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Abstract

This project focused on implementing a new Project Management Office (PMO) framework within the engineering services division at XYZ's Puerto Rico site. The objective was to standardize project management practices across the company, thereby improving reporting and enhancing visibility into project performance. The initiative was applied to one key project as a baseline for future scalability across business units. A Risk and Opportunity (R&O) template was introduced, and training was provided to the project team. The framework was successfully piloted on a key project, demonstrating the value of structured governance and team alignment in deploying PMO practices within an evolving business environment.

Introduction

The start-up company XYZ provides engineering services to large industrial companies. In 2025, it restructured its departments to establish a Project Management Office (PMO). Before this restructuring, its practices were not standardized across projects, business units, and global offices. Practices such as deliverable reporting, risk and opportunity management, and project kickoffs differed widely. This restructuring introduced a new project management framework, which required integration into ongoing projects. This project focused on implementing the new PMO framework on one key project at the company's Puerto Rico site serving as a pilot case to ensure the framework's adaptation to existing workflows.

Literature Review

A PMO is a function centralized within an organization that governs project management standards, ensures governance, and supports the alignment of projects with strategic objectives. PMOs enhance project efficiency, consistency, and oversight by providing standardized frameworks and tools for project execution [1]. Organizations often encounter challenges such as adversity to change, lack of stakeholder engagement, and difficulty integrating the PMO into existing workflows [2]. These challenges are usually tackled by adopting project management methodologies that align with their operational needs. The Waterfall methodology is an approach in which each project phase or task must be completed before the next begins, making it ideal for projects with clearly defined deliverables [3]. In contrast, the Agile methodology emphasizes flexibility, iterative development, and continuous feedback, making it more suitable for dynamic environments where requirements may evolve [3].

Stakeholder engagement is vital for successful project management and PMO adoption. Engaging stakeholders early and consistently helps to build trust, align expectations, and minimize resistance to change. Effective stakeholder engagement strategies encompass transparent communication, regular feedback loops, and the active involvement of key individuals in planning and decision-making processes [4]. A method to ensure proper stakeholder engagement is using a control tower. A control tower is a centralized, real-time dashboard consolidating project data and performance metrics, facilitating proactive issue identification and resolution [5]. Control towers are increasingly valuable in project environments, offering leadership and stakeholders a clear, data-driven perspective of project health and progress [5].

Motivation

This project was essential for standardizing project management within the company, enhancing consistency, and transparency. Implementing a structured PMO framework and using tools like the Risk & Opportunity template helped the organization track performance more effectively, manage risks proactively, and improve decision-making processes. This structured approach fostered growth and alignment with corporate objectives, setting a strong foundation for future scalability.

