

# An Agile Approach Applied in Enterprise Project Management Office

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**Abstract.** In a highly connected world, surrounded by many changes, companies need to adapt to remain competitive in the market. Many of the initiatives occur through projects, that need to be dynamic to meet the business need combined with the organization's strategic planning. The Project Management Office (PMO) in this scenario has the role of supporting the organization with tools and techniques to overcome this changes and ensure alignment with the organization's strategic initiatives. This paper presents an acting model for an Agile PMO putting the PMO at the center of the organizational changes being it the catalyst of information and the disseminator of good practices and knowledge to sustain the changes.

**Keywords:** Agile PMO · Agile project management  
Exponential Organizations

## 1 Introduction

Companies are currently undergoing several transformations. The ever-changing market acts as a driver for companies to adapt to new scenarios. Most of the organizational transformations occur in companies through projects [1]. These projects need to be aligned with the organization's need through its strategic planning. In this sense, the role of the Project Management Office (PMO) is to help organizations plan, implement and monitor these projects so that they achieve their goals.

A great motivator of change in organizations is the digital transformation [2], where companies need to adapt technology to remain competitive in the market. Many organizations that not technologically evolve in the coming years will probably have difficulties in surviving in a competitive market. The companies that are currently guiding the market are those that have an exponential growth, called exponential organizations (ExO). They are organizations that grow rapidly, reach growth 10 times their size in just 2 to 3 years [3]. How to be prepared for the changes you have seen with this growth? What is the role of the PMO in this scenario?

The PMO must be prepared to adapt to these changes and often be the area where the company's strategic shall be supported to be supported to maintain communication

and engagement of senior management with the progress of the projects. According to the Project Management Institute (PMI), the focus of senior management organizations remains largely focused on the bridge between strategy formulation and execution. Thus, giving greater emphasis to be more agile, customer-focused and competitive [4].

The PMO, being an important agent in this entire process of transformation, must have mastery of models and techniques capable of supplying the organization. His own actions have to follow a model that allows it to adapt and change their focus to monitor the company's needs. The vision of where the PMO wants to reach, its goals, its objectives and its systematic monitoring of their actions becomes a focal point for the continuous delivery of PMO value to the organization.

In this context, this paper presents a role model for Agile PMO containing elements that support its operations amid a backdrop of many changes. This model can be applied in many organizations, especially in cases where there are many transformations.

## 2 Theoretical Foundation

### 2.1 Massive Transformative Purpose

In 2015 Salim Ismail proposed in his book [3] a concept called MTP, Massive Transformative Purpose. This is a concept that indicates what the company intends to do and not what it does. Its main purpose is to provide organizations with a purpose with a focus and goals that are transformative.

The MTP is a feature of the companies called Exponential Organization (ExO), whose impact (or result) is disproportionately large - at least ten times higher - compared to its peers, due to the use of new organizational techniques that leverage accelerated technologies [3].

These companies are guided through their MTP and present 10 attributes in common. Of these, 5 attributes are internal (SCALE) and are responsible for the creativity, growth and uncertainty of the business: Team on demand, Communities and Crowd, Algorithms, Leveraged Assets and Engagement. The other 5 attributes are external (IDEAS) and are responsible for order, control and stability: Interface, Dashboards, Experimentation, Autonomy and Social.

### 2.2 Objectives and Results

Many companies guide their management by setting objectives and results. In 1999 John Doerr introduced a new model for Google, which he had first learned in Intel, the Objective and Key Results (OKR), a framework for goal setting [5].

The OKR consists of clear definition of objectives and their results, being measurable, enabling them to be monitored and controlled. The OKR model is a standard for aligning company strategy with individual team goals [6]. An OKR should be described simply and clearly. The model suggests that it is written as follows: "I will (goal) measured by (the result set)." The OKR definition consists of two levels. A strategic level set by the organization with a one year horizon. The other level is the OKR defined by the team and has a horizon of three months.

## 2.3 Scrum Framework

Scrum is a framework created in the 90s, initially used for development and support of complex products. The framework has several good practices that can be adopted by different teams. Being a framework, it can be used as needed by the team. [7] The framework is used, partially or totally, by about 95% of organizations that use agile methods in their companies [8].

The Scrum framework is based on an empirical process based on three pillars: transparency, inspection and adaptation. Scrum consists of the Scrum team and their roles, events, artifacts and associated rules. Scrum rules link events, roles, and artifacts, managing relationships and interacting with each other. The Scrum team consists of three roles:

- Product Owner (PO): responsible for maximizing the value of the product to be delivered through the work that the development team will build;
- Scrum Master (SM): responsible for ensuring that the Scrum framework is understood by everyone on the team and that it is being followed;
- Developer: are responsible for making deliveries. They are organized and empowered by the organization to manage their work.

The events in the Scrum framework aim to create rhythms in deliveries and minimize the need to hold meetings not defined in Scrum. All events have a set time for their realization (time-box).

