



**The Project Management Office (PMO):
Its role and contribution to governance and strategy in organizations**

مكتب إدارة المشاريع: دوره ومساهمته في حوكمة وإستراتيجيات المؤسسات

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Abstract

Alongside the move by organizations towards utilizing project management techniques for managing their operations, the PMO has recently become a key business unit in organizations that can impact positively on organizational performance. With the aim of assessing the role of the PMO as a key driver for governance and strategy; this dissertation has been developed to cover many advanced project management related subjects; PMO, corporate governance, project governance, and strategy.

The role of the PMO varies from organization to another, as it might have a very strategic role for the organization by managing and directing the overall organization business and operations, and might have a very limited supportive role in some divisions, and this variation is due to nature of business, type of organization structure, and the PMO location within the organization. A methodology of three stages have been deployed; started with determining the strategic and governing roles of the PMO, defining the factors that affect the PMO roles and contribution, and selecting five organizations from UAE business environment as case studies for this research.

The resulted outcome from this research has shown that the PMOs roles and contribution to the corporate governance and organization strategy increases with increasing the PMO maturity and moving towards projected team structures, and the PMOs roles decrease at low mature PMO and functional organizations. Within UAE, the role of the PMOs showed variation between organizations even those having same type of structures; however the results have shown that the contribution of the PMOs is ranging between medium to high even in projected team and matrix structure organizations. There are other factors affecting the role of the PMO i.e. percentage of projects to overall operations, nature of industry, and location of the PMO in the organization. Several recommendations can be made out of this research for PMOs professionals to put more efforts on some roles and areas as this will be reflected on PMOs maturity and the value for the organizations especially the strategic and the governing role.

Key words: Project Management Office, Corporate Governance, Project Governance, Corporate Strategy, Organization structure, PMO maturity.

الخلاصة

مع تحول المؤسسات في استخدام التقنيات الخاصة بإدارة المشاريع في إدارة عملياتهم، أصبح مكتب إدارة المشاريع أحد الوحدات التنظيمية الرئيسية في المؤسسات حيث أن له تأثيرات إيجابية على الأداء المؤسسي. تم إعداد هذه الأطروحة بهدف تقييم دور مكتب إدارة المشاريع كمحرك للحوكمة والإستراتيجية المؤسسية، كما تشمل أيضاً على العديد من المواضيع المتقدمة في إدارة المشاريع، مكتب إدارة المشاريع، الحوكمة المؤسسية، حوكمة المشاريع، والإستراتيجية.

إن دور مكتب إدارة المشاريع يختلف من مؤسسة لأخرى، حيث أنه دوره يمكن أن يكون إستراتيجياً من خلال إدارة وتوجيه أعمال المؤسسات وعملياتها، وقد يكون دوره محدوداً جداً ويتمثل في دعم بعض الإدارات في إدارة مشاريعها. إن هذا الاختلاف يعود لعدة عوامل تشمل طبيعة عمل المؤسسة، و/ أو نوع الهيكل التنظيمي، و/ أو موقع مكتب إدارة المشاريع في المؤسسة. تم تطبيق منهجية تتكون من ثلاث مراحل لغرض البحث بدأت بتحديد المهام الإستراتيجية وذات العلاقة بالحوكمة لمكتب إدارة المشاريع، وتعريف العوامل المؤثرة بمساهمة مكتب إدارة المشاريع، واختيار خمس مؤسسات من بيئة الأعمال في دولة الإمارات كحالات دراسية.

أظهرت نتائج البحث والدراسة أن أدوار مكتب إدارة المشاريع ودرجة مساهمته في الإستراتيجية والحوكمة المؤسسية تزداد بزيادة درجة نضوج مكتب إدارة المشاريع ومع هيكليات مؤسسية بنوع فرق عمل المشاريع، وإن دور مكتب إدارة المشاريع يقل مع قلة درجة نضوج مكتب إدارة المشاريع والمؤسسات ذات الهيكليات الوظيفية. في دولة الإمارات، ظهر تباين بأدوار مكاتب إدارة المشاريع مع إختلاف المؤسسات حتى في المؤسسات التي لها هياكل تنظيمية بأنواع متشابهة. ومع ذلك أظهرت النتائج أن مساهمة مكاتب إدارة المشاريع هي مساهمة تتراوح بين المتوسطة والعالية في المؤسسات ذات الهياكل التنظيمية من نوع المصفوفة (Matrix) وفرق المشاريع (Project Team). إن هناك عوامل أخرى تؤثر بدور مكتب إدارة المشاريع منها نسبة المشاريع إلى إجمالي عمليات المؤسسة، وطبيعة مجال المؤسسة، وموقع مكتب إدارة المشاريع في المؤسسة. إن العديد من التوصيات يمكن إطلاقها كنتيجة لهذه الأطروحة لمهنيي مكاتب إدارة المشاريع بحيث يقومون بوضع جهود إضافية على بعض الأدوار والمجالات حيث أنها هذا سينعكس على درجة نضوج مكاتب إدارة المشاريع والقيمة المضافة للمؤسسة وبشكل خاص الدور الإستراتيجي ودور العلاقة بالحوكمة.

الكلمات الرئيسية: مكتب إدارة المشاريع، الحوكمة المؤسسية، حوكمة المشاريع، الإستراتيجية المؤسسية، الهيكل التنظيمي، نضوج مكتب إدارة المشاريع.

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List of Abbreviations

Abbreviation	Description
UAE	United Arab Emirates
PMO	Project Management Office
EPG	Enterprise Project Governance
PMI	Project Management Institute
CEO	Chief Executive Officer
ISO	International Organization for Standardization
KPI	Key Performance Indicator
IT	Information Technology
EPMO	Enterprise Project Management Office
MS Office	Microsoft Office
PDA	Personal Digital Assistance
PBO	Project Based Organization
PO	Project Office
HSE	Health, Safety, and Environment
CEO	Chief Executive Officer
EFQM	European Foundation For Quality Management
CSR	Corporate Social Responsibility
VP	Vice President
CFO	Chief Financial Officer
QHSE	Quality, Health, Safety, and Environment
CIO	Chief Information Officer

1.0 Introduction

1.1 Research Background

Many recent indicators and research studies have shown that organizations worldwide are increasingly transferring to be projectized even the operational organizations either through daily project management or as strategic method to achieve vision, objectives, and strategy (Ward 2010). A study made by PM solutions (2012) covered organizations world-wide with focus on North America have shown that the 87% of the firms are having PMOs in 2012 while it was 48% in 2000. Moreover, research has shown that organizations lose millions because of poor project performance or poor project management (Crawford 2011). This has increased the need for specialized entity that can handle such complex role and the PMO was the solution.

The role, impact, and influence of the PMO vary between organizations, and many practitioner and academic studies have been made to investigate the role of PMOs in many countries (pmsolutions 2012), and many others have been made to compare between organizations with PMO and those without PMO, but limited research has studied how the PMO can contribute the overall organizational governance and strategy and what are the factors that affect this contribution.

Many of the research findings have shown that there is a need to focus on transparency and governance (Purohit 2012). These factors were the motivators to study the different levels of PMO, its operations and role in driving good governance practices and frameworks, and its strategic role to the organization and its role in driving strategy, in addition to study the factors that affect its impact and how can PMO maturity influence the overall organization.

1.2 Research Problem

The research will study the strategic role of Project Management Office (PMO) on overall organizations strategy and how can the PMO role drive value to the

overall organization corporate governance and strategy. This will involve a critical analysis for different levels of PMO maturity in terms of capability, competency, and roles. Hill (2004) has defined five levels for PMO maturity starting from Project Office till Center of Excellence and based on that the role of PMO varies from project oversight to strategic alignment. The research will analyze the impact of the PMO based on the different types of organization structure (functional, functional matrix, Balanced, Balanced matrix, and project team) and how can role of PMO in project governance and strategy affect the corporate governance and organization strategy.

1.3 Research aim and Objectives

The research aim is to identify the role of the Project Management Office and its contribution to the corporate governance and organization strategy.

While the research objectives are:

1. To review literatures on different roles of the Project Management Office, maturity, and its levels within organizations.
2. To clarify the factors affect the roles of the PMO and its contribution to the corporate governance and strategy.
3. To generate propositions to Project Management Office on how they can play major role in deriving strong corporate governance in organizations.
4. To discover the roles of PMO as perceived by professionals in UAE environment.

1.4 Rationale of Research

With the massive increase toward project management applications and the increase in the organizations which have PMOs. The research will help in understanding the strategic role of the PMO, its nature, its function, and maturity levels and how it can be a superior solution towards ensuring strong corporate governance and provide strategic alignment between different units in

organization. Moreover, the outcome will assist organization in setting appropriate PMO requirements according to the nature of organization structure.

1.5 Scope of Research

The research scope covers the type of the organizations which are the functional, functional matrix, strong (Project) matrix and project team structures. The organizations have been selected randomly and some of them are government and semi government organizations.

Chapter Two: Literature Review

2.1 Overview

Project Office, Project Management Office, Program Management Office, Portfolio Management Office, Project Control Office, Project Support Office, Central project Office (Taylor 2011), or Enterprise Project Management office (pmsolutions 2011) all are different names for the same terminology "PMO", and some new terminologies name it as Office of Strategy Management or the Office of Planning and Innovation (pmsolutions 2011). The difference in the names might indicate the level of maturity and its position within the organization which will be clarified in the coming sections of this paper.

The PMO has started to be more popular on 1990 (Dai & Wells 1990) and at early years of this millennium has become an important issue for project management and an increasing interest for it has been noted. Kaufman and Korrapati (2007) have indicated that Gartner's research mentioned that using the word PMO has increased from 1 in 2001 to 50 in 2006, and they stated that the top three threats facing the PMO are the "high expectations, enterprise critical path, and the flavor of month".

The role, functions, position, and maturity of the PMO differs between organizations and debate has been noted in this subject, however research show that there are an increment in PMO maturity over the years. A research conducted by pmsolution (2011) stated that 30% of the companies without PMO are at the lowest level of project management maturity, while only 6% of the companies with PMOs are in the same level. The same study has stated that there are positive relation between the PMO maturity and the value it provides, and the research recognized that there is grow on the level of PMO maturity for established category by 18% from 2007 to 2011. And since 2006 the PM Solution, PMI, and Program Office Community of Practice have launched the Project Management Office Award in a yearly competition based on specific criteria and requirements to encourage developments in this area and be a

source for PMO best practices worldwide (pmsolutions 2011). Nowadays PMOs are seen as transformative according to Forrester research and as strategy execution offices according to Gartner Inc. and in the last decade it has emerged from being a project office and divisional PMO to be an enterprise PMO taking higher value and strategic roles within organizations (pmsolutions 2011).

2.2 PMO Definition

Desouza and Evaristo (2006) stated that there is no specific definition for the PMO, Taylor (2011) has agreed with them that there is no specific unified definition for the PMO but he mentioned that the PMO in any shape is about leadership and achievements. The formal project management organization were keen to define the PMO and according to PMI (2008, p.25) the PMP is:

[an] organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain. The responsibilities of a PMO can range from providing project management support functions to actually being responsible for the direct management of a project

Dai and Wells (2004) has similar definition to PMI and defined it as “an organizational entity established to assist project managers, teams and various management levels on strategic matters and functional entities throughout the organization in implementing project management principles, practices, methodologies, tools and techniques”.

Neither PMI (2008) nor Dai and Wells (2004) have indicated that functions of PMO can be handles by department or section. However Pole to Pole communications (2009, p.05) has assured that the PMO is:

[t]he department or group that defines and maintains the standards of process, generally related to project management, within the organization. The PMO strives to standardize and introduce economies of repetition in the execution of projects. The office is also the source of documentation, guidance and metrics on the practice of project management and execution

2.3 Levels of the PMO

A research conducted by Pole to Pole communications in 2009 covered 13 countries in Europe and the UAE revealed that less than **10%** of the organizations have one central PMO that handle all projects across it and that **27%** of organizations have multiple PMOs reporting to different functions within the same organization. Therefore there are no unified PMO functions across organizations and according to Crawford (2010) the PMOs can be in 3 levels as per the following:

1. **Level 1:** The Project Control Office that reports to specific area within IT.
2. **Level 2:** The business unit PMO which report to the head of IT.
3. **Level 3:** The Enterprise PMO that report to the CEO/ General Manager.

However Crawford (2010) in levels 1 and 2 has focused only on the IT rather than other functions, pmsolutions (2011) have better classifications for PMO levels to be Project Office, Divisional PMO, and Enterprise PMO. Other researchers might do it a different way to incorporate certain purpose and classify it depending on the role not position within organization as below (Harrison and Lock 2004):

1. **Project/ Program Office:** focus on the delivery of large project or program and usually has temporary role.
2. **Project Support Office:** focus on the tactical side in order to improve the project delivery by supporting project managers with subject matter experts.
3. **Project Management Office:** has stronger role and focus on the governing part of projects within the business.
4. **Enterprise Project Office:** This is usually to strategic role that focus on the long term objectives and can incorporate the project management office and project support office services.

Although different classification has been developed, the classification according to the PMO position within the organization is the most valuable and representable as the other classifications can be incorporated within it. Therefore

the pmsolution (2011) can give the best presentation for the PMO levels which is three levels as illustrated previously.

2.4 PMO Maturity

The variation in PMO roles can be justified due to the level of PMO maturity, organization needs, and organization maturity. Hill (2004) has classified the PMO maturity into 5 levels as illustrated in Figure (1) under which he has mentioned certain attributes for PMO which increase gradually depending on the level of maturity.

STRATEGIC ALIGNMENT				
BUSINESS MATURITY				Stage 5 CENTER OF EXCELLENCE
PROCESS SUPPORT			Stage 4 ADVANCED PMO	
PROCESS CONTROL		Stage 3 STANDARD PMO	Apply an integrated and comprehensive project management capability to achieve business objectives.	Manage continuous improvement and cross department collaboration to achieve strategic business goals.
PROJECT OVERSIGHT	Stage 2 BASIC OFFICE			
Stage 1: PROJECT OFFICE Achieve Project deliverables & objectives for cost, schedule & resources utilization. - 1 or more projects - 1 Project Manager	Provide a standard & repeatable PM methodology for use across all projects. - Multiple projects - Multiple PMs - Program Manager - Part-time PMO support staff	Establish capability and infrastructure support and govern a cohesive project environment. - Multiple projects - Multiple PMs - Program Managers - Director/ Senior Program Manager - Full time & part PMO office	- Multiple projects - Multiple PMs - Program Managers - PMO Director - Dedicated PMO technical & support staff	- Multiple Programs - Vice President or Director of Project Management - Dedicated PMO technical staff. - Enterprise wide support staff

Figure (2.1): PMO capabilities across PMO competency, Adapted (Hill 2004)

From Another hand, Boles and Sheeny (2008) have defined 6 levels to the PMO maturity as illustrated in Figure 2.2 and have defined different criteria for each level in accordance to 4 factors that include people, process, technology, and financial management. The four defined factors maturity are proportional with the level of maturity. The main difference between Boles and Sheeny (2008) and Hill (2004) models is that the earlier has added level 0 which mainly consider the project management community of practice.

Shark (2009) has added governance to the 4 factors defined by PMI and kept it in five levels justifying that level 0 in PMI is a compulsory requirement that must be within any organization regardless of its type, nature, or size unlike many other models have been proposed.

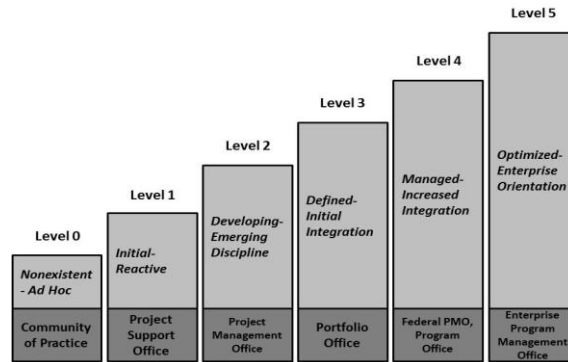


Figure (2.2): The PMO maturity Model (Boles & Sheeny 2008, p.2)

Although Hill (2008) has fixed those functions for PMO, the activities of PMO differ depending on the PMO maturity level where he classified them into 5 levels as illustrated on Figure 2.1. Hill (2008) has classified the activities of the PMO as shown in Table 2.2. However the categorization made by Hill (2008) can be better made to suit this type of research as illustrated in Figure 2.3.

The role of PMO role in organizations varies depending on many factors. Rad and Levin (2002) have defined six levels for PMO maturity and described it as in Table (2.1).

Level	Name	Description
Level 5	Optimized, Adaptive	The use of organizational data to conduct continuous improvement
Level 4	Comprehensive, Managed	The organization commits to PM culture and captures quantified performance data
Level 3	Integrated, Organized, Defined	The organization implements PM process and gives recognition to successful processes
Level 2	Consistent, abbreviated, Repeatable	Localized Implementation of formalized PM processes
Level 1	Ad hoc, Initial	Inconsistent procedures and no formal guidelines
Level 0	A rank zero	The organization has no procedures, and none of the projects have ever near the success mark

Table (2.1): PMO functions (Rad and Levin 2002, p.2)

2.5 Roles and Functions of the PMO

The area of focus for this paper is the roles of PMO within organizations which have been discussed briefly in the previous sections. The PMO has many roles that researchers sometimes clarify in high level way, and sometimes go deeply to daily processes and details. In this section; the PMO functions will be grouped together based on the function to facilitate understanding the various roles of the PMO and satisfy the objectives of this research.

Hill (2008) has stated 20 functions of the PMO and grouped them into 5 functions as stated in Table 2.2.

#	Major Function	Sub Function
1	Practice Management	1.1 Project Management Methodology
		1.2 Project Tools
		1.3 Standards and Metrics
		1.4 Project Knowledge Management
2	Infrastructure Management	2.1 Project Governance
		2.2 Assessment
		2.3 Organization and Structure
		2.4 Facilities and Equipment Support
3	Resource Integration	3.1 Resource Management
		3.2 Training and Education
		3.3 Career Development
		3.4 Team Development
4	Technical Support	4.1 Mentoring
		4.2 Project Planning
		4.3 Project Auditing
		4.4 Project Recovery
5	Business Alignment	5.1 Project Portfolio Management
		5.2 Customer Relationship Management
		5.3 Vendor/ Contractor Relationship Management
		5.4 Business Performance Management

Table (2.2): PMO functions (Hill 2008, p.XXX)

Unger *et al.* (2012) has stated that the PMO has three major roles which are coordinating role, controlling role, and supporting role. Unger *et al.* (2012) has classified the sub functions of the three roles in Table 2.3.

#	Major Role	Sub Function
1	Coordinating Role	1.1 Project appraisal and selection
		1.2 Cross-project support
		1.3 Cross-department coordination
		1.4 Managing and resolving conflicts
		1.5 Resources Management
2	Controlling Role	2.1 Information Management
		2.2 Provide inputs to decision making
		2.3 Project Monitoring and Control
3	Supporting role	3.1 Providing services to project members/leaders
		3.2 Training
		3.3 Promoting PM culture
		3.4 Project Management Methodology

Table (2.3): PMO functions (Unger *et al* 2012)

Julian (2008) has made a study with a focus on two of the key roles that other researchers include it implicitly within their research work which are cross project learning and continuous improvement. His key conclusion was that the PMOs are knowledge brokers; therefore such role shall have a focus as it might make difference through applying on the key principles of the quality management within organization. Unger *et al.* (2012) has focused on this role through the corrective actions that made through accurate, sufficient, and integrated information system. Hill (2008) also has focused on this role through different functions.

From another perspective, new trends applied the risk management by noticing its importance. Molina (2009) emphasized that the risk management can provide a tool for categorizations of risks for project managers, and produce reports of risks at all levels. Such roles can be segmented within the controlling role of the PMO.

Rad and Levin (2002) has used different approach in identifying the role of PMO and has stated that its role is managing scope, quality, cost, schedule, risk, integration, change, contract, communication, team, client, and vendor. Some of the roles come under the supporting roles of the PMO, meanwhile the others coordinating role, and few functions can be categorized under the controlling role.

According to these roles, the PMO and depending on its maturity and level within the organization might play four key roles; within each role there are massive amount of functions that included. The four key roles can be classified as in Figure 2.3.

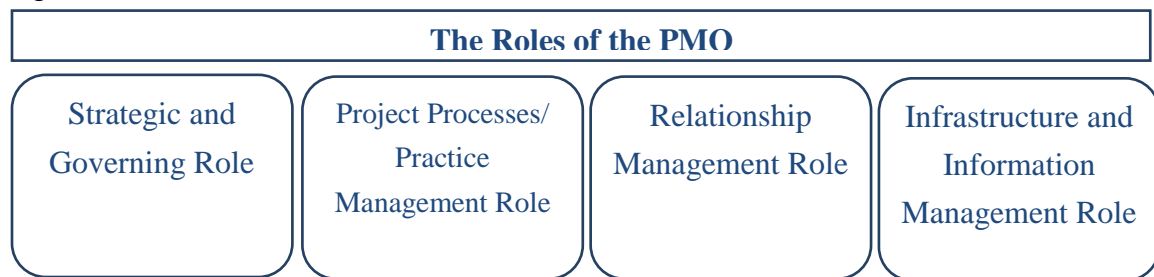


Figure (2.3): PMO Roles and Functions

2.5.1 Infrastructure and IT Management

The IT and Information management role of the PMO is also a key supporting role by which all related processes and functions will be implemented smoothly and in an easy way. The role of IT management includes the software, infrastructure, and other technical support. While Hill (2008) has classified the related sub-functions to include project tools and facilities and equipment support. Bekker and Steyn (2008) have just limited this role to the facilities and equipment support.

2.5.1.1 Project Knowledge Management

While Bekker and Steyn (2008) have focused on capturing knowledge sharing, Hill (2008) has focused on providing an integrated framework for managing knowledge for the project environment. This role involves **establishing knowledge management framework** that captures Information Management,

Document Management, Process Management, and Project archiving library management.

The other function is ***introducing the knowledge management system*** through establishing infrastructure and establishing contents management, and the other function is the implementation of that system and the supporting tools and mechanisms (Hill 2008). The importance of the knowledge management gives a valuable input for continuous development and learning for both staff, teams, and even for the internal systems.

2.5.1.2 Facilities and Equipment Management

The management of equipment and project management facilities is a resources support function and those equipment's include computers, desktops, laptops, audio equipments, measurement devices, specials printers, other heavy equipments and hardware's, etc. The role of the PMO is managing of such equipments, and this include assessing the requirements of teams for all types of equipments, provide all related workspaces that are required for the projects teams, and ensure satisfying all teams needs by the effective management of equipment resources (Hill 2008). Therefore related functions might include ***equipment inventory and update, the management of acquisition and requests, and monitoring equipments loss, transfer, or return.***

On the other hand, facility management for projects is also important, and the PMO will be responsible for providing project facilities for project teams, Hill (2008) has called it ***acquisition*** and has stated four methods for acquiring facilities for project teams which are collocation, leasing, purchasing, and/or development. The role of PMO does not stop on the acquisition but also includes ***monitoring the facilities utilization*** in which the PMO required to ensure the optimum utilization, plan for future needs, made decisions for continuity of facilities, returns, deactivation, expansion and other related tasks to facility management (Unger *et al.* 2008).

2.5.1.3 Project Management Tools

Project management tools are those tools that are required for the effective and efficient functioning of the project management environment and are varied depending on the organization nature of operation and may include (Hill 2008):

1. Paper based Tools: Usually are simple tools that include forms, checklist, and templates, and although it is called paper based but it might some simple automated application i.e. MS Office, and other databases. Those tools do not require big budgets and can be made internally if the resources are available.
2. Automated Tools: Are the tools that are required for managing the projects and there are different applications available in the market for these tools i.e. primavera, MS project.
3. Web-based tools: This might be required for better management of projects by providing web applications for the use of project teams.
4. PDA and Wireless tools: Those tools which are available for in the market due to the technological development. Those tools facilitate teams' jobs and allow them to quick and easy access for their applications.

The role of PMO in this regard is to **assess the need for these tools** and which are most suiting the project environment based on features, costs, maintenance, and other criteria (Bekker & Steyn 2008). The second function is the **acquisition and implementation** of these tools which may include planning the transition for use, user training and awareness, and following up its implementation. While the third function is **evaluating the tools performance** by identifications of utilization and functional problems, and the overall evaluation for the tools for future improvements and learning.

Accordingly, the Infrastructure and IT Management role of the PMO involve the functions as illustrated in Figure 2.4 which also illustrate the sub functions for each major function.

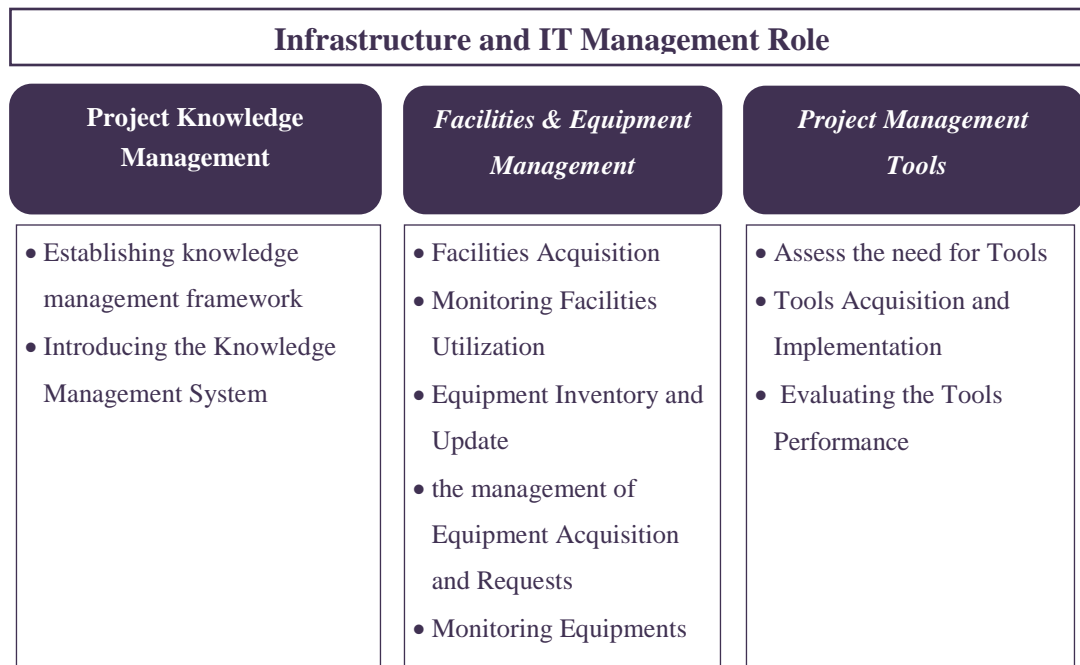


Figure (2.4): PMO Functions/ Infrastructure and IT Management Role

2.5.2 Project Processes/ Practice Management

This role of the PMO can be considered as the heart of PMO as it involve many functions that directly affect the success of the project management and its practice within organizations. This role involves many roles as it will be discussed in the following parts.

