IMPACT OF PROJECT MANAGEMENT OFFICE (PMO) IMPLEMENTATION ON PERFORMANCE AND IMPROVEMENT OF THE PROJECT

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ABSTRACT:

This research addresses the usage of socio-economic approach to management (SEAM) to improve the role of project management in any sector. An advanced action research in the form of intervention through SEAM will be created and it will be able to highlight the significant role of project management office (PMO) in supporting, controlling and creating interface between the project team and the executive management. The mentioned intervention will be a three-year-span project implemented with one company where access to policies and procedures, departmental workflows and all needed types of communication will be granted to be able to perform this intervention to what serves this study best. The findings of the research are believed to prove that a well-structured organizational arrangement such as the project management office (PMO) will impact both the improvement of the firm and the performance of the project.

Keywords: SEAM, PMO, intervention, project, research.

INTRODUCTION

Problem statement

As markets tend to become more competitive, firms have started to accept the fact that overcoming the constraints of quality, time and scope with a well- set budget is one of the main keys to success. This is why, there is a remarkable increase in adopting the project management elements of knowledge in different industries.

Managers nowadays are fully aware that project integration, risk, human resources, procurement, quality, scope, communication, time and stakeholder's management are essential for the success of any project.

However, the multiplicity of the projects in the world of business has set the need to coordinate the project management process as a whole. Senior managers sensed the need of a proactive management approach to ensure that their decisions are being served in line with the set procedures. They understood the need to finish their projects while balancing efficiency and experimentation,

empowerment and accountability. Executives realized that the success or the failure of any project is tied not only to the project team's performance but also to the governance mechanisms implemented in the project (E.G too P. Weaver, 2014). This is why institutions started looking for an operative management support to play the role of interface between the executive management and the project team.

This is where the role of project management office emerged. Researchers look at PMO as set of organizational arrangements that play various roles in managing the project. PMOs provide some "combination of managerial, administrative, training, consulting and technical services for projects and the organizations overall" (Dai, 2002 p.26). The main mission is to improve project performance through providing enough support to prevent certain failures from occurring and determine continuous improvement throughout the project cycle.

The Project Management Institute PMI (2008) defines Project Management office as:

"An organizational body or entity assigned various responsibilities related to the centralized 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 the project." (B.N. Unger et al, 2012)

Theoretically, this definition is too wide and does not specifically define the role of PMO in an organization. Several researchers, however, define PMO as an intermediary between the senior management and the project team. Some see it as an integrated mechanism to run tasks in a more effective and efficient matter (Rajendra Singh et al, 2009) while others describe PMO as an administrative tool in which the project management activities are integrated with a firm's policies and procedures (K.Artto et al, 2011).

Certainly, all these definitions do underline the vitality of PMO in the life of any Project/Organization. Although PMO is viewed as a relatively recent implemented organizational phenomenon, its history goes back to the 1930s and kept on evolving in the 1990s when organizations started establishing PMO in different types of projects (Rajendra Singh et al, 2009).

The problem with setting up a productive PMO is that its implementation faces many challenges and has a high chance of failing when not well supported by the senior management. In most failed cases, PMOs have been seen as an unstable structure with a very short life expectancy, too costly and had minimal contribution to the organization. A survey of 750 companies (Rajendra Singh et al, 2009), has found that more than 75% of the companies who establish a PMO took a decision to shut it down within three years because they did not see any added value by keeping it. Another survey conducted reported that out of 500 project managers, half have stated that PMOs are seen as too expensive with minor contribution to the project and the overall performance. In brief, PMOs were seen as unstable mechanisms (Aubry, Hobbs, Muller, & Blomquist, 2010).

In addition, it is believed that the current PMO structure does not cover all types of industries. They are often linked to IT and construction sectors, which makes it hard for managers of other specific specialized units to rely on them as an effective way out of any managerial challenge they might face. In this case, managers tend to look for wider organizational arrangements rather than focus on PMO only (K.artto et al., 2011).

Research Objective:

The research's main objective is to improve projects performances and increase efficiency through the creation of a well-structured project management office that will serve a centralized organizational entity facilitating deliverables and eliminating constraints.

Hypothesis:

Core hypothesis:

The right implementation of PMO helps facilitating works, eliminating poor management practices and improving performances.

This hypothesis is divided into three parts:

-Descriptive hypothesis: failures were observed in organizations that lack advanced coordination between the management level and the project execution level.

