Integration and governance of multiple project management offices (PMOs) at large organizations

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Abstract

This paper addresses governance of PMOs as an integration of loosely-coupled multiple governance units in large project-based organizations. A four-dimensional framework of PMO governance, consisting of structural, procedural, relational and regulative dimensions, is conceptually developed. This concept is qualitatively tested through a case study at a large European bank, which uses a network of four different project management offices (PMOs). The analysis explores the formal and informal aspects of their integration. Results suggest a predominance of relational and regulative dimensions for integration of multiple-PMO governance structures, and propose variables for observation and analysis of integration efforts in PMO governance. Implications include increased understanding of networked governance of PMOs, as well as the development of associated governance dimensions.

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1. Introduction

Projects have become widespread organizational structures nowadays, establishing new forms of organizations, namely project-based organizations. The myriad of the industries utilizing project work has sailed away from traditional project-based industries, such as construction and IT, towards heavy manufacturing, financial services, insurance and public services. Governance of those new types of organizations is in need of structures and institutions, such as project steering committees, program and portfolio management (Müller, 2009). In 2004 Dai and Wells (2004) pointed out that a new model for more-effective operations in project-driven organizations is required in order to address the emerging organizational changes. Eight years later Aubry et al. (2012) showed how network structures of PMOs emerged and pervade large industries. The need for those specific mechanisms of governance is explained by the loosely-coupled nature of project-based organizations and significant power decentralization, which creates complications for the alignment between projects, project governance systems, functional departments and the organizational context. Lawrence and Lorsch (1967) found that effective organizations solve those problems by balancing it with an appropriate amount of integration. In this sense, integration appears as a relevant element for designing governance mechanisms for project-based organizations. One integrative effort in organizational project governance is the establishment and incorporation of a new entity into the governance system, that is, the PMO (Hobbs et al., 2008), which may appear either alone in an organization or as multiple PMOs, entitled with different project governance tasks, scope of activities and authorities (Müller et al., 2013).

Existing literature on PMO integration into organizations reflects mainly the existing functional understanding of PMOs, capitalizing on formalized and standardized tools and software applications (Cicmil and Hudson, 2006; Turner, 1999).
Moreover, most of the PMO studies are single-PMO studies, whereas there is an emerging trend of establishing several PMOs within larger organizations, at various levels of the organizational hierarchy. This raises questions about the distribution of control and resources among these multiple PMOs, as well as complications in project decision-making processes (Müller, 2009). In addition, other organizational units sharing similar project governance tasks within the organization often coexist along with PMOs, some of them include functional departments and the top management (Müller, 2009). This often causes a significant tension in the power balance between those entities (Aubry et al., 2006).

Moreover, there is empirical evidence that multiple PMOs in an organization are not isolated or completely autonomous units, but instead there are growing interdependencies between them (Aubry et al., 2011). In general there is very little academic research exploring the mode of linkages among the multiple PMOs in order to understand the governance needs and peculiarities of those environments (Hobbs et al., 2008). Hence, taking into consideration that there is a gap of knowledge about the integration of multiple networked PMOs within project-based organizations, this paper aims to explore and identify the dimensions of integration of PMOs in project-based organizations. Building on classical denominators for governance systems in organizational theory this study includes functional dimensions, such as structures and processes, but also interactional and relational, as well as political, moral, and value-based dimensions. Hence, it explores the relational and regulative aspects in particular context to understand the integration in PMO governance from different perspectives.

Aligned with the aim of the paper, the following research question is addressed:

What are the relevant dimensions of integration for PMO governance in large project-based organizations?

In the context of this research question, we also ask:

What are the relevant constructs/variables for governing such integration?

An exploratory, qualitative case study was conducted for an in-depth exploration at a large European bank.

The paper continues with a review of relevant literature to build a conceptual framework for the assessment of the case. The subsequent Methodology section describes the research philosophy and process. The analysis of the case is done next, followed by the results presented in the Summary and conclusions section.

2. Theoretical framework

2.1. PMO governance and involved complexity

There have been many evidenced issues in the governance of project-based organizations. Problems such as misalignment of corporate and project governance efforts (Aubry et al., 2006; Lakemond and Berggren, 2006), retaining the corporate goal alignment (Williams, 2009), managing knowledge, organizational learning and political tensions (Aramo-Immonen and Vanharata, 2009; Turner, 1999; Williams and Samset, 2010) have been constantly discussed in the academic literature. Given the relentlessly changing need of the organization, turbulent organizational environment and the temporary embedded loosely-coupled nature of project-based organizations (Lakemond and Berggren, 2006), it may not be relevant to see organizational governance through the lenses of governance theories such as Transaction Cost Economics, Agency Theory, or Organizational Ecology, which assume organizations as (nearly) static entities (Brown and Eisenhardt, 1997). As Weick (1995) points out: “As we move from which is rational, to which is open, we concurrently move from structures, processes and environments that are less ambiguous, to those that are more so” (p. 70). Taking this perspective, Aubry et al. (2012) suggest studying multiple-PMO settings from the network governance perspectives. The authors argue that “PMO networks develop” in order to balance effectively and efficiently the changing needs for project management governance (Aubry et al., 2012, p. 15). “The net result is that there is considerable autonomous action that unfolds independent of formal structure requirements and in response to a variety of signals” as claimed by Weick (1995, p. 134). Accordingly, Provan and Kenis (2008) identify networks as “essentially cooperative endeavors” where autonomous entities simultaneously act in a goal-directed manner (p. 231). This definition is aligned with the above-mentioned concept of loosely-coupled systems (Aldrich and Whetten, 1981), which highlights that organizational units responsible for the performance of a certain range of functions, should be linked in such way, which ensures successful survival of the system and shows a unity of purpose. Additionally, Rank (2008) identifies formal type of links, such as “explicit, impersonal and functionality specific relationships among the organizational units and actors” (p. 147), and Informal ties. The latter are defined as voluntarily cooperative linkages between the actors, not determined by the organization’s formal structure (Rank, 2008). Given this, the nature and form of those linkages will potentially be major determinants and mechanisms for PMO networking, which will capture both flexibility (Aubry et al., 2006) and a solid staging of structures and processes (Williams, 2009) for governance.

