Functions and maturity of Project Management Offices: concepts and a field study

Germán GUIDO-LAVALLE and Michelle HIRST

Instituto Universitario ESEADE, Buenos Aires, Argentina

Abstract

Projects are critical to the success of organizations, and Project Management Offices (PMOs) are deployed to improve their performance. As they are rather new, functions are not yet well-established and maturity levels have been defined by several authors. The object of this paper is to study the functions that PMOs perform and present a field study made on them in Argentina.

The main conclusions were that implementation of PMOs are not treated like projects, and once established their functions change slowly according to varying requirements, but no phases or maturity levels were identified; PMO personnel do not envisage the mutation from an operational to a strategic role.

Concerning the functions PMOs actually perform, it seems that more effort should be given to establish a formal lessons-learned process, in order to achieve the organizational learning that is one of the main goals of every PMO.

Finally, it was interesting to note that many organizations that do not have a PMO, are thinking in establishing one, thus leading to a growing PMO community in the near future.

Introduction

Projects are critical to the success of any organization, and therefore their good management becomes a key strategy for competitiveness, and Project Management Offices (PMOs) come in response to it.

The object of this paper is to study the functions that PMOs perform and present a field study made on them in Argentina, in order to see which companies have implemented them, what roles they play, what results they give and what they do with them. The study is based on the hypothesis that after the initial high-impact in the organizations, PMOs need to reorient, resize, or close. This does not happen often and, ultimately, the risk is that organizations find them redundant and superfluous.

PMOs are complex organizational entities that provide integral support to the discipline of project management. Structures, roles and legitimacy vary significantly from one organization to the next. Hobbs[1] says that in order to be able to give an adequate description, several different characteristics have to be examined. These characteristics include value, organizational context, form and structure, roles and functions. The PMOs mandate may cover the entire organization´s projects or only a selected few. Organizations choose from among a number of possible roles or functions when deciding upon the mandate to give to the PMO. They also choose between a PMO in a support role with little or no authority and a PMO with a considerable decision-making power.

Rad and Levin[2], on the other hand, say that a PMO can have Project-oriented or Enterprise-oriented functions. In the project-oriented PMOs, augmentation, mentoring, and consulting are present. Augmentation is the process by which the PMO acts like a temporary agency that provides personnel of various skills to the project, in order to fill any shortfalls that might exist in the staff. Mentoring occurs when the project has the right number of staff members, but the team members do not count with the appropriate competency to carry out their respective project duties. Consulting occurs when the team members feel comfortable performing most of their project related duties. In the Enterprise-oriented

PMOs, promotion, archive and practice, are present. Promotion helps achieve better results, which are obtained if the PMO personnel set objectives for such improvements and continually check progress against plans. Archive is one of the most visible functions of the PMO, and includes developing, recording, and compiling the best practices in Project management. Practice regards collecting data, but, as it is not sufficient to collect and then file that data away without guidelines as to how to best use it in future projects, a standard repository is required, which must be supported by each existing project.

Hobbs[1] finds that functions of the PMO can be separated into the following groups:

- Monitoring and Controlling Project Performance: PMOs with these functions provide the information that managers need to maintain visibility, and to control the performance of projects which they are responsible for.

- Development of Project Management Competencies and Methodology: the PMO with these functions is often in the role of promoting the use of the methodology, the development of competencies and project management methodology in general.

- Multi Project Management: Some PMOs have mandates to manage whole sets of projects in a coordinated fashion. Managing whole sets of projects often involves program or portfolio management. Functions include coordination between projects; identification, selection and prioritization of new projects; management of one or more portfolios or programs and allocation of resources between projects.

- Strategic Management: involvement in these functions brings Project Management and the PMO closer to upper management.

- Organizational Learning: although organizational learning is of considerable impact, it is often seen as less important than other functions more directly related to operational or strategic issues.