2.5.2.1 Project Management Methodology

"There is no single well-defined Project Management Methodology" (Cheema & Shaid), however PMI (2008, p.438) has defined the methodology as:

A system of practices, techniques, procedures, and rules used by those work in a discipline.

Accordingly it can be concluded that the project management methodology is the practices, techniques, procedures, and the rules that are used for project management within organizations. Cheema and Shaid indicated that there is no methodology that is applicable for all organizations, each organization has to customize it based on their needs, and even they specify that each project methodology has to be customized. However their assumption can lead to losing

internal control over projects over time. According to Hill (2008), the project management methodology process group involves ***developing the methodology, training, its implementation, maintenance and the evaluation of the methodology performance and analysis.***

2.5.2.2 Project planning

The project planning was seen as a key function that Hill (2008), Hobbs and Aubry (2007), Letavec (2006), Meredith and Mantel (2012), Pellegrinelli and Garagna (2009), and Rad and Levin (2002) agreed on for the PMO. While Artto *et al.* (2011) stated that the role of PMO is to support project planning; Hill (2008) went for further details of the sub processes within each function of the project planning.

As the PMO is leading project management, it must identify the project plan components, planning tools, and establish the facilitation for project planning and projects kick off meetings (Hill 2008). This can be entitled as ***Establishing basis for project planning.*** Additionally the PMO have to facilitate the preparation of project plans i.e. workshops, meetings and managing the planning arrangements (Hill 2008) and can be entitled as ***facilitation of project planning.***

The project planning functions also include preparing other supporting plans i.e. quality management, risk management, and communication management where the PMO can provide recommendations and project guidance for project managers (Hill 2008). This can be stated as ***Project Planning Administration.*** Defining project team structures and stakeholders engagement levels is also an important function that the PMO play role within and will be entitled as ***Project Structuring.***

2.5.2.3 Resources Management

This is an important function as usually PMOs do not have the authority on the overall resources allocated for projects, however and at the minimum level the PMO must able to influence the quality and availability of resources for projects in

addition to overseeing the level of resources utilization over the period (Hill 2008). Not only the human resources is important, the financial and IT, and Information resources is important as well, however the IT and information will covered in different sections (Kaufman & Korrapati 2007).

Usually PMO play role in the identification of human resources needs, assigning human resources, monitoring and administering any travel or training arrangements, developing performance management guidelines and review and monitor performance, and coordinate extension of resources, resources transfer and terminations (Harris 2010). This function can be entitled as ***Managing Human Resources***.

Hill (2008) has not considered managing cost and finances, unlike Charvat (2003) who indicated that the cost and the financial control is a key function for the PMO as most of the executives are always keen to reduce this parameter as much as they can. PMI (2008) stated that cost management involve cost estimation, budget determination, and cost control. Similar to what has been stated within the project planning and managing human resources, ***managing financial resources*** involve cost estimation and budgeting, coordination of financial resources coordination and transfers between projects, and monitoring and review of financial performance of projects.

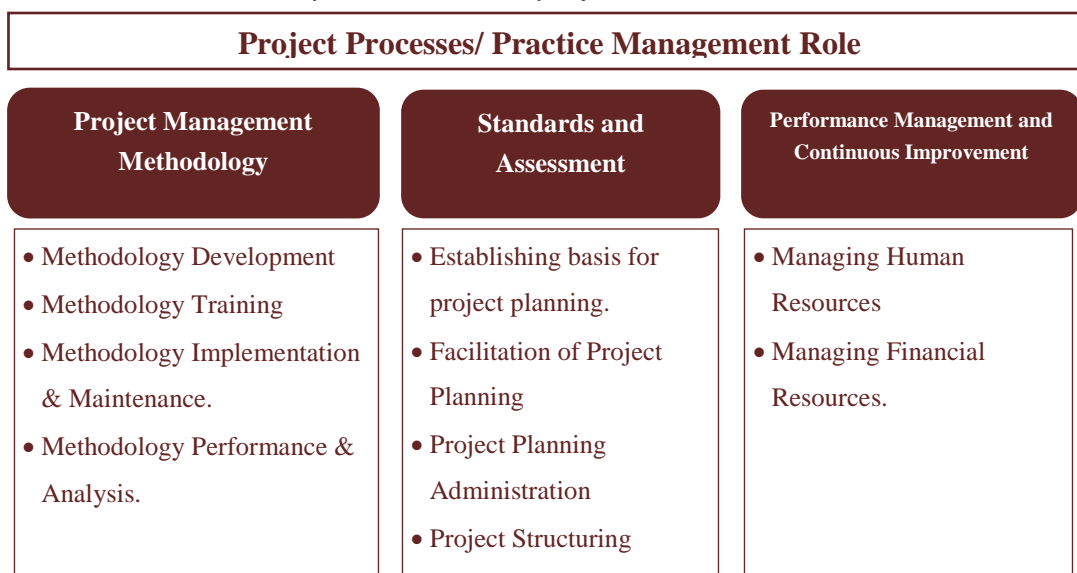


Figure (2.5): PMO Functions/ Project Processes-Practice Role

Accordingly, the Project Processes/ Practice Management role of the PMO involve functions as illustrated in Figure 2.5 which also illustrate the sub-functions for each major function.

2.5.3 Relationship Management

This role of the PMO is concerned with managing relationships with the stakeholders which usually involve customers, vendors/ contractors, people, and others. The PMO is not responsible for managing the relationships on daily basis rather than ensuring that the stakeholders are receiving the level of operation standards that set by the PMO (Hobbs & Aubry 2007). Such function involves many sub-functions and roles that are illustrated in the following sections.

2.5.3.1 Customer Relationship Management

Any project should have customers, and in case of customer dissatisfaction, there must be some malfunctioning in the PMO. Within this function Hill (2008) has defined many functions that include managing customer information, managing customer contracts, and managing customer satisfaction, meanwhile Bekker and Steyn (2008) has stated that the PMO role is focusing on measuring customer satisfaction and tracking it.

The PMO has to know who are their customers, segment them, and keep their information and data, keep up their business information and history of relationship in addition to maintain a charter that clarify the customers rights and responsibilities which is named by Hill (2008). This include managing project information, and managing customer business information and can be entitled as ***Managing customer information***.

Managing customer proposals, establishing the customer contracts, and administering the contract can also be one of the PMO functions (Hill 2008) which in other terminologies called service level agreements or client charter.

However the overall function can be summarized as ***managing customer contract***.

The measurement of customer satisfaction and following customer perceptions during, and post the projects are important functions involve assessing end users satisfaction covering all areas related to the project i.e. project managers performance, project management practices, technical performance, and business performance (Taylor 2011) which can be entitled as ***Managing Customer Satisfaction***.

2.5.3.2 Vendor Relationship Management

Hill (2008) and Bekker and Steyn (2008) have both agreed on the role vendor/contractor relationship management. The term vendor includes other descriptions that include supplier, provider, consultant, subcontractor, partner, etc... The proper management of this relationship may optimize the results for projects. This relationship can help the PMO to identify and qualify those best vendors who can add value, and avoiding low value vendors in future projects.

The PMO have to have an established database for vendors' information through which a full history for the contractor is established and maintained (Bekker & Steyn 2008). This database includes information about the vendors, contact numbers, representatives, their bids, and history of their performance which is in brief ***managing vendor relationship***.

The identification and the qualification of the vendors, managing selection and awarding of the contractors and the preparation of the contract documents (Hill 2008) can also be one of the PMO roles that can be briefly stated as ***managing vendor contracts***. Moreover and as continuous role for the PMO, the overseeing of vendor performance and commitment to contracts, monitoring their performance and linking it with the customer satisfaction (Hill 2008) which in brief can be stated as ***managing vendor performance***.

2.5.3.3 Human Resources Relationship Management

Managing human resources relationships has become so important for people working within project management environment as different researchers have covered areas of promoting project management cultures within the organization and creating career paths are one of the difficulties that face organizations (Abbas *et al.* 2011).

One of the key strategic aims of the PMO is to promote project management within organizations and create a supportive culture for managing projects. The results from this role can be attained through different tools and mechanisms that might include awareness, communications, and messages. Bekker and Steyn (2008) have considered it as sub-function within the training and consulting, while Hill (2008) didn't figure include it clearly, he implicitly include within other functions. This effort from the PMO can ease the other functions achievements and their tasks. Therefore it will be entitled as ***Promote Project Management Culture***.

Another function which is correlated with providing career path for project management professionals, supporting career planning, developing staff competencies through training and provide mentoring for project managers (Bekker & Steyn 2008). Moreover this career development might include providing professional training and providing project management learning through providing resources i.e. magazines, library, e-resources, etc... (Unger *et al.* 2012). This can be briefed as ***Career Development***.

One the key success factors for the projects is team working, as the cohesive project team may lead to successful project and might ensure its failure (Crawford 2011). The PMO follows the achievements of the teams, facilitates virtual teams, and follows their performance (Hill 2008). Other authors went further saying that the PMO has to provide incentives and rewards for the well performing teams (Bekker & Steyn 2008). This can be briefly named as ***team development***.

Accordingly, the relationship management role of the PMO involves functions as illustrated in Figure 2.6 which also illustrate the sub functions for each major function.

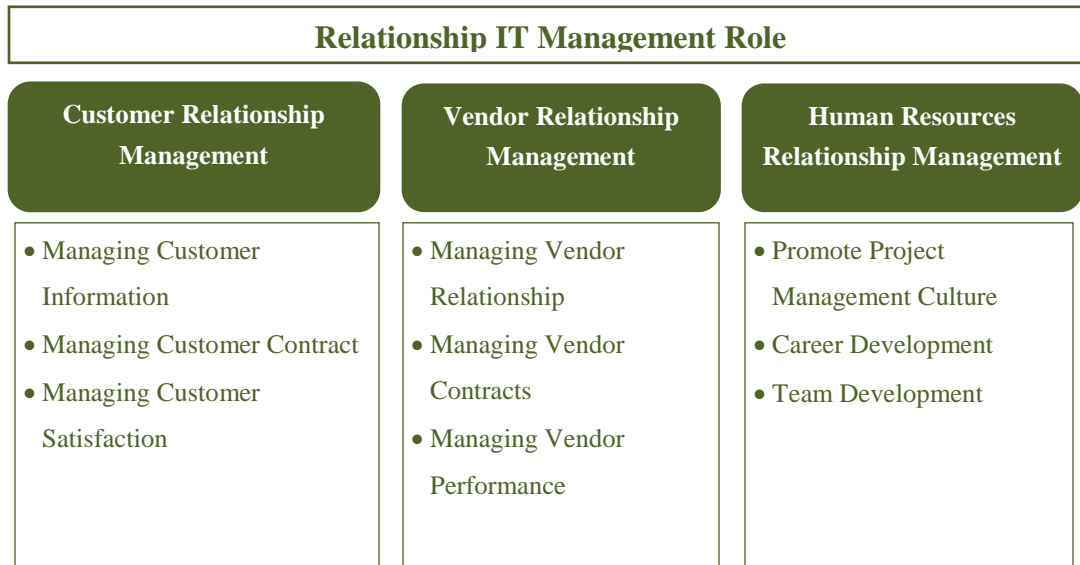


Figure (2.6): PMO Functions/Relationship Management Role

2.5.4 Strategic and Governing Role

This role is the most commonly missing role in organizations, as most of PMOs have the supporting role for the projects by which most of the strategic functions do not exist. The strategic role of the PMO involves the following parts.

2.5.4.1 Project Portfolio Management

The strategic role of the PMO is very important regardless of the PMO's position within the organization as managing multiple projects is a challenging role that could have an important effect on the strategic objectives of organizations (Julian 2009). Portfolio management involves governance for a collection of projects/programs which in practice involves portfolio boards, selection panels, and other high level committees (PMI 2008).

The project portfolio management function involves different key processes, Hill (2008) and Artto *et al.* (2011) have stated that the PMO has to ensure the periodic reviews for the alignment of the project portfolio with the strategy, project

and portfolio strategy, the identification of the project selection criteria and mechanisms, and the identification of the portfolio management roles. This important sub-role can be called ***Strategic Alignment***.

From another perspective and as a part portfolio management, second role involve new project screening, prioritization, and the recommendation for project financing and funding (Hill 2008; Artto *et al.* 2011; Gardiner 2005). As this role involves selection and adding new project, the second sub-role will be called ***Project Screening and Integration***.

It is important to assesses effectiveness of the project/ portfolio as a part of portfolio management by project portfolio performance monitoring and compilation, project gateway assessment, portfolio review and assessment, and project closing (Hill 2008; Artto *et al.* 2011). This can be called ***Project and Portfolio Reviews and closing***.

Another function for portfolio management is the assessment of key business results and overall stakeholder satisfaction (Artto *et al.* 2011). This is an important role that enables the PMO to assess its impact to the business and evaluating how effective it was, and can be called ***Strategic Portfolio Results and Impact***.

2.5.4.2 Standards and Assessment

This role is combined with the strategic role of the PMO in searching for excellence. Within this function the PMO shall identify the practices that will be used for managing the project environment (Hill 2008). Moreover it shall ensure cost, schedule, and resources control and guaranteeing compliance with organizational, industry, regulatory standards (Jullian 2008). Unger *et al.* (2012) have also added the function of assessment to the PMO functions, and Hill (2008) has classified it to capability, competency, and maturity assessment.

The PMO handle the responsibility for deploying project management or other related standards (Hill 2008). Such standards can be integrated with the project

methodology, and ensures that the project management practices is complying with best international standards (i.e. PMI, ISO9001, ISO10006) and other regulatory standards that the organization adhere to (i.e. policies, regulations and business excellence). This involves the identification of standards, benchmarking, and standards implementation and compliance. For large scale PMOs, the organization may set its own standards that ensure compliance with all other standards and can help the organization to be role model within the industry (pmsolution 2011). This will be entitled as ***Project Management Standards and Regulations.***

Another PMO role that has been mentioned by Hill (2008) is the assessment which can be considered as an integrative role for standards. For example an assessment can be made to assess the level of compliance with ISO10006 within the organization. As it was illustrated, this assessment can be made for maturity level, capability, or competency. The PMO role comes in the identification of the assessment, and the conducting the assessment with corrective initiative (Hill 2008). This role can be entitled in the same that was mentioned by Hill (2008) ***Maturity Assessment.***

2.5.4.3 Performance Management & Continuous Improvement

The PMO itself is not a revenue generating function; while it has a supporting role that can help improve the performance within the organization through deploying good practices for assessing performance and ensuring continuous improvement. This function is important as it provide an area where the learning lessons can be applied. Many project excellence models have focused on this part of learning which can be a part of PMO role (Barclay & Bryson 2010).

The assessment of different projects/ portfolios utilizing all assessment and monitoring tools that help the leaders to know which projects/ portfolios are well performing and which are the bottlenecks is also an important function (Barclay & Bryson 2010). This involves KPIs and indices data collection, monitoring and root cause analysis, and validation. According to Hill (2008), this involves the

performance of operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business fulfillment for all functions of the PMO, and can be entitled, **Performance Analysis**.

Performance analysis without corrective initiatives will not be beneficial; therefore there must be a function that identifies the areas of poor performance based on KPI analysis, and other inputs including auditing, complaints, and standards. This also involves trend analysis, initiatives and actions prioritization, and action/initiative implementation (Barclay & Bryson 2010). The effect of corrective actions involves improvement plans for processes, practices, and systems or competency improvement for staff based on the assessment of their performance. Accordingly this will be entitled, **Corrective Actions**.

2.5.4.4 Project Governance and auditing

The terminology of project governance have been used widely and been defined as "a set of management systems, rules, protocols, relationships and structures that provide the framework within which decisions are made for project development and implementation to achieve the intended business or strategic motivation" (Bekker & Steyn 2008). While Manello (2009, p.05) stated that "project governance is the set of structures, systems, and processes around the project that ensure the effective delivery of the project through to full utilization and benefits realization business". Other researchers deem that this definition is not fully representing the concept of project governance and that the project governance shall be aligned with the overall corporate governance, are practical for implementation and monitoring, and involve project finance and associated risks (Misner 2008).

Project governance affects risk planning, life cycle management, strategic change, and the value management (Gardiner 2005). While Hill (2008) has proposed a project governance model that involves 6 key functions involve the preparation of the PMO charter; developing project management policies; preparation of project classification manual; establish project manager authority;

establishment of the executive control board; and the alignment of business and technical committees. Bekker and Steyn (2008) have mentioned other roles for project governance through a well-integrated model that is shown in Table 2.4.

Project Steering Committee	1. Composition	1. <i>Core Competencies</i> • <i>Project finance and cost management</i> • <i>Business / project alignment</i> • <i>Front-end-Loading management</i> • <i>Crises response</i> • <i>Industry knowledge</i> • <i>International experience</i> • <i>Leadership</i> • <i>Strategic alignment capability</i> • <i>Contract management capabilities</i>
		2. <i>Steering Committee Size :Determined by project type, complexity and magnitude</i>
		3. <i>Member Mix: Comprise members with direct interest as well indirect stakeholder representatives i.e. socio-economic and environmental</i>
		4. <i>Chairperson Independent: The chairperson should be independent from any project stakeholders</i>
	2. Responsibility	1. <i>Committee Accountability: Overall accountability Bridging the gap between the project and the immediate external and statutory environment</i>
		2. <i>Charter: Development and adherence to project charter</i>
	3. Audit Committee to Board of Directors	1. <i>Levels of Independence: The project audit committee should be independent with the steering committee excluded from the audit committee</i>
		2. <i>Project Literacy: The Audit Committee should have extensive project experience on all aspects of LCPs</i>
Cost and Benefit Management	1. Financial Reporting Responsibility	1. <i>Steering Committee: Report against approved budget</i>
		2. <i>Project Governance Charter: Report on adherence to the charter</i>
	2. Financial Disclosures	1. <i>Project Finance: For any financial activities outside the GAAP requirements, full disclosure will be required</i>
		2. <i>Reports: Project financial status to be reported on a quarterly basis</i>
		3. <i>Corrections and Adjustments: To be reported quarterly</i>
	3. Internal Controls	1. <i>Risk Management Process: Formal risk management processes should be in place</i>
		2. <i>Risk Management: The steering committee must actively ensure that proper risk identification, quantification and mitigation planning is done on the project - not only the financials but covering all aspects of the project</i>
		3. <i>Risk Disclosure: Disclosures must be made about all the risks on the project during the total project lifecycle</i>
		4. <i>Risk Certification: Requirement for monthly certification by the chairperson of the steering committee regarding disclosure controls and procedures</i>
	1. Independence	1. <i>Objectivity: Independence and objectivity of the project auditors and reviewers must be ensured</i>
Project Reviews		

and Audits		2. <i>Scope: Project reviews and audits should not be confined to adherence to in-house methodologies and practices, but should include items that the review / audit deems necessary to protect stakeholder interests</i>
		3. <i>Rotation: Auditors should have no direct or indirect interest in the project or in the contractors / suppliers involved with the project</i>
	2. Interaction with Companies	1. <i>Internal Charter: The internal charter should include the approach towards the auditing of project management, the adherence to project methodologies, processes and agreed practices and the project team's functioning</i>
		2. <i>Communication: As with corporate governance, mandatory communication between the external auditor and the audit committee is required</i>
	3. New Attestation Report	1. <i>Report: External auditor must issue an attestation report on the project's internal control report</i>
	4. Disclosure	1. <i>Non-audit services: As with corporate governance, it is required that separate disclosure is made of the amounts paid to the external auditor for non-audit services together with a detailed description of the nature of services</i>
		2. <i>Fees: Requires disclosures of fees paid to a company's principal external auditor since project commencement</i>
D. Ethical, responsible conduct and conflict of interest	1. Code	1. <i>Standards: A code of ethics should be established and signed by each member of the steering committee. The code should include (as a minimum):</i> <ul style="list-style-type: none"> • <i>Environment</i> • <i>Social aspects</i> • <i>Socio-economic aspects</i> • <i>Conflict of interest guidelines</i>
		2. <i>Adherence: Adherence to the code of ethics should be disclosed and reported on a monthly basis</i>
		3. <i>Disclosure: Code should be made publicly available and any changes to the code or waivers from the code must be disclosed</i>
	2. Compensation	1. <i>Performance: Performance-related elements of compensation should represent a substantial portion of the total compensation package</i>
	3. Safety, Health & Environment (SHE)	1. <i>Adherence: SHE requirements should be to international standards as a minimum and supplemented by host country requirements</i>
	4. Social	1. <i>Adherence: Social and socio-economic considerations should be to international standards as a minimum and supplemented by host country requirements</i>

Table (2.4): Project Governance Framework (Bekker & Steyn 2008, p.1326)

The project governance involves setting up clear functional responsibilities, authorities, the organizational alignment, policies, and reporting structures (Hill 2008) and will be entitled, ***Establish Authorities, policies, and charters***. In addition to that project governance involves the composition of the control board

and steering committee, their responsibilities, their charters, their sizes, and their operating procedures (Hill 2008; Bekker & Steyn 2008) and usually known as ***Establish executive control board***.

Auditing is important as it provide key sources for many other functions. The project auditing involves setting out auditing, conducting project auditing, reporting of the audit outcomes, and follow-up improvement actions (Hill 2008). The PMO also have to ensure the independence of auditing, adherence to auditing international practices, interaction with external auditors and the audit committee, in addition to the disclosure of the audit results (Bekker & Steyn 2008). This can accordingly entitled as ***Project Audit and Reviews***.

Another new governance basic role is the sustainability through which a standard for code of conduct that involve environmental, social, economic, conflict interest guidelines are to be established (Bekker & Steyn 2008). In addition to that HSE requirements shall be made, and the regulatory standard requirements that shall be adhered to. Therefore this function involves establishing a code of practice, maintaining the code of practices, and following up on adherence to them and can be entitled, ***Sustainability, Ethics, and code of conduct***.

Accordingly, the strategic and governing role of the PMO involves functions as illustrated in Figure 2.7 which also illustrate the sub-functions.

The Strategic and Governing Role			
Project Portfolio Management	Standards and Assessment	Performance Management and Continuous Improvement	Project Governance and Auditing
<ul style="list-style-type: none"> • Strategic Alignment • Project Selection & Integration • Project & Portfolio Reviews & Closing • Strategic Portfolio Results & Impact 	<ul style="list-style-type: none"> • Project Management Standards & Regulations • Maturity Assessment 	<ul style="list-style-type: none"> • Performance Analysis • Corrective Actions 	<ul style="list-style-type: none"> • Establish authorities, policies, & charters • Establish executive control board • Project Audit and Reviews • Sustainability, Ethics, and code of conduct

Figure (2.7): PMO Functions/ the Strategic and Governing Role

2.6 PMO and the Organization Structures

The location of the PMO within organizations affects the organization is staffing and will also affect authority and resources (Tjahjan *et al.* 2009). Accordingly this will be implemented depending on the organization structures which are usually classified into 5 classifications functional, functional matrix, balanced matrix, strong matrix, and projectized structures. (Tjahjan *et al.* 2009) has detailed the effect of organization structure on the PMO and classifies it as illustrated in Table 2.5. He also mentioned that functional and functional matrix structures might not need PMO unlike other type of structures; however the PMO might be required for project coordination.

Effect	Type of Organization Structure				
	Functional	Functional Matrix	Balanced Matrix	Strong Matrix	Projectized Structures
PMO Level of Authority	None	Limited	Limited to Moderate	Moderate to High	High
PMO control Over resources	None	Limited	Limited to Moderate	Moderate to High	High
PMO control Over budget	None	None	Limited	Moderate to High	High
PMO role in the company	Advisory	Advisory	Advisory to Limited	Moderate to High	High

Table (2.5): Effect of the PMO according to Organization structure (adapted Tjahjan *et al.* 2009, p.29)

2.6.1 Functional Structures

Within these structures each staff member has one manager, and staffs are classified as per functional area (PMI 2008), in addition to appearing in the hierarchy (Tjahjan *et al.* 2009) as illustrated in Figure 2.8. As per Teece (1996, p. 201) "each project is divided into segments and assigned to relevant areas or groups within functional areas". Projects do not appear clearly on the structures and are treated internally, and projects usually are managed by a functional manager. In this type of structure projects have limited impact on overall organization operations (PMI 2008). Consequently the influence and impact of the projects are limited on the overall organization strategy and governance.

PMOs, if established within such structures, are usually at the minimum level of maturity and usually are divisional PMOs and are supervised by a functional manager often from IT. According to Tjahjan *et al.* (2009) PMO capability varies according to many factors culture, size, and financial capability, and he mentioned three levels for capability. The first level is suitable for functional structure and he mentioned that its roles are more focused providing coordination and summary reporting about the PMO's projects.

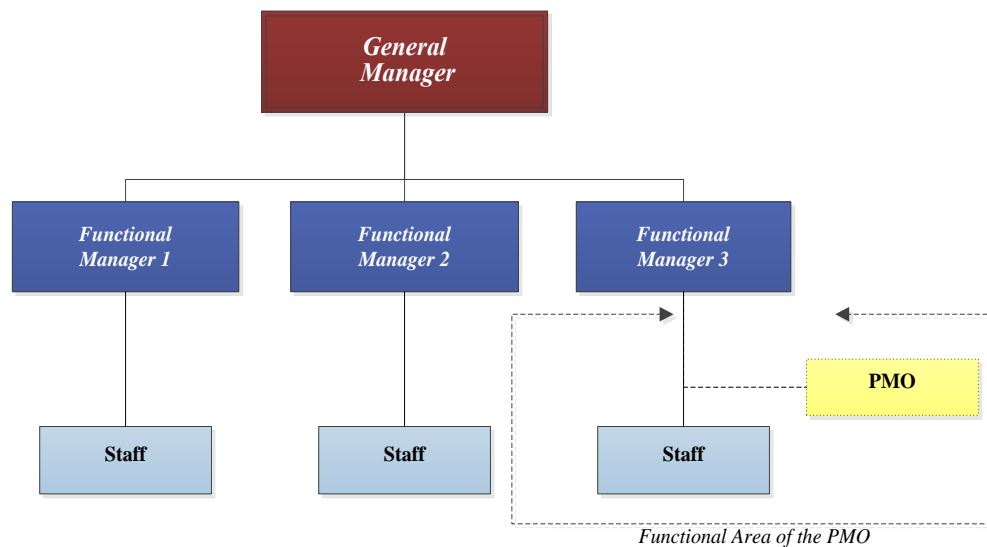


Figure (2.8): Functional Organization Structure

2.6.2 Functional Matrix Structures

This type of structure has many similar elements of the functional structure as illustrated in Figure 2.9 and the project manager has a limited authority to manage the project through organisation functions (Gray *et al.* 1990); in the meantime the functional managers retain responsibility for managing parts of projects (Bravoco & Yadav 1985). Within such type of structures the project management has more impact to the organizations operations but still limited roles comparable to other types of structures, consequently PMOs with medium maturity can be seen as sufficient in these structures.