-Explicative hypothesis: lack of management support, poor implementation of PMO, showing no interest in setting an intermediary to centralize coordinated management through different projects / departments.

-Prescriptive hypothesis: Using SEAM, the right implementation of a well-structured PMO through the project management knowledge areas (Scope, quality, risk, time, procurement, cost, resources, communication and stakeholders' management) will help eliminate project hurdles and will improve work performances.

Literature Review:

The Project Management's institute defines project management office as: "an organizational body or entity assigned various responsibilities related to the centralized and coordinated management of those projects under its domain" (PMI, 2004, p.369).

Others describe PMOs as organizational arrangements whose main purpose is to "support, coordinate and control project –related work" (Arto, Kulvik , Poskela, & Turkulainen, 2011)

According to Monic Aubry, Brian Hobbs, Ralf Muller and Thomas Blomquist PMOs are seen as dynamic entities that are in continuous transition from one charter to the other and one structure to the next while maintaining a short life expectancy (Aubry, Hobbs, Muller, & Blomquist, 2010). However, in their early stages, PMOs may not reflect their full capacity and what they are capable of or what they will be unfolding in the coming years (Xiaoyi Dai & Wells, 2004). This is why entities that give up on PMOs at early stages and do not offer proper support often end up claiming that PMOs were not beneficial and have not lasted long due to their inefficiency.

The project management office (PMO) is an organizational body established to assist the project manager and improve the project's effectiveness. With a team of professionals on various levels, PMO is believed to broaden the area of knowledge in the project enabling detection of early failures and offering an array of support on different project aspects (Dai & Wells, 2004). Its aim is to apply one or more of the following: consultation, knowledge management, standard setting and hands-on program implementation. A PMO also assists both the project manager and its relevant organization to understand and apply various

practices of project management while integrating the management governance into the project.

The PMO term started emerging the twentieth century when companies sensed the urge to coordinate large and complex projects all at once and with a limited time frame. Each organization started looking for ways to improve various aspects of the elements of the project management to enhance productivity and efficiency in its projects. Because of the diversity of PM elements, there is no specific job description for PMOs yet they are believed to be providing "some combination of managerial, administrative, training, consulting and technical services for projects and the organization overall" (Dai, 2002).

Some of the features of a PMO include but are not limited to the below:
PMOs mainly handle the reporting and software operations on behalf of the project manager.

They offer consultancy services to clear the way for the project manager for a well-set project planning.

They also play a vital role in unifying the standards and objectives of the project in such a way that the whole project team will be on the same page with their project manager.

They contribute in offering trainings to improve individual skills and encourage employees to give their best on the project. They also play a role in risk management of each project alone and work towards presenting a post project evaluation (Dai, 2002).

Although most researchers agree on the dynamic approach of PMO in managing projects, they differ in specifying its main distinction among other similar organizational structures. At any rate, what is commonly recognized among all researchers is that the characteristics of PMO are evident in any project.

For Rajendra Singh, Mark Keil and Vijay Kasi, as the organizational and technological arrangements are becoming more complex, the challenges for delivering successful IT projects are emerging. One of the approaches to enhance the management of IT projects is to create PMO. They believe that PMO plays a vital role in creating project management control and discipline in IT projects by providing training and establishing project management standards, improving knowledge management and delivering the required objectives. However, it was stated that PMO initiatives often fail to meet the desired expectations since the challenges in the projects are unknown. The failure rate of PMOs were highly reported.

This is why, Singh, Keil and Kasi started a detailed research to identify and highlight the major challenges that come along with the implementation of project management office.

They used the Delphi technique with 22 IT project managers and arranged the findings to conclude several main challenges that those PMs suffered from during the implementation of PMO. They were mainly the lack of resources and proper funding, lack of personnel who had PMO experience, lack of funding of PMO and lack of required performance.

Researchers concluded then that although PMO is becoming more popular nowadays, as it is playing an important role in the project management world. However, the lack of research regarding this topic is making it harder for

experts to highlight the main challenges and identify the specific obstacles that are standing in the way of a well implemented PMO.

Moreover, they believed that obtaining full support from the opinion leaders specially those responsible of the decision making in their organizations, recruiting experienced project managers who are willing to guide PMO implementation teams, setting processes and procedures prior to the project kick-off and most importantly, setting a flexible change management strategy. All these will contribute in minimizing the challenges and giving the PMO a chance to prove that its benefits are vital to the success of any project.