2.2. Integration in PMO governance

Integration is a common and widely used mechanism for organizational management (Scott et al., 1981), whereas its consideration in PMO governance is rarely discussed in the context of project-based organizations. However, PMOs themselves are integrative units within organizations (Macheridis and Knutsson, 2008).

There are different approaches of understanding the concept of integration: for example, as a structure (Macheridis and Knutsson, 2008), or as a process of technical and social integration (Kirsilä et al., 2007) or as a combination of elements and their interactions (Westra and Rodgers, 1991). More precisely, Macheridis and Knutsson (2008) discuss structural, process and strategic aspects in an organizational context and present...
Integration as a means towards an end, which does not seem featuring any behavioral or social aspects (Macheridis and Knutsson, 2008). “Integration is a structure shaped by process into a unified whole, able to maintain the organization in a purposeful relationship with its environment over time” (Macheridis and Knutsson, 2008, p. 4). Other authors in organizational science (Lawrence and Lorsch, 1967) and project management (Kirsili et al., 2007) define integration more as a process, rather than a goal to be reached.

Relational aspects of integration are explored in social and behavioral sciences. Westra and Rodgers (1991) conducted a concept analysis to identify the conceptual definition of integration. They concluded that besides the combination of the elements (structures, subsystems, certain formalized processes), integration also involves interaction, which refers to the participation, communication, coordination, and relationship building within the subsystems and the actors. In his turn, Beretta (2004) mentions that integration comprises also the context that supports it, that is, the values, visions and perspectives of the subjects and subsystems of integration. Moreover, Westra and Rodgers (1991) suggest that “the level of unity between entities is defined by the level of sharing of common purpose and goals” (p. 278).

Relational and regulative aspects of integration are the least often referred to in the context of strategic project management. Critically analyzing project management literature, Cicmil and Hudgson (2006) consider the approach of project management as making typical assumptions of rationality, universality, and objectivity, which result in “value-free decision making and law-like predictions in knowledge” (p. 10). Here managers are viewed as “rational technicians” and the political aspect of organizations and ethical/moral issues are ignored (Cicmil and Hudgson, 2006, p. 12). Hence, it is important that the integration efforts in governance of project management units are addressed from those aspects as well.

The concept of integration in PMO governance is therefore not only explored here in terms of static structures and certain due processes, but also as a “dynamic, interactive and changing and adaptation processes” (Macheridis and Knutsson, 2008, p. 4), where interactions and relations are unified by certain values and visions. In pursuit of exploring the research questions, a four-dimensional integration approach is proposed, consisting of structural, procedural, relational and regulative dimensions, and investigated further in this paper. See Fig. 1.

In order to be able to study these dimensions of integration, the study next attempts to create a framework of variables based on mainly classical theories of organization studies.

### 2.3. Variables of integration in PMO governance

This study uses a network approach to explore and identify the relevant variables for the four-dimensional model for integrated PMO governance. Underlying assumption is that the network approach will allow covering relational and regulative aspects of PMO governance, along with the structural and processual aspects. Kilduff and Tsai (2008) identify networks as “ties between actors/systems and as origins and outcomes of actors” structural positions (p. 36). Moreover, Tichy (1981) mentions that network approaches allow for both capturing of significant organizational processes at different levels and linking the micro- and macro-approaches of organizational behavior. Hence, the network approach is relevant both in terms of studying the interactions between the main actors (e.g. PMO managers, PMO employees, top management, Project managers — micro level), as well as the structural/procedural linkages within the structures (e.g. PMOs, organizational functional departments, Board of Directors — macro-level).

In order to guide the exploration of integrated PMO governance in a network context, a framework of variables to study and analyze integrated project governance is elaborated further. The framework addresses the research sub-question of the paper, aiming for the identification of the variables that are critical for integrated PMO governance. The framework is primarily elaborated utilizing the classical approaches of organizational theory, such as the organizational governance analysis by Scott et al. (1981) and network theories.

To start with, Pugh et al. (1969, cited by Scott et al., 1981) have identified three aspects of organizational design dealing largely with the organizational integration. These are: (a) formal processes/policies — the level of formalization and standardization of employee’s behavior through written rules (policies, regulations, reports, plans, etc.); (b) authority — the scope of authority delegated to managers at various levels of an organization, that is, determining the decision makers; and (c) control — the amount of personal self-control as opposed to impersonal control in the work-flow (monitoring, tracking, evaluating, rewards and punishments as an impersonal control; and indirectly influenced self-control through recruitment, training as well as socialization and value infusion process) (Scott et al., 1981).

