

## In Class Exercise

### Scenario

The company you work for, Pacific Systems, has decided to respond to a Request For Proposals (RFP) from a large U.S. Government Agency (The Agency). The RFP is for a web application built on top of a database maintained by the Agency to manage various assets, such as buildings and other structures.

A few technical details on the project:

- The web application replaces an old desktop application from the 1980s.
- The web application will also include APIs to allow other systems within the Agency to programmatically access the data. This is to support a larger Enterprise Modernization program within The Agency.
- The Agency maintains the database, and has a database team to make any necessary updates to the schema and to migrate data from the old to the new database.
- The Agency will deploy and operate the application in their own Enterprise environment.

There already is a team in Pacific Systems working on the technical solution for the proposal.

You have been assigned to prepare the project management section of the proposal. The RFP calls out the following constraints:

- The project must be completed in 1 year after contract award.
- The software must be delivered in 2 releases: The first to provide capabilities to manage civilian assets and the second to provide capabilities to manage military assets. The first release should be 8 months after contract award and the second after 12 months.
- Key project document deliverables include: Project Plan, System Requirements, Software Architecture Description and System Test Plan. The Agency must review and approval these deliverables.
- A 6-month warranty must be provided on the final software deliverable.

Pacific Systems is currently working with the The Agency on another aspect of their Enterprise Modernization program building a system that will leverage data from this new web application through web service based APIs. From this experience, you expect that Pacific Systems be provided with a Subject Matter Expert and user of the existing application from The Agency for the duration of the project.

You are responsible for the following in the proposal:

- Defining the software lifecycle model
- Risk management plan
- The schedule for the project
- Leading the estimation of the project effort (i.e., the cost)

## Part 1 – Project Lifecycle

Based on the information above, discuss the following questions:

- What would be the advantages and disadvantage of proposing a waterfall approach for the project lifecycle?
- What would be the advantages and disadvantage of proposing an agile approach for the project lifecycle?
- Which project lifecycle model would you put into your proposal? Why?
  - Are there any assumptions you would want to add to the proposal?
- Would knowledge of whether this is a Firm Fixed Price (FFP) or Time and Materials (T&M) contract impact your choice?

## Part 2 – Risk Management Plan

Based on the information above, what are the key project risks?

Start a Risk Analysis Table as per the template on D2L and the guidance below.

Risk Format (PMI)

- If CAUSE exists, then EVENT may occur leading to EFFECT
- Example: IF customer design approval is more than 1 month late, THEN software implementation will be delayed leading to a day for day schedule slip.

Probability

- Small (.2), Medium (.4) or Large (.8)

Impact, in weeks

- Small (1), Medium (2) or Large (4)

Risk Owner

- Pacific Systems or The Agency

Note: we will elaborate and refine the risk table next week, after working on the project schedule and estimates.