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ABSTRACT ■

This explorative article develops a relational typology of PMOs based on their roles with stakeholders. A multi-case study was used to identify the roles of PMOs in multiple-PMO settings. A three-dimensional role space allows locating the complex relational profiles that PMOs take on with respect to their stakeholders in practice. Superordinate, subordinate, and coequal roles were identified in a framework of servicing, controlling, and partnering in organizations. While servicing (subordinate role profile) and controlling (superordinate role profile) support organizational effectiveness and exploitation of knowledge, partnering (coequal role profile) creates the slack necessary for potential exploration of new knowledge.

KEYWORDS: PMO; PMO networks; relational typology; organizational slack; innovation; learning

INTRODUCTION ■

The organizational phenomenon of the project management office (PMO) keeps the interest within the project management research field. An indicator of this situation is the noticeable recent research production on this subject in research conferences (L. H. Crawford, 2010; Kulvik, Poskela, Turkulainen, & Arto, 2010; Winch, Meunier, & Head, 2010) and in specialized project management journals (Aubry, Hobbs, Müller, & Blomquist, 2010; Hurt & Thomas, 2009; Pellegrinelli & Garagna, 2009). This statement can also be extended to other project management subjects that pertain to the organizational level (as opposed to the project level) such as program, portfolio, business projects, and so forth.

One interpretation of the vigor of this research trend suggests that research has not yet delivered those answers needed to help professionals solve their problems. In a more critical approach, it can also be interpreted as a fashion nurtured by, among others, researchers themselves. To avoid the fashion effect and the fade out, L. H. Crawford (2010) suggested going back to what PMOs really do and focus on their functions. In parallel, project management structures continue to evolve. When considering a PMO as an organizational innovation, Hobbs and colleagues (Hobbs, Aubry, & Thuillier, 2008) showed that the PMO is still in a ferment era. The phenomenon is not stabilized yet.

Until recently, empirical research has primarily looked at individual PMOs, often because organizations had only implemented a single PMO to serve project management needs. Some of the well-researched questions related to PMO models (Hobbs & Aubry, 2010), performance (Dai & Wells, 2004), or frequent transformations (Aubry et al., 2010; Hurt & Thomas, 2009). With some exceptions, however, there is only limited quantitative validation to concepts and propositions regarding PMO performance (Dai & Wells, 2004), PMO typologies (Hobbs & Aubry, 2008), or patterns of change (Aubry et al., 2010).

More recently, large organizations have started to implement multiple concurrent PMOs, each one having different mandates, functions, and characteristics. From previous workshops in which the authors have participated, they know that implementation of multiple PMOs is often not coordinated; this results in multiple PMOs working in isolation, which is rather surprising given that project-oriented organizations were developed to break these silos of functional units (Burns & Stalker, 1961; Turner & Keegan, 1999). Organizations are now searching for a better articulation among their PMOs and within their overall governance structure. As of now,

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the authors are not aware of any academic research that has looked at this multi-PMO phenomenon.

Instead of looking at one PMO at a time, this article suggests considering multiple PMOs within an organization and understanding the consequences of the diverse PMO roles for organizational outcomes. For that, the authors raise the following research question: *What is the nature of PMO in terms of relationships within multi-PMO organizations?* Our unit of analysis is the relationship between a PMO and its stakeholders, and among other project managers, peer PMOs, and/or some project-related governance entities within the organization.

Complementary to prior conceptions and typologies of PMO characteristics (e.g., Hobbs & Aubry, 2008), this approach does not only qualify PMOs by their internal conditions and characteristics but, in addition, focuses on the relations that PMOs establish with their stakeholders. The value of such a relational perspective on PMOs, we argue, is that the actual relations between PMOs and project managers will have a strong impact on the way an organization learns. It is assumed that innovations in project management depend on effective knowledge sharing between experts in an organization. Specifically, the authors hypothesize that PMO roles affect the quality of knowledge exchange and thereby leverage innovation. This article pursues two concrete objectives: First, it seeks to understand fundamental types of PMOs from a role perspective, both conceptually and empirically. Second, it explores the impact of different PMO role models on organizational learning and innovation in the field of project management.

The article is structured as follows. The section on Conceptual Framework develops the PMO role typology by distinguishing three ideal role types that PMOs can establish with their stakeholders and the impact those PMO roles may have on performance in

terms of slack and innovativeness. By combining the literature of organizational learning and the role triangle, we develop propositions about the effects of particular PMO roles on innovation in project management. The section on Methodology reports the research design and methodology of a multiple case study approach, data collection, and analysis. The next section, Case Study Descriptions and Findings, reconstructs four organizational case studies by analyzing the PMO roles. The section on Effects of PMO Roles interprets the cross-case findings by use of a graphical representation, the role triangle. The Discussion section brings four themes into the discussion, and the article closes with the conclusion.

Conceptual Framework

Role Typology Based Upon PMO Relationships

PMOs are extremely heterogeneous—they vary in size, mandate, functions, and so forth—and they are very ephemeral in nature. One of the few extended surveys on PMOs found that the majority of PMOs observed had been implemented within the last 24 months only (Hobbs & Aubry, 2010). Given the seeming volatility and contextuality, there have been quite a number of efforts to detect underlying commonalities and generalize concrete ideal types of PMOs (Hobbs & Aubry, 2008); however, most of these typologies focus on characteristics or attributes of PMOs. This article takes a different typological approach. First, it focuses on the relationships that a PMO establishes with its intra-organizational environment rather than its internal characteristics. Second, the typology aims at identifying real types rather than ideal types in order to support management practice.

Given the focus of this article on relationships, we adopt a perspective of roles. A role describes a set of mutual expectations between two actors about their pattern of behavior and interaction.

A role perspective is helpful to understand relational social and organizational structures in that it focuses on the kinds of interactions and interdependencies between organizations or organizational units. In the context of project management, the role concept has been applied to the division of labor between project work and the project–client interface. Turner and Keegan (2001) observed that projects typically require two areas of management: internal project management and the management of the external needs and claims by the client. They consequently distinguish the roles of the steward and the broker. This confirms role differentiation within project management dealing with different stakeholders (Turner & Keegan, 2001).

Instead of focusing on projects, the focus of this article is on PMOs and the potential roles that they take vis-à-vis their stakeholders. A closer look at one of the most established definitions of a PMO serves as a starting point: “[A PMO 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 the PMO can range from providing project management support functions to actually being responsible for the direct management of a project” (Project Management Institute [PMI], 2008, p. 443). This definition has two important implications: first, the concept of the PMO covers a wide range of organizational designs, competencies, and interdependencies with the rest of an organization; second, the authority of a PMO may range from mere “support functions” to the actual responsibility “for the direct management of a project.” This article contends that this makes a difference for the nature of relationships and for the organizational outcomes, whether a PMO operates as a service unit or a management unit.

The central argument of this article is that PMOs relate in different (a)symmetric ways with their stakeholders.

Three roles have been identified: serving, controlling, and partnering. Some PMOs, for example, are pure service units, others are management units that directly control projects and evaluate the performance of projects or even staff, and again others cooperate on continuous improvement of project knowledge by means of reciprocal knowledge sharing with their stakeholders. The central difference between these three pure roles is the (a)symmetry in their relationships: management authority is a dominating role, service support responds to demand and is a complementary or even dependent role, and cooperation reflects a collegial role of partnership. Definitions of the three PMO roles are provided in the following:

- **Serving.** PMOs exert a serving role if they operate as a service unit to internal and external units, project managers, and project workers. Typically, a PMO offers a number of support functions to projects in order to increase resource efficiency and outcome effectiveness. In a serving role, a PMO extends the administrative capacity of a project and provides for operational support in projects through training, consulting, and specialized task execution. It responds to stakeholder needs and ensures overall project performance.
- **Controlling.** At the other end of the asymmetry, PMOs take a controlling role when they operate as management units for projects under their domain. Depending on the scope of managerial authority for which they are commissioned, PMOs may be responsible for the enforcement of project management standards such as methods and tools, for the control of compliance with set standards, for evaluation of project performance, and sometimes even for the assessment of employee performance and career promotion. Whenever PMOs are entitled not only to monitor and evaluate but also to take managerial

action and sanction malpractice, they exert a role of relative dominance and surveillance over project managers and project workers.