Building on the organizational design model suggested above, Scott et al. (1981) suggest a model of political governance variables, which includes an indicator for the organizational moral: (a) governance due processes, referring to the mode of decision making — whether they are participatory (substantive due processes), or unilaterally made by management (procedural
due process); and (b) regulative aspect (i.e. moral judgments of the employees) — the extent of the human development/ennoblement in the organization, which can be expressed with full participation of the employees either through obedience, or through the value infusion (Scott et al., 1981). In his regard, Weick (1995) emphasizes the role of ideology in sensemaking, which replaces formal structures “with self-control and voluntary cooperation" (p. 113). He finds this approach allowing loosely coupled systems to survive and cohere through idiosyncratic local adaptations. For our study, these models provide relevant variables, particularly to examine the structural, procedural and regulative dimensions of the integrated PMO governance. Specifically, the models reveal the role of the following constructs to study integration at an organization: decision-making, control, and ideology in terms of understanding common goals.

To evaluate the relational dimension of the integrated PMO governance, we draw on network theory. One approach of network theory considers networks as patterns of relationships, which is considered relevant to study within organizations (Aubry et al., 2012). Larson and Wikström (2007) suggest a framework for identifying the type of interactions in inter-organizational networks. This framework is developed to connect the efforts of separate and interdependent organizations directed to a unified goal (Larson and Wikström, 2007). Considering that PMO networks feature autonomy and existing interdependencies between each other, this framework is relevant to study intra-organizational networks. The authors propose a notion of relational interaction, which they study based on (a) form of action (participatory decision-making or decisions by authority); (b) mode of communication (closed conversation to attain consensus, or a dialogue open for discussion and conflicting ideas); as well as (c) the outcome of it (reproduction of earlier ideas or production of new ones), see Table 1.

Hence evaluating the mode/type of interactions in an organization will help in revealing the relational aspect of the integration in governance of PMO networks.

The discussion above allows consolidating the proposed variables and creating one possible framework of variables for examining the four dimensions of integrated governance in project-based organizations. Combining the frameworks of Pugh et al. and Scott et al. (1981), as well as consolidating it with the variables of relational aspects (i.e. interactions and linkages), the framework of variables shown in Fig. 2 is suggested for studying the dimensions of integrated PMO governance in an organizational context. Fig. 3 exhibits a consolidated picture of those four dimensions and the variables enabling their examination. However, it should be noted that each variable cannot be directly identified with each dimension, instead it is viewed in a wider context of all dimensions.

This section has identified applicable variables for the assessment of PMO governance implementation within organizations. We now introduce the method used for this study.

3. Methodology

The study takes a critical realism perspective, assuming that underlying organizational mechanics give rise to events, which provide the context for actors’ experiences. While many of the underlying mechanisms are explained objectively and through existing theory, the levels of personal experience are subjective interpretations by human beings (Bashkar, 2009). Qualitative data were collected in a single case study to select and frame plausible conjectures through abductive inferences (Van de Ven, 2007). Further, deductive analysis methods were used for explanation building (Saunders et al., 2007; Van de Ven, 2007; Yin, 2009). That allowed for the identification of events and underlying mechanics of PMO governance implementation. Hence a predominantly abductive approach was used in a cross-sectional, mono-method study.

The sampling approach was to interview at least one PMO manager plus one employee from each of the four PMOs in the organization. Complications in availability of interviewees made it impossible to meet this target, but a minimum of one PMO member was interviewed in all PMOs. All interviews were conducted over a period of 4 weeks, and each interview was recorded and transcribed afterwards. Interviews lasted from 45 to 90 min. In addition to interviews, an introduction to a few working tools was held for better understanding of the case such as presentations of tools and internal software interfaces used by PMOs. These tools helped to reflect on the main types of interactions between the PMOs and their members. Theoretical saturation was reached after nine face-to-face semi-structured interviews in the case company and the practical understanding of the organization.

3.1. Case study design and analysis

A case study design was used because it allows investigation of a contemporary phenomenon in its real life context (Yin, 2009). This design was appropriate because the integration mechanisms of governance, including the PMO governance, differ between organizations. For example, a study of PMOs has shown that the population of PMOs is characterized by a significant variety in structure, scope of mandate and specialization of staff (Aubry et al., 2011). Overall, a case study enables a deep and contextual examination of PMO governance and thus meets the aims of the research by providing a basis to test/generate theory out of the findings (Bryman and Bell, 2003; Rank, 2008; Sekaran, 2000).

To meet the research goals, a large European bank was approached, which featured largely as a project-based company

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and had multiple PMOs in its structure. Interviews centered on the organizational mandate, setup, design, roles, responsibilities, processes, and interactions (see Appendix A for the interview guide, p. 32). Explanations and patterns identified in the literature were deductively analyzed using the four-dimensional integration model shown in Fig. 1.

Further analysis was done using the network approach, which allowed picturing the integrative linkages and its mechanisms and explaining/analyzing both the formal and informal aspects of integration efforts in governance. The analysis explores the four-dimensional integration efforts in the network of PMO governance and proposes a pattern in the design of governance structures in the present multiple PMO organization.

Validity of the research, “the extent to which an account accurately represents the social phenomena to which it refers” (Hammersley, 1990, p. 57) was ensured by carefully selecting the best possible informants, cross validating their data with those of other interviewees, as well as cross-validating it with explanations found in existing publications. A validation workshop was held at the end of the study, with key informants and one of the researchers. Here the findings were presented and confirmed by the informants. Reliability is not necessarily a goal of qualitative research (Yin, 2009). However, we followed Yin’s suggestions for reliability and developed a case-study protocol upfront, including the interview questions, which was used during the data collection and analysis stages.