For Monic Aubry, Brian Hobbs, Ralf Muller and Thomas Blomquist, the role of PMO is relatively significant to the management structure of any organization they are part of. The correct implementation of PMOs and charters creates a dynamic context that is, for the authors, the main characteristic of Project Management Office (PMO). From their own perspective, Monic Aubry, Brian Hobbs, Ralf Muller and Thomas Blomquist view the importance of PMOs as an integrative arrangement that creates value by providing support to the administrative department, managing the practices applied in the project, monitoring the project, providing training and consultancy if needed, assessing, examining, and selecting the projects. Exceptionally, they see that PMO is not hard to capture as a concept, it is rather the ability to keep up with the changes in a project and adapt to the different paces that will incur during the execution. For them, this is where the challenge lays. "PMO's are changing, this calls for a process view where the unit of analysis is the PMO transformation" (Aubry et al, 2010).

They also believe that despite the fact that there are plenty of practitioners on PMOs there is scarcity in research discussing the implementation of PMO and the adaption to organizational changes. PMO's researches are often clichés, tackling different charters and structures. They rarely shed light on the functions and roles of PMOs especially the transitions that occur while the projects are evolving.

For this reason, a two-phase research took place when a questionnaire was conducted during which 13 questions were asked twice; pre-transition phase and post transition phase. Findings were assessed and snowball approach and convenience sample were collected. Data was then tested for compliance and the analysis was handled using two types: Factor analysis (creating unified factors on which the study will be based) and Pearson correlation analysis (to determine the correlation between the factors created.) Cronbach alfa was used to test reliability of the data.

In brief, empirical evidence showed that the transition of PMO from one composition to another is highly related to the change management process implemented in a company. The more the effort organizations put in the correct setting of a change management process, the easier the transition from on PMO to another. They believe that their empirical research has filled the void of lack of numerical data concerning PMO transitions, hoping that the future researches will be focusing on organizational project management using more theoretical approaches (Aubry & Blomquist, 2010).

In his turn, Jerry Julian emphasized on the role PMOs play in continuous improvement and cross-project learning. He viewed PMO as solution that will help reduce "runaway project"; those type of projects that fail because

one or more of the three main constraints in a project was not properly accomplished. Some projects go over budget, others do not meet the desired expectations of the clients or do not abide by the given time frame and end up with an overly delayed project. Julian believes that the services that PMOs provide help facilitating the cross-project learning which allows flow of information and lessons learned from one team to another. Julian wanted to highlight on the processes PMOs use to enhance cross project learning and continuous improvement. He kicked off the research from theoretical background that covered the project learning only by associating it with the lessons learned. Lessons learned is a practice that takes place at the end of each project in which internal project stakeholders share the lessons they learned from the obstacles they have faced during the project cycle. Lessons learned are then documented in the organization's databases for future projects. However, empirical researches made on this topic in specific, showed that the majority of project managers were not interested in applying lessons learned properly. He referenced surveys and studies done by Von Zedtwitz in 2003 and Keegan and Turner in 2001 that both concluded that projects were barely reviewed after completion (Von Zedtwitz, 2003) and even when they were "in no single company did respondents express satisfaction with this process." (Keegan & Turner, 2001) They both considered that knowledge acquired from projects can be possessed not transferred.

Furthermore, Julian conducted a survey that included 20 PMO leaders from different industries. They were each interviewed for 60 minutes. Snowball sampling strategy was adopted and the findings showed that the main perception for PMO leaders was to deliver the project within the time frame offered while meeting customer's expectations. (Jerry Julian. Julian Advisory Group,Inc, 2008). More than half of the interviewed leaders (60%) stated that they ask their team members to identify lessons learned at the end of the project. While less than half (45%) of the interviewees expressed interest in continuous improvement of project performance from one project to the other. Equally, the same number took responsibility in ensuring that the implemented practices in PM were also enforced across their company. Furthermore, a minority (20%) reported that they have the duty to offer support in creating an adequate environment for the project team to learn and grow.

Also, the data revealed that 100% of the interviewees support cross-project learning and they have been doing so by creating processes that are common for multiple projects and conducting lessons learned meetings in which knowledge and experiences were shared. They have also conducted formal trainings for the whole team and ensured that experienced team members were staffed on future projects. (Jerry Julian. Julian Advisory Group,Inc, 2008)

On one hand, the survey revealed that projects managers listed few factors they considered are enablers for cross-project learning. A strong relationships network and the support of senior managers played a positive role in enhancing cross-project learning followed by the culture of the firm and the utilization of an objective lessons learned workshop. In addition, the skills and the expertise of the project managers were also found to be key factors to a successful cross-project learning. (Jerry Julian. Julian Advisory Group,Inc, 2008).

