

Project Management Office in a Waterfall environment

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Abstract: Project Management Office or PMO works like a business unit to maintain project management activities of an organization. The aims is to standardize the project management methods, processes, and policies in execution of project activities. There are several approaches to project management that PMO can follow such as traditional waterfall approach, agile methods, lean practice or scrum framework. Each of these require specific culture, structure, and processes so that projects could be efficiently and effectively managed. This paper focuses on the issues faced by PMO with regard to project management methodology, relevant strategic impact, and stakeholder response to change in these methods. It also review other alternatives to project management and recommends a preferred alternative.

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1.0 Introduction

As laid down in (Schmidt, 2013), Project Management office (PMO) has multiple different methodologies that it can apply to manage projects. These methods include the traditional waterfall approach, agile methods, lean practice or scrum framework. The application of these methods depend upon the nature of the project. PMO has the authority to decide when to use which methodology. As described in (Mikoluk, 2013) waterfall approach of project management is a sequential process where each project is managed in a linear fashion and consists of pre-defined phases which are generally not skipped or changed during the project. Because of these requirements of waterfall approach of project management, this methodology is considered as rigid and sometimes not followed in large, complex and novel projects where the user requirements change frequently and the end-user requires frequent feedback.

2.0 Issue Details

2.1 Description

In aforementioned circumstances, the biggest issue for the PMO is that how they should tackle such ever changing projects. This issue forces the PMO to think whether they should use other project management methodologies such as agile or scrum or follow the traditional waterfall approach. This issue is considerably significant for the

company's strategy because if the PMO chooses to apply different project management methodology other than waterfall approach then it is their responsibility to coach the project team, create adaptability and make the new methodology work.

2.2 Strategic Impact

This issue will cause the PMO to change its overall strategy of how it sees and manages the projects. If they opt to go for other methodologies such as agile then the PMO has to change the entire culture and practices of project management team of how they initiate, manage and close phases of projects. According to (Lotz, 2013), a project team, that has been following traditional project management approach, is habitual of carrying out project sequentially and does not feel comfortable with projects with highly changing requirements. They consider that each phase has a stage gate and after passing through it the requirements can't be changed. This is not possible in complex software projects where the requirements constantly change.

If the organization come across such projects then the PMO has to change the execution strategy of the teams and disseminate the policies, procedures and techniques of agile methods or scrum framework. The organization has to constantly engage with the stakeholders and improve their communication

strategy with all the stakeholders. They will need to follow iterative strategy in execution of projects. In such situations stakeholders define the priority of the deliverables rather than the PMO and dedicated team is created to execute the work which has ultimate authority over their work. Thus the adoption of other methodologies entirely changes the strategies of PMO and the organization has to consider it when it faces this issue.

2.3 Stakeholders

The major stakeholders that will be affected by this issue include PMO, project management team and the end-users. The PMO will have to change its strategy of managing the projects and the project teams. They will have to train the project teams about the new methodologies and, depending upon the nature of the project, motivate them to use both methods at once. The project team, on the other hand, will face the challenge of adequately adopting the new methodology for the execution of the project and, sometimes, using both of them together. In this scenario their performance is needed to be monitored by the PMO. The end-user's trust is a significant factor which has to be maintained by the PMO and organization in the time of changing their core strategy of managing projects. If the organization fails to manage the project using agile methods then the quality of the end product may be

affected and as a result the user's trust may be lost.

3.0 Alternatives

(Symonds, 2013) discusses about the blend of the two project management methodologies, waterfall and agile, in an organizational environment. One alternative to the aforementioned issue is to separately use both the methodologies in the organization. The PMO, initially, has to coach the project teams about both the methodologies. In this way the project teams will be adapted to the traditional as well as the new agile approach. The PMO will just have to maintain the compliance as to which project will be dealt using traditional methods and which project will be executed using agile approach. The projects where end product is quite complex and its requirements can't be fixed in the beginning then agile approach can be utilized and those projects where strict phase start and exit, control and discipline are required then traditional project may be followed. In the second alternative, as mentioned in (Symonds, 2013), the organizations can use the blend of both the methodologies. The author also gives example of this alternative, that is, 'Iterative Waterfall'. As the name suggests, this approach is the combination of best practices of both agile and waterfall methods best suited for software development projects which require both strict discipline and control and have changing

requirements. The fundamental difference between this alternative and the first one is that here the combination of both methods is being used in the same project where as in the former alternative only one approach is used for one project depending upon the suitability.

4.0 Preferred Alternative

The preferred alternative of the issue is the latter one where the combination of both methodologies may be used. In this way the organization may be able to execute and manage the projects more efficiently by using the best processes of each method and the teams will be better trained to deal with the complex projects. By acquiring this methodology the project teams won't have to switch the methodology every time the projects change which may create confusion and inefficiency. Moreover, today's projects require discipline, control, and flexibility as well as consist of dynamic requirements and prototypes at periodic milestones therefore this methodology will be able to manage the projects in a better way.

5.0 Conclusion

Although the best strategy to tackle dynamic projects and those with highly changing requirements is to use the blend of both traditional and modern project management approaches, however, it is PMO's responsibility to tailor the combination of both methods.

PMO has to select those processes, tools and techniques from both the methods which are best for a specific project. Thus for every project PMO will have to slightly modify the combination of both the methods making it more relevant and effective for any specific project because some projects will require more processes of agile approach and less of waterfall where as some will be best managed by using majority of waterfall processes. If the PMO adopt this alternative then it will be able to better deal with traditional projects as well as novel projects because this alternative consists of processes of both waterfall and agile.

6.0 References

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