Elements of a Project Proposal

The project proposal is a more detailed plan on how the project will be executed tied to specific goals. The proposal like the charter will evolve over time but should be more of binding document agreed to between you and your sponsor.

- ➢ **Title:** A descriptive title of the project should be at the top of your project charter. For example, "Machine Learning Algorithm" doesn't say much. However, a title like "Tracking Use of Social Media Data and Voter Turnout" informs readers about goal and why you're starting the project.
- ➢ **Problem Statement:** In one or two sentences state the problem you are trying to solve.
- ➢ **Background:** Relevance to the current state of the knowledge. Why is this problem important and what do we already know about it? What part of the problem will you be solving. Use citations.
- ➢ **Goals and Objectives:** This is a high-level statement of what you hope to accomplish with this project. Objectives are tied to the goal but can be operationalized (development of database, algorithm or methodology)
- ➢ **Scope:** This answers the question, "What is being produced by the project?" Provide an overview of products you plan to develop. Similar to the objectives but it's also important to think of what is "out of scope" for this project. Defining what's out of scope early on can help keep a project on track down the road.
- ➢ **Technical Approach:** Break your product into iterations and use a data science lifecycle as a framework. Include evaluation of your method.
- ➢ **Budget:** Present the budget you are allocated for the project and how it will be spent.
- ➢ **Constraints, Assumptions, Dependencies, and Risks:** Create a section for an initial assessment of known risks that could affect the project's outcome. This includes factors that are known to be true, but will be evaluated more as the project progresses. It also takes into consideration existing constraints and dependencies that could change the project's scope. For example, you may need cloud resources to complete the project or additional data resources.
- ➢ **Success Measurements/ROI:** Define project success. Metrics should include what's important to the stakeholders and how it fits into the goals of the project and the larger organization. Similar to target setting.
- ➢ **DevOps:** Initial proposal on how this project could be put into production. Scalable web application or built into current operations are examples.