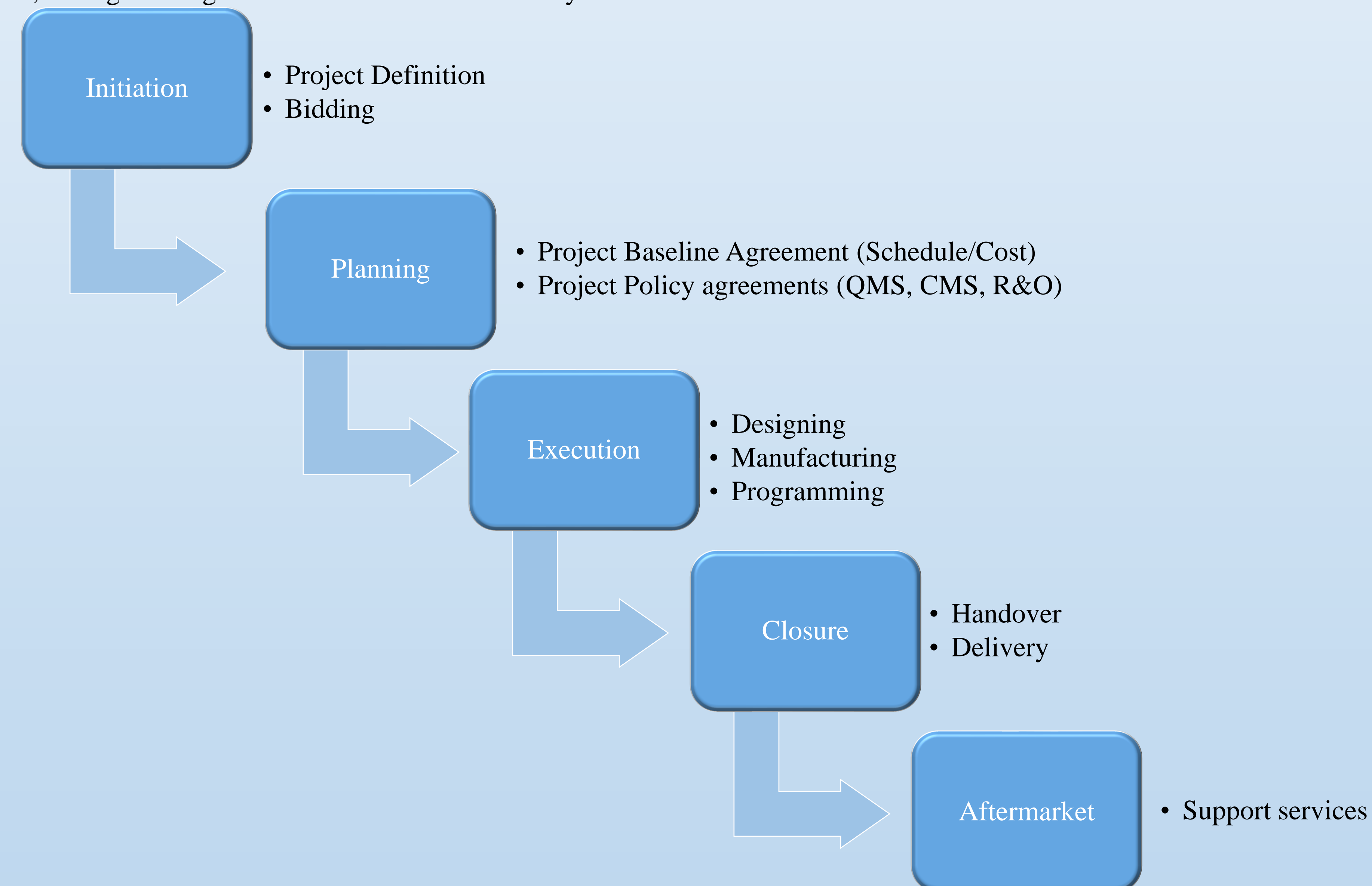


Figure 1
 Generalized Project Lifecycle

Methodology

This project followed a waterfall methodology, implementing a structured, sequential approach to ensure the successful adoption of the new PMO framework. The project began with a baseline assessment, where the functional manager assisted in identifying key projects. These key projects were evaluated to assess current project structures, reporting standards, and gaps. Based on these findings, an action plan called a Rolling Action Items List (RAIL) was created, defining specific actions that needed to be completed for a successful adoption of the framework.

The implementation phase introduced the new framework through structured documentation, training sessions, and the establishment of a control tower to monitor project performance. Once implemented, performance tracking and evaluation began, using KPIs identified within the framework that were required for project success. Regular check-ins with stakeholders were conducted to identify adoption challenges and ensure alignment. During the project closing phase, feedback was gathered to optimize the framework, and a plan was developed for expanding the approach to non-key projects, other business sectors, and sites.

Results

Steady progress was achieved throughout the project, driven by strong coordination across both local and global teams. Weekly meetings ensured alignment with leadership and provided a forum for tracking milestones. Through these weekly discussions and evaluations, one key project was identified to serve as a baseline for the adoption of the framework.

Conclusions

The implemented PMO framework at XYZ's Puerto Rico site achieved its primary objectives. The key project identified under the framework was successfully used as a baseline for rollout, serving as a practical test case for deployment. All required training, including the Risk & Opportunity (R&O) template and overall framework education, was completed by the assigned personnel ahead of schedule. The successful deployment of the R&O tool in the key project demonstrated the feasibility of applying corporate tools at the site level while maintaining alignment with broader business goals.

