

Skip to Main Content



SEARCH IN COURSE

Search



Darwin Tacubanza



coursera

1. [Share Data Through the Art of Visualization](#)



2. [Module 4](#)



3. Course challenge

< [Previous](#) [Next](#) >

≡ [Item Navigation](#)

The art and science of an effective presentation

Identify presentation skills and practices

Caveats and limitations to data

Listen, respond, and include

Weekly challenge 4

Course wrap-up

Purchase a subscription to unlock this item.



Quiz: Course challenge

15 questions



Video: VideoCongratulations!

. Duration: 57 seconds57 sec



Reading: ReadingComing up next...

. Duration: 10 minutes10 min

Course challenge

Quiz1 hour 15 minutes • 1h 15m

[Review Learning Objectives](#)



Submit your assignment

Due May 14, 11:59 PM PSTMay 14, 11:59 PM PST

Attempts 3 every 24 hours

[Try again](#)



Receive grade

To Pass 80% or higher

Your grade

80%

[View Feedback](#)

We keep your highest score



[Like](#)



[Dislike](#)



[Report an issue](#)

[Chat with us](#)



[Back](#)

Course challenge

Graded Quiz. • 1h 15m

Due May 14, 11:59 PM PST



Congratulations! You passed!

Grade received **80%**

Latest Submission Grade 80%

To pass 80% or higher

[Go to next item](#)

1.

Question 1

Scenario 1, questions 1-9

You have been working as a junior data analyst at Bowling Green Business Intelligence for nearly a year. Your supervisor, Kate, tells you that she believes you are ready for more responsibility. She asks you to lead an upcoming client presentation. You will be responsible for creating the data story, identifying the right tools to use, building the slideshow, and delivering the presentation to stakeholders.

Your client is Gaea, an automotive manufacturer that makes eco-friendly electric cars. For the past year, you have been working with the data team in Gaea's Bowling Green, Kentucky, headquarters. For the presentation, you will engage the data team, as well as its regional sales representatives and distributors. Your presentation will inform their business strategy for the next three-to-five years.

You begin by getting together with your team to discuss the data story you want to tell. You know the first step in data storytelling is to engage your audience.

Fill in the blank: A big part of engagement is knowing how to eliminate less important details. So, you use spotlighting to _____ the data in order to identify the most important insights.

1 / 1 point



recheck



research



study



scan



Correct

2.

Question 2

Scenario 1, continued

After you identify the most important insights, it's time to create your primary message. Your team's analysis has revealed three key insights:

1. Electric vehicle sales demand is expected to grow by more than 400% by 2025.
2. The number of publicly available vehicle charging stations is a significant factor in consumer buying decisions. Currently, there are many locations with so few charging stations that electric car owners would run out of power when traveling between stations.
3. Vehicle battery range is also a significant factor for consumers. In 2020, the average battery range was 210 miles. However, the vast majority of survey respondents report they will not buy an electric car until the battery range is at least 300 miles per charge.

Based on these insights, you create your primary message. Which of the following reflect the expectations of a primary message?

1 / 1 point



The number of publicly available vehicle charging stations is a significant factor in consumer buying decisions. Therefore, Gaea must begin building vehicle charging stations.



Electric vehicle sales demand is expected to grow by more than 400% by 2025. However, the number of publicly available vehicle charging stations is a significant factor in consumer buying decisions. Currently, there are many locations with so few charging stations that electric car owners would run out of power when traveling between stations. Vehicle battery range is also a significant factor for consumers. In 2020, the average battery range was 210 miles. However, the vast majority of people say they will not buy an electric car until the battery range is at least 300 miles per charge.



Although electric vehicle sales demand is on the rise, low availability of charging stations and short battery range are significant hurdles that Gaea must overcome.



Electric vehicle demand is skyrocketing.



Correct

3.

Question 3

Scenario 1, continued

Next, you decide on your data narrative's characters, setting, plot, big reveal, and aha moment. The characters are the people affected by your story. This includes your stakeholders, Gaea's customers, and Gaea's potential future customers. For the setting,

you describe the current situation, potential tasks, and background information about the analysis project.

As you begin to work on the plot for the data narrative, which of the following ideas would you include? Select all that apply.

0.5 / 1 point



How your data analysis can help Gaea solve its business problems



This should not be selected

Review [the video that discusses data narrative](#).