Early in PMO history, four models[3] were identified: Project Repository Model (serves as a source of information on project methodology and standards), Project Coach Model (assumes a willingness to share some project management practices across functions using the PMO to coordinate the communication), Enterprise PMO model (the mission implies

direct management or oversight of projects), Deliver-Value-Now Model (puts organization goals first. Improvement in PM methodology is viewed as a means to an end and not the end in itself.). Benefits of having a Project repository model include data gap identification, incremental risk management control as project initiate and mature, and bottleneck identification for all projects. A Project coaching model renders benefits such as sources of information on projects processes and often helps in project setup and post project reviews. Benefits of having a Deliver-value-now model include deployment of a well-balanced project portfolio, a monthly plan and forecast that identifies portfolio opportunities and threats, projects over/under budgets, governance board setup and/or modification and project management training, coaching and mentoring.

Whichever PMO is chosen, it is important to collect, assess and report on progress in meeting customer expectations on program/project delivery.

A crucial aspect of PMOs is the modification of their functions with time. This is usually associated with maturity and an increase of duties and responsibilities, as more strategic roles are performed. This does not necessarily have to be the case. That a PMO changes from an operational view to a strategic one is not synonymous with maturity, but a change of roles.

Finally, another topic of research is the implementation phase of PMOs. It is customary to think that it has to be treated just like any other project, with a finite duration. But, is this the case in real PMOs? And, if this were the case, how should changing functions be treated? As different projects moving the PMO from a maturity level to the next?

This paper is organized as follows: next section is devoted to the research methodology, where the field survey is described, the following concerns survey results, where the answers obtained from a web based survey are presented and interviews done to people working at PMOs are included. Finally, conclusions are derived.

Research Methodology

Research methodology consisted of two parts: a web-based survey of companies in Argentina, both having and not-having PMOs, and some in-depth interviews with professionals working at PMOs-

First part of the investigation was partly based on one done earlier by Hobbs[1], but focused on our objective: to analyze the changes in the functions of PMOs with time. The survey contained closed questions, where respondents have to select over given possibilities, and some open questions, designed to enlarge the possible answers.

The survey was divided into the following parts: the first section was focused on determining the situation in Argentina, which companies have a PMO, which had, which do not have but are thinking in having one. The second was related to very briefly describe the way companies manage projects and the results they were obtaining in terms of accomplishment of the objectives of scope, cost and duration. And the third was devoted to the main objective of this research: the functions of the PMOs, their changing (or not) nature, and the project characteristics of the implementation phase.

The second part of the study consisted of some interviews done to people who are part of PMOs. The object of these interviews was to go even deeper into PMO models in Argentina.

