NAM2 — TASK 1: DATA DASHBOARD AND STORYTELLING

REPRESENTATION AND REPORTING — D210

PRFA — NAM2

TASK OVERVIEW   SUBMISSIONS   EVALUATION REPORT

COMPETENCIES

4033.2.1 : Storytelling with Data
The graduate communicates data insights to technical and nontechnical audiences.

4033.2.2 : Data Visualizations and Representations
The graduate creates data representations to offer insight into an organizational problem.

4033.2.3 : Dashboards
The graduate designs interactive dashboards to support executive decision-making.

INTRODUCTION

The data analyst's job does not end once the data has been analyzed. A vital skill for data analysts is to represent and report the data to stakeholders. In this task, you will demonstrate your ability to identify actionable insights from data and communicate them using effective storytelling methods.

This task consists of three parts:

In part 1, you will use Tableau to create an interactive data dashboard to support executive decision-making. Your dashboard should enable leaders to explore the data, identify trends, and compare key metrics. Your dashboard will feature a variety of interactive reports and data representations and will be accessible to individuals with colorblindness.

Your dashboard will integrate data from two sources:

1. *Provided data set*: You will select **one** of the data sets and associated data dictionaries from the following link:

   D210 Data Sets and Associated Data Dictionaries

   It is recommended, but not required, that you choose the same data set that you used for your performance assessments in previous courses. Review the data dictionary that is relevant to your chosen data set for additional details about the audience.

2. *Additional data set*: You will identify an external, public data set as an additional data set for your dashboard. This data set should contain data and variables that complement the data set you chose from the provided options and should enhance the insights you can gain from the provided data set. Recommended sources include U.S. Census data, Kaggle, or other public data repositories. You are

responsible for ensuring that you have the rights to use the data set.

In part 2, you will give a simulated presentation to a panel of peers. You will identify actionable insights from the data and communicate these insights to a technical audience using effective storytelling methods. In your presentation, you should employ tactics to engage the audience and ensure that a meaningful message has been delivered.

In part 3, you will write a reflection paper to demonstrate your understanding of the techniques and value of data representation and reporting.

Refer to the data dictionary for your chosen provided data set for additional background information about the audience of your data representations.

SCENARIO

Your submission must be your original work. No more than a combined total of 30% of the submission and no more than a 10% match to any one individual source can be directly quoted or closely paraphrased from sources, even if cited correctly. The originality report that is provided when you submit your task can be used as a guide.

You must use the rubric to direct the creation of your submission because it provides detailed criteria that will be used to evaluate your work. Each requirement below may be evaluated by more than one rubric aspect. The rubric aspect titles may contain hyperlinks to relevant portions of the course.

*Tasks may **not** be submitted as cloud links, such as links to Google Docs, Google Slides, OneDrive, etc., unless specified in the task requirements. All other submissions must be file types that are uploaded and submitted as attachments (e.g., .docx, .pdf, .ppt).*

Part 1: Interactive Data Dashboard

A. Provide a copy of your interactive Tableau dashboard to support executive decision-making. Your dashboard must be accessible to users with colorblindness, and must include the components in *each* of the following bullet points:
  - data integrated from *both* chosen data sets
  - **four** different data representations to summarize the data or display trends
  - **two** different interactive controls that allow the user to modify the presentation of data
  - **two** different metrics or key performance indicators computed using data from *both* chosen data sets
  1. Provide *both* data sets that serve as the data source for the dashboard.
  2. Provide step-by-step instructions to guide users through the dashboard installation.
  3. Provide instructions to help users navigate the dashboard.

Part 2: Storytelling with Data

B. Provide a link to a Panopto multimedia presentation in which you tell a story about the data to an audience of data analytics peers. Your presentation should implement elements of effective storytelling and include *each* of the following elements:
  - an introduction of yourself and your background
  - a summary of *both* chosen data sets and the context in which they occur
  - an outline of key results from your analysis of the two data sets
  - **two** different data representations to serve as supporting evidence for your results

- a summary of actionable insights based on your results

Note: Your two data representations may come directly from your Tableau dashboard created in Part A or you may choose to use another software tool for data representation.

The audiovisual recording should feature you presenting the material on screen (i.e., not in voiceover or embedded video) and should simultaneously capture both you and your multimedia presentation.

For instructions on how to access and use Panopto, use the "Panopto How-To Videos" web link provided below. To access Panopto's website, navigate to the web link titled "Panopto Access," and then choose to log in using the "WGU" option. If prompted, log in using your WGU student portal credentials, and then it will forward you to Panopto's website.