- **Partnering.** A third role, not particularly acknowledged in PMO research is the partnering role. The partnering dimension has received limited or no attention so far and is not explicitly acknowledged in the seminal PMI definition (PMI, 2008). Partnering refers to a relationship that is characterized by reciprocity, mutuality, and equality. Partnering implies lateral communication between a PMO and other—equally qualified or equally commissioned—PMOs, project managers, or project workers. Such a coequal relationship would enable or emerge from cooperation and mutual interdependencies. More concretely, a PMO takes on a partnering role when it engages in equal knowledge sharing, exchange of expertise, lateral advice giving, and joint learning with equal level stakeholders.

PMO Role Profiles, Organizational Slack, and Performance

The role typology developed in the previous section is not an end in itself but is proposed as a strategic tool to assess the potential contribution of a PMO to diverse organizational outcomes. Once a PMO role profile is classified and mapped in the ternary role model, questions arise about the effects of this role profile on corporate performance. As of now, academic research is unable to statistically relate PMO characteristics and functions to its performance expressed in terms of financial indicators (Kwak & Ibbs, 2000) or project performance (Dai & Wells, 2004). One more promising approach would be to extend the concept of performance to include a diversity of perspectives such as those suggested within the competing values framework (Quinn & Rohrbaugh, 1983). This framework is based upon the assumption that organizations are diverse and that multiple

and competing values coexist. It already has been shown that the PMO contribution to the organizational performance can be captured using this framework (Aubry & Hobbs, 2011). Efficiency and other financial ratios are parts of the competing values framework but also include criteria from human relations, innovation, and internal processes. Such a perspective of multiple performance criteria, however, stands in contrast to the evolution of the common approach to project management. Projects are organizational tools used to optimize resource input to achieve a certain goal in time, cost, and quality. Although projects are a means to accomplishing short-termed tasks effectively and efficiently, they are not designed for long-term innovation. To prioritize short-term achievements over long-term improvement is one of the critical learning myopias identified by Levinthal and March (1993).

Therefore, this article takes a closer look at the conditions that fundamentally enhance learning, knowledge transfer, and innovativeness of a PMO and project management. PMOs are a novel intra-organizational form to support project management and to leverage performance and sometimes innovation in project management. However, knowledge is often very sticky (Szulanski, 2003), its transfer is difficult to achieve, and it imposes high costs of making new practice available and usable to other parts of an organization. As Porter (1985) witnesses from decades of research in corporations, “the mere hope that one business unit might learn something useful from another is frequently a hope not realized” (p. 352). Under what conditions do organizations innovate? Ever since March’s seminal work, one fundamental rule has become visible: rational organizations tend to prioritize the commercial exploitation of existing knowledge over the exploration of new knowledge, because exploitation yields immediate profits, whereas exploration

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(i.e., research, development, and learning) are investments into future profits with higher levels of uncertainty (March, 1991). Learning processes are subject to myopia because organizations tend to overlook distant times, distant places, and failures (Levinthal & March, 1993).

One approach to maintain exploration and experimentation despite the incentives to focus on short-term exploitation is organizational slack. Theoretically, the basic assumption is that every firm purchases and uses all of its inputs efficiently; however, “the data suggest that there is a great deal of possible variation in output for similar amounts of capital and labor and for similar techniques, in the broad sense, to the extent that technique is determined by similar types of equipment” (Szulanski, 2003, p. 404). This *x*-efficiency is defined as the discrepancy between actual output and maximum output for a given set of inputs (Leibenstein, 1966).

In its classic definition, slack refers to the “disparity between the resources available to the organization and the payments required to maintain the coalition” (Cyert & March, 1963, p. 36). Examples of slack are excess dividends to shareholders, higher wages than those needed to keep labor, or the supply of uncommitted resources. Slack is the “cushion of actual or potential resources, which allows an organization to adapt successfully to internal pressures for adjustment or to external pressures for change in policy, as well as to initiate changes in strategy with respect to the external environment” (Bourgeois, 1981, p. 30). Cyert and March (1963) hypothesize a positive effect of slack on performance; however, slack does not produce endless advantage. Empirical studies in multinational firms suggest that organizational slack enhances experimentation but that it also reduces discipline over innovative projects, resulting in a U-shaped relationship between slack and innovation (Nohria & Gulati, 1996).

Projects are by definition opposed to slack and experimentation because their primary task is to complete objectives in time, cost, and quality. Projects usually are *the* device of efficiency. The concept of organizational slack has merely been applied to innovation in project management. One interesting exception is an explorative case study by Keegan and Turner (2002) that found an accordion effect in which slack resources were tolerated more in some situations than in others: “According to descriptions of respondents, it seems that following a period of poor innovative outcomes, slack resources are considered as potentially important for innovation and more resources are subsequently made available. On the other hand, when positive results are slow to emerge, the mood changes, and slack is seen as negative and inefficient use of resources” (p. 377). Consequently, the authors conclude that for projects to perform good innovation projects, new management techniques are necessary to respect slack resources and use overcapacity to leverage real innovation.

What is slack in the context of PMOs and how could PMOs be fitted to enhance innovation in project management? We see at least three areas of missing slack in PMO organizations: (1) short life span; (2) missing human resources dedicated to knowledge sharing and innovation; and therefore (3), a limited engagement in a partnering role with other stakeholders. First, according to prior extensive research, PMOs tend to live short time spans (Hobbs & Aubry, 2010). Although the potential benefit of short-lived PMOs points toward their adaptability to changing situations of project management in an organization, it also implies a dangerous weakness. The fact that PMOs are implemented to meet certain objectives and that they are dissolved immediately after accomplishment reflects organizational efficiency. However, it also reflects a lack of slack in organizational capacity to consolidate lessons learned, to follow-up on achievements

and critical experiences and to develop new knowledge about project management perspectives, methods, or concrete techniques. This is in line with results from Williams (2007), confirming the difficulty to document lessons learned from projects.

Second, PMOs are often quite small units with limited human resources. PMOs are designed for efficient resource use and effective project management outcomes—time, quality, and cost targets. Hence, PMOs are often underequipped with personnel that takes care of collecting experience, sensing “better” practice, and developing new templates for innovative practices in project management. Third, and consequently, we expect that the efficiency focus will lead to a predominance of serving or controlling role profiles in which PMOs either offer support to efficient project management or take the management responsibility directly. Instead, partnering role profiles as suggested in the PMO role triangle would create slack through mutual knowledge exchange, reflective action, and feedback loops rather than purely leveraging efficient project execution. This article hypothesizes that PMO partnering creates slack and supports creative processes in yielding original project management innovation (see Figure 1).

