

QSO 300 Final Project Milestone Two Guidelines and Rubric

Overview: For the second milestone of your final project, you will submit a **quality, process, and location analysis case study analysis** that will address the typical problems that operations managers face. This case study analysis will be incorporated into the final summative analysis. **This milestone is due in Module Four.**

Prompt: Refer to the [Nissan case study](#), your own independent research, and the course materials to answer the following items. Specifically, the following critical elements must be addressed:

I. **Theories and Techniques**

- A. Explain the five steps of the **theory of constraints** (TOC) process. To what processes might the company in the case study apply TOC? Why would applying TOC to these processes be advantageous?
- B. Describe how **total quality management** (TQM) principles and tools can be used to improve quality in the latest line of products in the context of the case study.

II. **Data Analysis**

- A. Draw a cause-and-effect **diagram** that assesses why some of the company's supply chain partners might have struggled to implement some of the company's newly developed materials. Summarize your findings from the diagram.
- B. Draw a hypothetical **process** (time-function) **map** for producing a recently released (within the past two years) product manufactured by the company. As an operations manager, how will you use the value map? Be sure to include your process map within your case study analysis.
- C. Considering the data and options below, determine where the company should locate its new manufacturing plant. Explain why this would be the favorable location.

Factor	Weight	Mexico City	Columbia, SC
Political Risk	.25	70	80
Transportation Costs	.20	40	90
Labor Productivity	.20	85	75
Rental Costs	.15	90	55
Labor Costs	.10	80	50
Taxes	.10	90	50

Guidelines for Submission: The format for this assignment will be a Word document using a business writing format of your choice. There is no minimum page length requirement, but the submission should be double spaced, and no more than four pages in total. Copy and paste any data analysis from Excel into your Word document for submission. You may include your original Excel documents as supplementary material if you believe this will strengthen your contribution.

Rubric

Critical Elements	Proficient (100%)	Needs Improvement (75%)	Not Evident (0%)	Value
Theories and Techniques: Theory of Constraints	Correctly explains the five steps of TOC and explains why it would be advantageous to apply TOC to specific processes in the case study	Correctly explains the five steps of TOC but does not explain why it would be advantageous to apply TOC to specific processes in the case study	Does not explain the five steps of TOC or explanation is incorrect	18
Theories and Techniques: Total Quality Management	Describes how TQM can be used to improve quality in the context of the case study	Describes how TQM can be used to improve quality but does not provide context in the case study	Does not describe how TQM can be used to improve quality	18
Data Analysis: Diagram	Properly draws a cause and effect diagram assessing the struggle to implement newly developed materials and summarizes findings	Properly draws a cause and effect diagram assessing the struggle to implement newly developed materials but does not summarize findings	Does not properly draw a cause and effect diagram	18
Data Analysis: Process Map	Accurately draws and includes a process map for product and thoroughly describes how it would be used by an OM manager	Draws and includes a process map for product, but drawing is inaccurate, and description of how it would be used by OM manager is either not thorough or missing	Does not draw and include a process map for a product	18
Data Analysis: Data	Correctly determines where the new plant should be located and explains why this is a favorable location	Correctly determines where the new plant should be located but does not explain why this is a favorable location	Does not correctly determine where the new plant should be located	18
Articulation of Response	Submission has no major errors related to citations, grammar, spelling, syntax, or organization	Submission has major errors related to citations, grammar, spelling, syntax, or organization that negatively impact readability and articulation of main ideas	Submission has critical errors related to citations, grammar, spelling, syntax, or organization that prevent understanding of ideas	10
Total				100%