Similar to the functional structures, PMOs within these structures are usually divisional and might involve more than one division. Similar to what is stated in

functional structure level 1 of capability level is most fit this types of structures (Tjahjan *et al.* 2009).

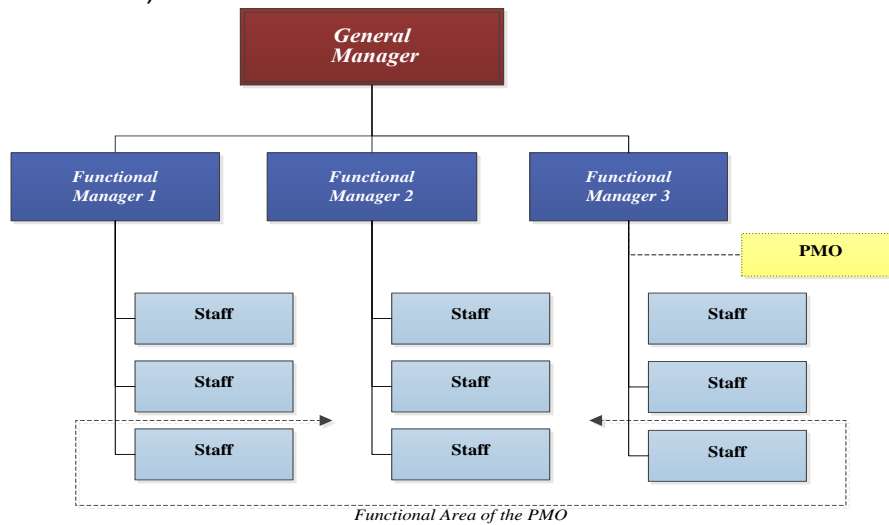


Figure (2.9): Functional Matrix Structure

2.6.3 Balanced Matrix Structures

According to Kendall and Rollins (2003), in this type of structure, the organization recognizes the need for the project manager as they are "assigned to oversee the project and shares the responsibility and authority for completing the project with the functional managers, and they jointly approve many decisions" Gray *et al.* (1990, p. 299). Figure 2.10 illustrate this type of structures.

The need for mature PMO that are capable to handle responsibilities is increased in this type of structures, and PMOs are more mature than those within the functional or functional matrix structures. According to Tjahjan *et al.* (2009), this level 2 of PMO matches this type with the authority of implementing actions that improve organization project management capability.

2.6.4 Project Matrix Structures

These types of structures have many attributes of the project team structures organizations and have full-time project managers and administrative staff (Thiry & Deguire 2007). According to Gray *et al* (1990, p.30) "The project manager is assigned to oversee the project and has primary responsibility and authority for completing the project. Functional managers assign personnel as needed and

provide technical expertise". Figure 2.11 illustrates the structures of this type which encourage having more matured PMO.

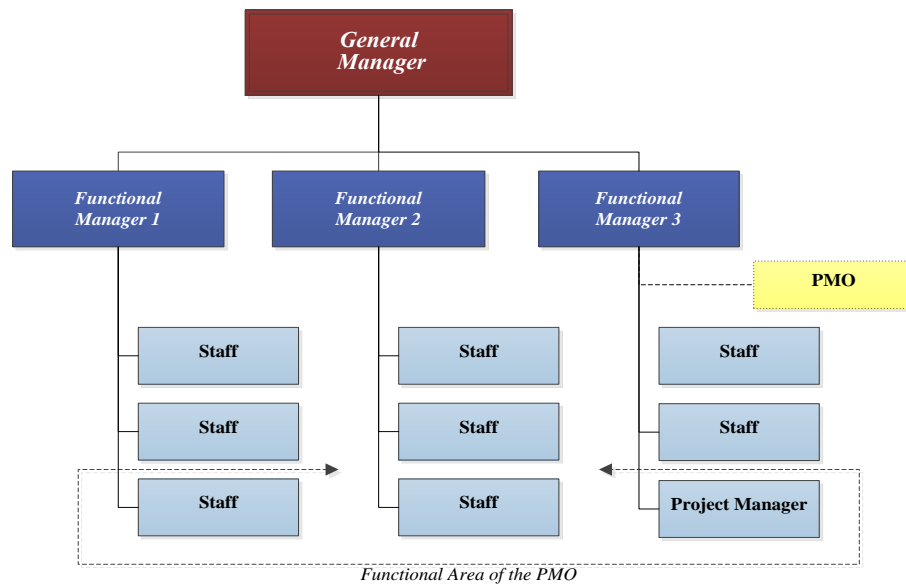


Figure (2.10): Balanced Matrix Structure

To perform well, organizations adopting this structure have to have a matured PMO which can handle the complexity of the projects with many division and cultures within the same organization. According to Tjahjan *et al.* (2009) level 2 or level 3 can be applied for this type of structure, where in level 4 the PMO might act as an independent body with the authority to lead the project environment.

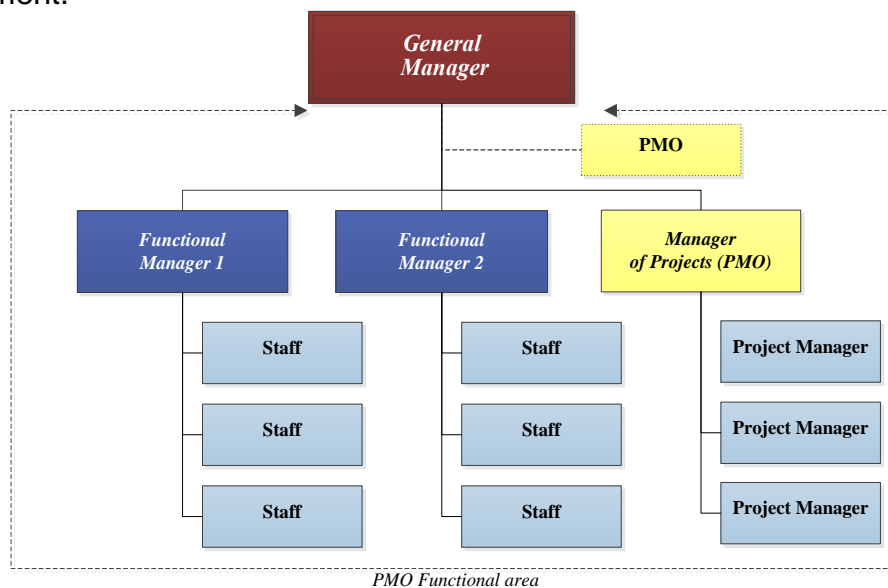


Figure (2.11): Project Matrix Structure

2.6.5 Project Team Structures

Hobbs *et al* (2008) has indicated that within project structure organizations' most of the organization's staff has involvement in projects associated work and project managers have more independence and authority as they are responsible for project teams composed of main group of staff from different functional areas and/ or groups. Figure 2.12 illustrate the project team structures which require the highly mature PMOs to oversee the project management. According to Tjahjan *et al.* (2009) the level 3 of capability PMO suits this type of structure and can take actions to implement strategies that create competitive value for the organization.

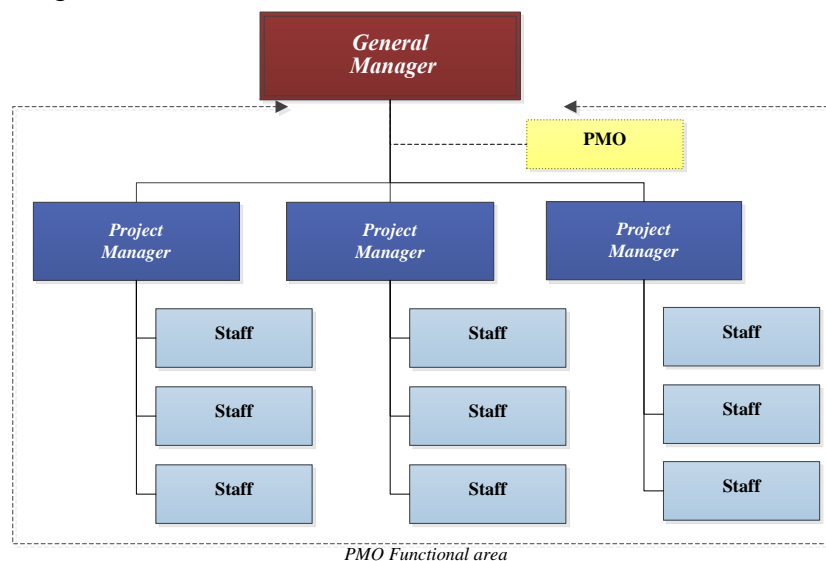


Figure (2.12): Project Team Structure

2.7 Project Governance vs. Corporate Governance

2.7.1 Enterprise Project Governance

According to Dinsmore and Rocha (2012), corporate governance is transferring into enterprise project governance especially if the organization is moving towards being projectised not in their structure but in their operations. Tjahjan *et al.* (2009) has emphasized on the role of PMO and mentioned that the PMO with level 3 capability has interactions with many parties as illustrated in Figure 2.13.

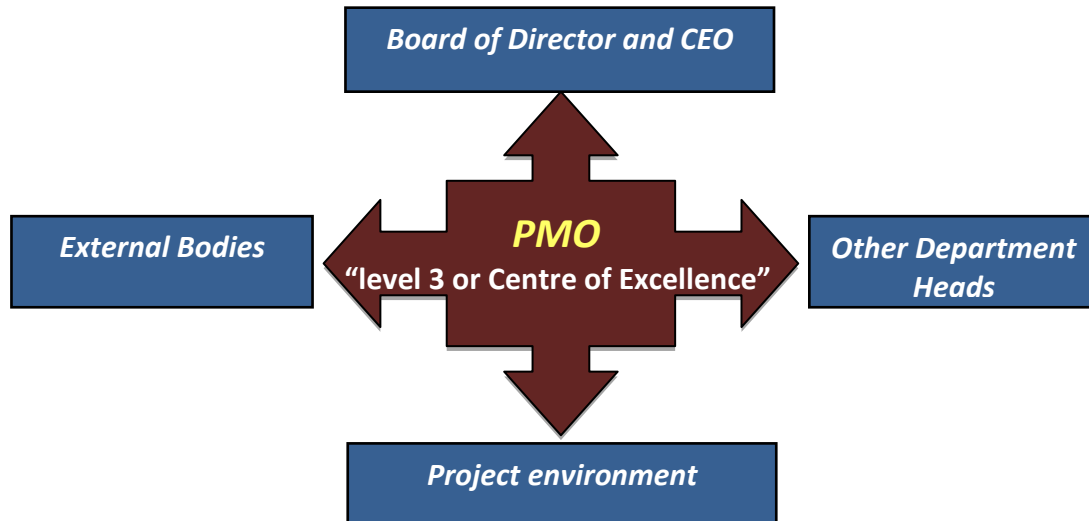


Figure (2.13): PMO “Level 3 or center of excellence” interactions

According to Dinsmore and Rocha (2012) there are two schools for enterprise project governance which are:

1. **Board Sponsored EPG:** within this school, the governance of the projects extends to the corporate governance principles. The main aim of EPG is to ensure that projects, programs, and portfolios are managed effectively and efficiently appropriate manner. Board establishes sub-related committee i.e. strategic planning, projects, or EPG to manage and oversee the organization portfolios.
2. **CEO Sponsored EPG:** In this school, the Board delegates the authority to the CEO and the Executive Committee. In this school the EPG take place in developing policies, procedures, structures, etc. under the direct supervision of the CEO. Figure 2.14 represents the full of picture of the EPG and what the factors that represents the governance.

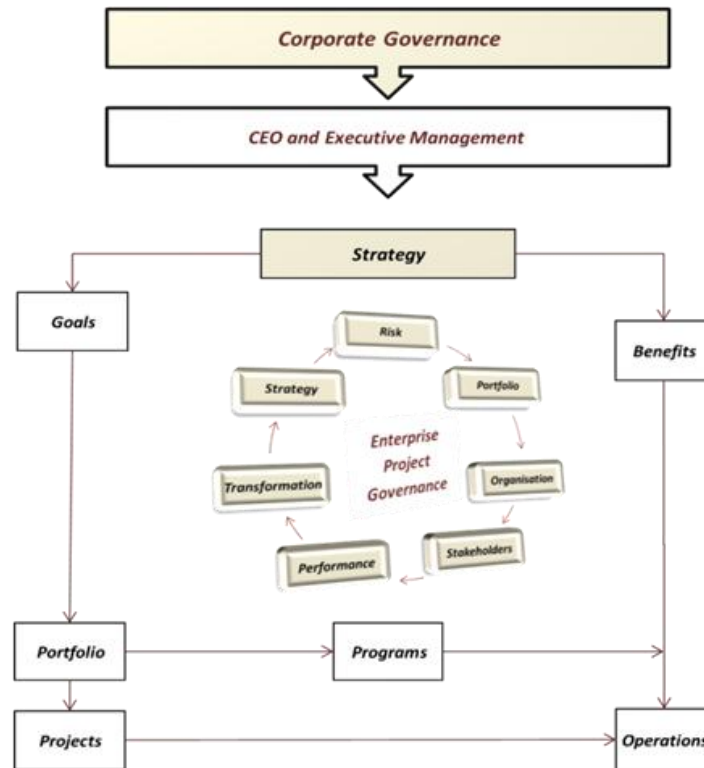


Figure (2.14): Enterprise Project Governance (Dinsmore & Rocha 2012, p.30)

2.7.2 Governance and Organization Structure

Rollins and Lanza (2005) has also focused on PMO and detailed its value and importance in deriving strong governance for organizations. On the other hand, few research studies have suggested suitable matching between the types of organization structure and the PMO maturity level. Crawford (2011) has stated that organizations and depending on their type of organization structure, where the projects represents a percentage of their overall operations. This varies according to the type of the organization structure and increases when moving toward projectised structures. Dinsmore and Rocha (2012) have mentioned that projects represent percentages as per type of structure as mentioned in Table 2.6.

Type of Organization structure	Percentage of projects
Projectised	85%-100%
Strong matrix	50%-95%
Balanced matrix	15%-60%
Weak matrix	0-25%
Functional	Not specified

Table (2.6): Percentage of projects according to organization structure type

According to this and in very projectised organization corporate governance mostly transferred be project governance or the EPG, and this will impact the overall organizational governance, Table 2.7 show how the percentage of projects can impact on overall corporate governance

Type of Organization structure	Nature of Project Governance	Impact to Corporate Governance
Projectised (85%-100%)	Projects formulate most or all the organization operations.	Strong project governance will guarantee strong corporate governance (High Impact)
Strong matrix (50%-95%)	Projects formulate half or most of the organization operations	Strong project governance will have (mid-high impact) on corporate governance
Balanced matrix (15%-60%)	Projects formulate part or half of the organization operations	Strong project governance will have (low-mid impact) on corporate governance
Weak matrix (0-25%)	Projects formulate part of the organization operations	Strong project governance will have (very low- low impact) on corporate governance
Functional (Not specified)	Projects formulate limited part of the organization operations	Strong project governance will have (very low) on corporate governance

Table (2.7): Impact of project governance to corporate governance in organization structures.

Oakes (2008) has stated that the PMO has become as a vehicle to establish an integrated project-based organization (PBO). Moreover Aubry and Hobbs (2005) have argued that in order to build real strong organization, they must focus on producing best value proposition for business and stakeholders, and mentioned that the PMO is a key tool for achieving that.

From what have been discussed, it can be concluded that there are three main factors that affect that affect the impact of the PMO on overall organization performance and consequently affect the level of governance within organization. Those factors are:

- The type of organization structure
- The PMO maturity level
- The PMO location within organization

However, some organizations especially the non-mature are having 50% of focus on projects in spite of having functional or weak matrix structures (Grisham 2010). Figure 2.15 shows a matrix can be made to show how both PMO maturity and type of organization structure can impact on corporate governance and organization strategy.

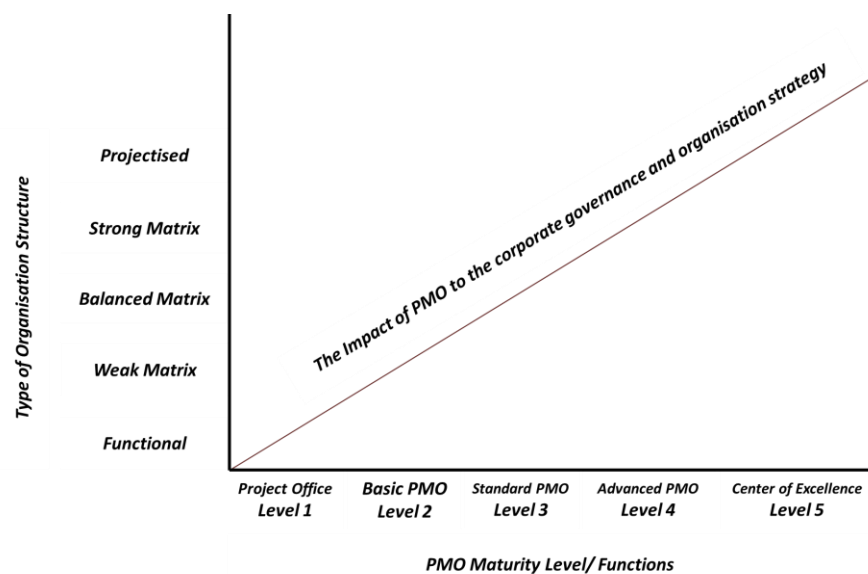


Figure (2.15): The Role of PMO to organization governance based on maturity and type of structure

2.8 The Value of the PMO

A survey undertaken by KPMG found that 98% of the projects with mature PMOs are successful, and 53% of projects with new PMOs are successful, while other projects success rates are below 50% (Weaver 2005). The same survey has

shown that most of the respondents indicate that PMO is a must have investment. Moreover Weaver (2005) stated that the PMO is a critical component for any governance system, and he stated that successful PMO tends to have many common characteristics that include:

- The PMO report to the a very senior management level and might be the CEO or General Manager
- The PMO is be led by a manager with excellent business experience
- The PMO have very professional project management staff.
- The PMO act as a mentor and coach for project teams
- The PMO develop a common and robust project management practices across the organization.

PGRM (2010) also mentioned that the major key success factor for the PMO is having an executive sponsorship that empowers the PMO function to become the catalyst for improving enterprise efficiency. Ward (2010) has also affirmed on the value of the PMO and its increase with increasing maturity and responsibility as it is clear in Figure 2.16.

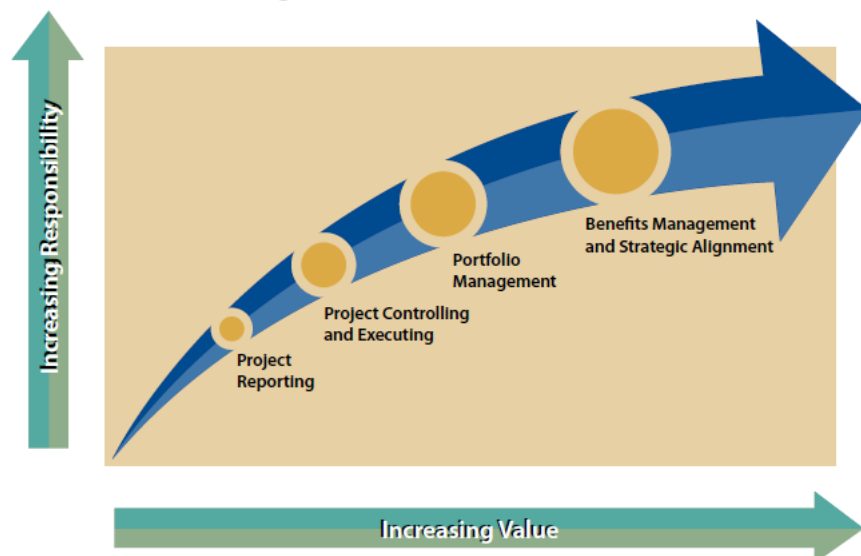


Figure (2.16): PMO Value Continuum (Ward 2010, p.9),

The PRGM (2010, p.03) affirmed that the strategic role of the PMO will lead to the following:

- Safeguard the strategic intent and provide an independent assessment of progress
- Drive effective coordination through an informed, knowledgeable grasp of issues at project, programme and strategic levels
- Facilitate flexibility in resource assignments through prompt and effective communication
- Manage stakeholder expectations

Letavec and Bollies (2011) have asserted that the PMO is the optimal solution for aligning projects to strategy and continually tracking the portfolio to meet business needs and provides a crucial link between business strategy and tactical plans, and establishes governance and compliance within organizations.

Bolles and Hubbard (2007) have stated that the EPMO is the key driver for the governance through utilizing it as a management method (business, strategy, business objective, and PBM planning operations), Setting policy and establishing a charter (Managing business and cultural change, project management policy statement, and issue PMO charter), and managing project, program, and portfolio.

2.9 PM Solution Study

A study conducted by project management solutions in 2012 (PM solutions 2012) about the state of the PMO reported many significant results showing that PMOs in high performing organizations are addressing issues that matter most to executives and alignment with business objectives and strategy, in addition that the PMOs have a key role in strategic planning for 62% of the organizations. It also indicated that the top priorities for PMOs are enhance governance processes, performance, reporting analytics and project management processes. The study listed the top 10 functions for the PMO as:

1. PM methodology, standards implementation/management
2. Project policies, procedures, templates implementation/management
3. Project/program monitoring and controlling
4. PM coaching and mentoring
5. Project/program initiation
6. Governance process implementation/management
7. Multi-project coordination
8. Project/program closing
9. Project performance monitoring/controlling
10. Dashboard/scorecard implementation/management

The same study uses the same classification for PMO capability provided by Hill (2008) as shown in Table 2.8.

PMO Maturity Levels	
According to Hill (2012)	According to PM solutions (2012)
Center of Excellence	Best in Class
Advanced PMO	Strategic
Standard PMO	Institutionalized
Basic PMO	Established
Project Office	Basic

Table (2.8): Comparison of PMO Maturity levels between Hill and PM Solutions

A key conclusion from PM solutions study (2012, p.11) has stated that “The greater the capability of the PMO, the greater the value the PMO contributes and the greater the overall performance of the organization. A highly-capable PMO engages in more functions, particularly project portfolio management and resource optimization, and is far less likely to have its value questioned by others in the organization”.

2.10 Attributes of the PMO according to maturity level

Most researchers classify PMO maturity into five levels regardless of the terminologies used to label it or the minor differences mentioned (Artto *et al.* 2011). Within this research a different category that facilitates integration between different viewpoints have been used as it is clear in the matrix below. These matrices are designed to help with defining and fixing specific attributes according to each maturity level. The matrices represent the PMO maturity level on a five-point scale where the level 1 means the lowest maturity level and level 5 means the highest maturity level. This matrix will assist in classifying PMOs according to the levels in addition to help with developing survey questions. Hill (2008) and many sources have used this classification scale to set the levels mentioned. The matrices have been developed based on the strategic and governing roles of PMOs.