Methodology

This study uses an abductive epistemological approach within a critical realist perspective (Archer, Bhaskar, Collier, Lawson, & Norrie, 1998; Sayer, 2000). Because the research question focuses on a new understanding of the nature of PMO relationships, the corresponding research strategy follows a qualitative methodology. The reality of a single PMO is quite well known; however, little is actually known when considering multiple PMOs and their relationships. In this context, the first research step to be undertaken is the understanding of the phenomenon within its context (Patton, 2002). This goal is better

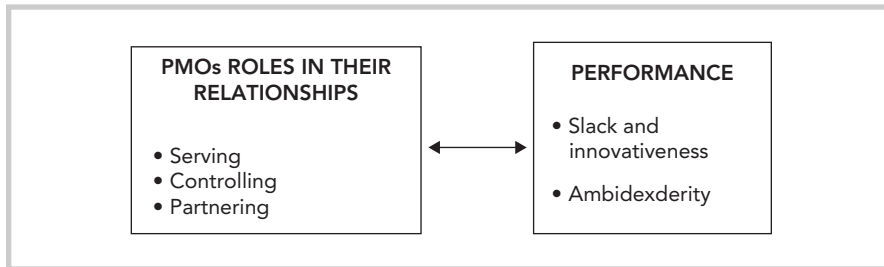


Figure 1: Conceptual model: Relations between PMO roles and performance.

reached within a qualitative approach such as case studies (Eisenhardt & Graebner, 2007). We adopted a multiple-case design, which implies replication logic (Yin, 2009) within which a case is treated as an idiosyncratic expression of the phenomenon under study. Four organizations have contributed to this research. Data were mainly collected through semi-structured interviews. Other complementary data were obtained from interviewees (such as internal reports, presentations, and so forth) or from public information on company websites. Organizations were selected to offer a strong research design with a mix between homogeneity and heterogeneity (Eisenhardt, 1989). All four organizations share some characteristics: they are large and they have formalized their project management processes through implementation of more than one PMO. On the other hand, each organization is specific to its geographical region and economic sector. In each organization, interviews were realized with individuals representing a variety of roles, such as PMO director, its supervisor, and project manager. A total of 46 semi-structured interviews were conducted. (See Table 1 for

the details on organizations and interviews.) In line with Yin (2009), validity was assured by looking for multiple sources of evidence and by having the key-informants reviewing the research report and findings. Reliability was assured through replication logic.

Interview data were analyzed by using different and complementary strategies (Langley, 1999). The interviews followed a grounded theory approach for each individual case. In line with an abductive approach described for the cross-case analysis, the grounded theory approach followed the Glaser and Strauss (1967) school. This implies an analysis after each individual interview and a continuous comparison approach to identify commonalities, as well as ruling out one-time events, thus ensuring a robust theory. Interviews in the first case study were registered, transcribed, and then analyzed using ATLAS.ti (ATLAS.ti Software Development, 2004). In the three other case studies, interviews were recorded and notes were taken by the researcher during the interview and were promptly analyzed; then, following Miles and Huberman (1994) and Eisenhardt (1989), we undertook cross-case analyses to develop the underlying

concepts. There was a steady back and forth between data from the cases and the identified concepts in order to ensure that the concepts were consistent with the data (and valid). Within each case, multiple respondents participated in semi-structured interviews to provide reliability of results. For each PMO, data were cross-validated between respondents.

Case Study Descriptions and Findings

In this section, the four case studies are first shortly described in their specific contexts; then, the structure of the PMO's network is described and analyzed under the three basic PMO roles (serving, controlling, and partnering). For each case study, a synoptic table summarizes findings and presents the intensity of roles for each PMO.

Case 1: Healthcare Service Provider

Context

This case study is a public healthcare service provider constituted of quasi-autonomous organizations spread over three structural layers: national, regional, and local (hereafter, Healthcare). Like in many western countries, the healthcare system is facing major challenges, such as the aging population, lack of personnel, outdated facilities, sub-optimal processes, and so forth. Major investments are therefore authorized and aimed at the healthcare system's renewal. Projects include construction of new hospitals, clinical processes reengineering, and implementation of new technologies. Stakeholders and change management are crucial to success. Project management practices

	Case #1	Case #2	Case #3	Case #4	Total
Geographical location	North America	Europe	Asia	Europe	4
Economic sector	Healthcare	Telecommunication	Pharmaceutical	Finance	4
Number of PMOs investigated	11	7	5	4	27
Number of interviews	21	7	10	8	46

Table 1: Case study descriptions.

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are quite well established at the national level but are often limited to the IT sector. There are various roles to PMOs, depending on their level and on their leadership to implement and develop project management competencies. Project methodology has been adopted since being at the national level for a few years and is actually in implementation at the other levels. Since 2004, rigorous governance rules have been applied to project management.

Structure of the PMO's network at the healthcare case study mirrors the organizational three-layer structure: national, regional, and local levels. At the national level, there are three PMOs. One PMO is located within the IT department. This national IT PMO is primarily responsible for project portfolio management and more specifically concerned with investment strategy, project coordination, project control, and so forth. It also aims at enhancing the overall project management competencies by the implementation of project management methodology, tools, and techniques at the regional level. Projects are realized by a private partner, outside the national IT PMO. This PMO also manages a *PMO coordination committee* where all regional PMO directors meet on a monthly basis. This committee serves as a sharing and learning mechanism, resulting in spreading out best practices to enhance the project management competencies. The second PMO at the national level is dedicated to the specific project of Personal Health Record (PHR). The third one is the delivery arm to the national IT PMO where projects are realized.

The 18 regional PMOs have been put in place following a recommendation from the national level. The majority of them are located in the IT department even if projects are rarely purely IT. There are large variations between these 18 PMOs regarding their size and their maturity in project management, and these PMOs are accountable for the implementation of the projects in local

settings. Their project managers are particularly interested in the implantation strategy and change management. Multiple informal links exist between regional PMO directors and between regional and local PMO directors. There is a climate of collaboration and help.

Local PMOs are located in a global local center and within individual hospitals and healthcare centers. This level also includes university hospitals; therefore, they are in direct contact with patients. There are approximately 100 PMOs disseminated over these local healthcare institutions. Some variations in size and project management maturity exist between the local PMOs. The biggest PMOs are actually found in university hospitals, because major investments are placed there. PMOs are often specialized in construction, IT, or process reengineering. Project managers often have certified qualifications.

Identifying PMO Roles

Eleven healthcare PMOs participated in this research. The analysis of their relationship under the basic PMO roles permits identifying five different groups of PMOs that are presented in more detail in the following paragraphs (see Table 2).

1. *PMOs at the national level (national IT PMO and PMO for PHR project).* These PMOs perform two high-level functions for controlling and partnering in relationship with other PMOs. On one hand, they strongly control projects within strict governance mechanisms. The national IT PMO asks the local hospital PMO to report periodically on their projects' costs expenditures and projections and asks for financial indicators or for more global value-added indicators. On the other hand, the same national IT PMO initiated a knowledge platform for use by all PMO managers and project managers. This effort could be regarded as a communities of practices activity. It takes the

form of a national committee, one grouping regional PMO directors and the other grouping regional project managers. The ultimate goal is to develop and engage the national healthcare system in project management. In the short term, the objective is to share good practices and to develop together any missing processes or tools. The partnering shows less intensive function in the implementation of project portfolio management. Actually, there is no inventory of all projects going on at all three levels in the healthcare national system, and consequently, there is no idea of the global resources allocated to projects. However, regional and local organizations sometimes perceive this initiative as an intrusive approach. The serving function is performed at a very low level.