Future Work

Future work will focus on expanding the implementation of the PMO framework across both key and non-key projects within the business unit. This effort aims to standardize project management practices, enhance reporting, and improve visibility into project performance throughout the organization. As part of this next phase, the harmonized Risk & Opportunity (R&O) template, which was successfully deployed in the initial key project, will be presented in an upcoming global chat session. This presentation will provide an opportunity to share best practices, gather feedback, and drive alignment across global teams. Following this discussion, the R&O template, along with the broader PMO framework, will be introduced to additional projects, ensuring consistent application of risk management and project governance principles. These activities are expected to solidify project execution standards further and contribute to long-term scalability within the company.

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This key project was determined to be in the final stages of its life cycle, as shown in Figure 1, and was completing its manufacturing phases. With the framework components that had been released up to the point of project identification, the only item this project could adopt was the Risk and Opportunity (R&O) matrix.

Global teams discussed changes to the R&O template to fill gaps in the corporate framework. Training was completed after agreeing on an improved template. Figure 2 shows the training burndown chart. Project leads initially trained for tool implementation, followed by training with both project leads and responsible employees. The R&O template was then deployed in the key project, marking a significant PMO milestone.

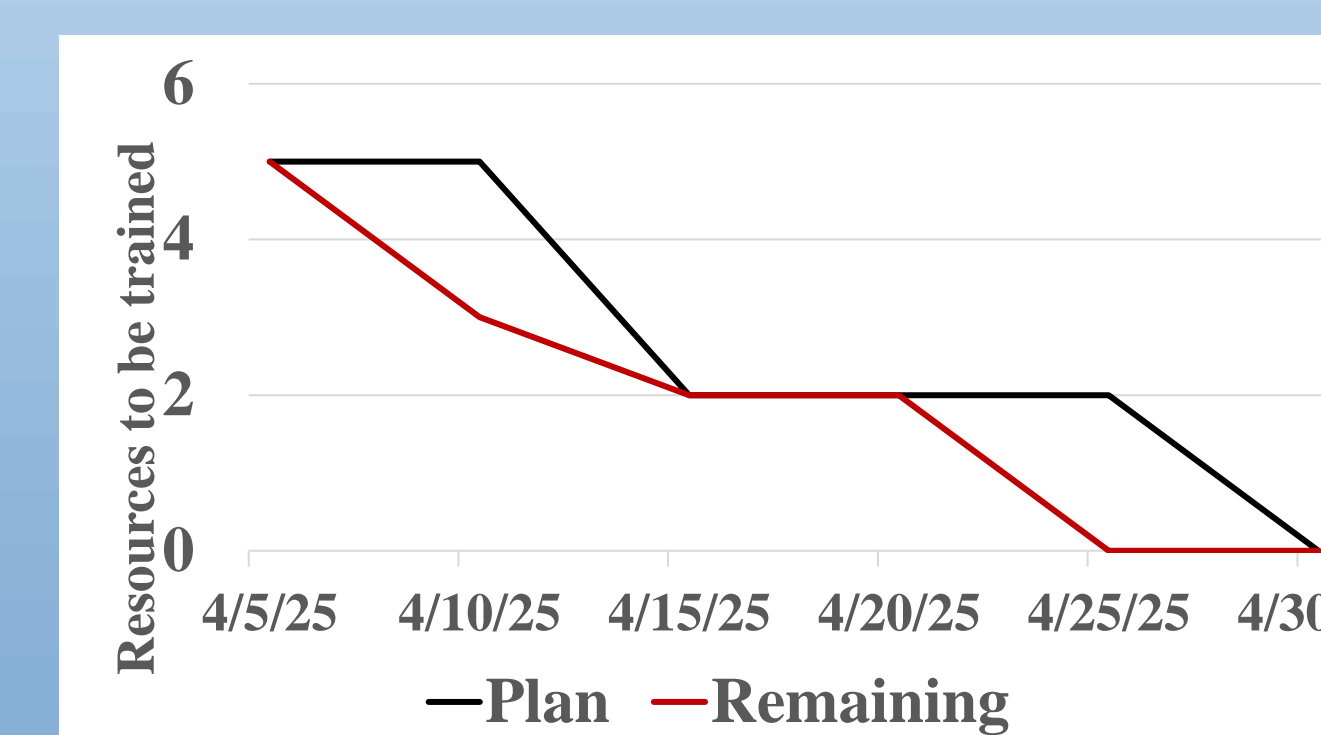


Figure 2
 R&O training Burndown