Role (1): Project Portfolio Management

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
Strategic Alignment	<i>Periodic reviewing for the alignment of the project portfolio with the organization strategy</i>	<i>No role, or very limited role</i>	<i>Introduced some concepts related strategic project alignment</i>	<i>Not fully applied, however have established processes for project alignment</i>	<i>Comprehensive project portfolio management alignment methodology</i>	<i>Major role in managing policies & guidance for projects strategic alignment</i>
	<i>Establishing and applying of the project portfolio selection criteria and mechanisms</i>	<i>Depend on key personnel to take decision of projects selections</i>	<i>Introduced such concepts for future improvements</i>	<i>Not fully applied however have developed criteria for project selection</i>	<i>Clear selection criteria and mechanism that's mostly applied to our portfolios</i>	<i>Mature portfolio selection mechanism that is applied to all portfolios</i>
Project Screening and Integration	<i>New project screening, prioritization, and the recommendation for project financing and funding</i>	<i>Depend on our decision makers for that</i>	<i>Launched an initiative to establish a mechanism and criteria for that</i>	<i>Built such methodology but not applied for all project portfolios</i>	<i>Has comprehensive mechanisms for priorities, screening, and funding to most portfolios</i>	<i>Have set and applied policies for priorities, screening, and funding to all projects portfolios</i>
Project and Portfolio Reviews and closing	<i>Project portfolio performance monitoring and compilation</i>	<i>Make some reports as requested by the decision makers</i>	<i>Measure some KPIs to assess effectiveness and efficiency</i>	<i>Built performance monitoring system but not fully applied for all projects</i>	<i>Comprehensive monitoring system applied for most of project and portfolios</i>	<i>Full performance monitoring system for all projects and portfolios</i>
	<i>Project gateway assessment, portfolio review and assessment, and project closing</i>	<i>Do some assessment and closing if requested</i>	<i>Assess some projects especially critical ones</i>	<i>Built such system but it is not applied for all projects and portfolios</i>	<i>Role in doing this for most of projects and portfolio through comprehensive</i>	<i>Deploy policies for gateway assessment, portfolio reviews, and project closing</i>

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
					<i>mechanism</i>	<i>for all projects</i>
Strategic Portfolio Results and Impact	<i>assessing the PMO impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function</i>	<i>On occasions we do minor assessment as requested</i>	<i>Sometimes we do it as requested by decision makers and top management</i>	<i>Do it but in a non-periodic basis</i>	<i>Mostly assess the impact of our portfolios and report it.</i>	<i>Always comprehensively assess the strategic role and impact in a periodic basis and report it</i>

Role (2): Standards and Assessment

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
Project Management Standards and Regulation	<i>Deploying project management standards, benchmarking, its implementation, and compliance</i>	<i>Do some benchmarks</i>	<i>Occasionally do some benchmarks but we don't deploy standards</i>	<i>Partially deploying some standards and do benchmarks</i>	<i>In compliance with some standards, and we do benchmarks</i>	<i>Apply many project management standards and even we set our own standards</i>
Maturity Assessment	<i>Conducting maturity assessment against certain standards and criteria and proposing corrective initiatives</i>	<i>Participate in some project assessments and evaluate teams</i>	<i>Sometimes we do some evaluation for essential issue of projects</i>	<i>Assessments but on a limited level</i>	<i>Conduct advanced examination for our capabilities, competencies and maturity for projects</i>	<i>Comprehensive mechanism with frequency, collaborate at enterprise level, and initiate and assess improvements</i>

Role (3): Performance Management & Continuous Improvement

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
Performance Analysis	Performance analysis for different projects and portfolios	Performance analysis report if requested by decision makers.	Facilitate some analysis for certain KPIs and indices	Set and analyse some KPIs that help us assessing projects performance periodically	Performance system that helps us to assess the performance of projects and portfolios periodically and we act as advisors for decision makers in this regards	Complete performance management system that involves KPIs and indices data collection, monitoring, root cause analysis, and validation for all projects and portfolios
	Conducting performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results	Sometimes we provide help in analyzing some KPIs	Analyze some of them as requested and provide raw data for other business units	Don't measure them all as some of them are measured by different business units	Have KPIs and measures that assess most of the specified perspectives	Comprehensive analysis for those all these perspectives through a matrix of KPIs and indices
Corrective Actions	Setting and applying system for corrective and preventive actions based on different performance	On yearly basis we initiate improvement initiatives as part of our plan	Take some actions as needed by decision makers	Corrective action mechanism for our poor performance results	Advanced mechanism for corrective and preventive initiatives but in few areas this function is not fully effective	Comprehensive corrective and preventive action mechanism that involves trend analysis, initiatives and actions prioritization, and we even follow those action/ initiative implementation and report it as part of our role

Role (4): Project Governance and Auditing

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
Establish Authorities, policies, and charters	<i>Prepare and maintain PMO charter including its objectives and purpose, its authorities and its alignment with the other business units</i>	<i>Have no clear charter but have personal job descriptions</i>	<i>Don't have charter but our role became known for all business units</i>	<i>Have an organization chart that clarifies our roles and responsibilities</i>	<i>As a part of organization structure have a clear roles and responsibilities for every staff in PMO</i>	<i>Comprehensive PMO charter that is updated according to the changes of authorities and purposes, and all relationships with all business units are clear</i>
	<i>Developing project management policies and guidance's for all stakeholders and participation in understanding business aspects of project management</i>	<i>Have our way of work but did not develop guiding policies</i>	<i>Have developed some guidance's and are developing new ones</i>	<i>Most of project related issues have developed procedures to help stakeholders to commit to way working</i>	<i>Have project management policies that communicated to all business units</i>	<i>Structured and documented project management policies and guidance that clarify all issues to commit and it is updated in periodic basis</i>
	<i>Developing project classification guidance and criteria for all stakeholders and participants</i>	<i>Don't have role and all projects follow the same sequence</i>	<i>Some important projects we follow different way of working</i>	<i>Have some classification based budget that make it different from project to another</i>	<i>Developed classification criteria and communicated it to all stakeholders</i>	<i>Clear ranking and classification guidance for all projects, programs and portfolios and within each there are different processes</i>
	<i>Establishing and identifying clear</i>	<i>There are no documented roles for</i>	<i>Each project manager assigned for any</i>	<i>Clarify project managers' role in</i>	<i>Project managers have a well-defined</i>	<i>Project managers have clear roles and</i>

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
	<i>authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities)</i>	<i>our project managers but it is known entirely</i>	<i>project have defined roles within project planning</i>	<i>project charters in addition to job descriptions</i>	<i>roles and responsibilities</i>	<i>responsibilities in all aspects related to project management, and we have clear authorities for them, program and portfolio managers</i>
Establish executive control board	<i>Having a sponsor, who is a member of the executive management team, or executive control board, or board of directors</i>	<i>Don't have sponsors in the management team</i>	<i>Report to another business units who transfer it to management team</i>	<i>Have sponsor who transfer our point of views for executive management team</i>	<i>Have sponsor who is a member in the management team and report directly to him</i>	<i>PMO director/ vice president is one the key management team in our organization</i>
	<i>Having a role in facilitating the executive board responsibilities by determining the executive oversight requirements</i>	<i>Don't do this</i>	<i>Some reports for another business unit who is responsible for that</i>	<i>Give some oversight for project if requested but on limited divisional level</i>	<i>PMO have the full picture for all projects and programs which give our management the full picture and oversight in everything at organizational level</i>	<i>PMO compile all project portfolio achievements, performance, portfolio management, and other functions for executive board use in a very comprehensive manner at organization level</i>
	<i>Having a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition)</i>	<i>Have no role</i>	<i>Sometimes submit advices on divisional level</i>	<i>Advise our project committee on divisional/ non corporate level</i>	<i>Give advice on committees compositions and follow up actions delivered from them at corporate level</i>	<i>It's one of PMO tasks to ensure the executive control board has full charter and providing them with advice. This is done at corporate level</i>

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
	<i>Having a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc.</i>	<i>Have no role of this</i>	<i>Submit some advices if requested</i>	<i>At divisional level</i>	<i>PMO have the role secretary for the project control board and related committees</i>	<i>PMO has made all of this and we update it on periodic basis at executive board level</i>
	<i>Establishing policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues (i.e. executive committee, steering committee, Governance committee).</i>	<i>Have no role of this</i>	<i>Adhere to such roles if any</i>	<i>Handle this function but at our divisional level</i>	<i>Ensure aligning our committees and sub groups with the corporate requirements</i>	<i>Major role to develop and oversee the governance structure and have made guidance for doing that</i>
Project Audit and Reviews	<i>The role in establishing the audit committee as sub group of the executive control board,</i>	<i>I never heard of having an audit committee, but have audit department</i>	<i>Have no direct relation with the audit committee</i>	<i>The PMO role focuses on reporting to the audit committee</i>	<i>PMO have memberships in the corporate audit committee</i>	<i>Have an audit and performance review committee and maintain its roles and update its composition</i>
	<i>The role in performing in project auditing</i>	<i>Do auditing if its required by decision makers</i>	<i>On occasions and for certain project we do some auditing and submit results to audit department</i>	<i>Perform project related auditing that is reviewed by the audit committee</i>	<i>PMO have audit procedures and we perform auditing to ensure alignment with our governance framework</i>	<i>PMO have comprehensive procedures for project auditing and we have full reporting and auditing effectively implemented</i>
	<i>Having clear approach for auditing and review of audit results</i>	<i>Audit Department is auditing</i>	<i>Do auditing on occasion and if requested</i>	<i>Have audit approach and review audit results</i>	<i>PMO an approach for project auditing that cover most of projects</i>	<i>PMO have a structured approach for auditing, delivering reports, and delivering actions and initiatives for result findings for all project portfolio</i>

Function	Factors of Assessment	Maturity Levels				
		Level 1	Level 2	Level 3	Level 4	Level 5
	<i>Discussing the external audit results related to projects and disclosing it</i>	<i>Don't have external audit.</i>	<i>Receive external audit finding, we propose corrective actions and report it</i>	<i>Review external audit results and propose corrective actions and report it</i>	<i>Review projects audit results, and follow corrective actions as required</i>	<i>Once the external audit report received we discuss it, its validity, and follow corrective initiatives. Summary of results is communicated and discussed with audit committee</i>
Sustainability, Ethics, and code of conduct	<i>The role in establishing a standard code of conduct for environmental, social, economic, and conflict interest</i>	<i>Don't have</i>	<i>Our organization have a code of conduct and we follow it accordingly</i>	<i>Established a code of conduct and the project related staff sign it</i>	<i>Established a code of conduct that is signed by most of our organization staff</i>	<i>Established a code of conduct that reviewed periodically and all staff have signed and approved it</i>
	<i>The role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects</i>	<i>Don't have</i>	<i>Apply some HSE practices in organization and follow it</i>	<i>Follow our organization HSE standard and apply it where applicable</i>	<i>in compliance with HSE standards and follow its implementation in projects</i>	<i>Established our own HSE standard and follow its implementation as part of system and project management methodology</i>
	<i>The role in risk management of projects and overall risk management approach</i>	<i>Trying to apply risk management practices.</i>	<i>Apply the risk management methodology in projects</i>	<i>Manage the implementation of risk management in projects</i>	<i>Established risk management mechanism and apply it in all projects</i>	<i>Established a comprehensive risk management approach that is applied for projects and monitor its implementation in related projects</i>

3.0 Research Methodology and Conceptual Framework

3.1 Conceptual Framework

The key proposition for this research is that the PMO has a contribution to overall corporate governance and organization strategy that proportionally increase with gains in the PMO level of maturity and when the organization moves toward more projectized structures, and in details the following are the propositions:

- PMOs in organizations with functional structures have low contribution on the corporate governance and organization strategy.
- PMOs in organizations with functional matrix structures have medium contribution on the corporate governance and organization strategy.
- PMOs in organizations with strong matrix (balanced) structures have medium to high contribution on the corporate governance and organization strategy.
- PMOs in organizations with project team structures have high contribution on the corporate governance and organization strategy.

Figure 3.1 represents the proposed conceptual framework of the research.

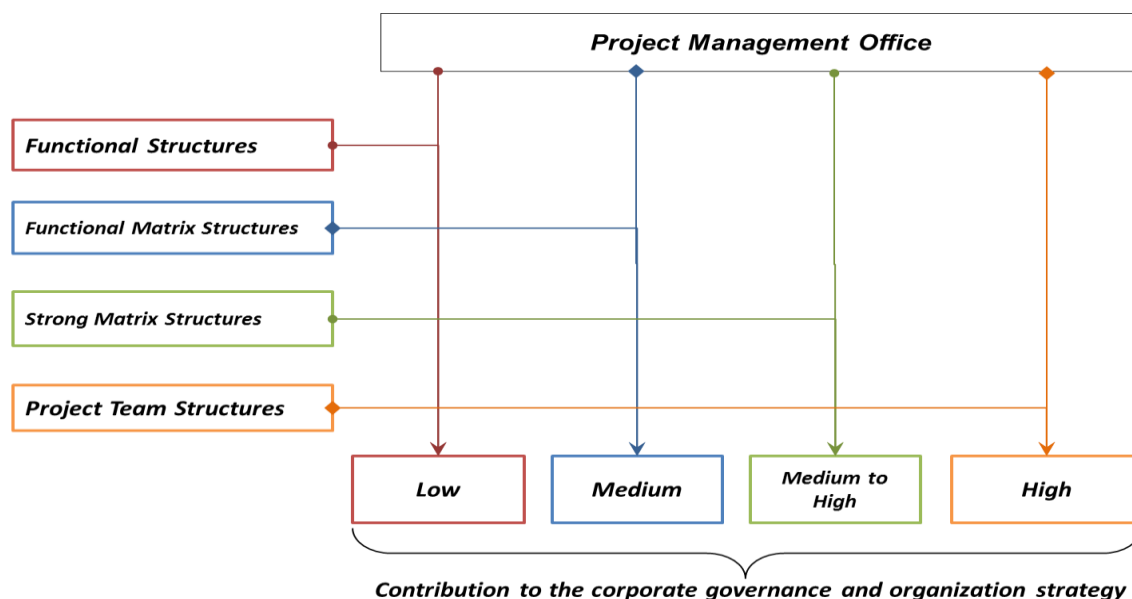


Figure (3.1): Conceptual Framework

3.2 Research Methodology

Many literatures have covered the role of PMO, but none has covered the contribution of the PMO to corporate governance and organization strategy. The purpose of this research is find out how the PMO can contribute and influence the organization governance system and its strategy, and how the PMO can contribute to this depending on various factors including type of structure and the level of maturity.

Blaikie (1993) has defined the methodology as the way of gaining knowledge, the way of generating and testing theories, and the relation between the theoretical background and research problem. Therefore it is the framework that will be used to conduct the research. Saunders *et al.* (2009) has stated that there are five levels for successful research methodology:

- Research Philosophy
- Research approach
- Research strategy
- Data collection
- Data analysis

3.2.1 Research Philosophy

Research philosophy is the development of knowledge and nature of this knowledge, which test the rationale of the research (Sanders *et al.* 2009). According to Sanders *et al.* (2009), two main research philosophies are used in business and management:

- Positivism: the researcher is assumes to be an independent of and not affected with the research subject. Generally it is correlated with the deductive or inductive approach.
- Interpretivism: the researcher needs to understand differences between humans in the role as social actors, and these are mostly used to investigate the organizational behavior, marketing and human resource management.

Within this research the positivism is used with the use of other philosophies when needed.

3.2.2 Research Approach

According to Sanders *et al.* (2009), two research approaches are usually used which are:

- Inductive approach: the researcher collects data and develops theory as a result of the data analysis, and usually used for more exploratory research
- Deductive approach: the researcher develops a theory that is subjected to a test, and usually used for testing and proving the hypothesis.

The aim of this research is to assess and analyze the impact of the PMO to the corporate governance and organization strategy and the PMO contribution to it. Moreover some hypotheses have been developed to help in creating more of a focus to the study. Therefore the positivism and deductive approaches are used which will support achievement of the research objectives.

3.2.3 Research strategy

According to Sanders *et al.* (2009), the research strategies are usually classified into:

- Case studies: used if research question in the form of (How, Why?).
- Field experiments: used if the research question in the form of (How, Why?).
- Surveys: used if the research question in the form of (Who, what, where, how many, how much?).
- Archival methods: Used if the research question in the form of (Who, what, where, how many, how much?)
- History: used if research question in the form of (How, Why?).

All types of research strategy are applicable, since our research question can be stated in two parts: 1. How the PMO can contribute and impacts the corporate

governance and organization strategy, and, 2. What is the impact of PMO to the corporate governance and organization strategy? However;

- Experiments, Archival analysis and histories were not suitable due to the nature of the research which do not require experimental or events studies.
- The use of single case study is not proper as the research cover different types of organization structures, so the generalization will not be appropriate.
- Multiple case studies can be one of the best fit for the purpose of study as different organizations with different PMOs and different organization structures can be selected and give relevant conclusions and results.
- The surveys can be an appropriate research strategy as well as it provide different cases with different point of views that will lead to relevant results and conclusions.

One of the key pitfalls for the survey strategy is the accuracy of the responses as they might provide responses they think the researcher want to hear, and they might do it quickly without consideration of the impact on the research (Sanders *et al* 2009). Moreover, according to the research nature, the questionnaire will be too long which might lead to low response rate, and the nature of the research require detailed meetings as some of the concepts might not be familiar to many people

Based on this and to ensure best results out this research the multiple case studies have been used. Therefore the qualitative research approach will be applied.

3.2.4 Data Collection

Saunders *et al.* (2009) has stated that there are three types of data collection through interviews:

- Structured Interviews: Through which detailed and well developed questions are used with all possible answers before the interviews.
- Semi-structured Interviews: Through which list of topics and questions are prepared before the interviews

- Unstructured Interviews: are informal and detailed interviews, and there are no questions prepared to help in guiding and directing the interviews.

Due to the nature of the research that involve many fields and since such research field is relatively new especially the governance subject, a mixed approach of the structured, semi-structured, and unstructured interviews were used as below:

- A list of detailed questions with all possible answers have been prepared to help managing the interviews and support the final collection of data that help in better analysis and support concurring strong results.
- Open ended questions have been used in order to get better results from the interviewee which can be help in to choose the correct answer according to the pre-pared list on answers. Moreover, some interviewees were keen to know more about subject which has led to discussions in a semi-structured way.
- The unstructured interviews were been used where it was easily accessible due to personal relationships and results out of these interviews were recorded to the data collection sheet.

Some interviewees have requested the list of questions before the interview so they will be better prepared for answering, and yet the list of questions have been sent before the interview. No records have been made because interviewees were sensitive to such way of conducting and documenting research findings within the culture of the Middle East. Further details about data collection are within chapter 5.0.

The targeted population of the research is important, and according to Hair *et al.* (2003) the populations are selected to fulfil the research objectives and scope. Therefore for this research purpose the population selected are project management professionals from UAE environment from organizations that have functional, functional matrix, strong (project) matrix, and project team structures.

The selected was a sample that represents the characteristics of the population bases on the typical cases that are known before to be useful and representing.

A total of 10 people have been selected from 5 different organizations. The sample of two persons per organization was important to ensure that the results of interviews are accurate and reflect more than one person's views, perspective, attitudes and recall.

3.2.5 Data Analysis

As the data have been collected, the data analysis has been made three stages in accordance with Saunders *et al.* (2009):

- **Data Reduction:** Within this stage all results put in the data sheet have been organized and summarized so it can easily be displayed and monitored.
- **Data Display:** Through which all have been put together into one sheet to ease reading and manipulating it into clear conclusions and results.
- **Drawing conclusions and recommendations:** This is the final analytical action by tabulating the results in accordance with the literature and conceptual framework, and state the conclusion which will help in further recommendations.

3.2.6 Research code of conduct

The code of conduct for this research has been strictly considered during all stages of the research. Special emphasis has been given to the process of data collection and all information given from the respondents has been treated as confidential. Moreover, the accuracy and preciseness have considered in data analysis and manipulations to ensure overall subjectivity.

Hence the population sample for this type of research, the generalization of the research to the overall population is considered one of the research limitations. A larger scale of research study might give more accurate and higher quality results. Although Saunders *et al.* (2009) has stated structured and semi-structured interviews have a certain level of biasness and the perception might

affect the results, this research makes a valuable contribution to this topic as it is unique and very few research studies have addressed the subject of PMO and organizations' governance.

3.2.7 Panel of Experts Evaluation

To ensure that the individual evaluation is consistent with the field evaluation, a second evaluation for the five cases has been made by a panel of five independent project management professionals. This will help correcting the results by having different point of views. The evaluation has been organized in small workshops or focus groups as per the following steps:

- Clarifying the rating system specified in section 2.10 for the specialists panel.
- Clarifying cases results and attaining the professionals rating for each particular role individually.
- Calculating the average of the ratings delivered by the professionals (Appendix 3).
- Comparing the results of the professionals' panel with the evaluation made at the early stage.

3.2.8 Research Steps

To satisfy the research goals and test the conceptual framework and the research propositions, the following steps are to be made:

#		Step	Clarifications
1	Literature and Design	Designing questions	The list of questions has been developed to cover the different areas of governing and strategic roles of the PMO as illustrated in the literature review. See appendix (1)
		Designing matrix of answers	The matrix has been developed so that the each PMO can be classified within one level of maturity (level1 means the lowest level and level 5 means the highest level of maturity). Deciding the level of maturity in each role means deciding the PMO contribution to the overall corporate governance and strategy.
2	Data collection	Conducting pilot interviews	Two interviews have been conducted as a pilot

#		Step	Clarifications
			study to help amending some of the questions and direct the rest of the interviews in a success manner. See section 4.0.
		Conducting the interviews	Another 8 interviews have been conducted to after doing few changes to the questions.
3	Data Analysis	Data Comparison	Comparison of data collected from the same organization, and reviews any differences between two interviewees, and one answer is being approved. See Appendix (2)
		Uploading data to the matrix	Uploading each answer of the answers, and decide on the level matching the role as the first assessment.
		Panel of Experts	Clarifying the rating system to a panel of five PM professionals, and get their results over the five cases. See appendix (3)
		Data Analysis and recommendation	The data analysis for each role and each organization has been illustrated in the section 4.0 followed by the first and panel of experts assessments.

Table (3.1): Steps of the research

4.0 Data Analysis, Interpretation and Analysis

The interviews have involved meetings that period varied according to the organization and as illustrated in Table 5.1. The meetings were planned in two phases as discussed previously, and according to the following details:

1. Phase One: piloting the study by conducting interviews with two personnel, getting their feedback on the proposed list of questions. This has helped in amending many questions and proposed answers that help in the phase two of data collection. The changes were as following:
 - Adding a question concerning the risk management as it is considered an essential part of the governance. This has been added as the last questioning.
 - Based on the answers some changes were made to the response matrix and helped in determining the level of maturity for the PMO.
 - Removing a question concerning the level of maturity of the PMO as the result of this answer will be subjective if the respondents don't have the relevant background knowledge of the maturity levels.
2. Phase Two: The data collection through the interviews with the eight personnel from 4 different organizations. With each meeting, both the open questions using how and why terminologies and the closed and direct questions have been used to ensure getting the right state, control the timing, achieve the targeted aims of the research. As mentioned previously to guarantee the consistency and reliability all answers from the same organization have been compared together. All responses have been put in a data collection sheet which was prepared with expected answers and results are segmented based on the practitioner and academic research as illustrated in Appendix 1. Limited differences have been resulted as most of answers were consistent and differences could be justified due to the seniority and experience. The interviews details are as in Table 4.1.

#	Case #	Type of Structure	Respondent job title	Phase
1	Organization A	Functional Matrix	Project Manager	Phase 1
		Functional Matrix	Business Analyst	Phase 2
2	Organization B	Project Matrix	Sr. Project Manager	Phase 2
		Project Matrix	Cost Control Engineer	Phase 1
3	Organization C	Functional	PO Manager	Phase 2
		Functional	Performance Analyst	Phase 2
4	Organization D	Functional	Planning Specialist	Phase 2
		Functional	Projects Engineer	Phase 2
5	Organization E	Project Team	Projects Head	Phase 2
		Project Team	Project Manager	Phase 2

Table (4.1): Interviewers details

Accordingly the following parts involve the analysis of the outcomes according to each function of the Project Management Office.

4.1 Organization (A)

4.1.1 General Information- Organization (A)

This organization has a functional matrix structure and provides services to public and has also monitoring role for certain products and services. The organization works with more 1000 staff members and has functional matrix organization structure and has one project management office that is located under the IT division and report directly the CIO. The results show that projects represent around 30% comparable to its overall operations.. As an overall the PMO manage around 60% of the projects portfolio within organization and focus on the improvement and modernization through information technology solutions. Figure 4.1 represents a sketch for the organization structure clarifying the area of PMO focus.

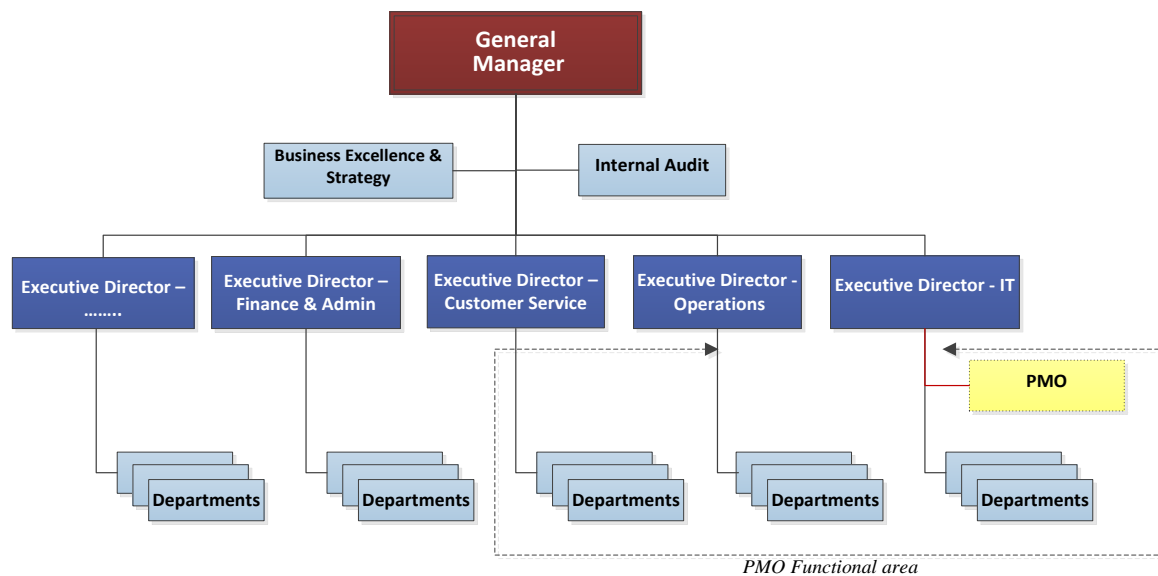


Figure (4.1): Location of PMO in (Organization A)

4.1.2 Project Portfolio Management

The PMO has many programs, project, and few portfolios that are managed by specialized projects, programs, and portfolio (Domain) managers. This area has involved my questions that covered the following parts:

4.1.2.1 Strategic Alignment

The strategic alignment has covered two factors which are the role of PMO in periodic reviewing for the alignment of the project portfolio with the organization strategy, and whether the PMO have established and applied of the project portfolio selection criteria and mechanisms as illustrated in appendix 1.

The PMO within this organization is divisional and there is another business unit (Business Excellence and Strategy) which has the full overview for the overall organization strategy. However some of the projects that are managed by the PMO are not in alignment with the overall strategy of the organization and other projects are managed and controlled by different business units as the PMO focus is the IT related projects. Moreover, there are no clear mechanisms that can ensure the alignment of IT and no-IT projects with organization strategy. Accordingly the annual revision of organization strategy does not fully guarantee that the PMO portfolios are fully aligned with the strategy.

As for the second factor, the PMO has established a mechanism through their project management methodology for project selection. This mechanism includes criteria for selection of projects and are applies for most of the projects that the PMO manage through having what is IT projects committee.

According to what have been mentioned in those two factors, the PMO for this role can be rated in maturity level 3. The panel of experts' average results is also at level 3.

4.1.2.2 Project Screening and Integration

The project screening as mentioned previously has been covered through one factor during the interviews which was a role in new project screening, prioritization, and the recommendation for project financing and funding as illustrated in Appendix 1. The PMO of organization (A) has a role that can be rated through comprehensive mechanisms for prioritization, screening, and funding to most of the project and this is done through project management methodology.

Accordingly this PMO can be rated in maturity level 4 for this role, and the same rating has been resulted by the panel of experts.

4.1.2.3 Project and Portfolio Reviews and closing

The project and portfolio reviews and closing has been covered through two factors during interviews which are the role in project portfolio performance monitoring and compilation and the role in project gateway assessment, portfolio review and assessment, and project closing.

