project performance against KPIs. The PMO team are required to run continuous review of the project performance to make sure that all methodologies, policies and best practice are applied and followed in the development processes. The PMO team shall avoid any questioning of the value added by the PMO to the organisation. Such questions are an indication of inefficiency in the project development.



## **Challenges of PMO Implementation**

Some challenges that may affect negatively the implementation of PMO in real estate development industry, are:

1. Lack of top management support
2. Unrealistic goals and objectives
3. Limited professional staff
4. Rigid project methodologies and policies
5. Lack of enough power and authority
6. Unrealistic project development budget
7. Failure to manage project risks and variables
8. Limited resources
9. Tight PMO budget
10. Lack of inter-organisational cooperation
11. Troubled stakeholders
12. Vague methodologies and policies

Considering these challenges in advance and while developing the PMO will lead to minimise the possibilities of failure.

## **Conclusion**

This research has defined the PMO in real estate development industry. It also described the real estate development process and indicates the complex nature of the development process. The third part of this paper is a proposed framework for implementing PMO in real estate development industry.

The efficiency and success of the PMO in the real estate development industry depend on the PMO location in the organisational structure with enough authorities and support from top management. The functions and roles of the PMO in real estate are very important in the organisation effort to achieve overall operational efficiency. This research proposed a framework for implementing the PMO in the real estate development organisation. If implemented properly, The PMO would eliminate or minimise the problems usually associated with the real estate project development lifecycle. Some of these problems are: 1) project delivery delays, 2) cost overrun, 3) bad quality, 4) unsatisfied stakeholders, 5) low quality reports, 6) unable to track projects status, 7) unpredictable cash flow, 8) untraceable scope changes, 9) absent of risk management, 10) lack of internal coordination, 11) reactive response to project execution issues, 12) inefficient resource allocation, etc.

## References

1. Pemsel, S., Wiewiora, A., (2013). Project management office a knowledge broker in project-based organisations. *International Journal of Project Management* 31, 31-42.
2. Australian Property Institute and Property Institute of New Zealand, (2017). Technical Information Paper - Development Management. ANZRPTIP 4 - Development Management.
3. Klimczak, K., (2010). Determinants of Real Estate Investment, *Economics & Sociology*, Vol. 3, No 2, 2010, pp. 58-66.
4. Hobbs, B., Aubry, M., Thuillier, D., (2008). The project management office as an organisational innovation. *International Journal of Project Management* 26 (2008) 547–555.
5. Daptiv. (2012). *Top 10 PMO worst practices: Pitfalls to avoid* [White paper]. Retrieved from [http://www.daptiv.com/document\\_library/whitepapers/Top-10-Project-Management-Office-PMO-Worst-Practices.pdf](http://www.daptiv.com/document_library/whitepapers/Top-10-Project-Management-Office-PMO-Worst-Practices.pdf).
6. Esquierro, J., Valle, A., Soares C., (2014). Implementation of a Project Management Office in a Public Sector Organization: A Case Study Involving a Sanitation Institution. *International Review of Management and Marketing*. Vol. 4, No.1, pp. 1-12.
7. Hubbard D., Bolles D., (2015). PMO Framework and PMO Models for Project Business Management. *PM World Journal*. Vol. IV, Issue 1 – January 2015, pp. 1-22. <https://pmworldlibrary.net/wp-content/uploads/2015/01/pmwj30-Jan2015-Hubbard-Bolles-PMO-Framework-and-PMO-Models-second-edition.pdf>
8. Miles, M., Netherton L.M., Schmitz, M., (2015). *Real Estate Development: Principles and Process*. Urban Land Institute; Fifth Edition.
9. Wiegelmann, T., (2012). *Risk Management in the Real Estate Development Industry*. Unpublished Doctoral thesis, Bond University, Australia.
10. Al-Maghraby, R., (2011). How to establish a Project Management Office (PMO). *PM World Today*. Vol. XII, Issue V, May 2011, pp. 1-13.
11. Graaskamp, J., (1989). *Fundamentals of Real Estate Development*. UL1—the Urban Land Institute. [http://morris.marginalq.com/GREM\\_RE720\\_MoreFiles/Urban%20Econ%20Graaskamp%20ULI.PDF](http://morris.marginalq.com/GREM_RE720_MoreFiles/Urban%20Econ%20Graaskamp%20ULI.PDF)
12. Developing a Project Management Office in the Department of Energy, Energy Information Administration. A supplement to the report, PMIAA: Strengthen the Government Delivery Foundation. (2019) Project Management Institution, Inc. [https://www.pmi.org/-/media/pmi/documents/public/pdf/case-study/pmiaa-eia-pmo-maturity-case-study.pdf?v=8fd735b8-fc16-4083-a9a5-1539a64743af&sc\\_lang\\_temp=en](https://www.pmi.org/-/media/pmi/documents/public/pdf/case-study/pmiaa-eia-pmo-maturity-case-study.pdf?v=8fd735b8-fc16-4083-a9a5-1539a64743af&sc_lang_temp=en)
13. Oliveira, C., Tereso, A., Fernandes., G., (2017). PMO Conceptualization for Engineering and Construction Businesses. *Procedia Computer Science* 121 (2017) pp. 592–599. 8-10 November 2017, Barcelona, Spain.