To submit your recording, upload it to the Panopto drop box titled "Representation and Reporting – NAM2 | D210." Once the recording has been uploaded and processed in Panopto's system, retrieve the URL of the recording from Panopto and copy and paste it into the Links option. Upload the remaining task requirements using the Attachments option.

Part 3: Reflection Paper

C. Write a reflection paper to demonstrate your understanding of data representation and reporting by doing the following:
1. Explain how the purpose and function of your dashboard align with the needs outlined in the data dictionary associated with your chosen data set.
2. Explain how the variables in the additional data set enhance the insights that can be drawn from the data set you chose from the provided options.
3. Explain **two** different data representations from your dashboard and how executive leaders can use them to support decision-making.
4. Explain **two** interactive controls in your dashboard and how *each* enables the user to modify the presentation of the data.
5. Describe how you built your dashboard to be accessible for individuals with colorblindness.
6. Explain how **two** data representations in your presentation support the story you wanted to tell.
7. Explain how you used audience analysis to adapt the message in your presentation.
8. Describe how you designed your presentation for universal access by all audiences.
9. Explain **two** elements of effective storytelling that you implemented in your presentation and how *each* element was intended to engage the audience.

D. Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.

E. Demonstrate professional communication in the content and presentation of your submission.

RUBRIC

A:INTERACTIVE DATA DASHBOARD ↗

NOT EVIDENT		COMPETENT

A Tableau data dashboard is not provided.

APPROACHING COMPETENCE

The Tableau data dashboard satisfies *some*, but not *all*, of the requirements in the bullet points, or the dashboard is not accessible to users with colorblindness. Or the dashboard does not function properly or is incomplete. Or the data source for the dashboard does not include 1 of the provided data sets or 1 additional external, public data set.

The Tableau data dashboard satisfies the requirements of *each* of the bullet points and is accessible to users with colorblindness. The dashboard is functional and complete. The data source for the dashboard is 1 of the provided data sets and 1 additional external, public data set.

A1:DATA SETS

NOT EVIDENT

The submission does not provide *any* data sets.

APPROACHING COMPETENCE

The submission provides 1 but not *both* of the data sets that serve as the data source for the dashboard.

COMPETENT

The submission provides *both* of the data sets that serve as the data source for the dashboard.

A2:INSTALLATION INSTRUCTIONS

NOT EVIDENT

Instructions for installing the dashboard are not provided.

APPROACHING COMPETENCE

The instructions are insufficient for guiding users through dashboard installation successfully, including step-by-step guidance.

COMPETENT

The instructions offer clear, step-by-step guidance that enables users to successfully install the dashboard.

A3:NAVIGATION INSTRUCTIONS

NOT EVIDENT

Instructions for navigating the dashboard are not provided.

APPROACHING COMPETENCE

The instructions are insufficient for helping users successfully navigate the dashboard, or the instructions include inaccuracies.

COMPETENT

The instructions provide clear and accurate guidance that enables users to successfully navigate the dashboard.

B:PANOPTO STORYTELLING WITH DATA

NOT EVIDENT

A link to a Panopto multimedia presentation is not provided.

APPROACHING COMPETENCE

A link to a Panopto multimedia presentation is provided, but the presentation is missing 1 or more of the given elements. Or the multimedia presentation does not implement elements of effective storytelling.

COMPETENT

A link to a Panopto multimedia presentation is provided, and the presentation includes *each* of the given elements. The multimedia presentation implements elements of effective storytelling.

C1:DASHBOARD ALIGNMENT

NOT EVIDENT

The submission does not explain how the dashboard aligns with the data dictionary associated with the chosen data set.

APPROACHING COMPETENCE

The submission attempts to explain an alignment between the dashboard and the chosen data set, but the explained purpose and function of the dashboard do not reasonably align with the needs outlined in the data dictionary associated with the chosen data set.

COMPETENT

The submission explains a reasonable alignment between the purpose and function of the dashboard and the needs outlined in the data dictionary associated with the chosen data set.

C2:ADDITIONAL DATA SET INSIGHTS

NOT EVIDENT

The submission does not explain how the variables in the additional data complement the chosen provided data set and enhance the insights the dashboard can provide.

APPROACHING COMPETENCE

The submission attempts to explain how the variables in the additional data set enhance the insights that can be drawn from the chosen provided data set, but the explanation is unclear or includes invalid assumptions or inaccurate information about 1 or *both* data sets.

COMPETENT

The submission clearly explains how the variables in the additional data set enhance the insights that can be drawn from the chosen provided data set.

C3:DECISION-MAKING SUPPORT

NOT EVIDENT

APPROACHING COMPETENCE

COMPETENT

The submission does not explain how 2 different dashboard data representations support executive decision-making.