Answers received to the survey totaled 100. In order to show the universe of respondents, Figures 1 and 2 present them according to size and economic sector. As can be seen, the answers obtained cover the different sectors and sizes, offering a good base for analysis.
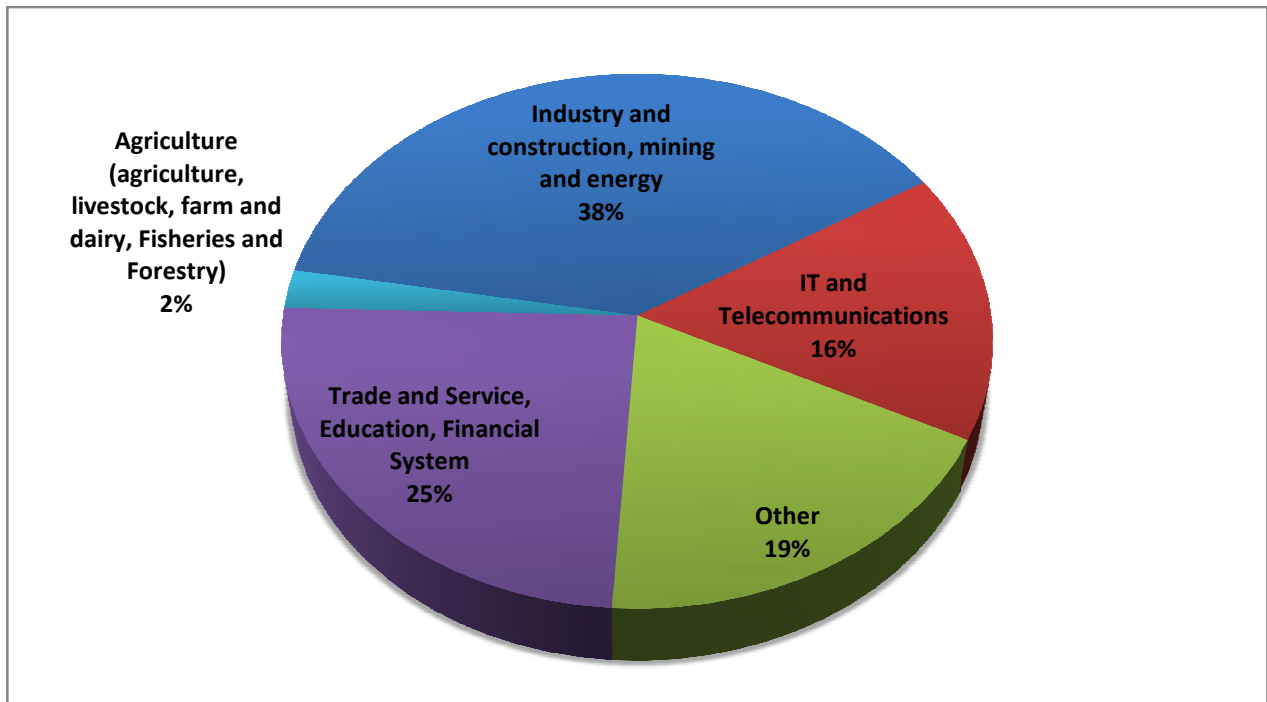
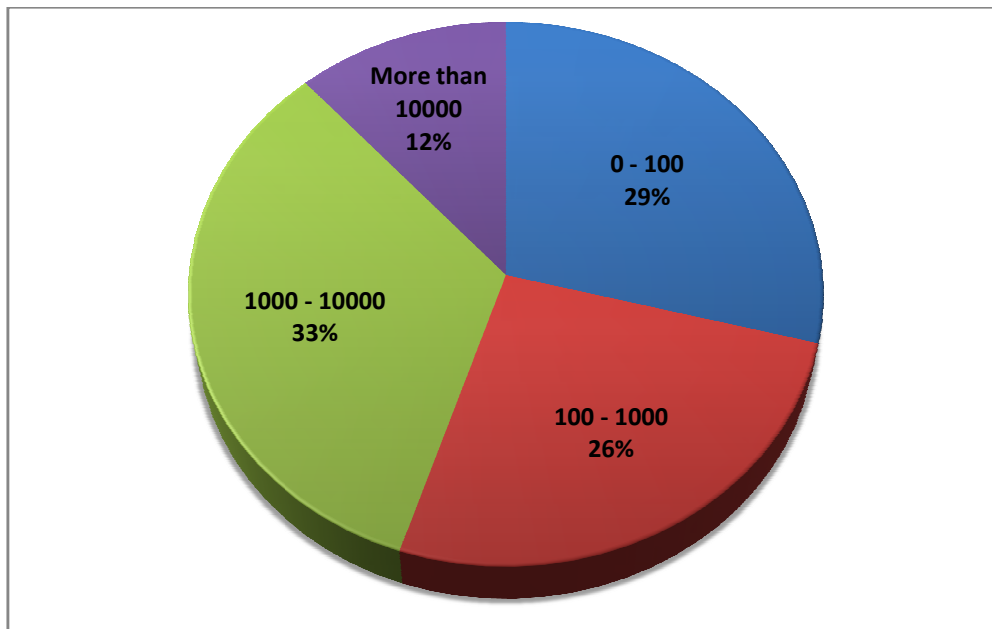Figure 1. Respondents to the survey by economic sector