4. The case study

4.1. Company profile

The headquarters of a European bank was selected for this case study. The bank was acquired by a European co-operative bank a few months prior to the study, after having been part of a large North American bank in the past. The bank (called The Bank further on) employs around 6000 employees and provides services to more than 3.5 million customers all over the country of operations.

4.2. Governance system

The Bank is a project-based organization, mainly due to the large number of simultaneous projects (approx. 100), but also because of management’s acknowledgement of projects as the preferred way of working, which is exemplified by project governance being one of the functions of corporate governance. This is manifested through the existence of four PMOs, two of which report directly to the executive board along with other functional structures.

The Bank uses multilevel project governance structures, embodied in four project management and project portfolio management offices in the organization, such as:

- Business Project Office (BPO), reporting to the Executive Board. An eight person PMO consisting of a management group and an expert group for finance, marketing and strategy projects. The BPO is the umbrella organization of all PMOs in The Bank. They foster communication between business and IT, provide processes, portfolio management and follow-up on projects.
- Project Management and Strategic Integration Office (PMSI), reporting to the Executive Board. It’s a 20-person PMO for IT projects, which provides the interface between business and IT. They translate business requirements in IT requirements, as well as assess the impact of changes on policies, structures etc., and test software.
The PMOs collaborate as a loosely-coupled system. Their relationships are both hierarchical as well as at the peer level. The BPO has a central role in project governance, since it provides the overall portfolio view for projects at the bank-wide level. Whereas PMSI and IT PO have only an IT project portfolio view and SPO has solely an O&T perspective.

The BPO spans as an umbrella organization over the SPO, PMSI and Local IT PO. The working-relations with PMSI and SPO are more at a partnership level and less strong with the Local IT PO. The latter reports to the BPO on project status, accomplishments, and issues.

PMSI is a separate unit reporting directly to the Executive Board. However, they have very strong links with the Local IT PO for clarifying project requirements and scope, as well as with the BPO for project prioritization and “Go/No Go” decisions. PMSI, BPO and Local IT PO use the same master spreadsheet, to track and update projects’ statuses.

SPO and Local IT PO are within the same departmental hierarchy, O&T. However, they rarely interact in their project work. SPO’s main interaction is with the BPO for making resource- and content-based pre-checks of initiatives/projects from their area, and sending estimates and priorities for the bank-wide portfolio to the BPO. Fig. 4 illustrates the structure of the PMOs within the top management.

The PMOs in themselves are autonomous and are not linked to each other vertically, but are subordinate to common higher levels in the organization. Their tasks are highly differentiated and in terms of functions they are not dependent on each other. However, they are supposed to work on almost the same set of projects, which creates the need for clear and formal processes within the PMOs. Hence, due to its significant role in initiation, prioritization, implementation and delivery of the projects, the Bank has furbished the system of operations as one of its core competency.

4.3. Linkages between PMOs

Our analysis addressed the design of the decision-making process among the various governance units (PMOs), specifically, whether decisions are made participatory or unilaterally by management.

The main observed way of decision-making is participatory PMO decision-making. Weekly and monthly meeting schedules are maintained among the different PMOs, using either face-to-face or virtual setups. Early phases of projects’ lifecycle require decisions on resource allocation, prioritization, as well as general ‘Go/No Go’ decisions. These are the most strategic decisions made by the PMOs with the involvement of top management. For that a long circle of face-to-face meetings between all related PMOs, IT developers, as well as top management takes place, see Fig. 5.

During the implementation phases of projects decisions are more often made in virtual meetings. Examples include technology-based virtual meetings for discussions and decisions among business professionals, IT developers as well as PMO employees.

4.4.2. Control system

The control system at the bank was assessed using vertical and horizontal approaches. Assessment for the former perspective addresses the structural and process dimensions of governance. That is the rules and routines and their compliance (Dunbar, 1981), as well as the monitoring, evaluating, and reporting systems (Scott et al., 1981). The latter assesses the
regulative aspect for organizational governance based on values and vision of the organization (Selznick, 1984). This is aligned with the concept of self-control discussed by Scott et al. (1981), which relies on the self-control of the employees and is influenced by recruitment, selection, management training as well as socialization processes.

Vertical level — PMO-projects Reports and other formalized documentation, as well as software systems, are utilized as a method of control in governing the projects. Continuous reporting and updating both upwards and downwards are the PMO modes of controlling projects. In the past, the BPO enforced external control intensively to keep track of projects through constant reporting and updates of the project status. Through that the PMOs encountered problems through perceived dominance and over-control of the project managers, which led to resistance of project managers. This caused inconsistencies with the formalized processes. The mode of control was reconsidered and liberalized as part of the acquisition through the new owner, as well as through managerial changes in the organization.

Horizontal level — PMO–PMO At the PMO–PMO level of linkages, control appears in both impersonal and self-control aspects. Most of the PMO representatives mention a split of responsibilities between each other, which helps to synchronize self-control. As a central PMO, BPO is designed to coordinate and control the activities of other PMOs, which is done through merely informal and co-operative interaction.