2. *National IT supplier and local PMOs.* These PMOs concentrate their most important function on the controlling and do not perform that much of the partnering and serving. This function is accompanied by strong project management techniques and strict methodology, processes, and tools. The national IT supplier PMO adopted a strategy of suppliers to deliver IT software components. This PMO manages a portfolio of contracts. With strong project management methodology, processes, and tools, this PMO can monitor and control its suppliers' work. Not surprisingly, this PMO owns an ISO certification in project management. Local PMOs dedicated to IT or real estate projects could also be associated with this national supplier PMO.
3. *Regional PMOs.* These PMOs present a strong function of serving clients. Everything is turned toward this goal of satisfying the needs of their clients. Their mandate covers two types of projects based on their clients: internal client—more often from a functional unit—and local needs where clinical solutions are directly implanted for

PMO BASIC ROLES			
PMO Identification	Serving	Controlling	Partnering
1. National IT PMO and PHR PMO	<p>LOW</p> <ul style="list-style-type: none"> Serving functions are less present at the national level 	<p>HIGH</p> <ul style="list-style-type: none"> Monitor and control projects costs/schedule/content particularly with local PMO for major projects and with the national IT supplier PMO 	<p>HIGH</p> <ul style="list-style-type: none"> Knowledge of national platform with regional PMO directors and project managers <p>MODERATE</p> <ul style="list-style-type: none"> Implementation of project portfolio management: inventory of projects <p>LOW</p>
2. National IT supplier and Local PMOs	<p>LOW</p>	<p>HIGH</p> <ul style="list-style-type: none"> Develop methodology, processes, and tools Monitor and control projects costs/schedule/content particularly with major projects sub-contractors 	
3. Regional PMOs	<p>HIGH</p> <ul style="list-style-type: none"> Develop and implement methodology, provide tools Manage projects under their regional mandate Provide support to project teams for project not directly in their mandate 	<p>LOW TO MODERATE</p> <ul style="list-style-type: none"> Monitoring and control of projects under their mandate 	<p>MODERATE</p> <ul style="list-style-type: none"> Participation to the national PMO coordination committee To local PMO directors: informal sharing of good practices <p>Low partnering function:</p> <ul style="list-style-type: none"> To internal organizational governance: not that much included
4. Regional/Local PMO	<p>HIGH</p> <ul style="list-style-type: none"> Develop a project management framework, including methodology, processes, and tools Manage project in a coaching approach Provide support to project teams for project not directly in their mandate 	<p>LOW</p> <ul style="list-style-type: none"> PCO: not acting as controller but collect information to present a global view of the project portfolio. Soft approach management language 	<p>HIGH</p> <ul style="list-style-type: none"> Participation to the national PMO coordination committee With regional and PMO directors: informal sharing of good practices Participate and influence international organizational governance <p>MODERATE</p> <ul style="list-style-type: none"> Executive Board members as “partners” to the PMO Knowledge acquisition and transfer through projects Strong relationship with other functional departments
5. University hospital	<p>MODERATE</p> <ul style="list-style-type: none"> Clear mandate to support organizational change Manage projects: Co-construction with project team Innovation is encouraged Support project management within a multidisciplinary advisor committee 	<p>MODERATE</p> <ul style="list-style-type: none"> To national project governance: provide strict monitoring and control of project. A specific function of the PMO is to evaluate projects and project management financial report. 	

Table 2: PMO roles in Healthcare case study.

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patients. They manage the project for the former and the support projects for the latter. Following this serving approach, control of the project is rather low. Considering now the partnering function, PMOs of this type are at a low or moderate level. They are at a low partnering level when considering its role vis-à-vis the internal organizational governance. This type of PMO is only partially involved in governance. But, when taking specifically a project management perspective, this PMO participates in partnership at the national level as a member of the PMO's coordination table. These PMOs are also associated with other local or regional PMO directors for sharing experience in an informal approach.

4. *Regional/local PMO.* This PMO has a particular double mandate, including regional and local responsibilities. Like regional PMOs, it has a strong serving function dedicated to internal clients and to local needs and quite low control over projects. This PMO has developed its own project management framework, which includes methodology, processes, and tools. It has a soft approach to their clients in order to get them engaged softly in project management; however, this PMO has a strong partnering function. Its director participates very strongly in the national PMO's coordination committee and in other specific working subcommittees. He also created other networks between PMO directors to share and build new components within the project management framework. This PMO participates actively in the internal organizational governance. The project management framework is at a point of being accepted at the organization level as a common project management language.
5. *University hospital PMO.* This PMO might be quite exceptional, showing moderate results in all three dimensions of serving, controlling, and

partnering. It refers to a PMO in a university hospital with a mandate to accompany a major organizational change. Serving clients is clearly in its mandate. Generic project methodology processes and tools have been developed but are adapted to each specific project's needs. Innovation in management is encouraged. A multidisciplinary advisory committee has been put in place for the PMO to support the entire organization in project management and, ultimately, in managing changes. This PMO has also provided results to the national governance level within strict financial limitations. A specific function within the PMO is to evaluate projects and project management financial performance and to report on it. Turning now to partnering, this PMO establishes strong internal links; it participates in the executive board, where members are considered as partners of the PMO (PMOs have given them the title of Partner). Another partnering function relates to knowledge management. This PMO has implemented a specific function to collect and share knowledge through projects and a specific role of knowledge broker. They want projects to be based on evidence-based data. This is true for clinical content, but also for management content. PMO has taken the leadership to establish strong relationships with other functional departments, such as human resources or quality management. Common project management processes were developed to insure a common and appropriate contribution from those units to projects.

Case 2: Mobile Phone Development and Manufacturing

Context

The company is a long established global telecommunications company, headquartered in Northern Europe, acting as a main player in a fast moving and competitive market (hereafter Telecom).

Project management is a well-established role in the organization. Most of the project managers are professionally certified, formally assigned to projects, and respected in this role. The projects are telecom projects for systems integration, multimedia, or network rollout. Project performance is assessed in terms of reaching targets for time, budgets, quality, and customer satisfaction. The particular role of the PMOs is to provide subject matter expertise in project management for particularly important projects, and within countries where the required expertise is not (yet) built up locally. Dedicated methodologies are in place for both project management and project governance (see Table 3).

Identifying PMO Roles

The PMO network consists of approximately 200 individual PMO organizations, with approximately 500 members altogether. The network is hierarchically structured in a PMO at Headquarters, as well as those at the global, regional, and country levels.

1. *Headquarters PMO.* This PMO develops and owns project management in the corporation. The hierarchical concept of the PMO network is developed here and deployed through the other PMOs. The main task is in policy development and deployment, which includes new tools, techniques, training, and certification programs. Feedback on the scope and depth of deployment at the regional and country levels is through the work of the global PMO. Synchronization of the different PMOs takes place through common charters, objectives, and incentives, as well as missions tailored for the different layers of the network hierarchy. The mission of the Headquarters PMO is to establish world-class PMOs and be recognized in the market for this.
2. *Global PMO.* This PMO works as the interface between the Headquarters PMO and the regional PMO by serving the Headquarters in terms of

PMO BASIC ROLES			
PMO Identification	Serving	Controlling	Partnering
1. Headquarter PMO	LOW	HIGH • Development and ownership of project management, its processes, methods, and policies	LOW
2. Global PMO	LOW	HIGH • Worldwide deployment • Evaluation of maturity	MODERATE • Tailoring to regional needs
3. Regional PMO	LOW • Manage projects on behalf of country project manager	MODERATE • Deployment of processes, methods, and policies	HIGH • Recovery of troubled projects • Knowledge transfer to local project managers • Tailoring to local needs
4. Country PMO	HIGH • Managing projects	LOW	LOW

Table 3: PMO roles in Telecom case study.

managing global deployment but also in assessing and evaluating project management maturity in the regions. The latter includes control of regional PMOs. The majority of work is done in partnership with the regional PMO for tailoring Headquarters deployment blueprints to the needs of the regions, supporting regions in balancing resources across organizational and country borders, as well as organizing global knowledge exchange events. The global PMO synchronizes with the regional PMOs through key performance indicators.

3. *Regional level PMOs.* Regional level PMOs work mainly in partnering functions on the recovery of troubled projects or as “place holders” in case of a lack of skills in a particular country organization. In the former role, they work with country-level project managers on project recoveries and on skills transfer. In the latter role, they serve a country organization by managing projects within a country until local skills are deployed. Some control through standardization and improvement of project management within the organization is also done here, but only by a few PMO members.