Figure 2. Respondents by size, according to the number of employees

Results

The first part of the survey was focused on getting a global view on PMOs in Argentina: 35% of the respondents said that their companies have a PMO, and 55% said that they don't (Figure 3). Analyzing this question according to organization size as shown in Figure 4, we saw that the companies with more employees had more PMOs than the ones with less, as expected. From the 55% of the respondents who said that they don't have a PMO, 80% belong to companies with less than 100 employees, and 30 % to companies with more than 10000 employees. The sample was also characterized according to economic sector, as is depicted in Figure 5. The extremes are the agricultural sector, where no PMO was found, and the services industry where the respondents that have a PMO were more than the ones that do not. Of course, these values characterize the sample rather than showing the overall situation of the population, since a bias is expected: companies having a PMO are more likely to answer than ones that do not.
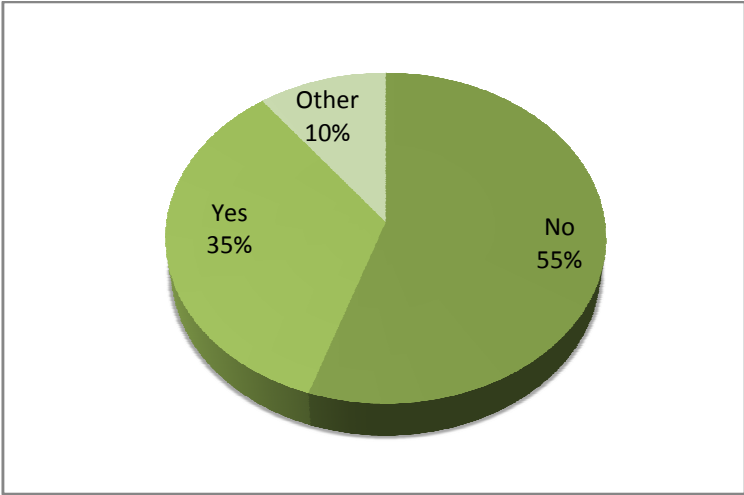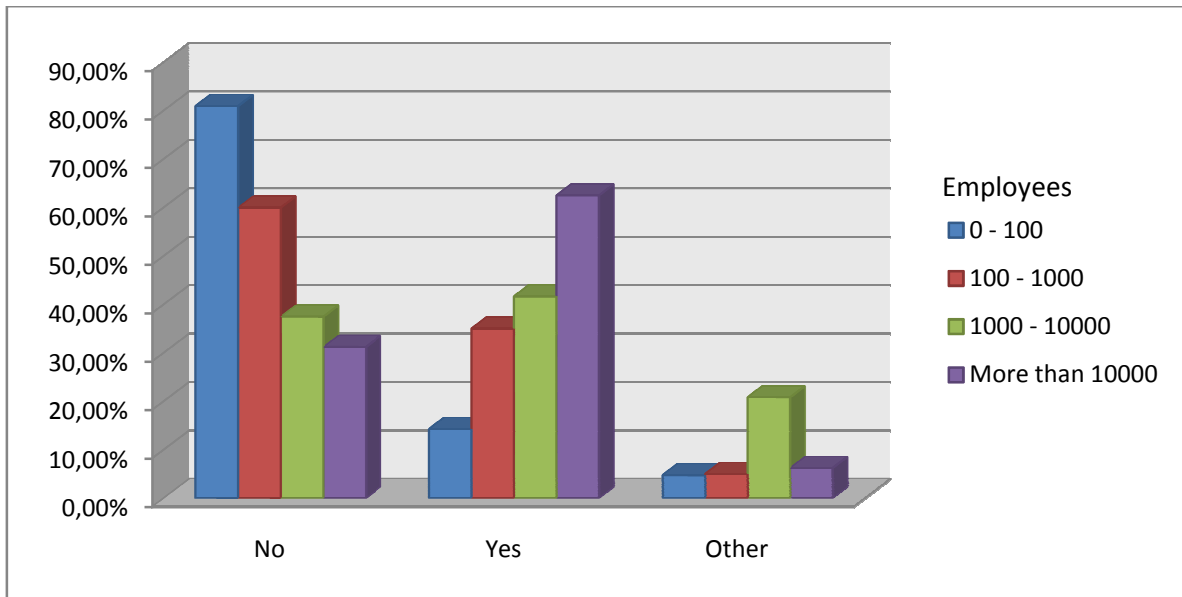

Figure 3. Organizations having a PMO.