The submission explains how 2 data representations from the data dashboard could support executive leaders' decision-making, but the explanation of 1 or *both* are unclear or implausible.

The submission clearly and plausibly explains how 2 different data representations from the data dashboard could support executive leaders' decision-making.

C4:INTERACTIVE CONTROLS [↗]

NOT EVIDENT

The submission does not explain *any* interactive controls in the dashboard.

APPROACHING COMPETENCE

The submission explains only 1 interactive control in the dashboard, or it explains 2 controls but does not accurately explain how *both* controls enable users to modify the presentation of the data in the dashboard.

COMPETENT

The submission includes an accurate explanation of how 2 interactive controls in the dashboard enable users to modify the presentation of the data in the dashboard.

C5:COLORBLINDNESS [↗]

NOT EVIDENT

A description of how the dashboard was made accessible for individuals with colorblindness is not provided.

APPROACHING COMPETENCE

The submission attempts to describe how the dashboard was built to be accessible for individuals with colorblindness, but the description is missing key details or is inaccurate.

COMPETENT

The submission includes an accurate and detailed description of how the dashboard was built to be accessible for individuals with colorblindness.

C6:DATA REPRESENTATIONS [↗]

NOT EVIDENT

The submission does not explain how 2 data representations in the presentation support the story told in the presentation.

APPROACHING COMPETENCE

The submission explains how 2 data representations in the presentation support the story, but the explanation for 1 or *both* data representations do not include plausible reasons for how the representation supported the story told in the presentation.

COMPETENT

The submission explains how 2 data representations in the presentation support the story told in the presentation and provides plausible reasons for *both* data representations.

C7:AUDIENCE ANALYSIS ↗

NOT EVIDENT

The submission does not explain how audience analysis was used to adapt the message in the presentation.

APPROACHING COMPETENCE

The submission explains how audience analysis was used to adapt the message in the presentation, but the explanation does not include specific examples from the presentation. Or any of the information in the explanation is inaccurate or does not relate to audience analysis.

COMPETENT

The submission accurately explains how audience analysis was used to adapt the message in the presentation, and it includes specific examples from the presentation.

C8:UNIVERSAL ACCESS ↗

NOT EVIDENT

A description of how the presentation was designed for universal access is not provided.

APPROACHING COMPETENCE

The description of how the presentation was designed for universal access is unclear.

COMPETENT

The description of how the presentation was designed for universal access is clear.

C9:EFFECTIVE STORYTELLING ↗

NOT EVIDENT

The submission does not explain how 2 effective storytelling elements were implemented in the presentation.

APPROACHING COMPETENCE

The submission identifies 2 storytelling elements implemented in the presentation but does not plausibly explain how *both* elements were intended to engage the audience. Or 1 or *both* elements are not examples of effective storytelling.

COMPETENT

The submission identifies 2 effective storytelling elements implemented in the presentation and plausibly explains how *both* elements were intended engage the audience.

D:SOURCES ↗

NOT EVIDENT

The submission does not include both in-text citations and a reference list for sources that are

APPROACHING COMPETENCE

The submission includes in-text citations for sources that are quoted, paraphrased, or summa-

COMPETENT

The submission includes in-text citations for sources that are properly quoted, paraphrased, or summarized and a reference list

quoted, paraphrased, or summarized.

rized and a reference list; however, the citations or reference list is incomplete or inaccurate.

that accurately identifies the author, date, title, and source location as available.

E:PROFESSIONAL COMMUNICATION

NOT EVIDENT

Content is unstructured, is disjointed, or contains pervasive errors in mechanics, usage, or grammar. Vocabulary or tone is unprofessional or distracts from the topic.

APPROACHING COMPETENCE

Content is poorly organized, is difficult to follow, or contains errors in mechanics, usage, or grammar that cause confusion. Terminology is misused or ineffective.

COMPETENT

Content reflects attention to detail, is organized, and focuses on the main ideas as prescribed in the task or chosen by the candidate. Terminology is pertinent, is used correctly, and effectively conveys the intended meaning. Mechanics, usage, and grammar promote accurate interpretation and understanding.

WEB LINKS

Panopto Access

Sign in using the "WGU" option. If prompted, log in with your WGU student portal credentials, which should forward you to Panopto's website. If you have any problems accessing Panopto, please contact Assessment Services at assessmentservices@wgu.edu. It may take up to two business days to receive your WGU Panopto recording permissions once you have begun the course.

Panopto How-To Videos

Data Sets and Associated Data Dictionaries for Provided Data Sets

If you have trouble with the link, copy and paste the link directly into your web browser.