Type your Name Here

American Intercontinental University

MGMT412 – Project Management

Date of Submission

**Unit 5 Individual Project**

**Introduction**

Provide a brief introduction (2-3 sentences) for the purposes of previewing what will be covered. Remember to always indent the first line of a paragraph (use the tab key). The margins, font size, spacing, and font type (italics or plain) are set in APA format. Please do not change the names of the headings and subheadings, and do not change the font or style of font.

*(Delete the information provided in the instructions.)*

**Concerns About Amount of Time to Complete Recent Jobs**

Communicate with Andrea McGee, McGee Carpet and Trim, in response to her concerns about the amount of time it took several of her employees to complete several recent jobs. Assure her that you, the project manager, will calculate the ET, (Expected Time) and the variance for all of the activities in the project, through the use of the PERT (Program Evaluation Review Technique) Formula. You will determine the critical path, which is the shortest time possible for the project, including all activities.

*This should be 1-2 paragraphs in length. (Delete the information provided in the instructions.)*

**Use PERT to Determine Critical Path**

The table below contains a list of the activities necessary to install carpets in offices for a new contract, and the OT (optimistic completion time), the MT (most likely completion time), and the PT (pessimistic completion time) for each activity.

 **PERT Activity Table**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Activities  | PredecessorActivity | OT | MT | PT | ET | ES | EF | LF | Variance | Slack |
| (determined in days) |  |  |
| 1)Measure Office Room Dimensions | \_ | 2 | 3 | 4 |  |  |  |  |  |  |
| 2)Estimate Cost | Activity 1 | 3 | 6 | 9 |  |  |  |  |  |  |
| 3)Material Requisition | Activity 2 | 4 | 8 | 12 |  |  |  |  |  |  |
| 4)Workforce Requisition | Activity 2 | 6 | 8 | 10 |  |  |  |  |  |  |
| 5)Special Tool Requisition | Activity 2 | 8 | 10 | 12 |  |  |  |  |  |  |
| 6)Installation | Activities 3, 4, 5 | 10 | 14 | 18 |  |  |  |  |  |  |
| 7)Inspection and Customer Acceptance | Activity 6 | 4 | 6 | 8 |  |  |  |  |  |  |
| Total Completion Time (in days) (show equation) |  |
| Critical Path for the Project(list activities) |  |

Each project has a required flow of activities where (a), Activity 2 starts immediately after Activity 1, (b), Activity 3, Activity 4, and Activity 5 start concurrently after Activity 2, and (c), Activity 6 does not start until after Activity 3, Activity 4, and Activity 5 are completed. The carpet installation project is complete after Activity 7 is completed.

Use PERT (Program Evaluation Review Technique) to fill in the table above with the ET (expected completion time), ES (early start), EF (early finish), LS (late start), variance and slack for each activity. Calculate the total projection completion time and the critical path for the project. Explain the difference between a projected completion time and the critical path.

What is the probability that McGee Carpet and Trim will finish the project in 40 days or less?

*This should be 1-2 paragraphs in length. (Delete the information provided in the instructions.)*

**Benefits of Using Project Management Techniques**

Explain to Andrea how she can use this table to identify expectations and standards for her employees to complete jobs that include all seven activities. Define *project management* and the necessary requirements. Analyze implications of changes in project scheduling. How do changes impact the calculations and the critical path? Evaluate application of project management techniques in terms of the firm's business operational goals and requirements. How does using PERT assist Andrea in meeting her company’s business goals?

*This should be 2-3 paragraphs in length. (Delete the information provided in the instructions.)*

**Conclusion**

 Add some concluding remarks-can be a sentence or two.

*This should be 1-2 sentences. (Delete the information provided in the instructions.)*

**References**

NOTE: The reference list starts on a new page after your conclusion.

*(Delete these references and provide ONLY those that you actually used for your paper.)*

**eBook - AIU Course Textbook**

Author, A. A. (Year). *Title of book in italics.* City, State Abbreviation: Publisher Name.

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**M.U.S.E. Materials**

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