On the other hand, the findings also showed barriers to the cross-project learning such as: absence of authority over the project managers, time constraints, rotation of staff, fear of admitting mistakes made at work, lack of management support and the complexity in accessing the lessons learned from previous projects and applying them.

Julien concluded that PMO leaders have the ability to bring all the experiences they have encountered throughout the project and integrate them in their organizations. He recommends that PMOs concentrate establishing a strong network across multiple communities in order to build support and gain trust by understanding the needs of each community. He also advises to concentrate on both successful and failed projects equally as they both offer lessons that can be learned from. Reflections for Julien should not be presented at the end of the project but rather during the project life cycle through weekly and monthly progress reports and upon completion of important milestones. Lastly, the author recommends that the PMO leaders arrange a way for the project team to hire a trained expert from outside the project who can assist the team in uncovering the knowledge the project is earning and help creating an environment that is less defensive and more effective (Jerry Julian. Julian Advisory Group,Inc, 2008).

In this context, project performance and high levels of management confidence clearly had a strong correlation with the implementation of PMO. Moreover the archiving of previous lessons learned, providing data and advice on procedure and processes that should be implemented were found in projects that showed high performance levels (Xiaoyi Dai & Wells, 2004).

What makes this research interesting is that each article tackles different gaps found in the implementation of PMO. In their research, Rajendra Singh, Mark Keil and Vijay Kasi have concluded that critical factors affect the success of a PMO implementation. The absence of a culture of governance in an organization is a main factor of failure as well as the lack of impact of a PMO. Sometimes, a PMO is either unsupported by the management or too supported to the extent of becoming over-authoritative. PMOs that attempt to micromanage projects often end up failing as well (Singh, Keil, & Kasi, 2009).

According to Monic Aubry, Brian Hobbs, Ralf Muller and Thomas Blomquist, one main challenge arises when talking about PMOs: PMOs often face structural transformation which hits their own core and affects their life expectancy that does not exceed two years normally. Their research mainly discusses the results and reasons behind this transition. Moreover, they have addressed one important issue PMO is facing in the front end of innovation projects. They observed several obstacles when it comes to implementing PMO in this type of projects, raising the issue of why PMOs are not efficient to all types of projects as they are viewed as structural organizational arrangements; "It is not clear as to the appropriate manifestation of a PMO in the front end of innovation project context. Formal PMOs or related specialized unit do not exist for such purpose, then we can ask what other relevant organizational arrangements would help the executives to manage the front end of innovation projects." (Aubry, Hobbs, Muller, & Blomquist, 2010). It is evident that the current PMOs literatures focus more on project practicality rather than creating theories that can come in handy in future projects (Arto, Kulvik , Poskela, & Turkulainen, 2011).

All the above researches tackled various aspects of project management office along with the possible challenges and barriers that accompany its implementation. They all sited the different roles PMO plays in the life of a project. But rarely any, have tackled the direct effect PMOs have on the project improvement and performance. None of them factors both the finances and the people into the project's success or failure when PMO is in place.

This is why, this research will deal with PMO implementation through a different process that will intervene with the whole organizational system. The socio economic approach to management SEAM is known as intervention research and is "more transformative than action research" (Conbere & Heorhiadi, 2011). Usually, a company's structure does not assure the results of its various activities; a well-structured firm does not necessarily have high productivity. It is the quality of its behavior that determines its performance (Savall, 2002). Since the PMO is about the interface between the management team and the project team, SEAM will be very efficient as the intervention will be smooth and effective.

Research Field:

The research takes place in the container terminal in one of the ports. The project is BOT and the parent company is a maritime and logistics multinational firm. The company has recently fully acquired the container terminal and is finalizing the transition phase with a vision and mission towards a rational improvement that affects the organizational body. This makes the research more practical since the top management will be giving its full support towards any positive change.

Methodology

The adopted methodology, socio-economic approach to management, is based on a set of values that are a bit unorthodox. What makes SEAM different is the fact that it believes that economic plans are not the only main factor behind an organization's success or failure. The employees or the "actors" as SEAM practitioners call them, play a major part in determining how a company can function (Conbere, 2011). This is where SEAM and PMO intersect, they both rely on the human skills and their development to measure organizational efficiency and success.