The resulted outcome for the first factor in organization (A) has shown that there are no clear performance monitoring system for the projects and portfolios, and that their role is limited to having some Key Performance Indicators that through which they assess the portfolios and project performance. However, and for the second factor the PMO has gateway assessment, and portfolio reviews and closing that is discussed within IT project committee meetings.

Accordingly the PMO can be rated in maturity level 3 for this role. The panel of experts' average results is also level 3.

4.1.2.4 Strategic Portfolio Results and Impact

The strategic portfolio results and impact has been covered through one factor during interviews by assessing the PMO impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function. The PMO of organization (A) assesses their impact and the benefits they deliver to the organization on a non-periodic basis and as requested by the Executive Director.

The both first and the panel of experts assessments have shown that this role is on maturity level 2.

4.1.3 Standards and Assessment

This role is has been covered through two main areas, within each there is one factor for assessment as illustrated in the following part:

4.1.3.1 Project Management Standards and Regulations

The project management standards and regulations have been covered through one factor that includes the role of the PMO in deploying project management standards, benchmarking, its implementation, and compliance. The organization (A) shown that the PMO deploy and do some benchmarking, and the standards they apply are as a part of ISO9001 and EFQM that is handled by different business unit, and they ensure compliance to those standards.

Accordingly this role can be on maturity level 3. The average assessment for panel of experts has shown that it is also on level 3.

4.1.3.2 Maturity Assessment

The maturity assessment is conducted to assess how far the PMO against certain standards. It has been covered through one factor that includes a role in conducting maturity assessment against certain standards and criteria and

proposing corrective initiatives. As for organization (A) PMO, they never have this role but sometimes they got certain assessment based on some related standards like EFQM and excellence awards, and evaluating the team's ability in managing projects.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.1.4 Performance Management & Continuous Improvement

This role is has been covered through two main areas, within each there are one or two factor as illustrated in the following part:

4.1.4.1 Performance Analysis

The performance analysis is correlated with having performance monitoring system in order to analyze areas for improvement and propose corrective initiative. This function within organization (A) has been covered through two factors which are the of the PMO in performance analysis for different projects and portfolios, and conducting performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results.

Within the first factor the PMO of organization (A) has set certain KPIs and measured it in periodic basis with no clear root cause analysis for good or bad performance. While the second factor has shown the PMO of organization (A) analyze some of these KPIs if requested by the other Business Excellence and Strategy Department.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.1.4.2 Corrective Actions

The corrective action role is important to assess the PMO role in setting and applying system for corrective and preventive actions based on different

performance. The results for the PMO of organization shows that the PMO propose some corrective action based on some poor performance results for some of the KPIs that they mention to assess.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.1.5 Project Governance and Auditing

This role is has been covered through four main areas as illustrated in the following sections.

4.1.5.1 Establish Authorities, policies, and charters

This is an important governance role and involves four factors that are PMO role in the organization prepare and maintains the PMO charter including its objectives and purpose, its authorities and its alignment with the other business units, its role in developing project management policies and guidance for all stakeholders and participation in understanding the business aspects of project management, its role in developing project classification guidance and criteria for all stakeholders and participants, and establishing and identifying clear authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities).

The PMO in organization (A) has developed the PMO charter that involve many sub-units with clear roles and responsibilities that is clarified in the organization chart and the project management methodology which is communicated to different stakeholders staff members and people within the organization. Moreover the PMO has developed a guidance manual and classification for their project according to its nature and budget. The PMO has also developed clear job description project manager clarifying their key duties and responsibilities in addition to illustrating the roles within each project plan.

Both first and the panel of experts' assessments have rated this role on maturity level 4.

4.1.5.2 Establish executive control board

This is also an important governing role that involves five factors, which are having a sponsor, who is a member of the executive management team, or executive control board, or board of directors, having a role in facilitating the executive board responsibilities by determining the executive oversight requirements, having a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition), having a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc..., and establishing policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues e.g. executive committee, steering committee, governance committee.

The resulted outcome for organization (A) has shown that Executive Director of IT is a member of the leadership team and always represents the PMO in their meetings; however the PMO has no role in facilitating or coordinating the leadership team responsibilities but they do it and IT division level especially for IT Projects Committee, and the PMO advice on the committee memberships and its composition.

From another part the PMO has supported the preparation of the Project committee operating procedures, and even sometimes they handle the secretary role for this committee, and as mentioned the PMO handle the IT Projects Committee governance relates roles.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.1.5.3 Project Audit and Reviews

The projects audit and review has been covered through four factors which are the role in establishing the audit committee as sub-group of the executive control board, the role in performing in project auditing, having clear approach for

auditing and review of audit results, and discussing the external audit results related to projects and disclosing it.

As for the PMO of organization (A), they have no direct contact with the audit committee and their direct interaction is with the audit department and accordingly they don't have any role in performing project auditing. Meanwhile the role of PMO comes to verify and ensure corrective initiatives based on the audit results.

As for the project auditing and review, the PMO can be rated in maturity level levels 1 for the first assessment. While the panel of experts average results have shown it is on maturity level 2.

4.1.5.3 Sustainability, Ethics, and code of conduct

The Sustainability, Ethics, and code of conduct have involved three main factors which are the role in establishing a standard code of conduct for environmental, social, economic, and conflict interest, the role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects, and the role in risk management of projects and overall risk management approach.

The PMO of organization (A) has no role in establishing any special code of conduct for project and HSE or ethics; however they follow the organizational code of conduct and apply the QHSE standards where applicable. From another hand the PMO and through the integrated project management methodology has established risk management mechanism that involves identification of risks during planning phase and applying mitigating actions where applicable.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

Moreover, another role that has been considered strategic for organization (A) was enhancing the project management culture through deploying different practices like training, awareness and online project management materials.

4.2 Organization (B)

4.2.1 General Information- Organization (B)

This organization has a project matrix (strong matrix) structure and work on the oil and gas area through providing different services and products. The organization has more than 1000 staff member and one project management office that is under the projects division and under the direct responsibility of the Vice president of projects. The projects represent more than 75% of operations for this organization. The PMO manage and control more than 90% of the project portfolio of the organization. Figure 5.2 represents the organization structure clarifying the area of PMO focus.

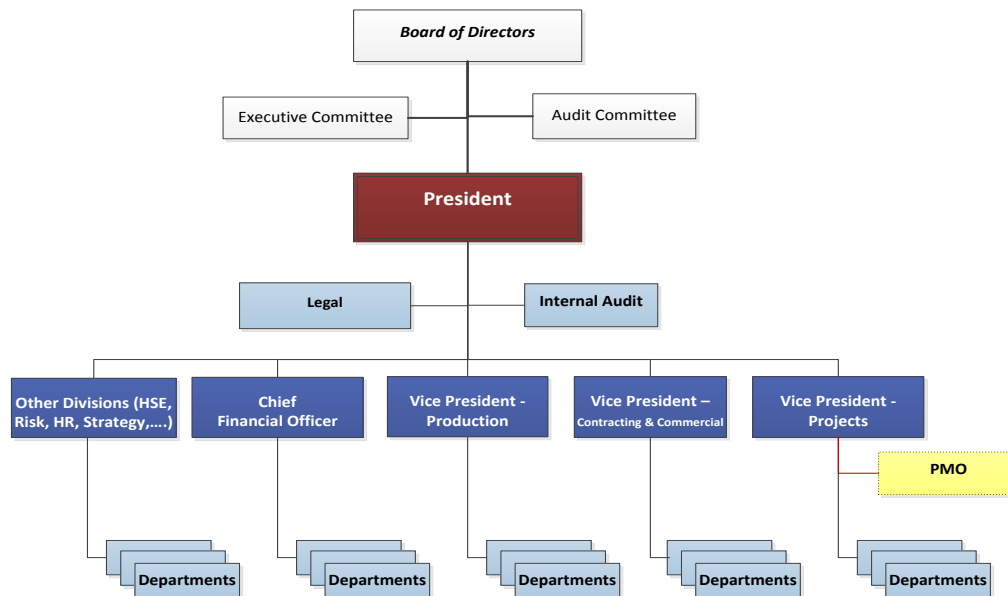


Figure (5.2): Location of PMO in (Organization B)

4.2.2 Project Portfolio Management

The Project Division has many portfolios, programs, and projects that are managed by portfolio managers (Assistant VPs), each one of them is specialized and having portfolio of projects in addition to project services that involve quality and some cost control and planning functions. As for the different functions of this part are illustrated in the coming sections.

4.2.2.1 Strategic Alignment

The resulted outcome for the strategic alignment for PMO of organization (B) has shown that since the project forms more 75% of their operations, then there strong alignment with the strategy. A continuous review always made with strategy and business development division with PMO to ensure that they are aligned with the organization strategy. This alignment has been reflected to have methodology for projects and portfolio selection which satisfy the need of the organization based on certain criteria to satisfy the goals of the company and ensure the achievement of the required profitability.

Both first and the panel of experts' assessments have rated this role on maturity level 4.

4.2.2.2 Project Screening and Integration

The results for projects screening and integration has shown that have clear procedures and policies for new project screening, prioritization, financing, and funding and this applied for all project. Such thing is done through the specialized committee constitute from VP of project, CFO, VP of contracting and commercial, VP for strategy and BD, and others according to the nature of the project.

The first assessment has rated this role in level 5 while the panel of experts' average results is on level 4.

4.2.2.3 Project and Portfolio Reviews and closing

The PMO of organization (B) has shown that they have full performance management system for project through which they can fully monitor all projects and portfolios in all levels. Moreover the PMO conduct gateway reviews and assessment and participate in projects closing and opening for certain projects especially those who strategic projects.

Both first and the panel of experts' assessments have rated this role on maturity level 4.

4.2.2.4 Strategic Portfolio Results and Impact

The PMO in a periodic basis assess the impact and the role of the PMO in costing saving and its impact profitability, and other important indices and are reported during the Executive Committee meetings.

Both first and the panel of experts' assessments have rated this role on maturity level 4.

4.2.3 Standards and Assessment

The organization deploys many international standards in many areas, but it is not the key responsibility of the PMO as illustrated in the following parts.

4.2.3.1 Project Management Standards and Regulations

The PMO of organization (B) is in adherence with all standards implemented within the organization, but they are not responsible for its implementation as there are quality unit which is reporting to the VP of project is responsible for issues related to the quality and related standards.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.2.3.2 Maturity Assessment

On occasion maturity assessment is being conducted to assess maturity especially for awards related issues as the company participates in many quality and HSE related awards.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.2.4 Performance Management & Continuous Improvement

The performance management and continuous improvement for organization (B) is reflected in the following parts:

4.2.4.1 Performance Analysis

The PMO in a continuous basis is conducting performance analysis for its projects and portfolios and usually on monthly or quarterly basis according to the nature of the project, and analysis reports are submitted to the VP of projects and Executive committee to take actions in this regard. From another hand the PMO conduct some analysis for operational efficiency and technical and financial performance, however other business units are responsible for stakeholders satisfaction.

Both first and the panel of experts' assessments have rated this role on maturity level 4.

4.2.4.2 Corrective Actions

As for the corrective actions, the company has clear corrective and preventive action mechanism, however and during the management meetings actions are taken for bad performing projects.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.2.5 Project Governance and Auditing

The role of the PMO in project governance and auditing is as clarified on the following sections.

4.2.5.1 Establish Authorities, policies, and charters

The PMO of organization (B) has established its own roles and responsibilities and has clarified roles objectives and performance measures that are followed on periodic basis. Moreover the PMO has developed clear project management procedures for each project that are amended periodically and are communicated through the internal web gate. The project management procedures include classification guidance for each project depending on its

nature and budget. Moreover our project managers have clear roles based on the nature of the projects.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.2.5.2 Establish executive control board

The PMO in organization has off course the VP for project as sponsor for its work who has membership in many leadership committees in addition to his reporting to the General Manager. The PMO has the full oversight for all projects and portfolios of the organization, therefore inputs from them always exist for management review in most of the meetings. However the PMO has no role in facilitating any of the board parameters or its memberships in addition to no role in setting any operational procedures for them.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.2.5.3 Project Audit and Reviews

Concerning project auditing, the PMO has no role in project auditing, and they got audits from the internal audit department who do this on periodic basis. However once investigations are required the PMO might participate in the auditing assignment. From another hand, the PMO has a strong role in ensuring correcting any audit findings through proposing changes to the procedures and project policies to ensure adherence to the internal audit code of practice.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.2.5.3 Sustainability, Ethics, and code of conduct

Although the organization has strong focus on sustainability and HSE related practices and standards, the PMO is just adhering to those conducts and code of practices and ensure the application of the organization procedures. From

another hand the PMO has special risk assessment procedures that is in full alignment with the organization overall risk management system.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.3 Organization (C)

4.3.1 General Information- Organization (C)

This organization a functional structure and projects represents less 20% of its operations. The organization operates with more than 400 staff. The project office is located within the business excellence department which is under the direct supervision of Director of Support Operations. Figure 5.3 represent the location of the PO within the structure of the organization.

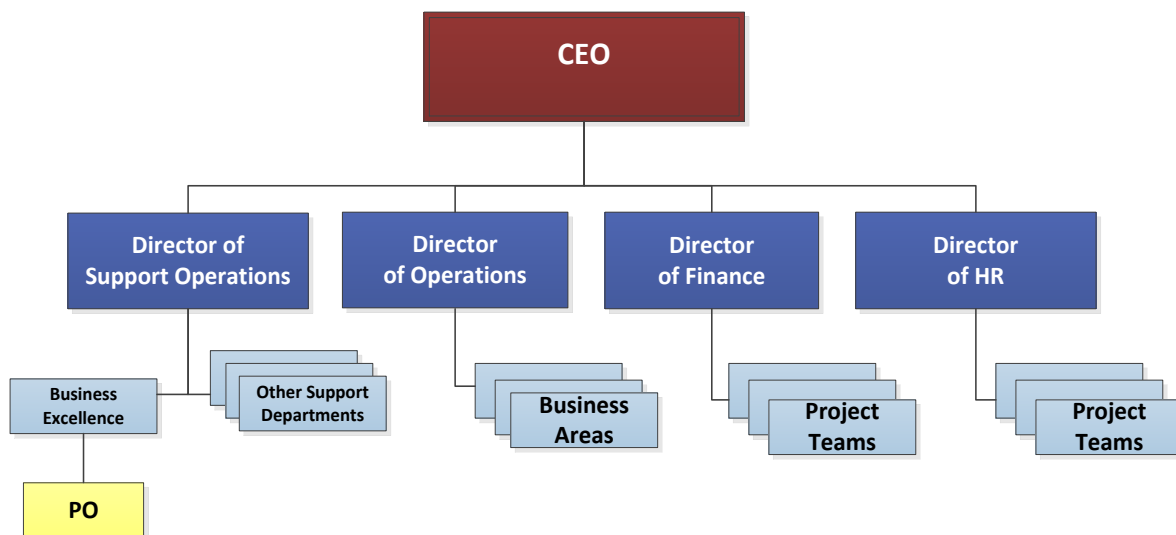


Figure (5.3): Location of PMO in (Organization C)

4.3.2 Project Portfolio Management

As the project office has a supporting role within the business excellence department, they just have coordination and performance monitoring role at project level, and other project management functions are handled by business unit has the project.

4.3.2.1 Strategic Alignment

Although the projects represents less than 20% of overall operation of the company, but the projects are strongly aligned with the organization strategy as decisions are made for the projects after strong revision and alignment from the top management and after studying the different parts of costs and impact of the project and other criteria and conditions. However; the role of the PMO is slightly limited in this issue as they mostly focus on project achievements and performance.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.3.2.2 Project Screening and Integration

As mentioned previously, the project screening and integration functions are mostly performed by the executive management with some support from the concerned business unit. However; since the PMO has certain functions of driving project management culture, some business units are using such methodologies for that.

Both first and the panel of experts' assessments have rated this role on maturity level 1.

4.3.2.3 Project and Portfolio Reviews and closing

The PMO is periodically reviewing the performance of the projects through a matrix of KPIs at corporate and project levels and submit monthly reports for that. Some assessments for the performance of after each milestone are also done, and for few projects the PMO participate in projects closing.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.3.2.4 Strategic Portfolio Results and Impact

The project office is not that much old one and its role is slightly limited, therefore no major assessment have been made to its role and impact, however and as a part of corporate performance measurement, some measurements are made for certain KPIs to assess the project office achievements.

Both first and the panel of experts' assessments have rated this role on maturity level 1.

4.3.3 Standards and Assessment

The organization is not certified for any standards; however they consider its requirements through their procedures.

4.3.3.1 Project Management Standards and Regulations

The PO doesn't implement project management standards but they consider its requirements through the operational procedures. However; the PO participated in some benchmarking exercises that are done at organizational level.

Both first and the panel of experts' assessments have rated this role on level 1.

4.3.3.2 Maturity Assessment

No maturity assessment has been conducted for the PO and its role or operations, however the PO do some assessments for the projects and teams and its level of maturity on some occasions.

Both first and the panel of experts' assessments have rated this role on maturity level 1.

4.3.4 Performance Management & Continuous Improvement

The performance management continuous improvement function was different and relatively mature function comparable to the other functions as will be illustrated in the following parts.

4.3.4.1 Performance Analysis

The PMO through a matrix of KPIs analyses the performance of the projects and the achievements comparable to the planned objectives and report it on a monthly basis, and track specific financial, customers and stakeholders satisfaction through the corporate Dash Board that are prepared by the performance measurement unit.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.3.4.2 Corrective Actions

The quality section has set up corrective action mechanism within the organization, and accordingly the PO takes some actions where it is required, however the PO itself is not responsible for taking actions for poor performance of the projects which is the responsibility of business unit and project managers.

Both first and the panel of experts' assessments have rated this role on maturity level 3.

4.3.5 Project Governance and Auditing

The role of the PO in this area is as clarified in the following sections.

4.3.5.1 Establish Authorities, policies, and charters

As a part of the organization structure, the PO has specific roles and responsibilities that are illustrated within the department structure in addition to the job descriptions for each staff member in the organization. The PO has prepared some corporate project management procedures that are communicated to all business units, and an internal quality audit is being done based on those procedures but from different sections.

The PO has developed classifications of the project based on its impact, risk, cost, and business units involved. The classification affects decision making and

different authorities of the project managers which have specific roles that are clarified during project planning phases of the projects.

According to this the overall maturity level for this role is at level 3 which is similar to what have been rated by the panel of experts.

4.3.5.2 Establish executive control board

Since the PO is located within department level, there two layers of management to reach to the management team of the company. The PO sometimes facilitate some committees meetings and attend it as part of project reviews and assessments; however they don't have clear role in setting parameters for the board committees, however for certain projects the PO set the frequency of meetings, memberships, and roles but at projects level not at corporate level.

Both first and the panel of experts' assessments have rated this role on maturity level 2.

4.3.5.3 Project Audit and Reviews

The projects audit function is handled by other business units; therefore the PO has no interaction with auditing related functions; however the quality auditing is handled by the quality staff within the same department. But sometimes and as a part of corrective action mechanism, the PO handle some changes to the project management practices.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 1.

4.3.5.3 Sustainability, Ethics, and code of conduct

The organization has strong focus on HSE and corporate CSR related practices through having different certifications and initiatives for this regards. This has been reflected to the projects of the company, however it is not the responsibility of the PO to handle such issues, but they take some actions during project planning to force the adherence to such functions. As a part of project

management procedures, the PO has a risk management mechanism that tries to apply through different business units. As for the company code of conduct, the PO staff and all organization staff adhere to the organization code of conduct.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 3.

4.4 Organization (D)

4.4.1 General Information – Organization D

This organization has a functional structure and provides services to the public through having different sectors each of them is provide different type of business and have its own services and projects, and all support and shared services are provided through corporate divisions. The organization has more 1000 staff member. The PMO is named as Strategy Department and handle the role and functions of the PMO. The projects represent 50-80% of the organization operations. Projects offices are available in each sector with the Executive Director Office and are responsible for providing data to the strategy department “the corporate PMO” and each office has different project portfolios. The strategy department has been rated as advanced PMO and divisions are rated as project offices due to the staff of it and its location on the executive directors' offices. The strategy department control around 80% of the projects within organization as some projects are done within division and are not covered in this area which focus on the strategic projects. Figure 5.4 represents the organization structure for organization (D).

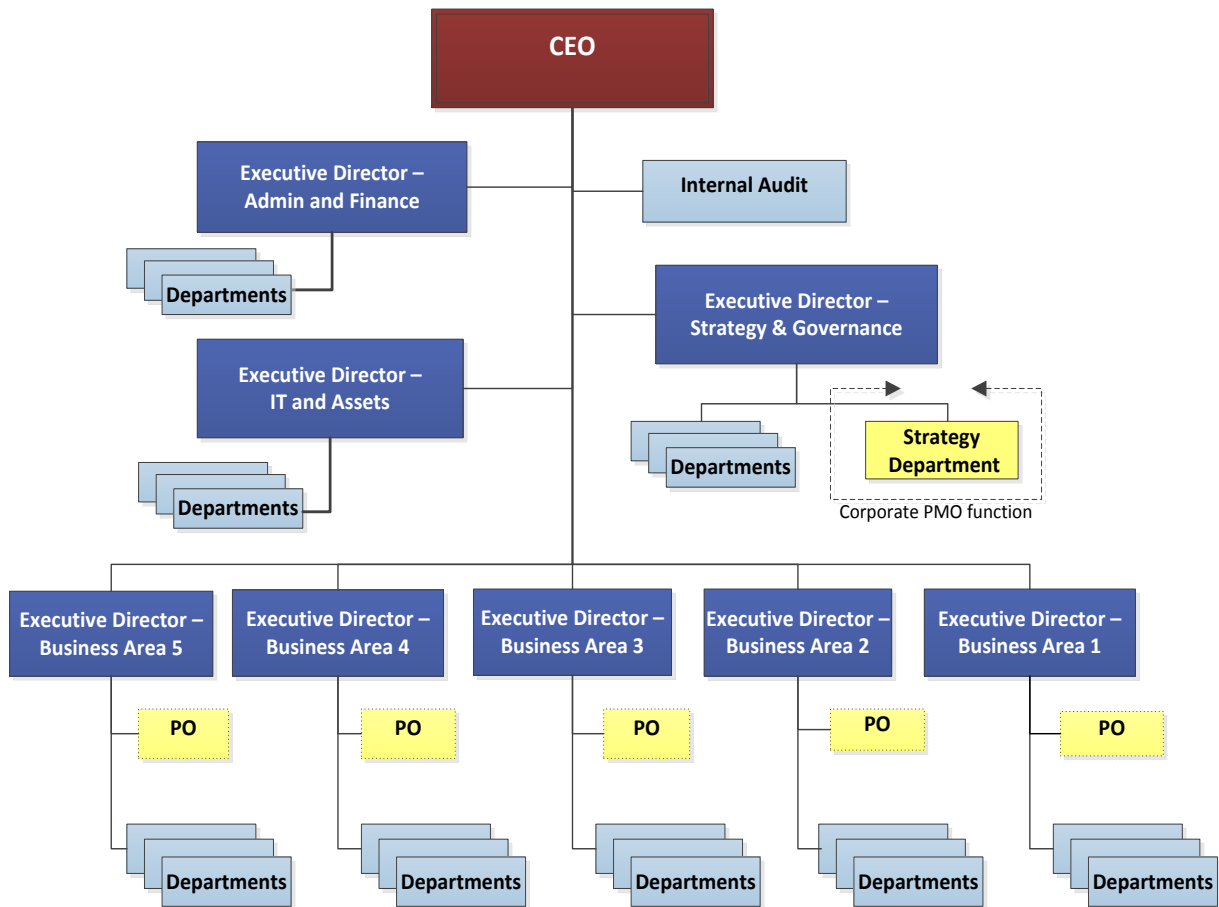


Figure (5.4): Location of PMO in (Organization D)

4.4.2 Project Portfolio Management

The PMO and as illustrated for organization (D) has corporate project management office and sub project offices within each business unit which are usually responsible for one portfolio and series of projects and programs. The role of corporate PMO is almost strategic and don't coordinate or supervise any project within the business units which is the responsibility of the project offices (Executive Director Office).

4.4.2.1 Strategic Alignment

The resulted outcome for organization (D) has shown that the corporate PMO has strategic role in setting and reviewing policies and methodologies that ensure the alignment with the organization strategic directions and vision. The PMO is

also responsible for developing mechanism that helps business units to prioritize the projects through clear procedures and criteria through what is called portfolio management system.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.4.2.2 Project Screening and Integration

As mentioned previously, the corporate PMO is responsible for establishing and reviewing the portfolio management system which include policies and regulations for prioritization, screening for projects and portfolios. The funding for project and the cost control are performed by different business units.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.4.2.3 Project and Portfolio Reviews and closing

The corporate PMO has an integrated performance measurement system that ensures the assessment of project performance and effectiveness on quarterly basis. The Corporate PMO doesn't do gateway assessment and project closing which is sometimes are done in project offices level.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.4.2.4 Strategic Portfolio Results and Impact

Concerning assessing the results and impact, the corporate PMO has done such things once and on non-periodic basis for purposes of assessing its performance. Moreover some KPIs are for assessing the performance of the PMO itself is measured on periodic basis.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 2.

4.4.3 Standards and Assessment

The organization is certified to some international standards in many areas, the PMO is not responsible for applying it; however the corporate PMO can ensure applying any standards through its portfolio management system.

4.4.3.1 Project Management Standards and Regulations

The corporate PMO and project offices don't apply certain standards, however they must adhere the standards that are applied QHSE department which is the ultimate responsible unit for that.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 3.

4.4.3.2 Maturity Assessment

As for the maturity assessment, a periodic assessment and reviews are conducted to ensure providing better services with the optimum efficiency, however this assessment are made for all functions not only for the PMO but it's been done for project as part of that. Those assessments are made against some international standards like EFQM.

The first assessment has shown that the maturity level for this role is 3, while the panels of experts' assessment have shown that it is on level 2.

4.4.4 Performance Management & Continuous Improvement

The performance management and continuous improvement for organization (D) is as illustrated on the following parts:

4.4.4.1 Performance Analysis

Through the performance management system, the corporate PMO follow and assess the achievements and performance of the projects and portfolios, and report are prepared for the CEO and board of directors about it.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.4.4.2 Corrective Actions

This function is being correlated with the performance management system, and has procedures that include assessing results out of the performance, and determine root causes for performance, assigning responsibilities, and following implementation of those actions bases on that. Moreover sometimes preventive actions are also made for that. However, this might not cover different projects and focus only on certain levels of projects.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.4.5 Project Governance and Auditing

This function involves the details clarified on the following sections. However since the projects represents around 50% of the organization operation, then project governance can ensure high level of overall corporate governance.

