The *FPS* simply states: "given what we know of the problem, we will try and we know we will succeed if/when ..."

your *FPS* should provide an answer to all **non-technical** questions based on the information you have at the onset of a project.

One approach for developing your template that might work well is to start by revisiting the notes from the first lecture that identifies roles and thier responsibilities. Your *FPS* should provide the information the *data scientists* can provide to help the non-technical roles meet those responsibilities.

The *FPS* **should** answer the **who**, **what**, **when** and **why**. It should:

* Identify key roles: management, owners, stakeholders, users, SMEs, etc.
* Clearly articulate **why** the project is being considered
* Estimate benefits of the project
  + Identify any non-quantifiable benefits associated with project
* Define what determines the project's success
  + Define a success metric for the project, a single quantifiable, unambiguous metric, that will be used to determine if your project is a success. This is not just a technical metrics, but one use at the managerial level. This of this is how "the needle must move" by your solution
  + Define (very precisely) the performance/power of the model or analysis that is necessary to achieve that success to achieve the success
* Estimate Risks
  + What if the success metric is not met?
  + What if the model performance metric is not met?
* Identify **who** the users of the model are and how the model will used
  + Discuss what changes have to happen within the organization to deploy the model
  + Discuss risks to model deployment, (e.g. push-back by employees )
* Propose a timeline for delivery of your project
  + **When** you will have preliminary results of model/analysis performance
  + **When** you need or expect to have determined whether the model performance
  + How much time it will take to deploy the solutions.

WHY: to understand or explain (traditional analysis) OR to aid or automate decision making

Responsibilities

* Collect data
* Organize data (ETL)
* Store data (warehouse)
* Utilize data (analysis)
* Decide

Functions

* Forecast\*
* Rare event detection
* Relationships
* Segmentation
* Optimization\*
* Causal analysis
* Data collection

**Does the proposed project align with strategic objectives?**

1. Inception: We want help deciding
   1. Determine the goals
      1. State the benefits
      2. Success criteria
      3. Timeline
   2. Identify data sources
   3. Deployment (use/delivery) of model
2. Formalization: You said… which means
   1. Formalize goal
      1. Success metric and criteria
   2. Review data sources
   3. Identify SME
   4. Plan (estimate effort, timeline, resources)