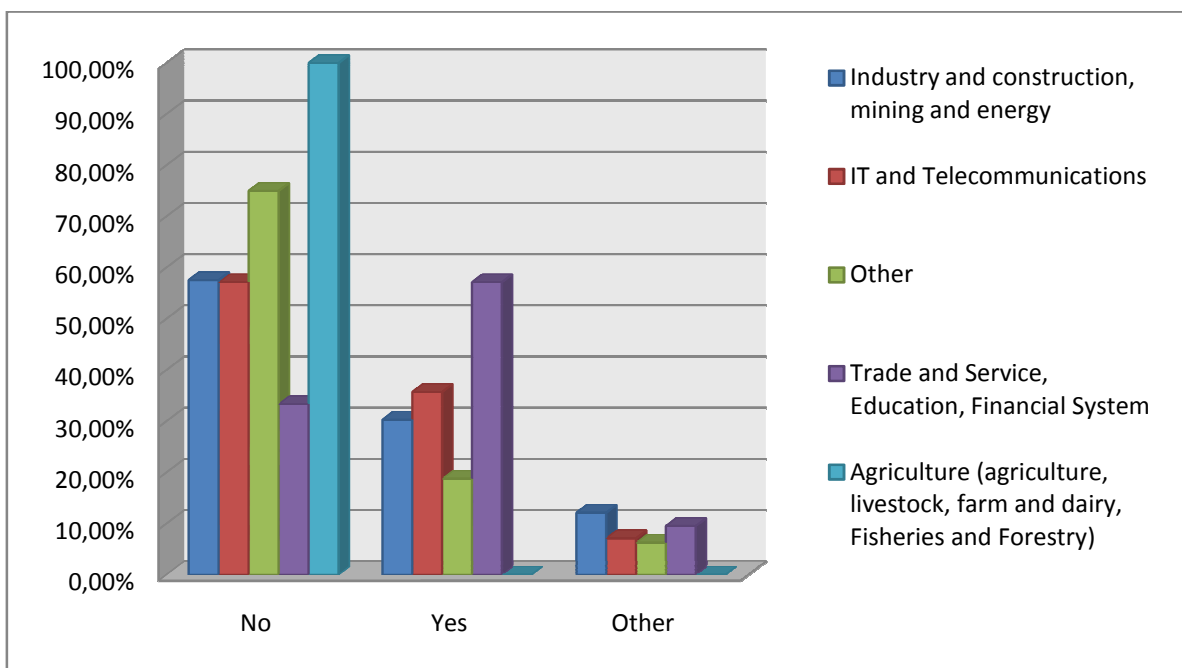Figure 4. Organizations having a PMO by size

Figure 5. Organizations having a PMO by economic sector

A second part of the survey was oriented to organizations having a PMO. The first result we got was that few PMOs had more than 5 years (Figure 6). When we performed the cross analysis according to sectors, as can be seen in Figure 7, nearly all respondents belonging to the information technology and communications sector had PMOs with a 3 years life, while