4. *Country level PMOs.* The mission for country and regional level PMOs is to provide resources for balancing competencies across borders. Country level PMO members manage projects at customer sites toward set objectives in terms of time, cost, quality, and customer satisfaction.

Case 3: Pharmaceutical Development and Manufacturing Company

Context

This company is a relatively young development and manufacturing company of medical and healthcare products with Headquarters in China (hereafter, Pharma). Since its start-up, the company has grown extensively within an established, but competitive market. The majority of its 30,000 people workforce is employed in China; however, cooperation with other institutions and sales are done worldwide. Project management is a well-established function, with approximately 100 (in their majority certified) project managers. Projects are classified by scope and complexity (A = strategic, B = cross departmental, C = within a line function). Project managers are assigned to projects based on their project management experience (see Table 4).

Identifying PMO Roles

The PMO is a virtual organization within the company’s headquarters. It consists of the PMOs of different departments. Each PMO representative at the Headquarters level functions in a dual role as department manager and as a PMO in his or her respective organization. At the Headquarters level they are referred to as an expert group for project management. This group consists of six members plus a manager. These managers frequently draw upon the knowledge from an additional 12 project management experts from within the community of project managers.

The Headquarter PMO is supported by a project information management group for the communication in the form of information collection and distribution, mainly using an IT platform.

1. *The Headquarter PMO.* This PMO selects projects; assigns project managers; and provides the methods, techniques, career path, certification, and communication platform for project managers. Simultaneously, the PMO functions as the steering committee and the escalation point for projects in execution. Development work within the PMO (e.g., of new practices) is assigned to

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PMO BASIC ROLES			
PMO Identification	Serving	Controlling	Partnering
1. Headquarter PMO	LOW	HIGH <ul style="list-style-type: none"> • Authorizing of projects • Ownership of processes, methods, and policies • Project steering group • Evaluation of project and project manager performance • Certification program 	LOW <ul style="list-style-type: none"> • Knowledge transfer through training

Table 4: PMO roles in Pharma case study.

PMO BASIC ROLES			
PMO Identification	Serving	Controlling	Partnering
1. Business Office Project (BPO)	LOW	HIGH <ul style="list-style-type: none"> • Portfolio management of country level projects • Ownership of processes • Project follow-up 	LOW
2. Project Management and Strategic Integration Office (PMSI)	MODERATE <ul style="list-style-type: none"> • Application testing 	LOW	HIGH <ul style="list-style-type: none"> • Interface business and IT through translation of requirements
3. Local IT PO	HIGH <ul style="list-style-type: none"> • Corporate-wide IT projects 	LOW	LOW
4. Strategic Project Office (SPO)	MODERATE <ul style="list-style-type: none"> • Project management for some of the strategic projects 	LOW	MODERATE <ul style="list-style-type: none"> • Definition of strategic projects

Table 5: PMO roles in Financial case study.

a member of the PMO, who then engages relevant experts. The final product is reviewed by the PMO expert group and may be adjusted before deployment through the web platform. Through this structure, the PMO does not interfere with the project managers' day-to-day work but governs project management in a subtle but comprehensive manner. Table 4 summarizes the roles and functions of the PMO in this case.

Case 4: Financial Services Provider

Context

The organization is a leading co-operative bank in Germany with approximately 7000 employees (hereafter, Financial).

A recent change of owner increased the number of projects because of the need to align the business and governance systems of the two organizations. Project and portfolio management are established functions. Approximately 100 projects were ongoing at the time of investigation. Four PMO organizations exist within the bank some of them in a hierarchical relationship, others at a peer-to-peer level (see Table 5).

Identifying PMO Roles

The four PMO organizations are:

1. *Business Project Office (BPO)*, reporting to the executive board. This eight-person PMO consists of a group for portfolio management and an expert

group for finance, marketing, and strategy projects. This is the "roof organization" of all PMOs with a holistic view over all projects. They hold a strong controlling role through ownership of the project management process and by providing portfolio management and follow-up on projects; furthermore, they ensure the communication between business and IT functions.

2. *Project Management and Strategic Integration Office (PMSI)*, reporting to the Executive Board. This 20-person PMO focuses on IT projects and serves as the interface between business and IT. Their tasks include translation of business into technical

requirements; assessment of impact of changes on policies, structures, and so forth; as well as testing of software. In this role, they show a high-partnering profile across the IT and business functions of the organization. Some minor serving is done by testing software, which is developed elsewhere in the organization in accordance with specifications that this PMO helped to translate from business to IT language.

3. *Local IT Project Office (Local IT PO)*, reporting to the IT Operations Committee, led by the chief information officer of the new owner of the bank (that is, another European financial institution). This six-person PMO manages, coordinates, and tracks the largest IT change projects. They focus on cross-organizational IT projects, by doing this, they mainly perform a serving function for and within corporate-wide IT projects.
4. *Strategic Project Office (SPO)*, reporting to the Operations & Technology (O&P) department. Their focus is on strategic projects in O&P which can also be non-IT projects. This PMO develops the strategies for the O&P department. This constitutes a controlling role; however, they also define and manage some of these projects. This constitutes a serving role, so their combined role is the most balanced role among all PMOs, given by the balance of a partnering and serving role in their work.

Central control lies with BPO, which provides the interface structure of the PMOs; however, PMO members feel responsible to act informally across organizations. This is especially visible in the participatory decisions and synchronization meetings, which have no central manager, only a facilitator without an ascribed position or responsibility.

The four case studies described and analyzed previously provide a novel approach to a PMO typology based upon their relationship with stakeholders. Results reveal differentiation between PMOs within the three basic roles leading

to a specific location within one of the four regions within a role triangle, which constitutes the relational typology. As said earlier, the typology is not an end *per se*. It allows associating a PMO type with capabilities, here learning capabilities and support to innovation. The following section highlights some facets from these findings.

Effects of PMO Roles

Introducing the Triangle

The conceptual framework presented in Figure 1 includes components that capture relationships between PMOs based on three base roles: serving, controlling, and partnering. The four case studies described above were analyzed with respect to these roles. We argue that potential responsibilities and actions that PMOs take on can be mapped into one of these three base roles. In practice, however, each PMO will most likely take on various roles simultaneously and will thus exhibit a complex profile made up of a mixture of these roles. In order to capture such an empirical role profile, we developed a ternary role model that offers a location for every theoretical combination of the three base roles: serving, controlling, and partnering. This typological approach is best realized by use of a ternary diagram.

A ternary diagram is a triangle that displays the relative proportions of three possible categories of individual elements, which make up an aggregate population. These categories must be mutually exclusive and collectively exhaustive (Plewe & Bagchi-Sen, 2001). A labor market, for example, is composed of employment, which is either primary (agriculture), secondary (manufacturing), or tertiary (services) (Preusser, 1976). Ternary diagrams are a graphical technique, which is common in various disciplines (e.g., demography, geography, chemistry, or pedology). They are used to represent trivariate data in which the three variables represent proportions of a whole (Graham & Midgley, 2000), such as the composition