- Sprint: is the main Scrum event, its time-box is one month or less. This is the period of making deliveries;
- Sprint Planning: Sprint initial event, where your planning is done. The expected result for this ceremony is the definition of what will be done, how it will be done and the purpose of Sprint;
- Daily Scrum: daily meeting with 15 min time-box. In this meeting, each of the team must answer three questions: (1) what I did yesterday, (2) what I'll do today and (3) if there is any impediment to the performance of my activities;
- Sprint Review: is the time where the team presents Sprint deliveries and collects feedback, incrementing the backlog, if necessary. His time-box is 4 h for a one month Sprint;
- Sprint Retrospective: this ceremony is the opportunity the team has, to inspect at Sprint and create a plan to implement improvements in the next Sprint.

The artifacts are used to promote transparency and create opportunities for inspection and adaptation. The main artifacts are the Product Backlog, an ordered list of the actions/tasks the product needs, and the Sprint Backlog, a list of items that will be worked on in the following Sprint.

## 3 Methodology

The objective of this paper is to provide a model to enable the PMO to be the support for the organization in massive transformations (MTP), being guided by focus on

deliverables and measurable results (OKR), through its team, joining efforts to realize the deliverables in periods of time (Agile). The Fig. 1 presents the performance model for an Agile PMO containing the elements necessary for its operation.

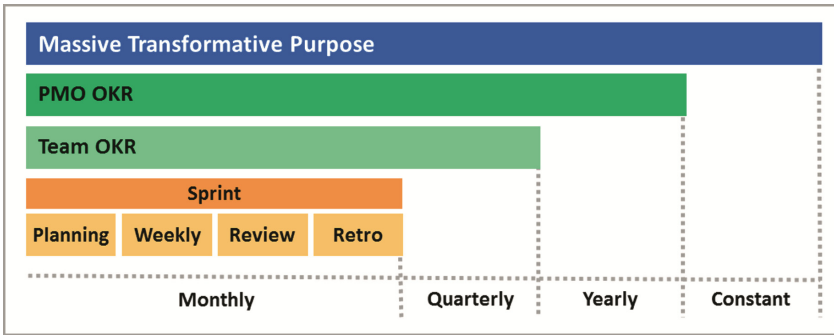


Fig. 1. Operating model of a PMO Agile. (Source: own authorship).

### 3.1 Agile PMO MTP

The massive transformative purpose is something that must be the great motivator of the PMO’s existence. As Salim Ismail quotes in his book [3], an MTP needs to impact many people to be relevant and make sense.

This definition associated to a PMO means that his actions and initiatives need to transpire beyond the organization department and permeate throughout the organization. It is necessary to think about how their actions can positively impact everyone in your company.

Some PMOs are already considered Enterprise PMO [9] and their actions must act throughout the organization. In this case, the definition of the MTP is something easier to define because its vision of every organization is implicit in its purpose. Another type of PMO, considered departmental, needs a little more understanding about its scope of action to define its MTP. It is worth mentioning that the tendency is for the PMO to become more and more corporate, helping the organization to monitor strategic initiatives [4].

For the formulation of MTP it is necessary to seek together the senior management directing the PMO to organization. With this information, bring together the PMO team, search for the essence words to describe their purpose and formulate the main phrase of the MTP. Other information may be described in addition to the main sentence.

### 3.2 PMO OKR

The OKR PMO are the objectives and results that the area intends to achieve. These are OKR that will give direction to all other actions that the team will propose. They need to be in sync with the organization MTP definition.

The definition of these OKR occurs by the high management of the organization giving the direction of the PMO. The vision is one year and aims to answer the question, where the PMO wants to be a year from now.

The main purpose of this OKR is to challenge the team to make deliveries above expectations. These are goals that take the team from the comfort zone and make people rethink the way they work to achieve maximum performance. For this reason, these goals are rarely achieved and serve to constantly challenge the team.

### 3.3 Team OKR

The Team OKR are the goals and results that the team wants to achieve to meet the PMO OKR. These objectives are more focused and detailed, serving as input for the definition of actions that the team will perform.

The definition of these OKR is performed by the team itself with a three-month view. The objectives and expected outcomes are to be achieved and have the ambition to create challenges for the PMO team to work together and with clear and defined focus.

If during the definition of Team OKR there are already identified some actions, these should be noted and included in the team’s backlog for further discussion during Sprint Planning.

### 3.4 Sprint Planning

Sprint Planning is the first meeting to begin Sprint. It is the moment of planning the actions that will be performed by the PMO team during the Sprint. In this case, it is suggested that the duration of Sprint is one month. This ceremony should be held with the whole team of the PMO, they will be responsible for knowing the team and ability to commit to the delivery of Sprint.

The main result of this event are the actions set to be held on Sprint beginning. One way to control these actions is to use a kanban [10], as presented in Fig. 2.

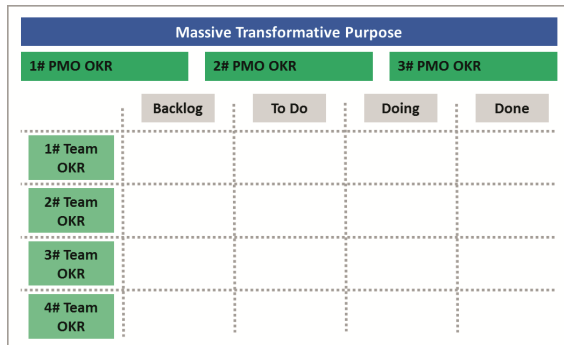


Fig. 2. Monitoring framework of the actions of Sprint. (Source: own authorship).