4.4.5.1 Establish Authorities, policies, and charters

As a part of organizational roles and responsibilities the corporate PMO roles and responsibilities are clearly identified in addition to have clear structure and sections within it. Furthermore; the corporate PMO is maintaining portfolio management system which has many sub project systems that include methodologies and policies at all levels and provide classification for projects based on its specific criteria (budget, staff, priority...). Since the organization has functional structure then many of project managers are department managers, and there roles and responsibilities are decided during planning phases of the projects in addition to the job descriptions.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 3.

4.4.5.2 Establish executive control board

The PMO has an executive director who is a member of the management team as he is responsible for the organization overall governance and strategy. Moreover and through the performance management and plans follow up sections, the PMO has an oversight for all operations and projects within the organization. From another the PMO has no role in setting any parameters for the board of directors or any sub committees or groups in addition it has no role in setting the executive board operating procedures or any of the committees as there are specific office at the CEO office responsible for such roles and responsibilities.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 2.

4.4.5.3 Project Audit and Reviews

The function of audit is being handled by the internal audit department which has four sub sections; one of them is project auditing. However the internal audit department has clear auditing approach for auditing that involve taking actions and submitting findings to specialized board of directors group. However; based on some findings the corporate PMO might do some changes and corrective initiatives for the projects and portfolio systems.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 1.

4.4.5.3 Sustainability, Ethics, and code of conduct

Concerning the sustainability, ethics, and code of conduct, the organization has focus on this role, but not through the project management office. However; the PMO adhere to the organization HSE, conducts, and sustainability related issues and they follow the organization standards. From another hand; the risk management is handled by different department within the same division and has focus on projects and non-projects related risks.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 2.

4.5 Organization (E)

4.5.1. General Information- Organization (E)

This organization has project team structure and provides services to clients through projects and projects constitute more than 90% of its operations. The organization has around 100 staff members. The project management office is reporting to the General Manager of the company. All core business related projects are managed through the PMO and that represents more than 99% of the organization projects. Figure 5.5 represents the organization structure for organization (D) and the PMO location.

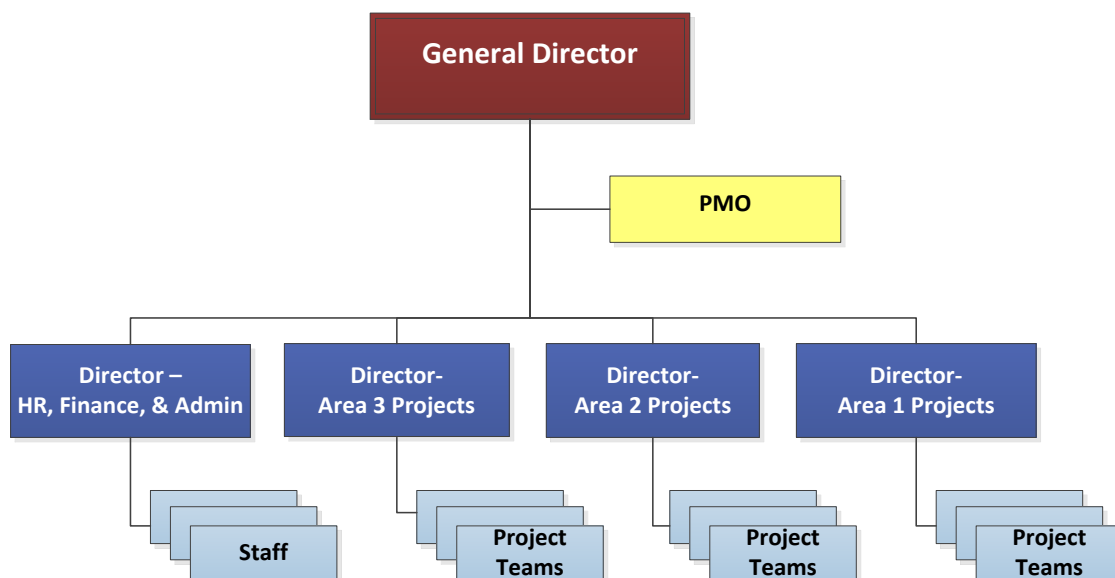


Figure (5.5): Location of PMO in (Organization E)

4.5.2 Project Portfolio Management

As mentioned previously, the company core business is built upon projects. Therefore the projects of the company are ultimately their strategy and their road map. Each director of business area represents a portfolio or program manager who has sub teams and project managers working under their direct supervision as will be illustrated in the following sections.

4.5.2.1 Strategic Alignment

Since the business of the company is executed through projects, then the organization has full focus on their strategy, and on continual basis revisions are made for the achievements of different areas of the projects and portfolio and propose new businesses that constitute the organization strategy. This is done through having project management methodology. This methodology include some criteria for projects selection; however the final decision for going with projects are made through the decision makers who have the full authority for that to ensure business development and improvement.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.5.2.2 Project Screening and Integration

The PMO and based on decision makers' directions set and provide project directors with prioritization and give recommendation for the team allocation in addition to the screening and funding of the projects. However this requires direct interaction with the finance and project directors.

The first assessment indicated that the PMO is on maturity level of 4 for this role as well as the panel of experts' results has shown the same results for this role

4.5.2.3 Project and Portfolio Reviews and closing

The PMO has full focus on reviewing and monitoring the projects to ensure the optimum efficiency of the projects and portfolios. Therefore they monitor the projects on continuous basis. Management meetings are conducted on biweekly basis to oversee achievements and obstacles, and through those meetings assessments for the phases are made and monitor delays.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.5.2.4 Strategic Portfolio Results and Impact

As for assessing the PMO impact and results and strategic advantage to the organization, it was clear that they do no assessment however on occasions and for the board of directors purposes, they presents some achievements that might enhance the compensation and bonuses of the PMO staff.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 2.

4.4.3 Standards and Assessment

The organization has some certifications with international standards in many areas, and that help in contracting and creating new businesses, but the PMO is not responsible for this function as it is the responsibility of the quality team; however the projects teams have to adhere to these standards as some of it re part of certain contracts.

4.5.3.1 Project Management Standards and Regulations

The PMO is not responsible for standards; however the PMO can force the project teams to apply such standards through the project management methodology. Additionally, they must follow certain requirements as per those standards. It appears that the PMO is also sometimes trying to incorporate certain project management standards within its methodologies.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 3.

4.5.3.2 Maturity Assessment

As for maturity assessment, no periodic or non-periodic assessment are been done for the PMO maturity, and the assessments are been done just assess some projects performance based on certain criteria.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 2.

4.5.4 Performance Management & Continuous Improvement

Concerning the performance management continuous improvement; it's been shown normal and standard level of maturity as illustrated in the following parts.

4.4.4.1 Performance Analysis

Through a matrix of KPIs and measures, the PMO is monitoring the projects performance and using some project management IT tools. The PMO has strong focus on this as the financial efficiency is strongly required in this organization. The upmost aim of the collection of these measures is to be reported to the General Manager and decision makers. The KPIs involve analysis for stakeholder satisfactions and complaints, financial performance, technical performance and others.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.5.4.2 Corrective Actions

The corrective action mechanism is effective, however the actions and initiatives are taken based on decision makers requirements and orders not as organizational approach implemented everywhere.

The first assessment for this role is level 3 while the panel of experts' average assessment is level 2.

4.5.5 Project Governance and Auditing

The projects represents the business of the company, therefore the strong project governance will guarantee strong corporate governance.

4.5.5.1 Establish Authorities, policies, and charters

The organization has established clear functions, roles and responsibilities for the PMO and maintains it, in addition to the establishing job descriptions for each staff member in the organization. Authority matrix for decision making has been also established to ensure that each project manager and director knows his/ her authority levels and accountabilities. Additionally some other policies and determinants are communicated for the projects teams through the intranet of the company. Projects of the company are classified according to its nature as products and services are grouped under portfolio, and according to this projects are segmented and classified in addition to the segmentation based on budget and fees. Moreover each project personnel have detailed job profile that illustrate its roles and responsibilities and clarify it in addition to the authority matrix.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 4.

4.5.5.2 Establish executive control board

The head of the PMO is a key member in the management team and is the sponsor for the PMO work and have direct report to the General Manager accordingly can be named as the strategic advisor for the company. Moreover and illustrated previously the PMO has the full oversight for all projects and all information about it and such oversight help for reporting to the board of directors of the company. However and concerning the PMO has no role in establishing any operating procedures for the board of directors or any committees as it is performed at different levels. But the head of PMO sometimes provide advice for key strategic issues of the company as illustrated previously in addition to his membership in the management review group of the company.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 3.

4.5.5.3 Project Audit and Reviews

The auditing function has been outsourced for specialized company who handle the function of internal auditing. However; the results of auditing are reported to the management team for review and decision making and actions are taken based on audit findings. The PMO sometimes do some performance auditing to ensure projects are going according to plans in addition to the internal quality auditing that is conducted by quality function.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 2.

4.4.5.3 Sustainability, Ethics, and code of conduct

The PMO as a part of any project have set a code of conduct that project team need to commit to it, and this code includes confidentiality and secrecy of the client which is reflected within the project management methodology. Moreover, the PMO is committed to standards of health and safety proposed by the Administration department and quality functions and adheres to its objectives and policies. Concerning the risk management, and as the PMO is trying to apply internal practices of project management, they deploy certain practice of risk management in the projects and this is mentioned through the project management methodology.

Both first assessment and the averages results of panel of experts' have rated this role on maturity level 3.

5.0 Conclusions and Recommendations

5.1 Conclusions

5.1.1 General Conclusions

According to the analysis and discussion in section 4 of this research paper, the overall maturity of the five PMOs as per the first assessment and the panel of experts can be illustrated as in the Tables 5.1- 5.4 for each particular strategic and governing role of the PMO.

- Project Portfolio Management

Sub role	Assessment	Maturity Level				
		PMO (org. A)	PMO (org. B)	PMO (org. C)	PMO (org. D)	PMO (org. E)
<i>Strategic Alignment</i>	First Assessment	3	4	2	4	4
	Panel of Experts Avg.	3	4	2	4	4
<i>Project Screening and Integration</i>	First Assessment	4	5	1	4	4
	Panel of Experts Avg.	4	4	1	4	4
<i>Project and Portfolio Reviews and closing</i>	First Assessment	3	4	2	4	4
	Panel of Experts Avg.	3	4	2	4	4
<i>Strategic Portfolio Results and Impact</i>	First Assessment	2	4	1	2	2
	Panel of Experts Avg.	2	4	1	2	2

Table (5.1): Comparison of PMO maturity results/ Project Portfolio Management Role

- Standards and Assessment

Sub role	Assessment	Maturity Level				
		PMO (org. A)	PMO (org. B)	PMO (org. C)	PMO (org. D)	PMO (org. E)
<i>Project Management Standards and Regulations</i>	First Assessment	3	3	1	3	3
	Panel of Experts Avg.	3	3	1	3	3
<i>Maturity Assessment</i>	First Assessment	2	3	1	3	2
	Panel of Experts Avg.	2	3	1	2	2

Table (5.2): Comparison of PMO maturity results/ Standards and Assessment Role

- Performance Management & Continuous Improvement

Sub role	Assessment	Maturity Level				
		PMO (org. A)	PMO (org. B)	PMO (org. C)	PMO (org. D)	PMO (org. E)
<i>Performance Analysis</i>	First Assessment	2	4	3	4	4
	Panel of Experts Avg.	2	4	3	4	4
<i>Corrective Actions</i>	First Assessment	2	3	3	4	3
	Panel of Experts Avg.	2	3	3	4	2

Table (5.3): Comparison of PMO maturity results/ Performance Mgmt. & Continuous Improvement Role

- Project Governance and Auditing

Sub role	Assessment	Maturity Level				
		PMO (org. A)	PMO (org. B)	PMO (org. C)	PMO (org. D)	PMO (org. E)
<i>Establish Authorities, policies, and charters</i>	First Assessment	4	3	3	3	4
	Panel of Experts Avg.	3	3	3	3	4
<i>Establish executive control board</i>	First Assessment	3	2	2	3	3
	Panel of Experts Avg.	3	2	2	3	3
<i>Project Audit and Reviews</i>	First Assessment	1	2	1	1	2
	Panel of Experts Avg.	2	2	1	1	2
<i>Sustainability, Ethics, and code of conduct</i>	First Assessment	3	3	3	2	3
	Panel of Experts Avg.	3	3	3	2	3

Table (5.4): Comparison of PMO maturity results/ Project Governance and Auditing

The assessments of the panel of experts were almost consistent with the first assessment with exception to four differences which are:

- The Project audit and review role in organization A
- The Project screening and integration role in organization B
- The Maturity Assessment role in organization C
- The Corrective Actions role in organization D

The differences can be considered one of the research limitations, however variation were in one level of maturity and do not affect the overall assessment of the of PMO maturity. These differences were normal and healthy because of the different point of views and experiences. The overall average maturities resulted

out the first and panel assessments for the five PMOs are as illustrated in Table 5.5.

PMO	Org. A	Org. B	Org. C	Org. D	Org. E
First Assessment	2.67	3.33	1.92	3.08	3.17
Panel of Experts Avg.	2.61	3.28	1.92	3.03	3.11
Average Maturity Level	Level 2-3	Level 3-4	Level 1-2	Level 3	Level 3-4

Table (5.5): PMOs Overall Maturity Results

Since the maturity level 5 indicates the high level of contribution and impact to the corporate governance and organization strategy and the maturity level 1 indicates the lowest level of contribution, and according to the results illustrated in Table 5.5 and the outcomes resulted from the five PMOs, it can be concluded that each type of organization structures, the PMO has a different contribution to the corporate governance and organization strategy. Therefore the main proposition of the research is moderately supported, and for the sub propositions, the below are resulted:

- The PMOs in organizations with functional structures have low to medium contribution to the corporate governance and organizational strategy. This has partially supported the assumed proposition.
- The PMOs in organizations with functional matrix structure have medium contribution to the corporate governance and organizational strategy. This has supported the assumed proposition.
- The PMOs in organizations with project matrix structure have medium to high contribution to the corporate governance and organizational strategy. This has supported the assumed proposition.
- The PMOs in organizations with project team structure have medium to high contribution to the corporate governance and organizational strategy. This has partially supported the assumed proposition.

Accordingly the conceptual framework is amended as illustrated in Figure 5.1.

Other conclusions have been drawn out of this research are expressed below:

- Project Governance and Corporate Governance:** The project governance is a very important part of the overall corporate governance regardless of the organization nature of type structure. However; the project governance in a more projectized organizations have more contribution and even the corporate governance function are becoming enterprise project governance. Therefore; the more mature PMO will ensure more mature project governance which will support the corporate governance.

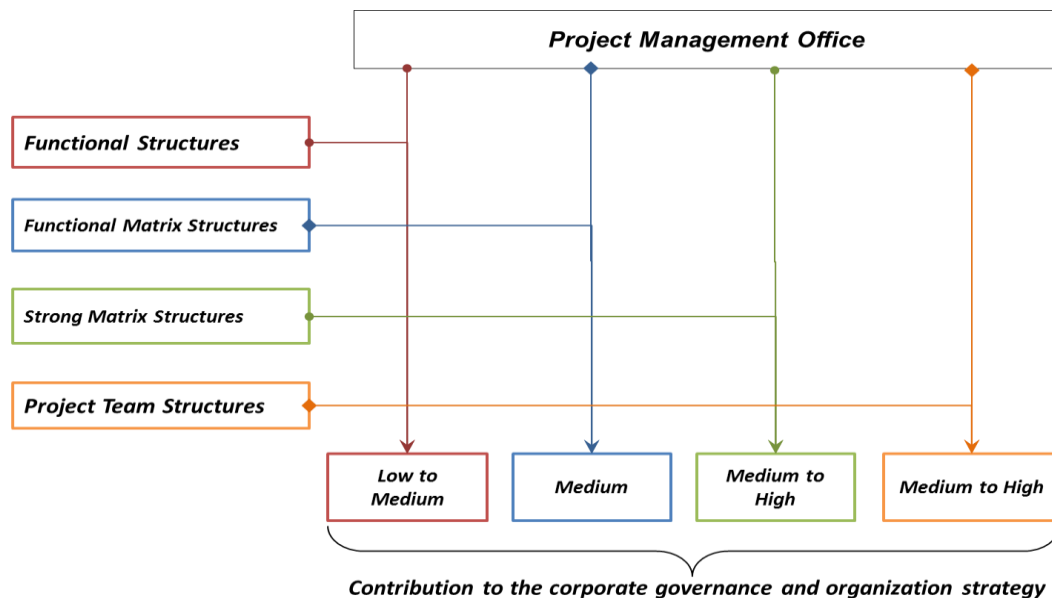


Figure (5.1): Revised conceptual Framework

- The organization strategy:** The projects are the vehicle that realizes the organization strategy; therefore the PMO represents the driver who controls this vehicle under the directions of top management or decision makers.
- PMO Maturity and contribution:** The PMOs have different roles and responsibilities that vary from organization to other, in addition to having variable contribution depending on the level projects within the organization. The contribution to the organization overall success and specifically to its governance and strategy will increase with moving towards project team structures. However; in some non projectized organizations, the PMO might have medium contribution to the organization governance and strategy depending on other factors.

- **Other factors affecting the PMO contribution:** Not only type of organization structure might affect the PMO contribution to the organization but there are several factors might play role of that, and might include:
 - The maturity of project management culture.
 - The location of the PMO within the organization (corporate or divisional).
 - The number of organization staff.
 - The organization industry.
- **Percentage of project to the overall organization operations:** The approach and maturity of project management varies between organizations. The PMO contribution and impact to the overall corporate governance and strategy is increasing with increasing the percentage of projects to overall operations regardless of the type of the organization structure. The results of this research has shown the following:
 - The PMOs in organizations with lesser project percentage to the overall operations have limited governance and strategy related roles, while the PMOs in organizations with higher project percentage to the overall operations have higher roles in the governance and strategy. Table 5.6 shows the resulted outcomes from this research.

#	Organization	Percentage of Project to overall operations	Maturity Level
1	PMO (organization C)	Less than 20%	Level 1-2
2	PMO (organization A)	21% - 50%	Level 2-3
3	PMO (organization D)	50%-85%	Level 3
4	PMO (organization B)	50%-85%	Level 3 – 4
5	PMO (organization E)	85%-100%	Level 3 – 4

Table (5.6): Comparison between percentage of projects and maturity level

5.1.2 Specific Conclusions

This part illustrates specific conclusions as per the key strategic and governing role covered within the cases.

- **Project Portfolio Management:** This key role was the most mature role out of the four key roles for all the PMOs. Four of the PMOs that have been researched have shown maturity level more than 3 in this key role. This

indicates that the PMOs regardless of its position have focus on the role of project portfolio management functions. This is supported Hill (2008) and many other researchers who focused on this function as key role for the PMO.

- **Standards and Assessment:** This role was one of the least mature roles for the PMOs researched. This indicates that PMOs are mostly adhering to standards that are required from different business units within same organization although applying project management standards is a project management function.
- **Performance Management & Continuous Improvement:** This key role has some variation between different PMOs from level 2 to level 4. Although this role can ensure continuous improvement through learning and monitoring and might affect many functions of the PMO, there was limited focus on this function on the organization as highly projectized organizations can have high impact on their performance and improvement functions.
- **Project Governance and Auditing:** This function is discussed in details in the sub-roles:
 - Establish Authorities, policies, and charters: This function shows a level of maturity more than 3 for all PMOs of this research. This gives an indication that there is a focus on determining the roles, responsibilities, and the authorities of the PMOs.
 - Establish Executive Control Board: None of the PMOs were having a role on the highest level of management role i.e. board of directors' level. However; some of them are handling this role of divisional level.
 - Project Auditing and Review: None of the PMOs of organizations covered in the research in UAE have role in project auditing and review, as this function is handled by different business units within organization usually Internal Audit Department. This has supported what some researchers stated that the project auditing shall not be the responsibility of the PMO to assure independency of the auditors and also satisfies the international auditing practices.

- Sustainability, Ethics, and code of conduct: This role is also similar to what have been mentioned in standards and assessment role as mostly such roles are handled by different business unit usually Quality or other support departments. However; the more projectized structures PMOs shows focus on applying risk management mechanisms as a part of their project management approach.

5.2 Recommendations

The recommendations hereafter are segmented according to the receiver of the recommendation.

5.2.1 Recommendations for Project Management Offices staffs

- It is recommended to increase and enhance the PMO maturity and roles regardless whether it has corporate or divisional level regardless of the top management support. This can show how important the PMO is and help to show the impact and advantages of the PMOs in organizations. It is also recommended to focus on communications, cooperation, and support to the other business units within the same organization.
- For all the five organizations, both of the Standards and assessment and the Performance Management & Continuous Improvement roles of PMOs can be better improved and enhanced internally without too much involvement from other units and decision makers.

5.2.2 Recommendations for policy makers

- The benefits and outcomes of the PMOs are strategic and more on the long term. Therefore it is recommended to give the PMOs the corporate and organizational role as this will definitely help in more successful projects, strong governing structures, and successful implementation for the organization strategy. Moreover; it is recommended that all projects within the organization to be reported to one PMO regardless of its name or the

other divisional project offices which are also recommended in big organizations.

- Having a corporate/ enterprise PMO and many divisional project offices for organizations (A) and (C) will facilitate the role of the corporate PMO and will ensure better project governance and strategic role as through this the role of the corporate PMO will be cascaded to the divisions and facilitate applying corporate project policies and procedures.
- The project auditing is very important function that shall be maintained and implemented in all organizations. Having such role will support the internal auditing function which is a key factor to ensure strong corporate governance structure regardless whether it is handled by the PMO or other business units keeping in mind the independency of the unit that is responsible for this function, and in organizations (B), (D), and (E) the PMOs were dependents units.
- Within organization (E), the role of project governance and auditing is recommended to be enhanced as the organization is fully projectized and the PMO can play better in role in establishing control board, project reviews, and the sustainability and HSE related issues.

5.2.3 Recommendations for future research

The following aspects are recommended for future researchers:

- With the increasing demand and need for the PMOs, it is recommended to conduct researches on criteria for assessing the PMO maturity based clear rating and scale system is highly recommended for all functions and roles of the PMO. This will provide organizations with a valuable input in setting up PMOs according to their needs and requirements.
- To conduct a quantitative research for all aspects discussed within this paper as this will help to cover more organizations and cover the contribution through some specific classification i.e. number of staff, organization industry, percentage of projects in organization, and others.

- Further researches can be made and cover the different five types of organization structure (functional, functional matrix, Balanced, Matrix, project matrix, and project team structures).
- Researches on the effect of the PMO on the organizations within UAE is also recommended as there are many worldwide studies covering this area which mostly not covering in UAE. The effect could involve cost saving, organization results, people satisfaction and perceptions, etc...
- Other researches work can also covers the PMO staffing, structures, experience, and establishing new PMO.

6.0 Appendices

The following are list of appendices

#	Appendix #	Clarification
1	Appendix 1	Questions
2	Appendix 2	Data Comparisons
3	Appendix 3	Panel of Experts Results

Appendix (1): Questions used for the interviews



The role of Project Management Office (PMO)

As driver for governance and strategy for Organizations in UAE

The following questions have been made as a part of British University in Dubai (BUiD) requirements to achieve MSc degree in Project Management. Filling this survey will not hold any obligation for the filler or its organization and the results of will be used for the scientific researches purposes only.

This study aims to criticize the impact of the PMO to the organizations overall governance and strategy, and how this impact might differ depending on the type of organization structure and the PMO level of maturity.

Thank you

Amin Ibrahim

Part One: General Demographic Information	
(1)	What type of organization structure does your organization have?
a)	Functional Structure
b)	Weak Matrix (Functional Matrix) Structure
c)	Balanced Matrix Structure
d)	Strong Matrix (Project Matrix) Structure
e)	Projectised (Project team) Structure
(2)	How Many Project Management Office (PMO) does your organization have?
a)	1 PMO
b)	2 PMOs
c)	More than 2
(3)	How can you classify your PMO/ PMOs position?
a)	Corporate/ Enterprise Office: (please specify to whom it reports).....
b)	Divisional Office: (Please specify in which department/s).....
(4)	As a percentage, how much do the projects represents comparable to overall operations?
a)	85%-100%
b)	50%-84%
c)	20%-50%.....
d)	10%-20%
e)	Less than 10%
(5)	As a percentage of overall projects, how much do of these are managed by the PMO?
a)	More than 80%.....
b)	60% - 80%.....
c)	40% - 59%.....
d)	20% - 39%.....
e)	Less than 20%.....

Part 2.1: Project Portfolio Management	
2.1.1 Strategic Alignment	
(1)	Do the PMO in your organization have a role in periodic reviewing for the alignment of the project portfolio with the organization strategy?
a)	Yes, our PMO have major role in managing policies & guidance for projects strategic alignment
b)	Yes, mostly as our PMO have comprehensive project portfolio management alignment methodology
c)	Yes, but not fully applied, however we have established processes for project alignment
d)	No, we don't do this but we introduced some concepts related strategic project alignment
e)	No, we don't do this but we provide reports if requested
f)	None of above (please describe):.....