the oldest PMOs belong to the construction business. This result shows a fashion or crowd effect in the IT business, and a long-established PM culture in construction companies.
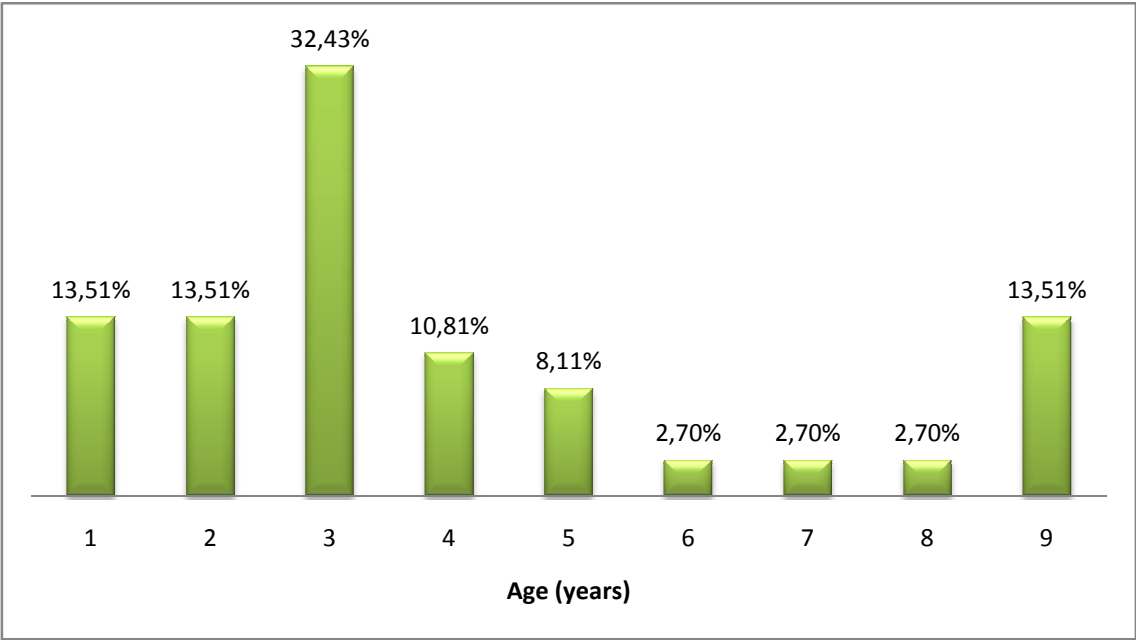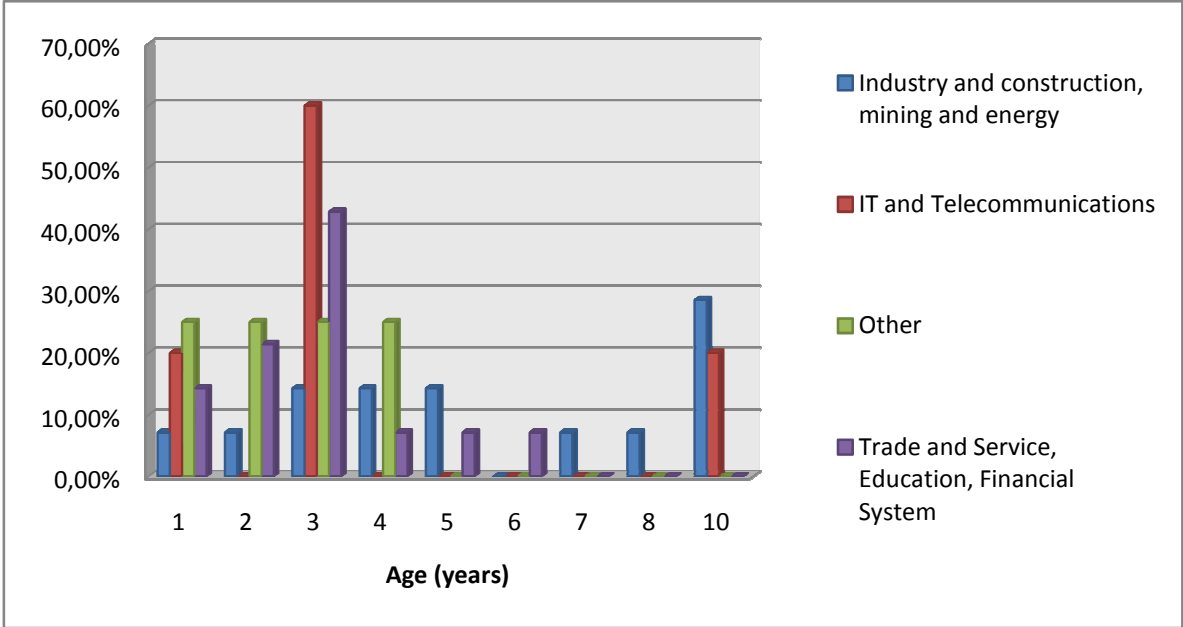