Meetings for the synchronization of control among the PMOs do not have a central coordinating PMO. There are moderators for those meetings. They keep track of the meetings, but are not in a formal position or have ascribed responsibilities. Müller et al. (2015) consider this type of governance built on “individuals that are mindful of the organization, self-responsible, and self-organizing to a degree that matches the goals of the corporation” (p. 8).

4.4.3. Relational interactions

As referred to the framework of variables for integration, the content of relational interactions is defined by existing formalized communication or open dialogues between the actors. This framework is utilized to observe relational interactions in The Bank.

Communicative content of relations is valued in the bank, especially expressed in direct and informal communication. Communicating with people from different areas is considered as an advantageous skill of employees. For example, one of the PMO mangers said, that they prefer to recruit internally, as they could ensure that the new person already knows people in the bank.

There is a salient emphasis at the bank on using communication as a means to manage the challenges of isolated work and inefficiencies. It is assumed that project difficulties often arise from miscommunication. At the same time, communication is utilized in overcoming conflicts between the organizational units of the bank. During the establishment of the new PMOs, with relatively unclear and conflicting split of responsibilities, conflicts arose between the PMOs, for example in who is doing the first screening of the project initiatives coming from O&T: the newly established SPO or the BPO. These types of issues were resolved by communicating through meetings in order to jointly evaluate the situation and clarify the borderlines of responsibilities. As the manager of the BPO stated, at a joint meeting they have decided to allow SPO to run pre-checks of projects coming from O&T.

In alignment with the control system, vertical communication is more formalized and based on pre-established processes and regulations, while horizontal communication appears voluntary and need-based. There is no assigned facilitator or fixed initiator for the meetings between the PMOs.

4.4.4. Understanding of common goals

Here the collected observations targeted to unveil the understanding of the PMO mission/value by the internal stakeholders. The mission helps to understand self-value and the organizational raison d’être (Kemp and Dwyer, 2003). A mission also generates trust and belief in the activities of the organization among the stakeholders and serves as a unifying force that fosters consensus activities conducive to the achievement of organizational goals among all organizational stakeholders (Kemp and Dwyer, 2003). For these two reasons of internal and external impact, mission was looked at from two perspectives: a) how the PMOs understand their own mission
towards projects; and b) how other internal stakeholders (i.e. project managers, other PMOs, top management) understand the value of the PMOs.

None of the PMOs had written mission statements, though all of them seemed in agreement about their mission as an organizational subunit, that is, to ensure quality project delivery. However, they also recognize that the rest of the organization perceives PMO as an administrative and controlling body. People did not approach PMOs for consultancy or proactive help, due to the extensive documentation and bureaucracy involved. Having recognized the issue, PMOs made efforts to change the situation during the recent transition period. First, the BPO tried to reduce the additional work stemming from the PMO involvement in troubled projects (such as reviews and interviews with managers of troubled projects) by ‘taking away the complexity with us and making it our problem and not others’ (BPO interviewee). Furthermore PMOs tried to compensate external control by giving feedback and consultancy to the projects during implementation.

There are indicators that top management lacks understanding of the role of the PMO. Despite that they support the PMO and value their work, as one of the managers said “there is a lack of understanding, very often about the role itself”.

5. Analysis

The PMO governance practices illustrated in the case organization appear in the shape of multilevel and multiform linkages and in a variety of relationships, all targeted to successful project governance. This interpretation of the governance system in the bank is consistent with the statement of Miller and Hobbs (2005), who describe interactions among the different groups of stakeholders involved in project development, approval and delivery as a dynamic social network. Within this network of PMOs, formal and informal linkages between the PMOs have been revealed in this study. This finding urges the analysis of the data through the discussion of formal and informal linkages or networks in the case organization as defined by Rank (2008) and introduced earlier in this paper. Those two types of observed linkages are discussed further through the four dimensions of the integrated PMO governance (structures, processes, relational and regulatory) studied with the help of governance variables (mode of decision-making, control, mode of interaction and the understanding of common goals). The formal type of linkages will be referred to as the formal network and the latter as the informal network of PMO governance.

5.1. Formal network

The structures of PMO governance at The Bank are materialized in specific configurations of PMOs (BPO, SPO, IT PO and PMSI), which constitute the main project governance entities at the bank.

In addition, centralization (i.e. centralized authority and control (Scott et al., 1981)), standardization (i.e. the degree to which standardized procedures are followed (Jennergren, 1981, p. 47)) and formalization (i.e. the extent to which rules, procedures and routines are formalized and written down (Jennergren, 1981)) are used as linkages for integration in PMO governance at the bank. This exposed formal network is expressed both in the vertical linkages of the network actors which are the PMO–project relationships, as well as in the formal interdependencies of the network actors on the level of PMO–PMO activities.

At the vertical level, formalization and centralization are strongly exposed in the network. Processes are formalized and based primarily on authority and control of both behavior and performance. Processes for project initiation, routine reporting practices and constant updates on project status are required for everyone in the organization. In addition, the rules, policies and regulations for project work are written down in the SDLC manual and reporting system, which every project manager and PMO employee should follow. Overall, control is external and impersonal at this level of linkages in the organization. It generates lots of documentation, reports, continuous and close tracking, as well as direct managerial involvement.