14. HOBBS, B., AUBRY, M., (2007). A Multi-Phase Research Program Investigating Project Management Offices (PMOS): The Results of Phase 1. *Project management journal*, pp. 74-86.
15. Hill, G.M., (2008). *The Complete Project Management Office Handbook*. 2<sup>nd</sup> edition, Auerbach Publications.
16. Chuah, F., Teoh, K., Ting, H., Lau, E., (2016). A Behavioral Approach to Modelling Strategy Execution: The Role of Organizational Support and the Moderated Mediation Effect of Engagement and Communication. *International Review of Management and Marketing*, 2016, 6(S8) 217-225. Special Issue for "International Conference on Applied Science and Technology (ICAST) 2016, Malaysia".
17. Kohlhepp, D.B., (2012). *The Real Estate Development Matrix*. Presented at The American Real Estate Society Meetings St. Petersburg, Florida, April 21, 2012.
18. Nicholas, J.M., Steyn, H. (2012). *Project Management for Engineering, Business, and Technology*. 4<sup>th</sup> edition, Routledge.
19. Apanavičienė, R., Daugėlienė, A., Baltramonaitis, T., Maliene, V., (2015). Sustainability Aspects of Real Estate Development: Lithuanian Case Study of Sports and Entertainment Arenas. *Sustainability* 2015, 7, pp. 6497-6522
20. Salameh, H., (2014). A Framework to Establish a Project Management Office. *European Journal of Business and Management*. Vol.6, No.9, 2014, pp.19-26.
21. Khoori, A., Hamid S. R., (2018). Project Management Office and its Impact on U.A.E. Public Sectors: A Literature Review. *SAR Journal*. Vol. 1, Issue 4, pp. 155-162.
22. Keating, D. (2009), 'How does the project management office (PMO) deliver value to the organisation?' Unpublished master's thesis, National University of Ireland Galway, Galway, Ireland.
23. Linde, J., Steyn, H., (2016). The Effect of a Project Management Office on Project and Organizational Performance: A Case Study. *South African Journal of Industrial Engineering*. May 2016, Vol. 27 (1), pp. 151-161.
24. Costello, G., Preller, F., (2010). *Property Development Principles and Process - an Industry Analysis*.
25. 16th Pacific-Rim Real Estate Society Conference Wellington, New Zealand, 24 to 27 January 2010.
26. Bulloch, B., Sullivan, J., (2010). Information – The Key to the Real Estate Development Process. *Cornell Real Estate Review*, Volume 8, Article 12, pp. 78-87.
27. Okumus, F., (2003). "A framework to implement strategies in organizations", *Management Decision*, Vol. 41 Iss 9 pp. 871 – 882.
28. Mariusz, H., (2014). Models of PMO Functioning in a Multi-Project Environment. *Procedia – Social and Behavioral Sciences* 119 (2014) pp. 46-54.

29. Crawford, J. K. (2010). The enterprise PMO as strategy execution office. Paper presented at PMI® Global Congress 2010—North America, Washington, DC. Newtown Square, PA: Project Management Institute.
30. Gehner, E., Peek, G.J., Real Estate Development Strategies and their Impact on the Risk Profile of a Project. <https://www.irbnet.de/daten/iconda/CIB16206.pdf>
31. Aubry, M., Hobbs, B., Thuillier, D., (2007). A new framework for understanding organisational project management through the PMO. *International Journal of Project Management* 25 (2007) 328–336
32. Unger, B.N., Gemünden, H.G., Aubrey, M., (2012). The three roles of a project portfolio management office: Their impact on portfolio management execution and success. *International Journal of Project Management* 30 (2012) 608–620.
33. PMI (2013), *Project Management Body of Knowledge A Guide to the Project Management Body of Knowledge (5th Edition)*, Newtown Square.
34. Hobbs B., Aubry, M. (2008). An empirically grounded search for a typology of Project Management Offices, *Project Management Journal*, Vol. 39.
35. PMI, (2008). *Organizational project management maturity model (opm3®) 2<sup>nd</sup> edition*, PMI.
36. Hill, M.H., (2004). Evolving the project management office: a competency continuum. *Information System Management*, fall 2004, pp. 45-51.
37. Dai Ch., Wells W. (2004). An exploration of project management office features and their relationship to project performance, "*International Journal of Project Management*", Vol. 22.
38. Geschwender, A. (2010): *Real Estate: Principles and Practices*, 8th ed., Cengage Learning.
39. Millhollan, C. (2009). The journey to an enterprise project management office. PMI Global Congress Proceedings. Orlando, Florida, USA

## About the Author



### **Habib Fayadh**

Riyadh, Saudi Arabia



**Habib Fayadh** is PMO director at Meinhardt. With over 20 years of experience in construction, PPP and real estate development, he has served as Vice president, PMO director, project director and delivery director in real estate development, PPP and construction industries. He managed the complete lifecycle of several real estate development projects (initiation, due diligence, feasibility, design, procurement, construction and handing over) in hospitality, retail, commercial and housing. He also served as construction manager for the construction of several hi-tech projects including oil and gas, x-ray inspection systems, hospitality, theme parks and retails. He is also a licenced engineer in Saudi Arabia.

Habib assists real estate development, engineering and construction organisations, as a Subject Matter Expert, to achieve their strategic business objectives, by providing analysis, managerial and methodological proposals that could allow organisation complete their projects on time within budgets and at the expected quality. He established and managed 3 PMOs for real estate development organisations in Saudi Arabia, integrating project management methodologies and tools in the business operations.

Mr. Fayadh holds a bachelor's degree in Civil Engineering and a Master of Science degree in Construction Engineering and Management from King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. He earned the PMP certification in 1990. He is a co- author of "Building Construction Detailed Estimating Practices in Saudi Arabia" a technical paper published in ASCE journal. He is currently working on a technical paper on the "Challenges of Real Estate Development in Saudi Arabia".

Habib Fayadh can be contacted at [fayadhh@gmail.com](mailto:fayadhh@gmail.com)

LinkedIn: <https://www.linkedin.com/in/habib-fayadh-30a58822/>