Figure 6. Age distribution of PMOs

Figure 7. Age distribution of PMOs according to economic sector

Most authors insist that the establishment of a PMO should be performed as any other project; that is, having a finite duration, apart from clear objectives and costs. This finiteness may be of two kinds: the PMO itself being of a pre-determined finite duration, probably if created to solve a particular problem, or the deployment period being given and then achieving an operational phase. Concerning duration, 91% of the survey respondents and 100% of the people interviewed said that their PMO did not have a pre-established duration time. Generalized opinion is that as long as organizations have projects, the continuing need of controlling them remains and the PMO should subsist. In relation to implementation time, again the majority said they did not have one. Therefore, at least for Argentinean PMOs, implementation is not treated as a project.
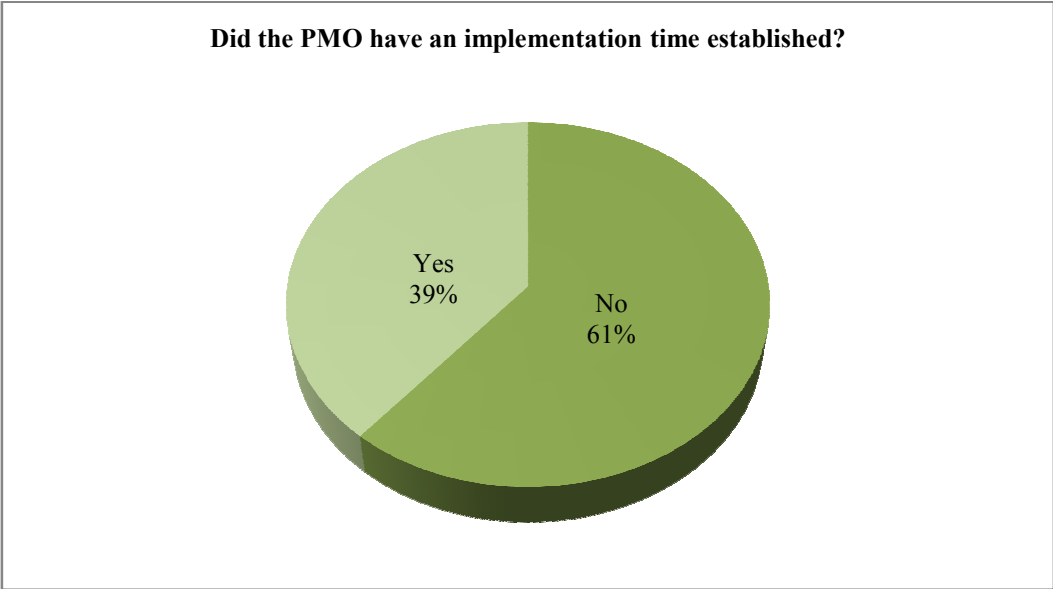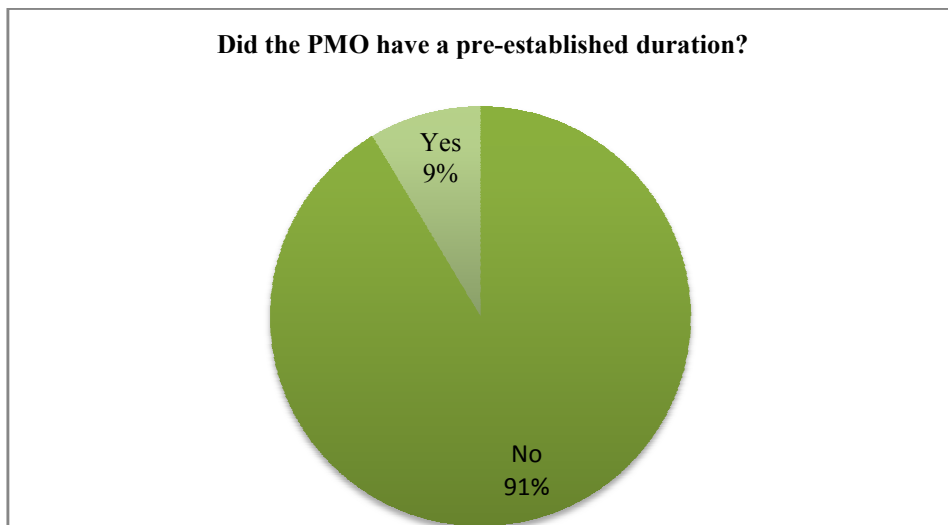