Why it's important for Gaea to increase its cars' battery range by 2025



A list of your recommendations and details about why they will help Gaea be successful



The challenges associated with the current lack of vehicle charging stations



Correct

4.

Question 4

Scenario 1, continued

Now, it's time to consider which tools to use to create data visualizations that will clearly communicate the results of your analysis. You and your team decide to make both spreadsheet charts and Tableau data visualizations. In addition, you agree to build a

dashboard to share live, incoming data with your stakeholders. This will help them achieve the following goals:

- Organize multiple datasets about electric vehicle battery ranges into a central location
- Enable tracking and analysis of electric vehicle data
- Simplify data visualizations about the number of available charging stations using maps of the different geographies

Another key benefit of dashboards is that they enable you to maintain control of your data narrative.

0 / 1 point



True



False



Incorrect

Review [the video about telling a story with data](#).

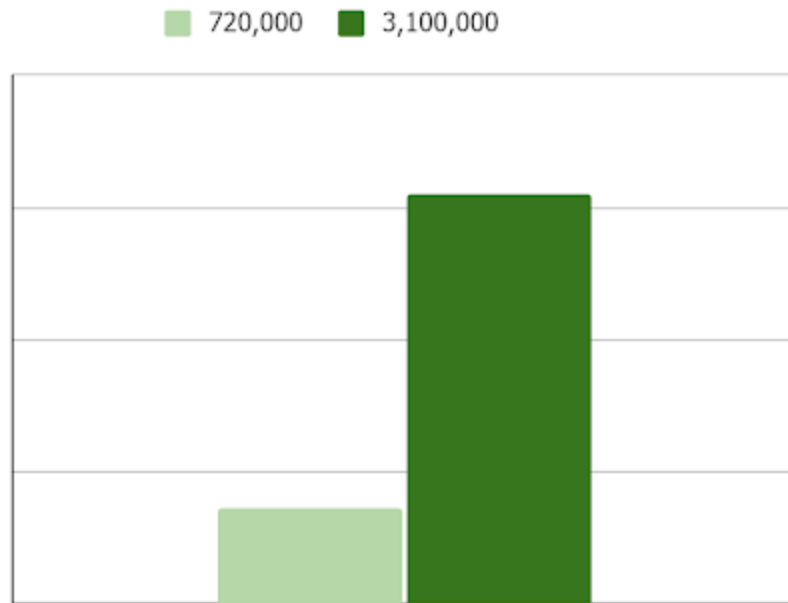
5.

Question 5

Scenario 1, continued

Now that you have finished planning the data story with your team, it's time to create data visualizations. First, you consider electric vehicle sales worldwide in 2015 compared to 2020. You use a spreadsheet to create the following bar graph to compare the two values:

Electric Vehicle Sales, 2015 Compared to 2020



You want to add a label to represent the scale (total count by year) of electric vehicle sales. Where on the graph do you label these values?

1 / 1 point



The y-axis



The colors



The x-axis



The vertical bars



Correct

6.