The picture is different in PMO–PMO relationships. The organization itself is constructed in a way, that there are pooled interdependencies between the multiple PMOs in the organization. Interdependency is defined, for example, by McCann and Galbraith (1981), as a situation where each part makes a discrete contribution to the whole (i.e. a project during its whole life-cycle) and is supported by the whole organization (i.e. the executive board and organizational resources allocated for the projects and project governance). However, each part does not necessarily depend on, or support or work with every other part directly, such as not all PMOs have touch points with each other in their activities during the project life-cycle, solely there is a common interest among them. This pattern is in alignment with the network characteristics that outlines Tichy (1981): ‘in network settings not all pairs of actors join directly, and some join through multiple relationships’ (p. 225).

Deriving from the existence of pooled interdependencies between the actors of the network, the project governance integration mechanisms used are the standardization of the norms, skills and the knowledge. This is consistent with Barki and Pinsonneault (2005). For instance, technological interfaces are created to deliver standardized and formalized mechanisms for the governance of the projects, such as the common master database mentioned in the data illustration section of the article.

Overall, the formal network at both vertical and horizontal levels is rather dense and the high level of standardization and formalization causes a significant bureaucracy in the organization (Jennergren, 1981). Bureaucratization creates several problems in project governance for the bank:

- The unwillingness in using PMO services proactively due to the project managers’ perception that it slows down progress and executes too much control. Project managers are reluctant to take advantage of the services provided by the PMOs, which, in turn, have all the necessary capability to support their projects and help in problematic situations. An effect described as the ‘bagel effect’ by Aubry et al. (2012).
• Resistance of project managers, as well as area PMOs, to use formalized procedures for project work. This is found in the lack of process compliance, and circumventions of the BPO in initiating new projects. In other cases, reporting may be delayed, which complicates the work of the PMOs and requires additional efforts to pursue project managers. This extra effort makes the external control more intense and explicit.

A reason for the bureaucratization may be the relative non-specialization of the organization in project management (as a discipline) and not capitalizing on it as a core capability. This means that the project managers, who are not specifically specialized in project management, need to adhere to external rules and regulations, as well as PMO support, in order to deliver successful projects. However, project managers circumvent the PMOs for reasons described above. This creates a need for the PMOs to have sophisticated external control in place to avoid project delays, inefficiencies and low-performances.

Scott et al. (1981) showed that the centralized and standardized formal networks are a way of integration in an organization. Provan and Kenis (2008) find that formal hierarchies bring a necessary level of stability to the organizational governance. However, by itself, formal structure is insufficient to deploy governance to its full capacity (Provan and Kenis, 2008) and deliver the flexibility that projects are considered to deliver. Bureaucratization and one-sided communication challenge the successful implementation of project governance at The Bank.

5.2. Informal network

To compensate for the drawbacks of formal network of PMOs and project governance, informal networks emerge and/or are created alongside with the formal network at The Bank. Informal networks are present both at the level of PMO–PMO interactions and at the PMO–project level. As Provan and Kenis (2008) suggest, this seems to be an effort to add flexibility, thus efficiency and involvement of the network actors, to the existing formal network.

Its first expression is in the voluntary actions of actors in the network in the decision-making process, as well as in overcoming conflicts of interest and sharing the power and responsibilities. As discussed in Subsection 4.4 the process of strategic decision-making behind the final formal Go/No Go decision of projects, is not formalized or designed by top management. It is initiated by various PMO managers/members based on the need arising at the moment a complete proposal can be made to the Executive Board for a final decision. The effectiveness of those meetings in achieving outcomes, consistency, as well as efficiencies in terms of time, resources and conflict prevention (as it was exposed in Subsection 4.4) calls for repetition of the approach.

Rank (2008) points out the number of unused formal relationships by the managers and questions the necessity of some formal procedures, since some of them are accomplished through informal networks anyway. Aligned with this argument, the joint meetings in the bank are not only non-designed or non-formalized, but they are not centralized as well. There is no central and formal coordination of those meetings, but there are volunteer facilitators, and sometimes just initiators. The initiations are based on the understanding of common goals among the PMOs, which ensures the commitment and inclination of PMOs to work together. As Provan and Kenis (2008) argue, the consensus on goals can be not only for the organizational goals, but for the network-level goals, as in this case have been the selection of relevant projects and the delivery of quality projects.

Furthermore, some of the formalities are skipped in informal communication to avoid additional bureaucracy and in favor of accelerating execution. One of the managers mentioned that sometimes they would not wait to receive 45 confirmations for a project, but will proceed with the project, before receiving all confirmations.

Control here is based on self-control and is expressed in the self-motivation of the involved actors. However, this is expressed mainly at the level of PMO work. All the PMOs understand their main mission of delivering projects and employing the advantage of joint and informal meetings to use each PMO’s specific expertise in decision making, as well as in overcoming critical situations in projects.

At the peer level, an understanding of reciprocal values resides among PMOs and their members. Reciprocity is considered to be one of the critical features of the interactions in informal networks (Kahler, 2009). However, it is not observed in the vertical dimension of the bank’s hierarchy. This mainly reflects the fact that project managers do not recognize the mission of the PMOs and underestimate PMO value to the extent of seeing it as a point of control, which hinders their activities.

Parts of the issues with the reputation and value of the PMOs are attempted to be solved by building informal relationships through intense communication. The latter prompts the actors to acknowledge their professional and personal differences and make efforts in finding the consensus in processes, decisions or conflicts (Larson and Wikström, 2007). Acknowledgement of each other’s work is being much highlighted by the PMO employees, since they feel the pressure of incomplete legitimacy of their value both by top management, as well as by other stakeholders. Hence, the relations within the informal network appear to be of vital importance. McCann and Galbraith (1981) mention how personal skills and characteristics sustain the issues of a decentralized organization. That is why the bank capitalizes on the special social and communication skills during recruitment of the new employees, rather than on their professional skills. Consequently, they prefer to hire PMO employees internally, as they already know people in the bank, so that it will be easy for them to interact and build relations within the responsibilities of the new position.