(2) Do the PMO in your organization established and applied of the project portfolio selection criteria and mechanisms?
a) Yes, our PMO have mature portfolio selection mechanism that is applied to all portfolios
b) Yes, our PMO have clear selection criteria and mechanism that's mostly applied to our portfolios
c) Yes, but not applied everywhere, however we have developed criteria for project selection
d) No, but we are introducing such concepts for future improvements
e) No, we depend on key personnel to take decision of projects selections
f) None (Please specify):
2.1.2 Project Screening and Integration
(3) Do the PMO in your organization have a role in new project screening, prioritization, and the recommendation for project financing and funding?
a) Yes, our PMO has set and applied policies for priorities, screening, and funding to all projects portfolios
b) Yes, our PMO has comprehensive mechanisms for priorities, screening, and funding to most portfolios
c) Yes, our PMO built such methodology but not applied for all project portfolios
d) No, however we have launched an initiative to establish a mechanism and criteria for that
e) No, we depend on our decision makers for that
f) None (please specify):.....
2.1.3 Project and Portfolio Reviews and closing
(4) Do the PMO in your organization have a role in project portfolio performance monitoring and compilation?
a) Yes, our PMO has full performance monitoring system for all projects and portfolios
b) Yes, our PMO has comprehensive monitoring system applied for most of project and portfolios
c) Yes, our PMO has built performance monitoring system but not fully applied for all projects
d) No, but we measure some KPIs to assess our effectiveness and efficiency
e) No, but we make some reports as requested by the decision makers
f) None (Please specify):.....
(5) Do the PMO in your organization have a role in project gateway assessment, portfolio review and assessment, and project closing?
a) Yes, our PMO deploy policies for gateway assessment, portfolio reviews, and project closing for all projects
b) Yes, our PMO has a role doing this for most of projects and portfolio through comprehensive mechanism
c) Yes, our PMO has built such system but it is not applied for all projects and portfolios
d) No, but we assess some projects especially critical ones
e) No, but sometimes we do assessment and closing if requested
f) None of the above (please specify):.....
2.1.4 Strategic Portfolio Results and Impact
(6) Do the PMO in your organization assess its impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function?
a) Yes, we always comprehensively assess the strategic role and impact in a periodic basis and report it
b) Yes, we mostly assess the impact of our portfolios and report it.

c) Yes, but we do it but in a non-periodic basis
d) No, but sometimes we do it as requested by decision makers and top management
e) No, but on occasions we do minor assessment as requested.
2.2 Standards and Assessment
2.2.1 Project Management Standards and Regulations
(7) Do the PMO in your organization have a role in deploying project management standards, benchmarking, its implementation, and compliance?
a) Yes, we apply many project management standards and even we set our own standards
b) Yes, we are in compliance with some standards, and we do benchmarks
c) We partially deploying some standards and do benchmarks
d) We occasionally do some benchmarks but we don't deploy standards
e) No, but we do some benchmarks
f) None of the above (Please specify):.....
2.2.2 Maturity Assessment
(8) Do the PMO in your organization have a role in conducting maturity assessment against certain standards and criteria and propose corrective initiative for that?
a) Yes, we have comprehensive mechanism with frequency, collaborate at enterprise level, and initiate and assess improvements
b) Yes, we conduct advanced examination for our capabilities, competencies and maturity for projects
c) Yes, we assessments but on a limited level
d) No, but sometimes we do some evaluation for essential issue of projects
e) No, but we participate in some project assessments and evaluate teams
f) None of the above (please specify):.....
2.3 Performance Management & Continuous Improvement
2.3.1 Performance Analysis
(9) Do the PMO in your organization have a role in performance analysis for different projects and portfolios?
a) Yes, we have a complete performance management system that involves KPIs and indices data collection, monitoring, root cause analysis, and validation for all projects and portfolios
b) Yes, we have performance system that helps us to assess the performance of projects and portfolios periodically and we act as advisors for decision makers in this regards
c) Yes, we have set and analyze some KPIs that help us assessing projects performance periodically
d) No, but we facilitate some analysis for certain KPIs and indices
e) No, but we do performance analysis report if requested by decision makers.
f) None of the above (please specify):.....
(10) Do the PMO in your organization conduct performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results?
a) Yes, we do comprehensive analysis for those all these perspectives through a matrix of KPIs and indices
b) Yes, we have KPIs and measures that assess most of the specified perspectives
c) Yes, but we don't measure them all as some of them are measured by different business units

d) We analyze some of them as requested and provide raw data for other business units
e) No, but sometimes we provide help in analyzing some KPIs
f) None of the above (please specify):.....
2.3.2 Corrective Actions
(11) Do the PMO in your role organization have a role in setting and applying system for corrective and preventive actions based on different performance results?
a) Yes, we a comprehensive corrective and preventive action mechanism that involves trend analysis, initiatives and actions prioritization, and we even follow those action/ initiative implementation and report it as part of our role
b) Yes, we do have an advanced mechanism for corrective and preventive initiatives but in few areas this function is not fully effective
c) Yes, we do have corrective action mechanism for our poor performance results
d) No, but we take some actions as needed by decision makers
e) No, but on yearly basis we initiate improvement initiatives as part of our plan
f) None of the above (Please specify):.....
2.4 Project Governance and Auditing
2.4.1 Establish Authorities, policies, and charters
(12) Do the PMO in your organization prepare and maintain PMO charter including its objectives and purpose, its authorities and its alignment with the other business units?
a) Yes, we a comprehensive PMO charter that is updated according to the changes of authorities and purposes, and all relationships with all business units are clear.
b) Yes, as a part of our organization structure we have a clear roles and responsibilities for every staff in our PMO.
c) Yes, we do have an organization chart that clarifies our roles and responsibilities.
d) No, we don't have charter but our role became known for all business units.
e) No, we have no clear charter but we have personal job descriptions.
f) None of the above (Please specify):.....
(13) Do the PMO in your organization have a role in developing project management policies and guidance's for all stakeholders and participants to understand business aspects of project management?
a) Yes, our PMO has structured and documented project management policies and guidance that clarify all issues to commit and it is updated in periodic basis.
b) Yes, we have project management policies that communicated to all business units.
c) Yes, for most of our project related issues we have developed procedures to help stakeholders to commit to our way working.
d) Not really, as we have developed some guidance's and we are developing new ones.
e) No, we have our way of work but we did not develop guiding policies.
f) None of the above (Please specify):.....
(14) Do the PMO in your organization have a role in developing project classification guidance and criteria for all stakeholders and participants?
a) Yes, our PMO clear ranking and classification guidance for all projects, programs and portfolios and within each there are different processes.
b) Yes, we developed classification criteria and communicated it to all stakeholders

c) Yes, we have some classification based budget that make it different from project to another
d) No, but in some important projects we follow different way of working.
e) No, we don't have role and all projects follow the same sequence.
f) None of the above (Please specify):.....
(15) Do the PMO in your organization have established and identified clear authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities....)
a) Yes, our project managers have clear roles and responsibilities in all aspects related to project management, and we have clear authorities for them, program and portfolio managers.
b) Yes, our project managers have a well-defined roles and responsibilities.
c) Yes, we clarify project managers' role in project charters in addition to job descriptions.
d) Each project manager assigned for any project have defined roles within project planning
e) There are no documented roles for our project managers but it is known entirely
f) None of the above (Please specify):.....
2.4.2 Establish executive control board
(16) Do the PMO of your organization have a sponsor who is a member of the executive management team, or executive control board, or board of directors? "Usually Vice President for Projects, or Director...."
a) Yes, our PMO director/ vice president is one the key management team in our organization
b) Yes, we have sponsor who is a member in the management team and report directly to him
c) Yes, we have sponsor who transfer our point of views for executive management team
d) No, but we report to another business units who transfer it to management team
e) No, we don't have sponsors in the management team
f) None of the above (Please specify):
(17) Do the PMO in your organization have a role in facilitating the executive board responsibilities by determining the executive oversight requirements (i.e. Business Performance, Portfolio Management, etc...)
a) Yes, our PMO compile all project portfolio achievements, performance, portfolio management, and other functions for executive board use in a very comprehensive manner at organization level
b) Yes, our PMO have the full picture for all projects and programs which give our management the full picture and oversight in everything at organizational level
c) Yes, we do give some oversight for project if requested but on limited divisional level
d) No, but we do some reports for another business unit who is responsible for that
e) No we don't do this
f) None of the above (Please specify):
(18) Do the PMO in your organization have a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition)?
a) Yes, It's one of our PMO tasks to ensure the executive control board have full charter and providing them with advice. This is done at corporate level
b) Yes, we give advice on committees compositions and follow up actions delivered from them at corporate level
c) Yes, we advise our project committee on divisional/ non corporate level
d) No, but sometimes we submit advices on divisional level

e) No we have no role
f) None of the above (Please specify):
(19) Do the PMO of your organization have a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc...)?
a) Yes, our PMO has made all of this and we update it on periodic basis at executive board level
b) Yes, our PMO have the role secretary for the project control board and related committees
c) Yes, but at the level of our division
d) No, we submit some advices if requested
e) No, we have no role of this
f) None of the above (Please specify):
(20) Do the PMO in your organization have established policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues (i.e. executive committee, steering committee, Governance committee...)?
a) Yes, it's a major role for us to develop and oversee the governance structure and have made guidance for doing that
b) Yes, ensure aligning our committees and sub groups with the corporate requirements.
c) Yes, we handle this function but at our divisional level
d) No, we adhere to such roles if any
e) No, we have no role of this
f) None of the above (Please specify):
2.4.3 Project Audit and Reviews
(21) Do the PMO in your organization have a role in establishing the audit committee as sub group of the executive control board?
a) Yes, we have an audit and performance review committee and we maintain its roles and update its composition.
b) Yes, we our PMO have memberships in the corporate audit committee.
c) The PMO role focuses on reporting to the audit committee.
d) We have no direct relation with the audit committee
e) I never heard of having an audit committee, but we have audit department
f) None of the above (Please specify):
(22) Do the PMO of your organization have a role in performing in project auditing?
a) Yes, our PMO have comprehensive procedures for project auditing and we have full reporting and auditing effectively implemented
b) Yes, our PMO have audit procedures and we perform auditing to ensure alignment with our governance framework.
c) Yes, we perform project related auditing that is reviewed by the audit committee.
d) On occasions and for certain project we do some auditing and submit results to audit department
e) No, we do auditing if its required by decision makers
f) None of the above (Please specify):
(23) Do the PMO of your organization have clear approach for auditing and review of audit results?

a) Yes, our PMO have a structured approach for auditing, delivering reports, and delivering actions and initiatives for result findings for all project portfolio
b) Yes, our PMO an approach for project auditing that cover most of projects
c) Yes, we have audit approach and we review audit results
d) We do auditing on occasion and if requested
e) No, Audit Department is auditing us
f) None of the above (Please specify):
(24) Do the PMO in your organization have a role in discussing the external audit results related to projects and disclosing it?
a) Yes, once the external audit report received we discuss it, its validity, and follow corrective initiatives. Summary of results is communicated and discussed with audit committee
b) Yes, we review projects audit results, and follow corrective actions as required
c) Yes, we review external audit results and propose corrective actions and report it
d) If we receive external audit finding, we propose corrective actions and report it
e) We don't have external audit.
f) None of the above (Please specify):
2.4.4 Sustainability, Ethics, and code of conduct.
(25) Do the PMO in your organization have a role in establishing a standard code of conduct for environmental, social, economic, and conflict interest?
a) Yes, we established a code of conduct that reviewed periodically and all staff have signed and approved it
b) Yes, we established a code of conduct that is signed by most of our organization staff
c) Yes, we established a code of conduct and the project related staff sign it
d) No, but our organization have a code of conduct and we follow it accordingly
e) No, we don't have
f) None of the above (Please specify):
(26) Do the PMO in your organization have a role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects?
a) Yes, we established our own HSE standard and follow its implementation as part of system and project management methodology
b) Yes, we are in compliance with HSE standards and follow its implementation in projects
c) We follow our organization HSE standard and apply it where applicable
d) No, but we apply some HSE practices in our organization and we follow it
e) No, we don't have
f) None of the above (Please specify):
(27) Do the PMO in your organization have a role risk management of projects and overall risk management approach?
a) Yes, we established a comprehensive risk management approach that is applied for projects and we monitor its implementation in our related projects
b) Yes, we established risk management mechanism and we apply it in all projects
c) Yes, we manage the implementation of risk management in projects
d) No, but we apply the risk management methodology in our projects

e) No, but we are trying to apply risk management practices.

f) None of the above (Please specify):

Further comments and Notes (If you think that the PMO in your organization have further strategic and governance roles that have not been covered, please specify it below)

Appreciating your timing and wishing you the best of luck

Appendix (2): Comparison of Data Collection

Organisation (A):

<i>Part One: General Demographic Information</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
(1) What type of organization structure does your organization have?	Functional Matrix	Work on IT and business operation Divisions
(2) How Many Project Management Office (PMO) does your organization have?	One PMO	One PMO
(3) How can you classify your PMO/ PMOs position?	IT Division	IT Division and team members from other divisions
(4) As a percentage, how much do the projects represents comparable to overall operations?	Almost 30%	Not sure but between 20% to 40%
(5) As a percentage of overall projects, how much do of these are managed by the PMO?	60% -70%	60%

<i>Roles</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
Part 2.1: Project Portfolio Management		
2.1.1 Strategic Alignment		
(1) Do the PMO in your organization have a role in periodic reviewing for the alignment of the project portfolio with the organization strategy?	The strategy Department has the full view over the strategy. We ensure aligning our projects with the strategic objectives. No clear me mechanism for strategic alignment.	We report many of our projects to the strategy department for performance monitoring but not all projects are considered within the strategic plan.
(2) Do the PMO in your organization established and applied of project portfolio selection criteria and mechanisms?	Through the PM methodology, we have set mechanism for project selections, and it is applied by the IT PM Committee.	We have PM methodology that includes clear criteria for project selection.
2.1.2 Project Screening and Integration		
(3) Do the PMO in your organization have a role in new project screening, prioritization, and the recommendation for project financing and funding?	Our project management methodology has a mechanism for prioritization and screening of new projects and selection of the proper domain.	As mentioned, the PM methodology has all PM related issues and the project screening is included within it.
2.1.3 Project and Portfolio Reviews and closing		
(4) Do the PMO in your organization have a role in project portfolio	We have a set of KPIs to assess our performance periodically.	We use KPIs to assess our performance.

Roles	Respondent 1	Respondent 2
performance monitoring and compilation?		
(5) Do the PMO in your organization have a role in project gateway assessment, portfolio review and assessment, and project closing?	Our PMO organize the meetings for the IT project committee who handle such role.	Mostly its been done through the IT project committee project teams with the PMO involvement.
2.1.4 Strategic Portfolio Results and Impact		
(6) Do the PMO in your organization assess its impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function?	Our CIO request similar report frequently as required for assessing our performance and submit the executive management team.	Have no idea but don't think so unless it is requested.
2.2 Standards and Assessment		
2.2.1 Project Management Standards and Regulations		
(7) Do the PMO in your organization have a role in deploying project management standards, benchmarking, its implementation, and compliance?	We have our PM methodology that is updates as required. We do some benchmarks and ensure applying PM organizations practices. We also comply with standards issued by the Business Excellence team.	We don't apply special PM standards; however and through the DGEP, we have to comply with certain criteria.
2.2.2 Maturity Assessment		
(8) Do the PMO in your organization have a role in conducting maturity assessment against certain standards and criteria and propose corrective initiative for that?	Maturity assessment has not been conducted, however through the EFQM and DGEP we got certain assessments after which some corrective initiatives have been applied.	The business excellence team conduct self-assessment for certain projects and teams as a part of DGEP award.
2.3 Performance Management & Continuous Improvement		
2.3.1 Performance Analysis		
(9) Do the PMO in your organization have a role in performance analysis for different projects and portfolios?	We have a set of KPIs to assess our performance periodically.	We use KPIs to assess our performance and report other to the business excellence team.
(10) Do the PMO in your organization conduct performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results?	Our KPIs include cost, time, and compliance measures for portfolios and projects.	

Roles	Respondent 1	Respondent 2
2.3.2 Corrective Actions		
(11) Do the PMO in your role organization have a role in setting and applying system for corrective and preventive actions based on different performance results?	We do some corrective actions as required from the strategy department.	When our targets of KPIs are not achieved, we propose corrective actions.
2.4 Project Governance and Auditing		
2.4.1 Establish Authorities, policies, and charters		
(12) Do the PMO in your organization prepare and maintain PMO charter including its objectives and purpose, its authorities and its alignment with the other business units?	We have our PMO charter that includes the staffs and reporting channels within the PMO in addition to the roles and responsibilities.	Through our PM methodology, we have set the PMO roles and responsibilities at the beginning of it.
(13) Do the PMO in your organization have a role in developing project management policies and guidance's for all stakeholders and participants to understand business aspects of project management?	We communicate our PM methodology to all project teams and staff. Moreover we conduct awareness sessions for our project management approach for different department.	Through our intranet, we update it with the latest version PM methodology.
(14) Do the PMO in your organization have a role in developing project classification guidance and criteria for all stakeholders and participants?	We developed classification manual for the project based on certain criteria and that include cost, nature and budget.	Through the project classification manual we have different ways to deal with projects based on budget and nature, priority, and other criteria and its linked with PM methodology
(15) Do the PMO in your organization have established and identified clear authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities....)	Each project manager has clear job description that specifies his/her roles and responsibilities.	Yes through job descriptions in addition to specifying certain roles at project initiation and planning phase.
2.4.2 Establish executive control board		
(16) Do the PMO of your organization have a sponsor who is a member of the executive management team, or executive control board, or board of directors? "Usually Vice President for Projects, or Director...."	Our CIO is a member of the management team.	Our CIO is the head of IT projects committee in addition to his membership in the leadership team.

Roles	Respondent 1	Respondent 2
(17) Do the PMO in your organization have a role in facilitating the executive board responsibilities by determining the executive oversight requirements (i.e. Business Performance, Portfolio Management, etc...)?	We facilitate the role of IT projects committee.	No, but it's been for IT project committee
(18) Do the PMO in your organization have a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition)?	We do this for the IT Project Committee only and other IT related committees.	We don't do this, but we set this for teams sometimes, but sometimes we submit advices.
(19) Do the PMO of your organization have a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc...)?	Just for IT projects committee	We don't do this, but we set this for teams sometimes.
(20) Do the PMO in your organization have established policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues (i.e. executive committee, steering committee, Governance committee...)?	Just for IT projects committee or for project teams.	For projects and domains teams and groups.
2.4.3 Project Audit and Reviews		
(21) Do the PMO in your organization have a role in establishing the audit committee as sub group of the executive control board?	No, we don't this	No
(22) Do the PMO of your organization have a role in performing in project auditing?	No, project auditing are performed by the Audit Department	No
(23) Do the PMO of your organization have clear approach for auditing and	If we got findings out of the internal audit, we propose corrective actions based on the	We deploy the organizational approach for internal auditing.

Roles	Respondent 1	Respondent 2
review of audit results?	findings and its priority.	
(24) Do the PMO in your organization have a role in discussing the external audit results related to projects and disclosing it?	Some high level audit findings are discussed with the CIO and IT projects committee.	We rarely have external audits and most of the audits are by the internal audit department.
2.4.4 Sustainability, Ethics, and code of conduct.		
(25) Do the PMO in your organization have a role in establishing a standard code of conduct for environmental, social, economic, and conflict interest?	We follow the organizational code of conduct through HR department which include ethical related issues.	No we don't have, but we have at organizational level.
(26) Do the PMO in your organization have a role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects?	We follow the QHSE related standard implemented by the business excellence teams. Our projects are mostly IT so it has very limited impact on HSE.	We deploy the organizational standards and sometimes we got quality audit from business excellence teams.
(27) Do the PMO in your organization have a role risk management of projects and overall risk management approach?	Yes we have mechanism that is integrated with the PM methodology.	Yes we procedures for identification of risks, impact, mitigation and follow up in the projects.
Further comments and Notes (If you think that the PMO in your organization have further strategic and governance roles that have not been covered, please specify it below)		
The focus on promoting project management culture as a part of the strategic aims of the PMO.		

Oragisation (B):

<i>Part One: General Demographic Information</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
(6) What type of organization structure does your organization have?	Project matrix	Don't know but we have divisions as in the website.
(7) How Many Project Management Office (PMO) does your organization have?	One PMO	One PMO
(8) How can you classify your PMO/ PMOs position?	Corporate	Corporate excluding support services functions.
(9) As a percentage, how much do the projects represents comparable to overall operations?	Around 80%	¾ of overall business
(10) As a percentage of overall projects, how much do of these are managed by the PMO?	Mostly all of them	90%

<i>Roles</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
Part 2.1: Project Portfolio Management		
2.1.1 Strategic Alignment		
(1) Do the PMO in your organization have a role in periodic reviewing for the alignment of the project portfolio with the organization strategy?	Our projects and expected projects represents the future the plans of the company, therefore projects have strong alignment.	We follow the projects and portfolio achievements continuously in correlation with the strategy and business development department.
(2) Do the PMO in your organization established and applied of project portfolio selection criteria and mechanisms?	We deploy a set of procedures for selection of projects and portfolios and have criteria before going with the projects that is approved by the management team.	We have an approach for projects selection as each new project pass through complex approach before it got approved with business development team.
2.1.2 Project Screening and Integration		
(3) Do the PMO in your organization have a role in new project screening, prioritization, and the recommendation for project financing and funding?	We follow new projects screening and prioritization that is performed by the different VPs.	The PMO arrange periodic meetings for the VP of projects, CFO, VP of contracts, and VP of strategy.
2.1.3 Project and Portfolio Reviews and closing		
(4) Do the PMO in your organization have a role in project portfolio performance monitoring and compilation?	We have a performance management for projects through which we follow its performance.	We performance measurement system and dashboard for projects and portfolios i.e. offshore, onshore...

Roles	Respondent 1	Respondent 2
(5) Do the PMO in your organization have a role in project gateway assessment, portfolio review and assessment, and project closing?	We do projects opening and closing as well, in addition to having periodic reviews for project achievements and phases by the concerned leadership group.	The PMO shares the opening and the closing of strategic projects, and phases reviews are conducted periodically.
2.1.4 Strategic Portfolio Results and Impact		
(6) Do the PMO in your organization assess its impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function?	Yes and it includes assessing the savings, actions, impact, and other measures.	Through the performance management system, we track our achievements and impact and report in a periodic basis.
2.2 Standards and Assessment		
2.2.1 Project Management Standards and Regulations		
(7) Do the PMO in your organization have a role in deploying project management standards, benchmarking, its implementation, and compliance?	We strictly follow the company standards and implement it.	We are not responsible for following up the standards as there are quality department who handle this for projects in addition to the corporate quality teams.
2.2.2 Maturity Assessment		
(8) Do the PMO in your organization have a role in conducting maturity assessment against certain standards and criteria and propose corrective initiative for that?	Since our company is striving for excellence and improvement, we participate with many local and international awards; therefore we conduct maturity assessment based on its criteria.	We did this sometimes as a part of participation in the excellence award.
2.3 Performance Management & Continuous Improvement		
2.3.1 Performance Analysis		
(9) Do the PMO in your organization have a role in performance analysis for different projects and portfolios?	Through the PMS, we conduct analysis for projects and portfolios on monthly and quarterly basis.	We do analysis report and submit through the dashboard and we submit it to the committees and the VP of projects.
(10) Do the PMO in your organization conduct performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results?	Analysis is been performed for costs and budgets, operational efficiency, and other operational measures that are specified in the dashboard.	Analysis for budget compliance and other operational are made. However; the stakeholders analysis is made by the quality team.
2.3.2 Corrective Actions		

Roles	Respondent 1	Respondent 2
(11) Do the PMO in your role organization have a role in setting and applying system for corrective and preventive actions based on different performance results?	The quality department has corrective and preventive action mechanism as a part of ISO 9001 standard that is made within the management review meeting.	Yes, the quality department have a corrective and preventive action mechanism.
2.4 Project Governance and Auditing		
2.4.1 Establish Authorities, policies, and charters		
(12) Do the PMO in your organization prepare and maintain PMO charter including its objectives and purpose, its authorities and its alignment with the other business units?	Yes, we do have clear roles, objectives for our PMO.	Yes, even we have some performance measures for our PMO is being measured to assess our performance.
(13) Do the PMO in your organization have a role in developing project management policies and guidance's for all stakeholders and participants to understand business aspects of project management?	We a system for reviewing and monitoring the project management procedures that is updates periodically and communicated through the web gate.	We have project management procedures that are followed periodically.
(14) Do the PMO in your organization have a role in developing project classification guidance and criteria for all stakeholders and participants?	It is been specified within the PM procedures.	Yes, we it is clarified within the project management procedures.
(15) Do the PMO in your organization have established and identified clear authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities....)	Project managers have clear roles and responsibilities within the project plans, PM procedures, and the role profiles	Project managers have clear job accountabilities that is communicated to them.
2.4.2 Establish executive control board		
(16) Do the PMO of your organization have a sponsor who is a member of the executive management team, or executive control board, or board of directors? "Usually Vice President for Projects, or Director...."	The VP of project is the sponsor and he member in many leadership committees.	Our VP who reports to the General Manager.
(17) Do the PMO in your organization have a role in	Since the PMO has an oversight over the projects and portfolios,	We submit reports to the leadership committees for this

Roles	Respondent 1	Respondent 2
facilitating the executive board responsibilities by determining the executive oversight requirements (i.e. Business Performance, Portfolio Management, etc...)	we provide the management meetings with most of the information for the projects.	issue.
(18) Do the PMO in your organization have a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition)?	No role	No role
(19) Do the PMO of your organization have a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc...)?	No role	I don't know about this but don't think so
(20) Do the PMO in your organization have established policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues (i.e. executive committee, steering committee, Governance committee...)?	No role as this entire role is done by the General Manager office and the internal audit.	No role and it's been done by and followed by the internal audit team.
2.4.3 Project Audit and Reviews		
(21) Do the PMO in your organization have a role in establishing the audit committee as sub group of the executive control board?	No, we don't this	The audit committee is correlated with the internal audit department.
(22) Do the PMO of your organization have a role in performing in project auditing?	No, project auditing are performed by the Audit Department	No, audits are performed by the Audit Department
(23) Do the PMO of your organization have clear approach for auditing and review of audit results?	We have strong corrective actions mechanism to deal with QHSE audits and other findings.	Yes and changes are done sometimes as a part of the audit findings.
(24) Do the PMO in your	We discuss audit findings if any	No idea but don't think so.