Question 6

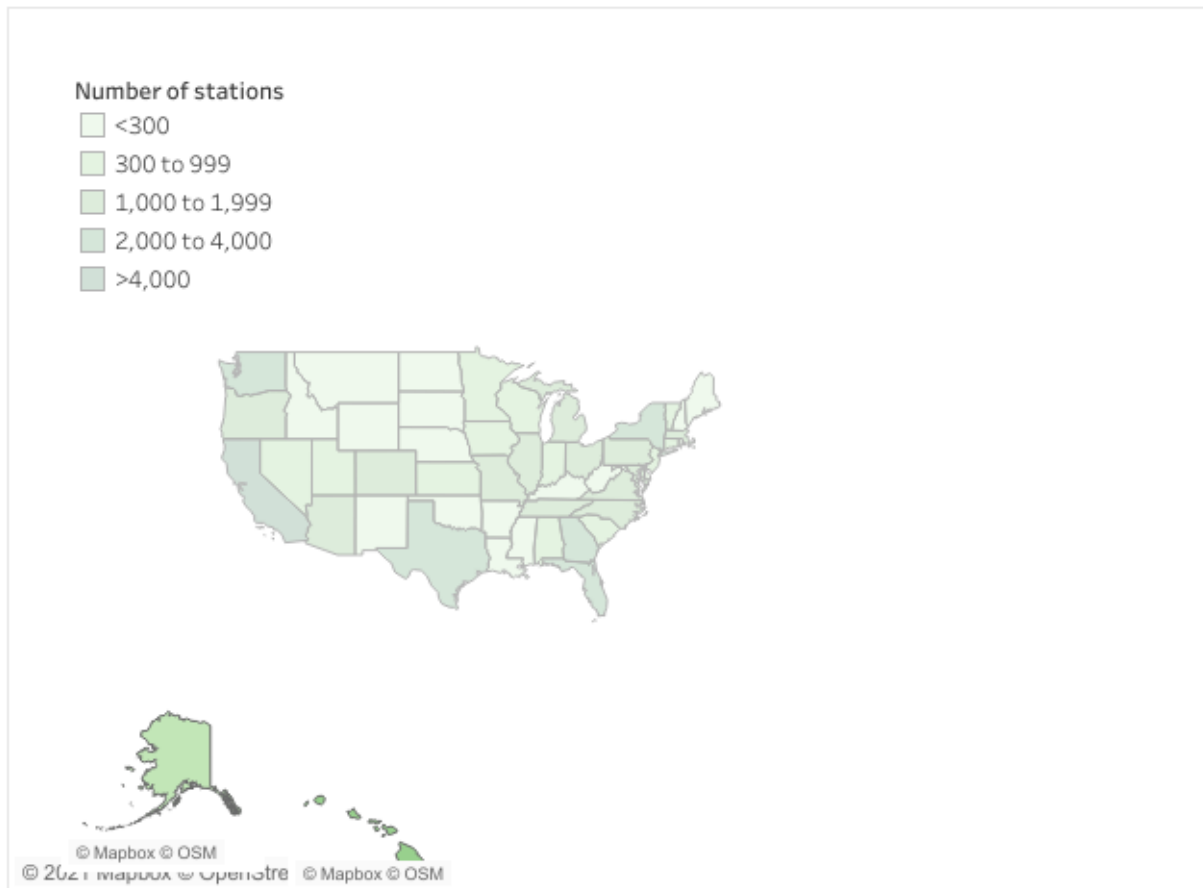
Scenario 1, continued

Next, you explore how access to public car-charging stations is influencing electric vehicle purchases. As your analysis has revealed, there are many areas without enough places for people to plug in and charge their cars. This lack of charging stations has a negative impact on demand for electric cars and overall vehicle sales.

You use Tableau to create the following draft of a visualization, which organizes the charging station data geographically:

Where People Can Charge Their Electric Cars, 2020

Number of charging stations by U.S. state



Source: U.S. Department of Energy, Vehicle Technologies Office

After reviewing your draft, you realize that it could be improved.

Fill in the blank: To improve your draft, you select more varied hues and make the color intensity stronger. In addition, you choose darker _____ in order to reflect more light.

0 / 1 point



visuals



values



views



variables



Incorrect

Review [the section on maps and visualization design](#).

7.

Question 7

Scenario 1, continued

Now, you want to highlight what your team's analysis discovered about the number of charging stations available compared to the number of cars purchased. Your data has confirmed that the lack of charging stations causes the effect of fewer car sales. To communicate this effectively, you will need to convey causation to the stakeholders.

How do you explain causation?

1 / 1 point



Causation involves everything associated with an event. In the case of Gaea's business, the lack of charging stations has a negative effect on the entire automotive marketplace.



Causation is when an action directly leads to an outcome, such as a cause-effect relationship. In the case of Gaea's business, the lack of charging stations directly leads to the outcome of fewer car sales.



☐

Causation is the measure of the degree to which two variables move in relationship to each other. In the case of Gaea's business, charging station numbers and car sales move in the same direction.

☐

☐

Causation involves how often data values fall into certain ranges. In the case of Gaea's business, data about the number of charging stations will fall into ranges associated with car sales.



Correct

8.