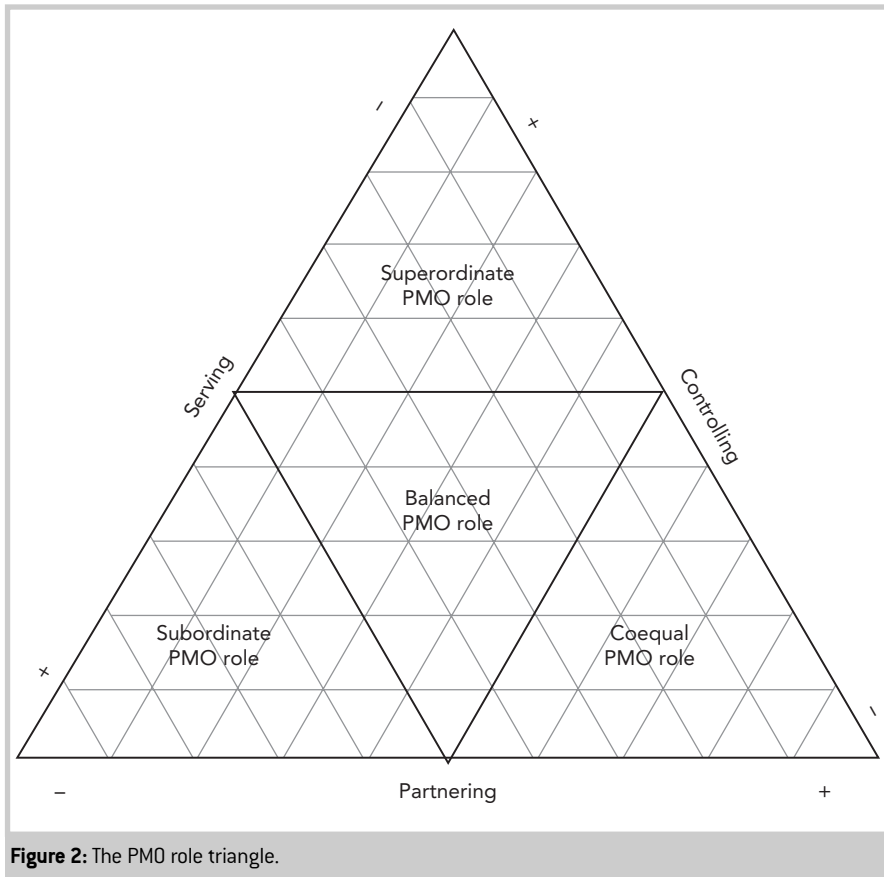
of a territorially bounded population by age (adolescent, adult, retired) or ethnicity (Plewe & Bagchi-Sen, 2001), or the composition of a population of schoolchildren according to public, private, or post-secondary schools (Patterson et al., 2007). In the context of PMOs, serving, controlling, and partnering are clearly exclusive role elements that combine into an aggregate role profile. Within a three-dimensional role space, each theoretical mix of roles can be plotted as a specific role profile. For reasons of simplicity, we distinguish four role regions based upon role profiles (see Figure 2): the superordinate role profile (controlling), the subordinate role profile (servicing), the coequal role profile (partnering), and a balanced profile in the center without a focused orientation. Every PMO role profile can now be located in this role space. Within this conceptual framework of a ternary role space any concrete combination of roles that a PMO exerts can be associated with a particular role region and thus be located as a ternary role profile. The diagram can be used for different scales of analysis, that is, at the level of the PMO (mapping the distinct activities), at the level of the organization (mapping the different PMOs), or at the level of a group of organizations (mapping the distinct PMO cultures for a set of organizations).

PMO Role Profile

The case studies presented above can now be analyzed using the role triangle. In this section, a cross-case analysis is presented comparing the four individual case studies. As illustrated in Figure 3, PMO networks can be drawn for each of the case studies showing interesting results about PMO relationships.

Except for the Pharma case, the other three case studies show a variety of PMO roles. PMOs at the top apex in the superordinate profile are positioned higher in the organizational hierarchy. They share the accountability for project results with respect to scope,

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budget, and schedule. This is obvious in Telecom and Finance, where PMOs at the top level have direct formal authority over PMOs at the regional level. In Healthcare, the two superordinate PMOs are not in a position of formal authority over the other ones, but they have established relationships under the control of projects. In Pharma, the virtual PMO has clear authority over project managers, for example, through the annual assessment. Altogether, the position of PMOs within the triangle and the analysis of their position within the organizational chart may be contrasted to the hierarchical PMO model suggested in K. J. Crawford (2010), where multiple PMOs coexist at different hierarchical levels without taking into account their relationships. However, to date, no research has identified a

clear correlation between organizational hierarchy level and the function of a PMO, for example, monitoring and control of projects (Hobbs & Aubry, 2008).

Results also show PMOs in serving roles. In three cases, these PMOs are directly managing projects; they are in between a PMO that asks for control and other PMOs that are implementing projects.

On the partnering apex, there are three PMOs offering different interpretations. In Telecom, this regional level PMO has clearly in its mandate to support and help in troubled projects. This function has more chance to succeed in a partnership type of relationship, where learning is a value rather than a fault culture often associated with control. In Healthcare, this PMO maintains

rich network opportunities through implication of its director at different organizational levels. Under this PMO leadership, many new project management initiatives have been implemented on a voluntary basis and diffused throughout the whole network. In Finance, the coequal PMO type has a strategic mandate with a translation responsibility between business and IT. In this particular case, partnership appears to be a good approach to opening up a dialogue between stakeholders that more often have different perspectives on projects.

At the central part of the triangle, the balanced PMO role is positioned, reflecting equilibrium in the intensity of controlling, serving, and partnering. Two PMOs are at this triangle position. In the Healthcare case, the PMO has a controlling relationship over the projects it manages because it has great pressure from upper levels to respect the budget and make projects contribute to the ROI. On the other hand, in the healthcare sector in general, the project management standardization is rather low. The approach this PMO has developed with PMOs in clinical projects is to serve and help participants grow their projects and learn constructively. This PMO has also developed partnerships with other functional units, which otherwise would have possibly entered in tensions or power struggles (Aubry, Hobbs, Müller, & Blomquist, 2011). In short, this PMO in Healthcare undertook strong actions in all three roles. In Finance, the PMO undertook rather moderately strong actions in each role.

Slack and Innovativeness Through Partnering Roles

In this section, a cross-case analysis is presented taking an integrative view of the 27 PMOs identified in this research. Figure 4 suggests a new interpretation from the qualitative case studies.

Interestingly, what could be observed from Figure 4 is that the distribution of PMOs in the ternary diagram

