

STEP: A Comprehensive Project Lifecycle Management Framework for Large Enterprise Clients

A Professional Readiness Experiential Program (PREP) Project Effort

----- *Authors / Student Project Team Members* -----

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Benjamin Wichard is a student at George Mason University graduating with a bachelor's degree in operations and supply chain management. He currently works for Shirley Contracting as an engineering intern and plans to further his Project Management career through his education here at George Mason University while using knowledge gained from this PREP project to gain real world experience.

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Interested in being an Industry Participant and or PREP Sponsor? Please reach out to bnzac@gmu.edu, Thanks!

Introduction

In the Professional Readiness Experiential Program (PREP), the students work with Clients to solve situations and work with a designated company on an issue the company is facing, creating an interactive experience with skills that they have learned to help the company succeed in their goals. In this group, the students who will be tackling the problem are Ben Wichard, Tina Dang, Dayton Crowley, and Amber Slezakowski. The company that they will be working with is Parsons, a solutions-providing business that works with technology to deliver answers and services to their clients' dilemmas. Throughout the semester, the students will be working with a representative of the company to create a solution for Parsons' issue, with the representative evaluating and approving their plan as the semester goes on. At the end of the semester, the final product is presented to the Client (representative) and Professor, and the final judgement is given. This is Parsons PREP team of 2025.

Business Challenge

Parsons Corporation is currently experiencing a lack of consistency and execution within the way they currently start, execute, and finish a project. Some of these inconsistencies stem from a lack of communication and discipline to follow through with the completion of a project. These gaps in the practice of project management throughout the company have led to stakeholder frustration, inefficiencies, and poor performance measures that do not follow Parsons Corporation's expectations. Parsons also struggle with getting through each phase of their projects as well as phase gate approval that can be proved difficult through issues within communication. Because of this, Parsons needs an end-to-end project lifecycle management system that Project Managers and their teams can follow to be more efficient and work toward Parsons' standards for every project.

The main goal of this initiative would be to raise the bar on the overall standard of Parsons' project performance while being efficient. It is also important that this system is detailed and easy to use/understand for Project Managers to worry more about other aspects of the project and not so much about the system being used and how it will be implemented. This unified project lifecycle management approach is expected to reduce busy work, show comparative costs that can help a project manager track budget, and overall improve efficiencies within time management and discipline. A more structured approach that will also improve stakeholders as well as customer satisfaction.

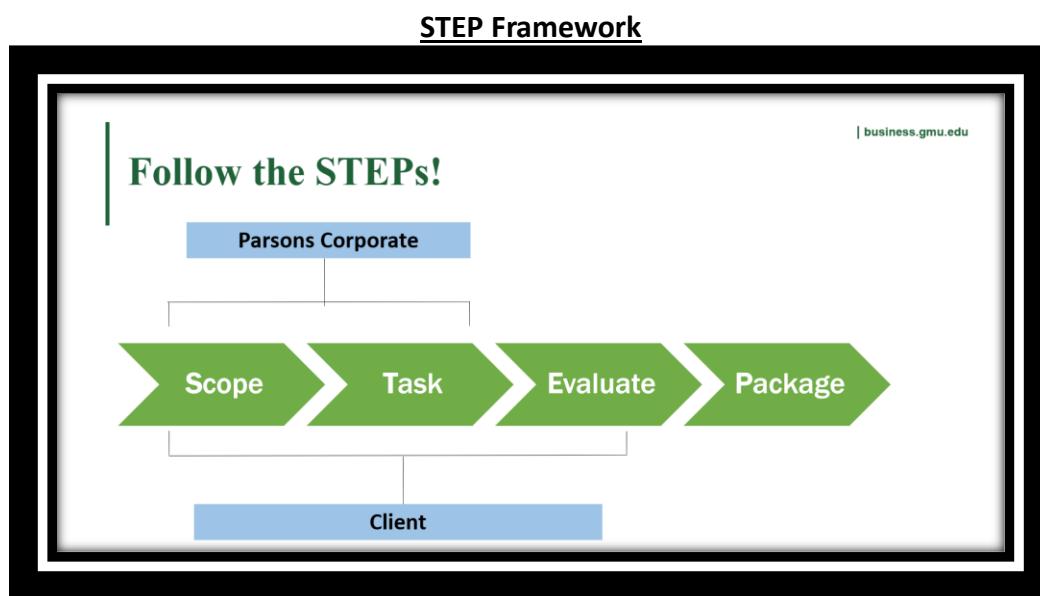
However, even though this sounds ideal, many Project Managers, Executives within the company, stakeholders and even customers are hesitant and cautious about introducing new processes and systems that they are unfamiliar with, and feel it would take a lot of time to initially learn. Some may feel like it could take too much time to implement or are unlikely to add any value to the current system that Parsons Project Managers use. Since Parsons already has issues with their current system, it would be a challenge to roll this new system out to Project that are already underway as well without interrupting current workflows or bringing an even bigger challenge to a job than it already faces. Due to this, this initiative must be balanced and flexible while making it easy for a Project manager to access and see each phase of a job while being