This transition towards the incorporation of the relational and regulative aspects of the integration in the organization is consistent with the notion that in highly uncertain environments (i.e. project-based organizations) rules and procedures become less effective (McCann and Galbraith, 1981). As Selznick...
(1948) argues “no abstract plan of organizational design can reflect the empirical totality” (p. 25). Hence, in order to ensure integrity of governance, the formal design of PMO governance needs to be supported by the informal design. The latter of which comprises the quality and intensity of the relations between actors, as well as perceived and built legitimacy towards each other.

5.3. Pattern of integration in PMO governance

In this section a theoretical pattern is proposed to describe the integration efforts in project governance. The following steps are used to outline the proposal: a) description of the elements of the integration efforts of project governance; b) how those elements are related to each other; c) why these elements are present and what underlying theoretical lenses are used for them; and d) identification and explanation of the boundaries of the proposed theory.

a) The integration efforts in PMO governance are expressed by the coexistence of formal and informal networks among the governance units (PMOs), which themselves comprise the main constructs of integration in PMO governance. Together these two constructs ensure the stability and flexibility in the network (Provan and Kenis, 2008) of multiple PMOs. While the formal network has been widely recognized and developed by the professional project management theories, the informal network in project governance is yet to be explored and understood. Key elements, which help to expose the existing constructs of the integration in PMO governance, are the mode of decision-making, control mode, relational interaction, as well as the regulative perspective.

b) Data analysis helps to understand how the formal and informal networks relate to each other. It appears that the formal integration alone does not deliver a value-creating environment, particularly by causing an extensive bureaucratization. These drawbacks are attempted to be overcome through the opportunities provided by the informal network, taking the advantages of relational aspects of integration and fostering intensive communication and participation. Furthermore, given the unresponsiveness of the stakeholders, management feels an urgency to employ value-based mechanisms aiming to legitimate the PMO activities. Communication, relationship-building, legitimization, mission-understanding, participative decision-making, as well as mitigated bureaucracies make up the compromising strategies for the existing formal network. Provan and Kenis (2008) argue that network governance, where members are not bounded by formal accountability for network-level goals and act voluntarily, is critical for organizational governance. Hence the formal and informal networks are tightly complementary to each other. The first one brings in clarity to the working environment; the other one creates flow, understanding and frequent exchange among the actors.

c) Some reasons for the co-existence of formal and informal networks have been discussed above, however, the main sources of the apparition of formal and informal integration need to be explained. Firstly, the context of the organization considers the processes in the bank as the competitive advantage in the market, in terms of efficiency and effectiveness in operations and governance. This fuels the formal network in the organization and supports the formalization and standardization processes in there. Next, the governance paradigms (Müller, 2009) provide an explanation for the formalization and centralization in the organization. The bank is not predominantly relying on project management (the discipline) as a core competence in its project governance; but they apply standardized methods and techniques (not the breadth of a discipline) for management at the project level. Both project managers and employees of the Bank are specialists in IT or financial services, even the PMOs do not have a mandate to provide training to the project managers or employees. It is considered to be too costly and time-consuming. This helps to understand why the formal network becomes a highly necessary construct of project governance at the Bank. Further, the nature of the industry (banking) serves as another source for the formalization need in project governance. Processes in the banking industry must comply with legal requirements and they are regularly inspected by internal and external auditors. Consistent with institutional theory, the external industrial patterns have a great influence on the design of the Bank’s formal structure and processes (Greenwood, 1996). Hence, the compliance of the organization for a rigid formal network emerges from the industrial category. At the same time, the value of the informal network was recognized primarily as a result of the issues emerging from the predicaments of the transition period, when the PMO governance system was complicated by the establishment of new entities and the new multilevel management has identified impediments of project work. Such turbulent environments prompted an intense communication, participative decision-making, as well as elicited recognition of the legitimacy need.

d) At present, being limited by the data of a single case study, the boundaries of this theory are yet to be confined within multiple-PMO environments of the banking industry in Europe, as well as within the transitional periods in the organizational lifecycle, when essential organizational changes are underway. As Provan and Kenis (2008) mention, looking at networks as forms of governance unfolds a world of “unique structural characteristics, modes of conflict resolution, bases of legitimacy etc.” (p. 232). Moreover, the four governance variables are based on four sets of dichotomies, which may be too simplistic, or ineffective in other contexts. For example, The Bank benefits from the above-described approach in terms of minimizing costs for formalization of control structures and the associated agency costs for establishing, maintaining and adapting these structures (Turner and Müller, 2004). However, this is only possible through self-responsible, and self-organizing employees whose objectives match the goals of the corporation (Müller, 2009). Hence, other contexts, such as
those with less self-responsible and self-organizing employees may be better analyzed with greater emphasis on traditional governance perspectives, such as the Agency Theory or Transaction Cost Economics. Therefore the network approach for understanding integration efforts in PMO governance should be extended to further studies, allowing the building of a more holistic picture of PMO governance and its context. To that end, more qualitative studies should emerge in the short term, eventually leading to quantitative studies in the long term, which then allow for generalizable results.