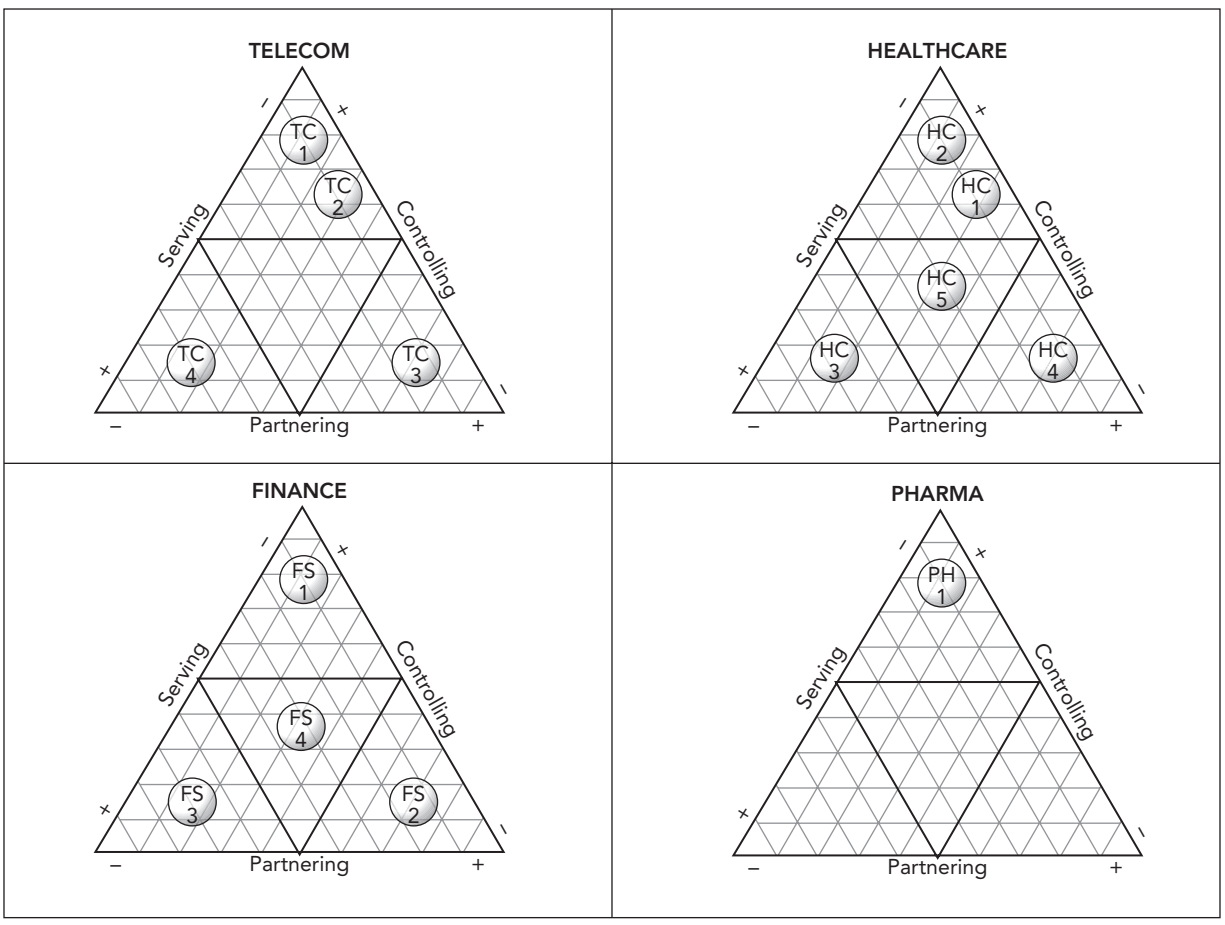


Figure 3: The four case study triangles.

shows that PMOs are more likely to take on controlling or serving roles rather than partnering roles, with both being separated by a bold line with nine out of fourteen PMOs. Some of the circles stand for more than one individual PMO. When taking the reference to the number of individual PMOs, it is 10 in the controlling role and five in the serving role out of 21 PMOs, or globally, 71% for both roles. The five other PMOs are associated with the partnering role.

Controlling is the most common role and can be associated more specifically with the PMO function of monitoring and controlling projects. This result is in line with previous research

that has shown that this function is the most important one and one that is under the mandate of most PMOs (Hobbs & Aubry, 2010). Conversely, the serving role is associated with a collaborative approach to internal clients. In this role, a PMO is more likely to offer services to project management stakeholders.

The serving PMO will negotiate its own mandate to answer the specific needs of stakeholders and to respect the relationship with it (Huemann, 2010). Instead of imposing a methodology, a process, or a tool, this approach supposes that the PMO will adapt its solution to the need and the degree of

formalization of each stakeholder. These PMOs share a certain degree of fear of being rejected; being rejected may mean attacking the PMO's legitimacy. Fifty percent of PMOs have been put into question over their last two years (Hobbs & Aubry, 2010). Avoiding conflict to maintain PMO survival was the strategy of some of PMOs in the serving role.

Developing partnerships with stakeholders takes time and engagement for long-term relationships. It may seem curious to invest resources in a long-term partnership knowing that projects are temporary organizations (Lundin & Söderholm, 1995; Turner

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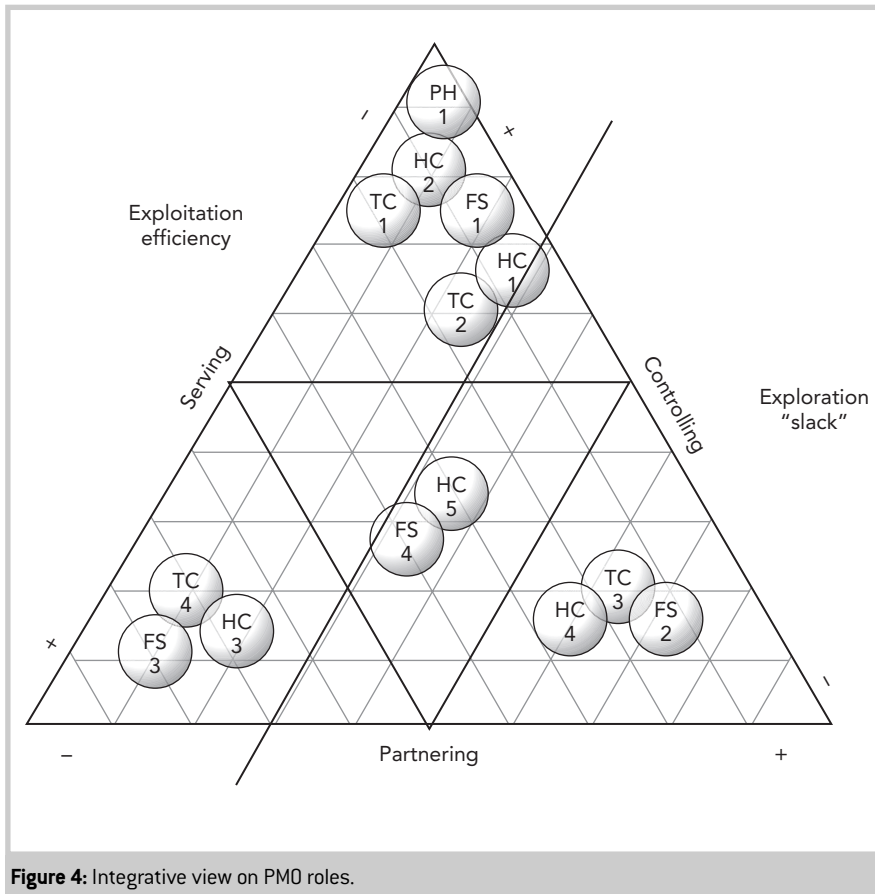


Figure 4: Integrative view on PMO roles.

& Müller, 2003) and that PMOs are transitioning over time as do the environment and their organization (Aubry et al., 2011). This is exactly the point of the role of the PMO as a leader in knowledge sharing between different project management stakeholders. An example from the Healthcare PMO is the dialogue that has opened up on process development between the PMO and the HR department. The PMO has the mandate for reviewing almost all clinical processes within the new hospital construction project. Process development was part of the HR department, which first reacted against the PMO, but the PMO director managed to involve the HR department in reviewing together how this work should be undertaken in the specific large project context. They both agreed on a chart, resulting in the HR department

embarking on the journey with the PMO. For the PMO director, this is the only way to succeed in the long term.

This partnering role is not an ad hoc way of working; it is based on foundations, such as values and shared vision, which are pervasive in all their relationships.

The common characteristics of PMOs in partnership roles, is that they are parts of the network governance; they don't feel the fear, or if they feel it, they act to pursue their vision and to influence decision makers and they are risk taking.

Discussion

Within-case analysis indicates that PMOs within the same organization show different role profiles when interacting with different stakeholders. This becomes evident through the relation

type and the particular position a PMO occupies within the PMO role triangle. Cross-case analysis shows that some PMOs occupy pure roles, whereas others are more diversified or mixed in their roles. From these results, four themes are discussed in more detail in this section.

Superordinate Type PMO Limits

Knowledge Exchange

A pure PMO role is defined as one showing a strong expression of one role and little of the other two roles. From the three possible pure PMO roles, the controlling role is the most common role associated with a superordinate PMO. It is present in all four case studies, suggesting that this function prevails within organizations dealing with multiple projects. PMOs in superordinate roles are found at higher levels in the organizational hierarchy or in similarly legitimized authoritative positions; however, the shared commonality of these PMOs is a lack of learning or knowledge-sharing mechanisms. These results are in line with previous empirical results where control over projects is compared with the return of the iron cage, thus giving great emphasis on controlling projects (Maylor, Brady, Cooke-Davies, & Hodgson, 2006) over creativity and innovation (Turner & Keegan, 2004).