efficient and helping a project team, stakeholders and phase gate approvers to work together to execute a project.

Activities Done to Address the Business Challenge

Our group came up with 4 main deliverables to address the business challenge. The first was creating a mockup for a PowerBI dashboard. When developing this dashboard, we included information that would be crucial for project managers. To decide what information to include, we gathered data from previous projects and conducted user research through Andrew.

The second was creating a framework in the effort of creating a standardized process. The framework we came up with was the STEP Framework which stands for Scope, Task, Evaluate, and Package. The Scope phase in the STEP framework displayed focuses on the beginning of the project, counting as the planning phase. Task works on transitioning from planning to the production phase, setting things in place to start working on the setup and execution of the project. Evaluate is the working stage, in which creating the project product, experimentation, and re-evaluation occur. Package looks towards finishing up the product and delivering it to the client of the project, with data being collected and stored of the project information for future projects. These phases are preferably performed linearly; however, they do have the ability to be performed iteratively, with certain tasks in different phases able to be worked on at the same time. With this framework in place, project managers have a clear pathway for progressing their projects from start to finish.



The third was creating associated templates for the activities in each phase. Before creating the templates, we first went through all the activities to determine which activities needed a template and which ones didn't. After making that determination, we created templates using Excel. The templates include columns with information that we thought would be crucial for the activity. A key thing to note about the templates is that all the columns may not be filled based on the project.

The last deliverable was pulling everything together on a SharePoint site. The purpose of this was to have a place for a knowledge management system where all the templates and information can be housed. After taking all options into consideration, we chose to go with SharePoint since it's widely used across the organization. To build this out, we created a project management lifecycle page then created folders with the templates in it.

Results & The Positive Impact

The STEP framework and infrastructure designed to support the total project lifecycle – SharePoint page, templates, and Power BI dashboard – form a streamlined project lifecycle that enables standardization across Parsons' sectors, rapid identification of positive and negative project trends, and universal understanding for administrative requirements inherent in planning, executing, and delivering projects. In the long term, the anticipated impact of the STEP framework includes developing an enterprise-wide comprehension of the project lifecycle, improving alignment on project goals and status through published documentation, and increased efficiency through reduced rework and the application of lessons learned from previous projects.

By embedding the STEP lifecycle framework into daily operations, Parsons will achieve standardization in project execution across disparate business units and operating segments, enabling teams and functional staff to better understand the needs of projects. This change will allow more modular solutions by enabling contributors to be more easily engaged across Parsons' diverse set of projects and clients. The standardized templates and the dashboard allow for better tracking and reporting on project metrics, allowing project managers and leadership to gauge trends in projects and enabling teams to solve nascent issues proactively rather than reactively. Finally, a unified vision of project administrative requirements will ensure that planning, execution, and delivery are aligned with contractual and operational expectations.