What makes the socio economic approach to management an important methodology, is its ability to create interaction between the organizational structures implemented and the employees' behaviors. This is how SEAM is incorporated with the topic of this study; performance and continuous improvement, the two variables that this research is tackling, rely massively on human intervention.

In addition, SEAM proposes a methodical way to test and assess the hidden costs in an institution. Hidden costs are the figures that are not directly mentioned in the company's financial reports such as ledgers, financial and cost accounting and budget reports. (Savall & Zardet, 2008). However, they emerge in the form of "absenteeism, industrial injuries and occupational diseases, staff turnover, non-quality and direct productivity gaps." (Savall, Zardet, & Bonnet, 2008).

Prior to starting the intervention, approval will be taken from the management after having explained the SEAM approach in details. It is important to highlight that the success of this process is very dependent on the support received from the top management throughout the journey.

Furthermore, this will result a two-way intervention:

- Top down: starting with the top management acknowledgment of SEAM and support of the change that will occur.
- Bottom up: when "actors" start becoming familiar with the process and become more engaged in identifying hidden costs and working on reducing them.

The following step includes interviewing the leadership team where data will be collected from the participants which will be used later on in assessing the effectiveness of the change process.

The use of the data emerges in analyzing its dysfunctions from the ISEOR dysfunctions category and conveying it back to the top management team through the "mirror effect". (Conbere & Heorhiadi, 2011).

This will result a reaction from the management team when given the findings through the mirror effect, they will recognize the magnitude of the hidden costs and how they are keeping the company from achieving the required level of performance and improvement (Conbere & Heorhiadi, 2011).

What differentiates SEAM over other methodologies is that the consultancy does not offer a solution to a problem. It is rather giving the management the root cause behind poor performance and weak improvement in a way that actors do not feel blamed.

As SEAM moves forward, the horivert will start emerging. The horivert, as the name indicates, is the mix of both horizontal and vertical interventions that will work on including the whole organization in the process which will eventually lead to an effective implementation of the organizational development and improvement (Savall, 2003).

The horizontal phase is what the consultants were doing during the initial phase; working with the management team. In the vertical diagnosis, the hierarchy is divided into vertical silos in which each silo follow the same process of diagnosing the problem, mirror effect, involving actors and recording the magnitude of hidden costs and poor performances (Conbere & Heorhiadi, 2011)

The next step is reducing the dysfunctions. For this, specific management tools should be applied:

1- An internal and external strategic plan that has a lifespan of 3 to 5 years: this plan serves to put together both internal strategies as well as the external environmental ones that revolve around the organizations' mission.

2- The priority action plan, initiated every six months, in which the objectives are set by the internal stakeholders to prevent potential dysfunctions.
3- The time management tool helps clear the way towards a well-established schedule in which actors are aware of what obstacles are behind them and what specific coordinated actions are ahead of them.
4- The competency grid is used to help the management determine the skill level of each employee and create their development plans to what serves the organization better.
5- The strategic piloting notebook: it is the measuring tool of each activity, its results and dysfunctions and the creation of potential activities.
6- Periodically negotiable activity contract- as the name indicates, this tool uses extra effort that might be needed to implement potential activities.

All these tools play a vital role in emphasizing the development of the human potential in order to reach the organization's set goals instead of focusing only on short-term economic goals. (Savall, 2003).

In conclusion, this is how SEAM will operate: reducing dysfunctions and lowering hidden costs while improving structures and behaviors all through a sustainable economic performance. The reason behind choosing SEAM is the baseline this methodology starts from: various people may see the truth each in a different way (Conbere & Heorhiadi, 2011) and all of them are involved in the change management and in making their work environment healthier, more efficient and more successful.

Work in progress:

Up till date, the management was introduced to SEAM, showed great support and gave the green light for the intervention to start.

The interviews were conducted both horizontally with operations and engineering departments and vertically through their subordinates. Field note quotes were extracted and the themes and subthemes of each potential dysfunction were highlighted.

Gantt Chart:

	Activity	Jan till June 2021	Jul till Dec 2021	Jan till June 2022	Jul till Dec 2022	Jan till June 2023
1	Interviews	■				
2	Qualitative Analysis (Mirror effect/Expert Opinion)		■			
3	Vertical Intervention		■	■		
4	Qualitative Analysis (Mirror effect/Expert Opinion)		■			
5	Interviews For Calculating Hidden Costs			■		
6	Implementing projects				■	
7	Evaluating				■	
8	Data Formalization and analysis					■
9	Finalization of the thesis					■

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