The Pharma PMO is very strong in controlling and they even do a project manager performance evaluation, which influences their career options; therefore, project managers respect the PMO and have incentives to be recognized only for good work performance and learning activities. They would, however, not seek the help of a PMO if the knowledge deficit could be interpreted as negative.

The two other PMO roles are rarely found in their pure forms; of those few, PMOs that show a pure serving role have a specific expertise and support the organization through this expertise. For example, the Local IT PMO from the Finance case has a coordination

role throughout the whole organization for major IT projects, while not having any controlling or partnering function. Similarly, the country PMO within the Telecom case strongly supports the customers at their own site.

Pure partnering is not present at all and only one PMO shows a pure serving role. One interpretation of this result might be that it is difficult for a PMO to exist with just a partnering role. Partnering may have to rely on other complementary roles to exist.

Strengths and Drawbacks on Diversification in PMO Roles

The strength of the PMO role triangle resides in its capacity to locate PMOs in a multidimensional space. Most of the PMOs within the four case studies do present diversification in their roles; this result is in line with the difficulty of typifying PMOs under a single set of activities. As shown here, most PMOs perform more than one single function. PMOs with diversification may fall into the four role types. Looking at mixes of roles, superordinate PMOs are strong in controlling but also in partnering. These PMOs adapt their role to different stakeholders by providing strong control within strict governance mechanisms and simultaneously establishing or participating in learning mechanisms with regional or local needs. In our case studies, we did not find a mix between the controlling role and serving role within the superordinate PMO.

PMOs with a serving function in a subordinate role deploy their efforts to support all project management initiatives within their organization. These PMOs participate in others' partnering efforts; usually, their legitimacy is fragile. They are rarely involved in local governance work. From our case studies, we see no indication of a combination of serving function and controlling role within the subordinate type.

Role diversification may lead to bureaucracy and political lack of transparency. This shows up in the Telecom case study. The global setup supports

tacit and explicit knowledge exchange across the different layers of the hierarchy. Speed in communication up and down the hierarchy is increased through the intranet-based communication platform, allowing for both formal and informal communication between the PMOs and their project managers. Formal and informal communication structures for PMO deployment and related feedback loops allow for evaluating the deployment of both PMO structures as well as project management practices. Communication flows are, however, seen as confidential by PMO members. Although the official knowledge-sharing structures were openly discussed, the researchers' attempts to assess the real data flow in the PMO hierarchy were denied. The unwillingness to support the commensuration of formal and informal structures indicates possible differences thereof and "turf fights" at the level of individual PMOs. To that end, it supports Ouchi's (1977) argument for *bureaucratic control structures*, based on norms and reciprocity of the environment, the legitimate authority of leaders, plus the acceptance of hierarchy by the members of the organization, where information is carried by rules.

Balanced Type PMO: Resources Slack and Responsibilities Shift for Knowledge Transfer to the Individual

There are two elements that merit discussion regarding the balanced type of PMO; first, there is the resource slack. Balanced PMOs occupy the heart of the PMO role triangle. They are at the equilibrium of all three roles, not necessarily with a strong role expression in all three roles but in at least two of them. The major characteristics of these PMOs are:

1. A profound cultural orientation in performing the three roles. It is like not having silos between the three functions. Partnering is present in controlling as well as in serving roles. Partnering is the basic approach for

managing stakeholders, not with a limited number of them.

2. These roles are embedded within the PMO structure. There are dedicated resources for performing activities in partnering within the organization. These two basic values surround the balanced PMO; they are part of what has been identified earlier in this article as providing resource slack in the context of PMOs in order to enhance innovation in project management. From our case studies, we found PMOs that have developed capabilities to interact with a diversity of stakeholders in different roles. What seems to be of major importance, however, is the global orientation toward partnering.

Second there is the responsibility shift for knowledge transfer to the individual. The knowledge flow between PMOs in this case is complex, because of its cross-departmental nature, the span of multiple hierarchical layers, and the geographic distance. Informed decision making across PMOs would require a comprehensive set of formal meetings and other structured communication. To balance the shortcomings of this potential bureaucracy, the communication structures are rather open and only rudimentarily designed, and a "clan" culture in the sense of Ouchi (1979) is fostered to shift the responsibility for knowledge flow for proper decision making from the bureaucratic "system" to the individual. Knowledge sharing is felt as an obligation, a condition for successful inter-organizational performance. Through that, the PMO employees feel responsible for ensuring information flow and mutual update across PMOs and hierarchies. Meetings are held without a formal manager, and information is shared through joint documents, extensive email communication, as well as formal and informal meetings using all available media. Balanced PMO roles increase knowledge sharing but

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reduce codification and compliance with standards.

PMO Ambidexterity

From our results, superordinate PMOs perform mostly a single function of controlling associated with the search for more efficiency. In March's (1991) language of ambidexterity in learning and innovation, these PMOs reflect the rational thinking of exploitation, repeating what is already known. At the other end, the balanced PMOs could rather be associated with exploration, with the learning within uncertainty. Partnering calls for being engaged with different stakeholders in learning from each other, but at the same time, the balanced PMOs perform a controlling and serving role. In this respect, the PMOs may reuse existing knowledge and adopt a more rational approach; at the same time, the balanced PMO should play on exploitation and experimentation.

The concept of ambidexterity has also been applied at the individual level. Aubry and Lièvre (2010) have used this concept to understand the project manager competency to combine and change different management modes in polar expeditions. This is exactly what is needed from a PMO, to combine exploitation and exploration and, more importantly, to change from one mode to the other when required.

Conclusion

We can now answer the research question: *What is the nature of PMOs in terms of relationships within multi-PMO organizations?* The PMO is a multi-role organizational phenomenon, which adapts to the idiosyncratic needs of an organization by varying the expression of their controlling, partnering, or serving role. This leads to different relationships with other PMOs and project management related organizational entities, in which the PMO is seen as either superordinate, subordinate, coequal (respectively), or as balanced across the three extremes.

To answer this question, we developed a simple role typology and a

three-dimensional role space that serves as a tool to capture the complex relational profiles that PMOs express with respect to their stakeholders in empirical practice. The value-add of the triangular role model is twofold: First, it reduces the high complexity of PMO relations into a comprehensive and simple typological framework and thus may qualify as a tool for managers in organizational development. Second, based on the literature on organizational learning and innovation and grounded in four organizational case studies discussed in this research, the article suggests that for project management to enable absorptive capacity and attain sustainable innovativeness, PMOs should engage and intensify the partnering dimension in their overall role profiles. Although service orientation (subordinate role profile) and management orientation (superordinate role profile) support organizational effectiveness and exploitation, partnering creates the slack necessary for potential exploration.

This research has limitations mostly due to its explorative nature. The typology of PMO based on its relationship with stakeholders will need to be tested against a larger number of PMOs; therefore, more quantitative studies for proving and stabilizing the model presented here are suggested for the future. In particular, the partnering role would benefit from much more examples to build a foundation of innovation and slack resources in project management. The strength of the research lies in the combination of so far discretely researched roles into one integrated model.

More research is needed to enlighten the role of project management in innovation, which will also serve the current critics on the lack of flexibility found in the project management field. The contribution to knowledge lies in the integration of thus far distinguished roles and is therefore in line with current methodological trends, which seek to integrate past dichotomies into new

continua in order to integrate views toward new and different knowledge (Teddle & Tashakkori, 2010). To that end, it supports Kuhn's (1996) claim that new knowledge is created by rather small paradigm shifts. ■

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