Roles	<i>Respondent 1</i>	<i>Respondent 2</i>
organization have a role in discussing the external audit results related to projects and disclosing it?	without disclosure.	
2.4.4 Sustainability, Ethics, and code of conduct		
(25) Do the PMO in your organization have a role in establishing a standard code of conduct for environmental, social, economic, and conflict interest?	No but strictly adhere to these practices as our company has strong focus on this.	We adhere to sustainability and HSE related standards and other code of conducts.
(26) Do the PMO in your organization have a role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects?	It is the responsibility of the Quality Department and HSE department but we follow their conducts.	
(27) Do the PMO in your organization have a role risk management of projects and overall risk management approach?	We have risk management system that is aligned with HSE risks and other corporate management risk within the company.	Yes as a part of any project, we developed risk assessment procedures and projects teams adhere to it in addition to the QHSE audits.
Further comments and Notes (If you think that the PMO in your organization have further strategic and governance roles that have not been covered, please specify it below)		

Oragisation (C):

<i>Part One: General Demographic Information</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
(1) What type of organization structure does your organization have?	Functional	Functional
(2) How Many Project Management Office (PMO) does your organization have?	Small Project Office	One
(3) How can you classify your PMO/ PMOs position?	Corporate	Corporate
(4) As a percentage, how much do the projects represents comparable to overall operations?	Less than 20%	Less than 20%
(5) As a percentage of overall projects, how much do of these are managed by the PMO?	No estimate	No estimate

<i>Roles</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
Part 2.1: Project Portfolio Management		
2.1.1 Strategic Alignment		
(1) Do the PMO in your organization have a role in periodic reviewing for the alignment of the project portfolio with the organization strategy?	Projects decisions are taken on top level and are studies very to ensure its alignment with the strategic objectives.	All new projects are aligned with the organization directions and continuous revisions are made by the decision maker and performance management team.
(2) Do the PMO in your organization established and applied of project portfolio selection criteria and mechanisms?	There is a procedure for projects and studying its impact at investment committee level; however the PMO role is very limited.	Have no role as the PMO receive projects to follow up its implementation and performance.
2.1.2 Project Screening and Integration		
(3) Do the PMO in your organization have a role in new project screening, prioritization, and the recommendation for project financing and funding?	The PMO have not role in this as it is done at Top management level.	It's been done by the finance department and business development team.
2.1.3 Project and Portfolio Reviews and closing		
(4) Do the PMO in your organization have a role in project portfolio performance monitoring and compilation?	Through a matrix of corporate and project KPIs, we continuously review the performance of projects and submit reports on monthly basis.	We have a matrix of KPIs to review the corporate and projects performance levels.

Roles	Respondent 1	Respondent 2
(5) Do the PMO in your organization have a role in project gateway assessment, portfolio review and assessment, and project closing?	Some projects are assessed at each phase and milestone without participation in project closing	Through the monthly performance report, an assessment is been made by the on projects phases and at closings as well.
2.1.4 Strategic Portfolio Results and Impact		
(6) Do the PMO in your organization assess its impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function?	The project office role is new established function, with very limited staff members; therefore no impact assessment has been done.	We have some KPIs to assess business unit performance and through which the PO performance is being assessed.
2.2 Standards and Assessment		
2.2.1 Project Management Standards and Regulations		
(7) Do the PMO in your organization have a role in deploying project management standards, benchmarking, its implementation, and compliance?	No project management standard is implemented but we consider some practices within our procedures.	No project management standards, but some benchmarks are been done through which some additions have been considered.
2.2.2 Maturity Assessment		
(8) Do the PMO in your organization have a role in conducting maturity assessment against certain standards and criteria and propose corrective initiative for that?	No maturity assessments have ever been made.	No assessments, but some assessment projects and teams are sometimes made.
2.3 Performance Management & Continuous Improvement		
2.3.1 Performance Analysis		
(9) Do the PMO in your organization have a role in performance analysis for different projects and portfolios?	Through a matrix of KPIs, we analyze the performance of the projects and the achievements comparable to the planned objectives and report it on a monthly basis, and track specific financial, customers and stakeholders satisfaction	We track the project performance through BSC system and dashboard system.
(10) Do the PMO in your organization conduct performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results?		
2.3.2 Corrective Actions		

Roles	Respondent 1	Respondent 2
(11) Do the PMO in your role organization have a role in setting and applying system for corrective and preventive actions based on different performance results?	The PO is not responsible for this role, however we adhere to this procedures within our team.	We use the corporate corrective action procedures to initiate corrective actions.
2.4 Project Governance and Auditing		
2.4.1 Establish Authorities, policies, and charters		
(12) Do the PMO in your organization prepare and maintain PMO charter including its objectives and purpose, its authorities and its alignment with the other business units?	As a part of our organization structure, the PO roles and responsibilities are clarified.	The roles and responsibilities of the PO are clarified and the job descriptions are available for each position in the PO.
(13) Do the PMO in your organization have a role in developing project management policies and guidance's for all stakeholders and participants to understand business aspects of project management?	We prepared and updated the corporate PM procedures and communicated it to all business units.	We developed the PM procedures and an internal quality audit is been performed to the level of compliance to this role.
(14) Do the PMO in your organization have a role in developing project classification guidance and criteria for all stakeholders and participants?	The PO classifies projects according to its nature (construction, IT...) and risks and BU involved.	Not sure, but might have by different personnel.
(15) Do the PMO in your organization have established and identified clear authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities....)	Within planning phase of the project, the project managers' roles and responsibilities are clearly specified.	It is prepared at the planning phase of each project.
2.4.2 Establish executive control board		
(16) Do the PMO of your organization have a sponsor who is a member of the executive management team, or executive control board, or board of directors? "Usually Vice President for Projects, or Director...."	Not really, but our manager reflect the PO to the management team.	The director of support services can be considered as our sponsor.
(17) Do the PMO in your organization have a role in	We coordinate some organizational committee meetings	No but sometimes, it's been done for some teams or groups.

Roles	Respondent 1	Respondent 2
facilitating the executive board responsibilities by determining the executive oversight requirements (i.e. Business Performance, Portfolio Management, etc...)	for project reviews and assessment.	
(18) Do the PMO in your organization have a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition)?	No role of doing this	No roles unless it is for some projects but not a corporate or high level
(19) Do the PMO of your organization have a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc...)?	No role	No role
(20) Do the PMO in your organization have established policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues (i.e. executive committee, steering committee, Governance committee...)?	No roles, for some projects related committees we help and support doing this.	No role
2.4.3 Project Audit and Reviews		
(21) Do the PMO in your organization have a role in establishing the audit committee as sub group of the executive control board?	The internal audit role is handled by the Internal Audit department	No interaction as this made by the Internal audit department
(22) Do the PMO of your organization have a role in performing in project auditing?	NO	NO, the quality section perform quality audit.
(23) Do the PMO of your organization have clear approach for auditing and review of audit results?	NO	NO
(24) Do the PMO in your	No role, but based on some audit	No role

Roles	<i>Respondent 1</i>	<i>Respondent 2</i>
organization have a role in discussing the external audit results related to projects and disclosing it?	findings we might take actions and amend our practices.	
2.4.4 Sustainability, Ethics, and code of conduct		
(25) Do the PMO in your organization have a role in establishing a standard code of conduct for environmental, social, economic, and conflict interest?	We the organization code of conduct and we apply it	We follow the organization code of conduct.
(26) Do the PMO in your organization have a role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects?	It is specified that the within the PM procedures that we should adhere to the HSE roles and practices.	We the quality section requirements as they are responsible for that.
(27) Do the PMO in your organization have a role risk management of projects and overall risk management approach?	As a part of PM procedures, we developed RM approach to be applied.	RM approach is used as apart PM procedures but on limited level.
Further comments and Notes (If you think that the PMO in your organization have further strategic and governance roles that have not been covered, please specify it below)		

Oragisation (D):

<i>Part One: General Demographic Information</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
(1) What type of organization structure does your organization have?	Functional	Functional
(2) How Many Project Management Office (PMO) does your organization have?	We have strategy department which follow projects at corporate level and PMOs at divisions level	One corporate and 5 divisional
(3) How can you classify your PMO/ PMOs position?	Corporate / Divisional	
(4) As a percentage, how much do the projects represents comparable to overall operations?	More than 50%.	Between 50%-80%
(5) As a percentage of overall projects, how much do of these are managed by the PMO?	More than 80%	Not sure, but more than ¾ of projects.

<i>Roles</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
Part 2.1: Project Portfolio Management		
2.1.1 Strategic Alignment		
(1) Do the PMO in your organization have a role in periodic reviewing for the alignment of the project portfolio with the organization strategy?	The strategy department set policies and methodologies for all divisional offices to ensure the alignment with strategy.	There is a methodology for projects and portfolio management that is implemented at corporate and divisional level.
(2) Do the PMO in your organization established and applied of project portfolio selection criteria and mechanisms?	We have portfolio management system that includes criteria and procedures for projects selection before submission to decision makers.	We have procedures for selection in addition to the criteria.
2.1.2 Project Screening and Integration		
(3) Do the PMO in your organization have a role in new project screening, prioritization, and the recommendation for project financing and funding?	Our PMS have clear policies and procedures for new projects screening and prioritization.	We have procedures for projects screening and prioritization, but the cost control and funding are handled by the finance team.
2.1.3 Project and Portfolio Reviews and closing		
(4) Do the PMO in your organization have a role in project portfolio performance monitoring and compilation?	Through an integrated performance system, we follow and monitor projects performance on quarterly basis.	We get a quarterly performance report from the different division.

Roles	Respondent 1	Respondent 2
(5) Do the PMO in your organization have a role in project gateway assessment, portfolio review and assessment, and project closing?	As for portfolio reviews, it is sometimes done at POs level.	Projects closing is done at divisional level.
2.1.4 Strategic Portfolio Results and Impact		
(6) Do the PMO in your organization assess its impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function?	It's been done for one time and some actions have been made.	We have specific KPIs that assess our performance within the corporate management system.
2.2 Standards and Assessment		
2.2.1 Project Management Standards and Regulations		
(7) Do the PMO in your organization have a role in deploying project management standards, benchmarking, its implementation, and compliance?	This is the responsibility of the QHSE department, but we ensure that their requirements are applied within each division.	It is handled by the QHSE department.
2.2.2 Maturity Assessment		
(8) Do the PMO in your organization have a role in conducting maturity assessment against certain standards and criteria and propose corrective initiative for that?	As a part of business excellence awards, some assessments have been made for organizational PM methodologies.	Some assessment for people satisfaction has been conducted and the satisfaction about the Bus, and his is done for all departments.
2.3 Performance Management & Continuous Improvement		
2.3.1 Performance Analysis		
(9) Do the PMO in your organization have a role in performance analysis for different projects and portfolios?	Through the performance management system, the strategy department follows the performance of each project and reports it on quarterly basis. The reports include KPIs according to the BSC system.	The assessment is been done on through set of KPIs that represents the balanced scorecard approach and we report it to the CEO and board.
(10) Do the PMO in your organization conduct performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results?		
2.3.2 Corrective Actions		

Roles	Respondent 1	Respondent 2
(11) Do the PMO in your role organization have a role in setting and applying system for corrective and preventive actions based on different performance results?	As a part of the PMS, there is procedure for corrective and preventive actions that include root cause analysis, assigning responsibilities, and following implementation of these actions.	After the analysis of the KPIs and the achievements of the targets. Preventive and corrective actions are taken, however this do not cover all projects.
2.4 Project Governance and Auditing		
2.4.1 Establish Authorities, policies, and charters		
(12) Do the PMO in your organization prepare and maintain PMO charter including its objectives and purpose, its authorities and its alignment with the other business units?	As a part of organizational manual, the strategy department and divisional offices, the roles and responsibilities are clearly identified with the sections and the role of each section.	All organizational units have clear roles and responsibilities, and as well for the strategy department.
(13) Do the PMO in your organization have a role in developing project management policies and guidance's for all stakeholders and participants to understand business aspects of project management?	As a part of the portfolio management system, we have methodologies and policies for business units to be followed in project management.	The PMS has clear policies and methodologies that are updated in a periodic basis and communicated to different business units.
(14) Do the PMO in your organization have a role in developing project classification guidance and criteria for all stakeholders and participants?	Policies for projects classifications developed based on budget, staff, prioritization and other related criteria.	We do this based on projects budgets and priorities specified by the top management.
(15) Do the PMO in your organization have established and identified clear authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities....)	The project managers' roles and responsibilities are clarified during the planning phase of the projects, and also each project manager has clear job description.	During planning phase of the project, the roles and authorities of the project manager are clarified as a part of performance management system.
2.4.2 Establish executive control board		
(16) Do the PMO of your organization have a sponsor who is a member of the executive management team, or executive control board, or board of directors? "Usually Vice President for Projects, or Director...."	Our executive director is a member of the management team and he is our sponsor.	Our executive director is our sponsor.
(17) Do the PMO in your organization have a role in	We don't facilitate the meetings but as we have the full oversight	No facilitation for meetings but provide reports for that.

Roles	Respondent 1	Respondent 2
facilitating the executive board responsibilities by determining the executive oversight requirements (i.e. Business Performance, Portfolio Management, etc...)	over the organization strategy, we provide strong input to the management review meetings.	
(18) Do the PMO in your organization have a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition)?	No role	No role, but it is done at the CEO office.
(19) Do the PMO of your organization have a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc...)?	No role	No role
(20) Do the PMO in your organization have established policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues (i.e. executive committee, steering committee, Governance committee...)?	No role	No role
2.4.3 Project Audit and Reviews		
(21) Do the PMO in your organization have a role in establishing the audit committee as sub group of the executive control board?	No role	No role
(22) Do the PMO of your organization have a role in performing in project auditing?	It is handled by the Internal Audit Department that has specific section for projects auditing.	It is handled by the Internal audit department.
(23) Do the PMO of your organization have clear approach for auditing and review of audit results?	The internal audit department has integrated approach for auditing on projects.	
(24) Do the PMO in your	Actions are taken to bridge the	No role

Roles	<i>Respondent 1</i>	<i>Respondent 2</i>
organization have a role in discussing the external audit results related to projects and disclosing it?	internal audit findings but no disclosure are been made,	
2.4.4 Sustainability, Ethics, and code of conduct		
(25) Do the PMO in your organization have a role in establishing a standard code of conduct for environmental, social, economic, and conflict interest?	We adhere to the organizational HR policy which focuses on this role.	We adhere to the organization code of conduct
(26) Do the PMO in your organization have a role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects?	We adhere to the HSE requirements initiated by the QHSE departments and include it within the portfolio policies and procedures.	We adhere to the organization HSE requirements and CSR.
(27) Do the PMO in your organization have a role risk management of projects and overall risk management approach?	It is handled by the risk department which is in the same division we report to.	We adhere to the risk management procedures that are handled by different department.
Further comments and Notes (If you think that the PMO in your organization have further strategic and governance roles that have not been covered, please specify it below)		

Oragisation (E):

<i>Part One: General Information</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
(6) What type of organization structure does your organization have?	Project team structure	Project team structure
(7) How Many Project Management Office (PMO) does your organization have?	1 PMO	1 PMO
(8) How can you classify your PMO/ PMOs position?	Corporate	Corporate
(9) As a percentage, how much do the projects represents comparable to overall operations?	More than 90%.	Our business is built on projects, so around 100%
(10) As a percentage of overall projects, how much do of these are managed by the PMO?	All projects	More than 99%

<i>Roles</i>	<i>Respondent 1</i>	<i>Respondent 2</i>
Part 2.1: Project Portfolio Management		
2.1.1 Strategic Alignment		
(1) Do the PMO in your organization have a role in periodic reviewing for the alignment of the project portfolio with the organization strategy?	The projects formulate our strategy, and each project shall be fully aligned with our strategy.	Each functional area represents a portfolio and together formulates the organization strategy which is reviewed continuously.
(2) Do the PMO in your organization established and applied of project portfolio selection criteria and mechanisms?	The PM methodology of our company have selection criteria of the projects	All projects pass through clear selection mechanism before the final decision is made to proceed with it.
2.1.2 Project Screening and Integration		
(3) Do the PMO in your organization have a role in new project screening, prioritization, and the recommendation for project financing and funding?	The PMO is responsible for team allocation and prioritization with interactions with finance department and decision makers	The decision makers and the PMO are allocating teams to the project according to the priority and screening of the important ones.
2.1.3 Project and Portfolio Reviews and closing		
(4) Do the PMO in your organization have a role in project portfolio performance monitoring and compilation?	A continuous monitoring for projects to ensure optimum efficiency are made through	The PMO has full focus on reviewing and monitoring the projects to ensure the optimum efficiency of the projects and portfolios. Therefore they monitor the projects on continuous basis

Roles	Respondent 1	Respondent 2
(5) Do the PMO in your organization have a role in project gateway assessment, portfolio review and assessment, and project closing?	Management review meetings are conducted on biweekly basis to see achievements, and through those meetings assessments for the phases are made and monitor delays.	The PMO organize some management meetings to review achievements and project assessment.
2.1.4 Strategic Portfolio Results and Impact		
(6) Do the PMO in your organization assess its impact to the business strategy; evaluate its strategic advantage, and the impact of portfolio management function?	No impact assessment is made but on occasion we report achievements for bonuses and performance assessment issues.	We don't do this.
2.2 Standards and Assessment		
2.2.1 Project Management Standards and Regulations		
(7) Do the PMO in your organization have a role in deploying project management standards, benchmarking, its implementation, and compliance?	The quality team is responsible for applying standards and benchmarks. Such things are incorporated within the PM methodology for project teams' application.	The quality team applies some standards and we add their requirements to the procedures and PM methodologies.
2.2.2 Maturity Assessment		
(8) Do the PMO in your organization have a role in conducting maturity assessment against certain standards and criteria and propose corrective initiative for that?	No maturity assessments are been conducted, however the PMO conduct an assessment for certain projects according to some criteria.	The PMO only conduct assessment for some projects with no full maturity assessment.
2.3 Performance Management & Continuous Improvement		
2.3.1 Performance Analysis		
(9) Do the PMO in your organization have a role in performance analysis for different projects and portfolios?	Using the IT project management tools Ms Project and Primavera, we analyze our performance through a matrix of KPIs.	We have set of KPIs that followed periodically.
(10) Do the PMO in your organization conduct performance analysis for operational efficiency, financial and technical performance, customer and stakeholders' satisfaction, and business results?	We focus on financial efficiency and some other indicators like customer satisfaction and quality of deliverables.	Reports are submitted to the general manager and decision makers about the financial performance of the projects for decisions making.
2.3.2 Corrective Actions		

Roles	Respondent 1	Respondent 2
(11) Do the PMO in your role organization have a role in setting and applying system for corrective and preventive actions based on different performance results?	As a part of our QMS, we apply corrective action mechanism based on decision makers' recommendations.	We apply this but not for everything and on occasion.
2.4 Project Governance and Auditing		
2.4.1 Establish Authorities, policies, and charters		
(12) Do the PMO in your organization prepare and maintain PMO charter including its objectives and purpose, its authorities and its alignment with the other business units?	We maintain a clear roles and responsibilities for the PMO in addition to having job descriptions for each staff member.	We do have this clarifying the roles and responsibilities. We have as well an authority matrix for each member of the project.
(13) Do the PMO in your organization have a role in developing project management policies and guidance's for all stakeholders and participants to understand business aspects of project management?	Our project management policies are updated and communicated through the intranet.	We do have policies that are communicated through the intranet.
(14) Do the PMO in your organization have a role in developing project classification guidance and criteria for all stakeholders and participants?	Projects are classified to its nature and type of products and services, and budget. All projects and programs comes within each portfolio are grouped together.	We have classification according to the type of the project and it fees.
(15) Do the PMO in your organization have established and identified clear authorities and responsibilities for project managers (contractual, financial, resource, vendor, and customer relationship management authorities....)	Each project personnel have job role profile within each project.	All project managers have job profile in addition to the authority matrix that specifies personnel authorities.
2.4.2 Establish executive control board		
(16) Do the PMO of your organization have a sponsor who is a member of the executive management team, or executive control board, or board of directors? "Usually Vice President for Projects, or Director...."	The head of the PMO is a member of the management team and report to the General Manager	Our PMO head is reporting to the General and act as strategic and business development advisor.
(17) Do the PMO in your organization have a role in	Since the PMO has the full view over all projects, reports are to the	We deliver reports to the executive management teams.

Roles	Respondent 1	Respondent 2
facilitating the executive board responsibilities by determining the executive oversight requirements (i.e. Business Performance, Portfolio Management, etc...)	BOD are delivered to them.	
(18) Do the PMO in your organization have a role in setting executive control board parameters (purpose, roles and responsibilities, competencies of members, & membership composition)?	No role	No role
(19) Do the PMO of your organization have a role in preparing executive control board operating procedures (Meeting frequency, collaboration process, Actions management, preparation of meetings, etc...)?	No role	No role, but the head of PMO is a member of the management team and gives advices to them.
(20) Do the PMO in your organization have established policy guidance for smaller group or committees as a part of executive control board to manage, align, and oversee certain business issues (i.e. executive committee, steering committee, Governance committee...)?	No role, but the head of PMO is a member of the management team	No role
2.4.3 Project Audit and Reviews		
(21) Do the PMO in your organization have a role in establishing the audit committee as sub group of the executive control board?	The audit function is outsourced to specialized audit firm and reports are delivered to the audit team.	No role
(22) Do the PMO of your organization have a role in performing in project auditing?		No role
(23) Do the PMO of your organization have clear approach for auditing and review of audit results?	Decisions are made after revisions of the management team, and the quality audit is performed by the quality section.	Auditing are made by external company and findings are reviewed by the management team
(24) Do the PMO in your	No role	No role but sometimes actions are

Roles	<i>Respondent 1</i>	<i>Respondent 2</i>
organization have a role in discussing the external audit results related to projects and disclosing it?		taken at the management level and our head of PMO ask for actions.
2.4.4 Sustainability, Ethics, and code of conduct		
(25) Do the PMO in your organization have a role in establishing a standard code of conduct for environmental, social, economic, and conflict interest?	Yes, code of conduct and confidentiality agreements is made and all project teams have to commit to it.	Confidentiality agreement has to be signed as a apart of the PM methodology.
(26) Do the PMO in your organization have a role in setting and Health, safety, and environment standard and ensuring adherence to its requirements in projects?	No role but commit to the standards made by the quality team	We apply HSE practices but it is the responsibility of the Admin Department.
(27) Do the PMO in your organization have a role risk management of projects and overall risk management approach?	We are pushing the deployment of risk management approaches as a part of PM methodology.	As a part of PM methodology we deploy some RM procedures.
Further comments and Notes (If you think that the PMO in your organization have further strategic and governance roles that have not been covered, please specify it below)		

Appendix (3): Panel of Experts Results

- Organization (A)

Sub role	Panel of Experts Results					
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Average
<i>Strategic Alignment</i>	3	2	3	3	3	3
<i>Project Screening and Integration</i>	3	3	4	4	4	4
<i>Project & Portfolio Reviews & closing</i>	3	3	3	3	3	3
<i>Strategic Portfolio Results and Impact</i>	2	2	3	2	2	2
<i>Project Management Standards & Regulations</i>	4	3	3	3	3	3
<i>Maturity Assessment</i>	2	2	1	2	1	2
<i>Performance Analysis</i>	1	2	2	2	2	2
<i>Corrective Actions</i>	2	2	2	2	2	2
<i>Establish Authorities, policies, & charters</i>	3	4	4	4	4	4
<i>Establish executive control board</i>	2	3	3	3	4	3
<i>Project Audit and Reviews</i>	2	1	2	2	3	2
<i>Sustainability, Ethics, & code of conduct</i>	3	3	3	2	3	3

- Organization (B)

Sub role	Panel of Experts Results					
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Average
<i>Strategic Alignment</i>	4	3	4	3	4	4
<i>Project Screening and Integration</i>	4	3	4	5	5	4
<i>Project & Portfolio Reviews & closing</i>	4	4	4	4	4	4
<i>Strategic Portfolio Results and Impact</i>	3	4	4	4	3	4
<i>Project Management Standards & Regulations</i>	4	3	3	3	2	3
<i>Maturity Assessment</i>	3	4	3	2	3	3
<i>Performance Analysis</i>	2	4	4	4	4	4
<i>Corrective Actions</i>	4	3	4	2	2	3
<i>Establish Authorities, policies, & charters</i>	3	3	3	2	3	3
<i>Establish executive control board</i>	2	2	2	1	2	2
<i>Project Audit and Reviews</i>	3	3	2	2	2	2
<i>Sustainability, Ethics, & code of conduct</i>	2	4	3	3	3	3

- Organization (C)

Sub role	Panel of Experts Results					
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Average
<i>Strategic Alignment</i>	2	3	3	2	2	2
<i>Project Screening and Integration</i>	2	1	2	1	1	1
<i>Project & Portfolio Reviews & closing</i>	2	3	2	2	1	2
<i>Strategic Portfolio Results and Impact</i>	1	1	2	1	2	1
<i>Project Management Standards & Regulations</i>	2	1	1	1	2	1
<i>Maturity Assessment</i>	1	1	1	1	1	1
<i>Performance Analysis</i>	3	2	3	3	4	3
<i>Corrective Actions</i>	3	3	3	2	3	3
<i>Establish Authorities, policies, & charters</i>	3	3	2	3	3	3
<i>Establish executive control board</i>	2	3	2	2	2	2
<i>Project Audit and Reviews</i>	1	1	1	2	1	1
<i>Sustainability, Ethics, & code of conduct</i>	3	2	3	3	3	3

- Organization (D)

Sub role	Panel of Experts Results					
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Average
<i>Strategic Alignment</i>	4	4	4	4	4	4
<i>Project Screening and Integration</i>	3	4	4	4	4	4
<i>Project & Portfolio Reviews & closing</i>	4	4	4	4	3	4
<i>Strategic Portfolio Results and Impact</i>	3	2	3	2	2	2
<i>Project Management Standards & Regulations</i>	3	2	3	3	3	3
<i>Maturity Assessment</i>	3	2	2	2	2	2
<i>Performance Analysis</i>	4	5	4	4	4	4
<i>Corrective Actions</i>	4	3	4	4	4	4
<i>Establish Authorities, policies, & charters</i>	3	2	3	3	3	3
<i>Establish executive control board</i>	2	1	2	2	2	2
<i>Project Audit and Reviews</i>	1	1	2	1	2	1
<i>Sustainability, Ethics, & code of conduct</i>	2	1	2	2	2	2

- Organization (E)

Sub role	Panel of Experts Results					
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Average
<i>Strategic Alignment</i>	4	4	4	4	3	4
<i>Project Screening and Integration</i>	4	4	4	4	3	4
<i>Project & Portfolio Reviews & closing</i>	5	4	4	3	4	4
<i>Strategic Portfolio Results and Impact</i>	2	3	3	2	1	2
<i>Project Management Standards & Regulations</i>	3	3	3	3	2	3
<i>Maturity Assessment</i>	2	1	2	2	2	2
<i>Performance Analysis</i>	4	4	4	3	4	4
<i>Corrective Actions</i>	3	2	2	2	3	2
<i>Establish Authorities, policies, & charters</i>	4	3	4	4	4	4
<i>Establish executive control board</i>	3	2	3	3	3	3
<i>Project Audit and Reviews</i>	2	1	2	2	2	2
<i>Sustainability, Ethics, & code of conduct</i>	2	3	3	3	2	3

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