

DATA-DRIVEN DECISION MAKING

Competencies:

3009.1.1: The Case for Quantitative Analysis - The graduate uses decision-making methods to develop strategies for organizational decision processes.

3009.1.2: Statistics as a Managerial Tool - The graduate uses a variety of decision-analysis tools to evaluate alternatives during the decision-making processes.

3009.1.3: More Statistical Tools - The graduate uses quantitative techniques and statistical tools to identify the most appropriate decision alternatives.

3009.1.4: Quality Metrics and Tools - The graduate analyzes how work is accomplished and applies quality metrics and tools to increase efficiency, effectiveness, and quality.

3009.1.5: Real World Data-Driven Decisions - The graduate analyzes data from business intelligence and knowledge-management systems to make appropriate decisions.

3009.1.6: Improving Organization Performance - The graduate uses appropriate data to improve organizational performance.

Introduction:

In this task, you will address the real-world business situation that you identified in task 1. Using relevant data you have gathered, analyze the data, and recommend a solution. This recommendation will be included in a report that you will write, summarizing the key details of your analysis.

Note: Work performed for a client or an employer is their property and should not be used without written permission. Fictionalize identifiable organizational information, or obtain written permission to use any information that would be considered confidential, proprietary, or personal in nature.

The “Determining the Appropriate Analytical Technique” presentation in the Attachment section below will help you identify an appropriate technique to analyze the data.

Note: You must successfully pass task 1 before work on task 2 is started.

Requirements:

Create a report (*suggested length of 3–5 written pages*) by doing the following:

- A. Summarize the real-world business situation you identified in task 1.
- B. Report the data you collected, relevant to the business situation, by doing the following:
 1. Describe the relevant data you collected.
 2. Create an appropriate graphical display (e.g., table, chart, descriptive statistics) of the data you collected.
- C. Report how you analyzed the data using an appropriate analysis technique by doing the following:
 1. Describe the analysis technique, chosen from the following approved list, that you used to appropriately analyze the data:
 - regression (linear regression, multiple regression, logistic regression)
 - trend analysis
 - time series analysis
 - chi-square
 - one sample z-test or t-test
 - two independent-samples t-test
 - paired-samples t-test
 - ANOVA
 - statistical process control
 - linear programming
 - crossover analysis
 - break-even analysis
 - decision tree
 - simulation
 2. Include the output and any calculations of the analysis you performed.
 3. Justify why you chose the analysis technique.

Note: The "Determining the Appropriate Analytical Technique" presentation in the Attachment section below will help you determine the appropriate analysis technique for your data and business situation.

- D. Summarize the implications of your data analysis by doing the following:
1. Discuss the results of your data analysis.
 2. Discuss the limitations of your data analysis.
 3. Recommend a course of action based on your results.
- E. When you use sources to support ideas and elements in a paper or project, provide acknowledgement of source information for any content that is quoted, paraphrased or summarized. Acknowledgement of source information includes in-text citation noting specifically where in the submission the source is used and a corresponding reference, which includes:
- Author
 - Date
 - Title
 - Location of information (e.g., publisher, journal, or website URL)

Note: The use of APA citation style is encouraged but is not required for this task. Evaluators will offer feedback on the acknowledgement of source information but not with regard to conformity with APA or other citation style. For tips on using APA style, please refer to the APA Resources web link found under General Information/APA Guidelines in the left-hand panel in Taskstream.

Note: No more than a combined total of 30% of a submission can be directly quoted or closely paraphrased from outside sources, even if cited correctly.

Note: For definitions of terms commonly used in the rubric, see the Rubric Terms web link included in the Evaluation Procedures section.

1. VPT Task 2 Rubric
