Massachusetts Institute of Technology

Model-Based Systems Engineering: Documentation and Analysis

Project Scoring Rubric

WEEK 4: MANAGING THE MODEL

Criterion	Peer Assessment Feedback
Prompt	Please provide feedback (300 characters or less) for this project.
Points	
1	**Project submitted:** An answer has been submitted for this assignment. Feedback is mandatory for this step.

Criterion	Step 1: Initial Verification and Validation of the Model
Prompt	How do you validate the model in the first place? Under what bounds does the model need to be valid? Who will validate the initial model?
Points	
3	**Complete:** The write up describes how the initial MBSE model will be verified and validated. It also defines who will validate the model and how the model will be approved for use in the project.
2	**Partially Complete:** The write up describes briefly, how the model will be validated without mentioning who will validate it or how it will be approved for use in the project.
1	**Incomplete:** The validation plan is not clear from the write up.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.

Criterion	Step 2: Governing the Inputs to the Model
Prompt	Will restrictions be applied to each of these inputs? How will bugs and flaws in the model be reported and addressed?
Points	
3	**Complete:** The write up describes how inputs will be restricted in the system, including information about how users will be notified about these restrictions. The write up also describes how bugs and flaws in the model will be reported and addressed, including the processes involved in reporting the issues.
2	**Partially Complete:** The write up either describes what restrictions will be applied to the model or it mentions how the bugs and flaws in the system might be reported or addressed, but not both.
1	**Incomplete:** From the write up it's not clear how inputs will be governed for the model.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.

Criterion	Step 3: Communicating Model Results
Prompt	Will the assumptions and caveats be communicated along with the results? If so, how? Will the supporting test cases be communicated along with the results? If so, how?
Points	
3	**Complete:** The write up describes how model results are communicated to all the necessary stakeholders, including the assumptions and caveats from the model. In addition it also mentions what supporting information such as test results or sensitivity analysis to be communicated along with the results to back up model claims.
2	**Partially Complete:** The write up describes how the model results will be communicated to various stakeholders without going into details about what accompanying information will be supplied along with the results to enable better decision making from those results.
1	**Incomplete:** From the write up it's not clear how results will be communicated from the model.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.

Criterion	Step 4: Model Configuration Management
Prompt	How can multiple projects use the same model? Will data restrictions be imposed for different project teams?
Points	
3	**Complete:** The write up describes if and how multiple projects could use the same model. It also describes what restrictions will be applied to prevent different project teams from accessing each other's data.
2	**Partially Complete:** The write up gives an overview of how multiple projects could use the same model, without providing much details about conditions like data privacy.
1	**Incomplete:** From the write up it's not clear how configuration management of the model will be handled.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.

Criterion	Step 5: Defining the Model Owner
Prompt	What responsibilities does the model owner have (technical, financial, etc.)? What decision rights do they have?
Points	
3	**Complete:** The write up describes who will own the model management task, what their roles and responsibilities will be and what all decisions right will they enjoy. At least one responsibility and one decision right is noted. The write up also provides example where some of these decision rights might be used (for example, certain contingency situations etc.)
2	**Partially Complete:** The write up describes briefly who the model owner is and what their responsibilities are, but it does not leave the reader with a complete picture of the model owner.
1	**Incomplete:** From the write up it's not clear who the model owner will be.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.

Criterion	Step 6: Funding the Model
Prompt	How will the model be funded?
Points	
3	**Complete:** The write up describes how the model will be funded within the organization, specifically which funds will be used and how stable this source of funding is. The write up might also describe one pro and cons for the given approach.
2	**Partially Complete:** The write up describes briefly how the model will be funded without much detail.
1	**Incomplete:** From the write up it's not clear how the model will be funded.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.

Criterion	Step 7: Process for Model Changes Over the Lifecycle
Prompt	How will changes to the model be re-validated? Who will re-validate them? Is there a need to show traceability to past results? How will they be handled?
Points	
3	**Complete:** The write up describes the process to make changes to the model. As part of the process it also describes how these changes will be validated and by whom. It mentions how changes to model will impact past results from the model.
2	**Partially Complete:** The write up describes briefly the process of how the model will be changed or updated, and does not describe how traceability to past results will be impacted.
1	**Incomplete:** From the write up it's not clear how the model will be changed.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.

Criterion	Step 8: Model End of Life and Renewal Planning
Prompt	What is the life cycle duration or time horizon for the model? Who is scanning outside to see what new modeling capabilities may be available?
Points	
3	**Complete:** The write up describes the model end of life cycle and how it will be retired. It also describes how new modeling capabilities would be identified that might help update or replace existing capabilities.
2	**Partially Complete:** The write up describes very briefly when the model will be retired.
1	**Incomplete:** From the write up it's not clear when the model will be retired.
0	**Not attempted:** No answer is provided. Sample project is copied for submission.