6. Summary and conclusions

This paper used the case study of a European bank to understand integration in PMO networks in larger organizations, which demonstrated the integration efforts, achievements and issues of the case study organization.

Along with the structural and procedural dimensions of integration, the other two dimensions — relational and regulative appear as equally critical dimensions for governance of multiple PMO organizations. Hence, the consideration of a four-dimensional integration may enable a viable and relevant PMO governance system in large project-based organizations. Meanwhile, the variables of governance widely used in existing organizational theories appear relevant and applicable to study and understand PMO governance in a project-based organization. Such as the mode of decision-making, the control system, the interactions between the entities and the understanding of mission/value in the organization are relevant dimensions for governing four-dimensional PMO governance at a large project-based organization. Further, an attempt for a theoretical pattern of the integration in PMO governance is delineated and proposed for further debate and validation.

The implications stemming from this study, as well as the study’s contribution to knowledge are:

- Integration in PMO governance should not necessarily be seen as merging the processes and structures in a tangible sense. Instead, governance units can still stay unique, autonomous and loosely-coupled, but can be unified by participative actions and legitimate context, which can render unified delivery of governance goals. Barki and Pinsoneault (2005) propose the metaphor of human body, arguing that integration can capture both distinctiveness and responsiveness as the parts of human body does. The network of the PMOs featured by their distinctiveness of their specific roles and responsibilities, formal independence and informal interdependences, as well as working with autonomous projects, could still be unified by formal and informal linkages, assuring that they are responsive to each other and can work together as a unified whole.
- The structural and processual perspectives of integration nourish the level of bureaucratization in the organization, which does not render responsiveness, commitment of the actors, and may jeopardize the attributed advantages of the project-based organizations in terms of being flexible, dynamic and delivering innovative and efficient outcomes. Whereas, facilitating the informal network in the organization engenders a good balance between the elements of the integration and ensures that efficiency, speed and commitment are achieved through participation and legitimate activities of PMOs. This is specifically important for the banking industry, where the institutional impact of formalized processes is very high.

- The four-dimensional integrated approach to PMO governance makes the organization more focused on the long-term strategic goals (Macheridis and Knutsson, 2008), which delivers more value to both shareholders and stakeholders, rather than following the daily operational objectives. Moreover, this helps to foster ennoblement of human capabilities, rather than just sustaining their passive involvement under external controls (Scott et al., 1981). Involving actors in decision-making as well as intensifying the two-sided communication aiming to raise legitimacy for supervision, motivates the actors to share their expertise and knowledge, as well as enable them to gain their effective cooperation.

Hence, a few new perspectives are prompted in the paper. First, the paper introduces a brief assessment of the organizational theories in PMO-governance environments, thus investigating and advancing the qualitative boundaries of the existing organizational theories. As an emergent phenomenon, multiple-PMO environments are in need for in-depth studies and theories. Next, the paper attempts to build and suggest a theoretical framework by integrating project management and organizational theories and base it on a clearly examined case study approach. In this sense, the paper has also tested and employed the proposed models and frameworks in the case study. In conclusion, an initial theoretical pattern of integration in PMO governance is suggested as a contribution to the governance of projects theory and relevant implications for both the practitioners and researchers are made.

Conflict of interest

The authors declare that there is no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

Appendix A. PMO governance

Interview guide — general

1. Tell me about the your company
2. Tell me about your role in relation to project management and PMOs
   a. How strong is project management in your company?
3. Projects
   a. What is the type of projects you do?

1 This guide may have to be adapted for a specific role around PMO.
b. How do you assess the performance of projects within your mandate?
c. How does the PMO support projects? (Is it more consulting or managing, light or heavy PMO?)

d. How is this PMO different from other ones in the organisation? (in terms of size, scope, mandate, etc.)
e. Why have you divided the work of PMOs this way?
f. Do you feel any pressures/troubles/difficulties in having several PMOs in the company? What are they?
g. What are your relations with other PMOs? What are you doing together?
h. Which parts of your projects are realised without collaboration with other PMOs?
i. Do you think there are any overlapping responsibilities/tasks or objectives with the other PMOs? What are they and how do you manage them?
j. What are the attributes of the PMO (number of people, mandate, etc.)?

5. Employee
a. Tell me about employees of your PMO (competence area, work climate, controller versus adviser, etc.)
b. How would you qualify the relationship between employees from different PMOs?
c. What made you a Project Manager/PMO Manager? (the professional background)

6. Governance
a. How do you collaborate with other PMOs?
b. Is there a central management or coordination of PMOs?
c. How do you synchronize between PMOs
   i. Charters
   ii. Objectives
   iii. Incentives
   iv. Responsibilities
   v. People/skills
   vi. Authority
   vii. Governance of projects
   viii. Emergencies
d. Is your organization more process (compliance) or more outcome (results) oriented?
e. Related to the question above. Is the work of yours and other PMOs in alignment with the organizational governance approach?
f. Is your organization more stakeholder oriented or more shareholder oriented (mark horizontal line in Fig. 1)?
g. Does your organization focus on compliance (e.g. use of methodology and existing processes) or results (outcome of projects)?
h. Do you have policies, processes, etc. for PMO work, organizations, roles and responsibilities?

7. Change of ownership
a. Did the change of ownership of the bank impact the PMO and how?
b. What works differently now compared to previous years in terms of earlier PMOs?
c. How would you like to see things changed?

8. Closure
a. Do you have any comments to add that would help our understanding on PMOs in your organisation?

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