Looking ahead, the STEP framework is positioned to deliver enduring benefits across Parsons. By creating an enterprise-wide project framework, we can foster collaboration across project teams, break down silos between units, sectors, and segments, and develop an organizational structure that promotes knowledge-sharing and the application of lessons learned from past projects to ongoing and future contracts. These major changes will enhance stakeholder confidence and ensure that Parsons remains the premier provider of solutions in the defense, intelligence, and critical infrastructure markets.

Conclusion

In conclusion, Parsons has an issue with their lifecycle framework, having different variants being used across the company with varying levels of consistency and accuracy. With the main goal of the PREP teams project being to improve the standard of Parsons performance with their projects, several deliverables were made.

The Lifecycle Framework was made using the acronym STEP. STEP stands for Scope, Task, Evaluate, and Package, in which each section is a phase that teams work through to accomplish

their projects in an efficient manner. It creates a standard system for how the project lifecycle will work across the entire company, while also allowing for different scaled projects to have variations of use, due to Parson's complex network of ventures from their range of Clients.

Templates were made to track progress and are the individual guides towards completing the tasks needed for each phase of the project. Project teams can complete all templates or complete all that pertain to them, with certain templates not requiring completion, based on the projects needs. Easy to consult, connected to other programs that Parson uses, and capable of being automated due to its link to the widespread information that Parson has, the templates can assist Parsons to follow steps across the company.

The PowerBI dashboard was created to make a place that information can be gathered and form visual information of how the given Parsons project is progressing. With the detailed report using the PowerBI dashboard, a more accessible metric of data collection can be created and shared while staying up to date in real time, making an efficient tool to summarize and track the progress of the teams work, while being easy to use and understand.

Overall, these solutions by the PREP team will create a flexible, yet constant system across Parsons, creating efficiency in the variety of projects Parsons does through a central use of the lifecycle framework using STEP, a guideline template for unchanging yet variable performance of teams work and automation for simplifying tasks, and a dashboard for visual understanding and data gathering of Parsons teams work.

PREP Student Reflection

Ben: The PREP project was very beneficial in helping to gain real world experience and being able to apply what I have learned at George Mason University and as well as my career so far to a real-world project within a real company. I learned a great deal about project management, time management, and how a good team must communicate well to be successful in a job. I will take valuable knowledge and experience from this class as learning how to develop a project lifecycle management system has given me good insight into what it is like to be a project manager, which is a career path I am interested in pursuing. Overall, I am grateful that I took this course as it has been one of the most beneficial courses I have taken when it comes to real experience and knowledge of what I might be doing post grad.

Tina: The PREP class was definitely one of the more beneficial classes I've taken at Mason. The biggest takeaway for me was learning to work in ambiguity. Although it was a challenge working with minimal requirements, I soon learned that this project is very similar to what it's like in the real world. This also gave our team the freedom to explore a variety of possible solutions. As a result, I learned to be okay with the fact that the result may be different than the original idea. In conclusion, this class has affirmed to me that I want to further explore project management and consulting as future career paths.

Amber: PREP was an immensely helpful class/program to teach me more about the applications of what I have been learning in college. It has helped me also learn more about task delegation,

teamwork, and experience on working with Clients. Through my time in this course, I have learned about sprints, different types of lifecycle methodologies, and databases that are used to communicate the final report of data to a projects team. I will take from this class my skills that I have developed from the application of this program, as well as use my newly learned knowledge to further my schooling and my career. I am thankful that I was able to be in this program, and I want to share my appreciation with what I have learned.

Dayton: The Professional Readiness Experiential Program has been an excellent opportunity to apply my skills learned in school to an industry project. Not only did it build upon my skills in designing and executing projects that I've gained through work and internships, but I also learned a great deal about applying project management frameworks and methodologies to organizations that I will carry with me through my career. Participating in PREP has been an incredible professional development opportunity, and I would highly recommend it to any Costello student looking to apply their classroom knowledge to a professional project.