Figure 8. Implementation time

Figure 9. Duration of a PMO

PMOs change depending on what type of organization they belong to; they are usually composed of few people and only some of them are Project Managers, and as the organization size increases so does the amount of people belonging to it. Hobbs[1] study found that either all or none of the project managers are located within most PMOs, and the situation in Argentina resembles the international one. Concerning their usefulness, we observed that in most cases employees from other areas of the company rely on the PMO and see them as a useful resource. From the interviews, we learned that in big organizations for PMOs to work, they have to be well positioned within the company, and have a big exchange of information with all areas having to do with projects. People working in these areas see PMOs as an important part of their organization. In small organizations, on the other hand, PMOs are seen as an unnecessary area. Most organizations studied have one central PMO, they receive support from superiors, and resources assigned to the PMO are usually enough. Therefore, the situation of PMOs in Argentina looks more favorable than the international average.

The central part of the survey was dedicated to the functions PMOs have and their variation with time. Most of the respondents said their PMO had strategic and tactic functions; detailed answers are shown in Table 2. There is a coincidence with Hobbs study on the

variety of functions PMO have, since he found that PMOs fill highly variable roles and perform a wide range of functions. PMO people interviewed said that functions vary according to the organizational position, and that the charter allows for new functions to be implemented, as required to accomplish their mission. They also said that the PMOs appeared as a result of a need to formalize and organize project execution and, being that the case, nearly half of respondents said that their PMO acted on all the projects of the company, with periodic inspections on them. In respect to the contribution to the company, some mentioned the activities devoted to maintain active the PM community, the diffusion of methodologies used in project solving, greater operational control of projects achieved by an enlarged visibility and the diffusion of best practices.

Functions	
Support to project teams	100,00%
Develops standard methodology	87,50%
Reports on project progress	87,50%
Develops tools for project teams	83,33%
Identifies best practices and capitalizes experiences	62,50%
Analyzes project risks	54,17%
Provides training	50,00%
Allocates project budgets	50,00%
Conducts post-project reviews	45,83%
Organizes files and creates a library	41,67%
Defines and evaluate metrics	41,67%
Develops training programs	37,50%
Selects the projects to be carried out	37,50%
Strategic Portfolio Management	37,50%
Evaluates performance of the project team	37,50%
Measures the degree of customer satisfaction	29,17%
Others	12,50%

Table 1. Functions of PMOs.

One of the most typical PMO functions consists of project management organizational learning. Therefore, it was somewhat surprising that only 2/3 of surveyed PMOs identify and capitalize experiences, and below 50% acknowledge being involved in post-project or lessons learned reviews.

The last part of the survey was focused on companies which do not have a PMO. We asked if they had ever had a PMO and from the 55% that had answered that they don't have a PMO, none have ever had one, a result in contrast with that of Hobbs, where he found closings. Only 19% said that they had once thought about having a PMO, and the benefits this will give to the organization. The interesting part of this section is that 70% of respondents think that a PMO would be useful for the company. They have never had one, but nevertheless they think it will be a good change.

Discussions and conclusions

After having presented the information collected from the survey and interviews, the main conclusions are the following.

The majority of PMOs in Argentina are not deployed like a project with pre-defined clear objectives and schedule. This fact has been reported earlier and is quite paradoxical in a project-oriented environment. Nonetheless, PMOs seem to achieve a "steady state", in which functions vary rather slowly and depending on the changing requirements; it has not been found the definition of phases or maturity levels, as proposed by different authors. PMO personnel interviewed do not support the idea of functions changing from an operational to a strategic perspective.

A surprising finding of this study was that the lessons-learned process is not as formally implemented as it should be, given the importance that it has on the continuous learning process, which is one of the major functions of PMOs.

When analyzing data by economic sectors, the conclusion was that the Industry and Construction sectors have the older PMOs, while the Information Technology one seems to have followed a trend some three years ago.

It was interesting to observe that companies where no PMO is established, do not turn down the idea, and believe that including one would be very useful for the organization.

Acknowledgment

References

[1] Hobbs, B. The Multi Project PMO: a global analysis of the current state of practice. Project Management Institure White Paper, 2005.

[2] Parviz F. Rad & Ginger Levin. The advanced project management office. New York: CRC Press Company, 2002.

[3] Kendall, G. & Rollins, S.C. Advanced Project Portfolio Management and the PMO. J. Ross Publishing, 2003.