To determine what Sprint actions will be, the team must consider the actions that are already in their backlog and the actions they will propose to achieve Team OKRs. The actions that are selected must be moved or added in the “To Do” kanban column. An important point is that in this ceremony one should not focus on the details of how each action will be performed. It should be clear “What” will be done, the “How” can be detailed when any member of the team takes that action.

In order to conduct this and other Sprint ceremonies, the role of PO is performed by the PMO manager. The role of SM is performed by any team member who knows the methodology, except for the PO. The role of SM must be alternated between the members of the team anytime. It is suggested that the exchange occurs every three months. The exchange of members for the role of SM is important so that all team consolidate the understanding of the methodology facilitating in the moment of disseminating this knowledge.

### **3.5 Weekly Meeting**

The Weekly Meeting is a meeting with all the PMO team. Its purpose is to monitor the actions. This meeting should take place in front of the team kanban and should take a maximum of 15 min.

Each team member should answer the three questions: What did I do last week? What will I do this week? Is there any impediment for completing my job?

This moment is important for the team to synchronize the activities being carried out and the main milestone for the kanban to be updated. Ideally, the update is performed as the actions are initiated (by moving tasks from “to do” to “doing” status) or completed (by moving tasks from “doing” to “done” status). If it does not, the actions must be updated at the most before the Weekly Meeting.

### **3.6 Sprint Review**

This ceremony is the moment where the team presents its deliverables, the result of the completion of the actions defined for Sprint. All team members must participate and can also be of top management people invited to contribute feedback of deliveries made.

If any action has not been completed, it must return to the team’s backlog. This action will be evaluated at the next Sprint, if it continues to be a priority compared to other backlog actions. In addition, the feedback obtained during the ceremony may generate new items in the backlog, which in turn will be evaluated together with the others in the Sprint Planning meeting.

At the end of the meeting, after deliveries have been submitted and with the feedback received, it is time to update the Team OKR and PMO OKR based on the result obtained in Sprint. In this moment, only the team participates and must be used to reflect on the evolution of its goals and the next challenges.

### 3.7 Sprint Retrospective

Sprint Retrospective is a time for the team to review how Sprint was going. This is an exclusive event for the PMO team member who participated in Sprint. This is the ceremony that ends Sprint.

It is the moment where it seeks to identify the positives and negatives that have occurred throughout the Sprint. For the positives, a collective agreement is created by the group in maintaining these attitudes, as well as defining improvement actions to be implemented in the next Sprint for points that are negative.

## 4 Discussion and Results

According to research conducted by VersionOne, 87% of companies that use the agile approach say their main benefit is their ability to manage with changing priorities [11]. This agility is essential considering the current market scenario that is constantly changing. For organizations to remain competitive they need to be agile to make changes and the PMO in this scenario becomes fundamental.

The PMO has the role of keeping the organization's strategy and its execution in line, as well as providing tools and techniques to support the organization in these transformations. Approximately 73% of the organizations surveyed by PMI, believed that one of the main tasks of the PMO is to provide standards for Project Management [4].

The use of agile approaches to project management has been steadily increasing to meet the need for changing organizational priorities. About 71% of organizations report that they use agile approaches to their projects sometimes, often and always [4].

Analyzing this context, as the PMO can be the reference in Project Management with Agile approaches, while he does not use this approach in their daily work? The model of performance proposed in this article comes in response to this questioning, providing the PMO with an agile approach to its operation. The use of this model evidences the pillars of the agile methods transparency, inspection and adaptation, making the PMO can be considered a PMO Agile.

## 5 Conclusion

This paper presented a model of action for a PMO Agile. The fact that companies are seeking market competitiveness, forces them to have the need to make changes, and the Agile PMO serves as support for them.

The proposed model may bring contributions to the community regarding agile practices applied to project management and innovative practices for agile businesses. The proposed model provides new techniques for PMO performance and can be widely used, thus contributing to the growth of new techniques for agile project management. In organizational transformations, the proposed model may contribute to the management of complexity as well as a support strategy to scale the agile in large organizations.

This model is currently used in the PMO of a private company in the region of Rio Grande de Sul. Its use in the first months has already shown benefits in terms of

organization, transparency and focus of the PMO's performance in the organization. Based on reports from the team members themselves, there is an improvement in several points of daily life:

- Individuals and Interactions: from the implantation of the model weekly interactions are carried out to discuss the team objectives and activities, before this interaction occurred monthly or bimonthly;
- Response to change: changes occur more naturally, as the focus becomes on the OKRs and more on the activities;
- Partial and recurring deliveries: the team delivers smaller deliveries, collect feedback, and evolve;
- Transparency of work: Every team has visibility of what is being done and can contribute;
- Motivated individuals: the team knows where it wants to go and works in synergy to achieve the results.

As future work, it is expected to collect some more information throughout the year of 2017 and later be consolidated and disclosed to test the performance improvement of the PMO.

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