Question 8

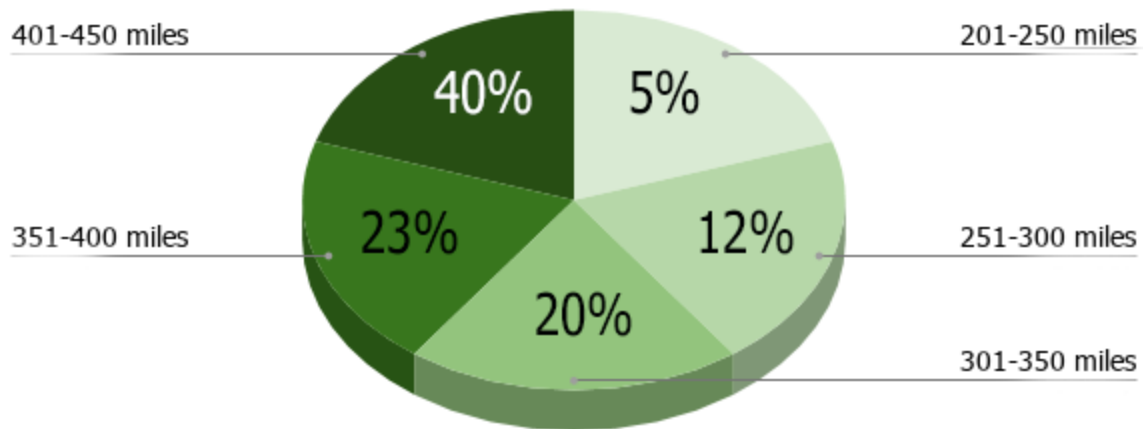
Scenario 1, continued

Once you finish creating data visualizations about the current state of the electric vehicle market, you turn to projections for the future. You want to communicate to stakeholders about the importance of longer vehicle battery range to consumers.

Your team's data includes feedback from a consumer survey that investigated the importance of longer battery when choosing whether to purchase an electric car. The current average battery range is about 210 miles. By 2025, that range is expected to grow to 450 miles per charge.

You create the following pie chart:

How Many Miles Per Charge Would You Require in Order to Purchase an Electric Vehicle?



After reviewing your pie chart, you realize that it could be improved by resizing the segments. Resizing the segments in proportion to each segment's relative value enables you to visually show the different values.

1 / 1 point



True



False



Correct

9.

Question 9

Scenario 1, continued

It's time to build your Tableau dashboard for stakeholders. You consider what type of layout to use.

Describe the differences between vertical and horizontal layouts. Select all that apply.

1 / 1 point

☐☐

Vertical layouts prevent items from being layered over other objects

☐☐

Horizontal layouts prevent items from being layered over other objects

☒☒

Vertical layouts adjust the height of the views and objects contained



Correct

☒☒

Horizontal layouts adjust the width of the views and objects contained



Correct

10.

Question 10

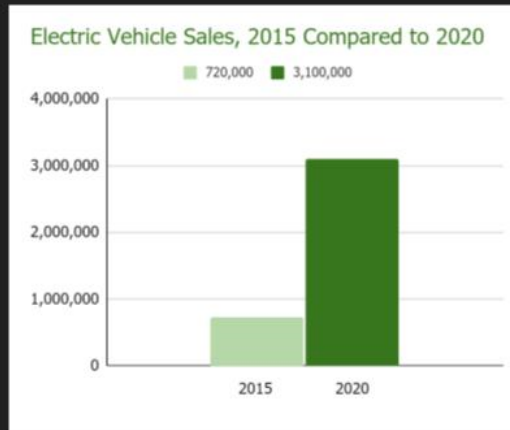
Scenario 2, questions 10-15

You have created your narrative and visuals, so now it's time to build a professional and appealing slideshow. You choose a theme that matches the tone of your presentation. Then, you create a title slide with a title, subtitle, and the date.

Next, you create the following slide that compares electric vehicle sales in 2015 and 2020:

How Have Electric Vehicle Sales Changed Between 2015 and 2020?

This chart shows that there were 720,000 electric vehicles sold in 2015. In 2020, that number grew to 3,100,000.



Electric vehicles are moving steadily into the spotlight. The annual sales of electric vehicles reached the 2,00,000 mark for the first time in 2019. This is a much-anticipated milestone and demonstrates changing consumer priorities. Gaea is well-positioned to make the most of this trend, as electric vehicle sales are only expected to continue rising in the coming years.

Alt-text: Slideshow with bar chart of electric vehicle sales from 2015 and 2022. 2022 had higher sales. There are also multiple sentences at the bottom of the slide and another piece of descriptive text near the chart.

After reviewing your slide, you realize that it could be improved. What steps do you take to make the two text boxes beneath the header more effective? Select all that apply.

0.75 / 1 point



Ensure the text does not simply repeat the words you plan to say



Correct



Use abbreviations to reduce the amount of text



Edit the text to fewer than five lines total





Edit the text to fewer than 25 words total



Correct

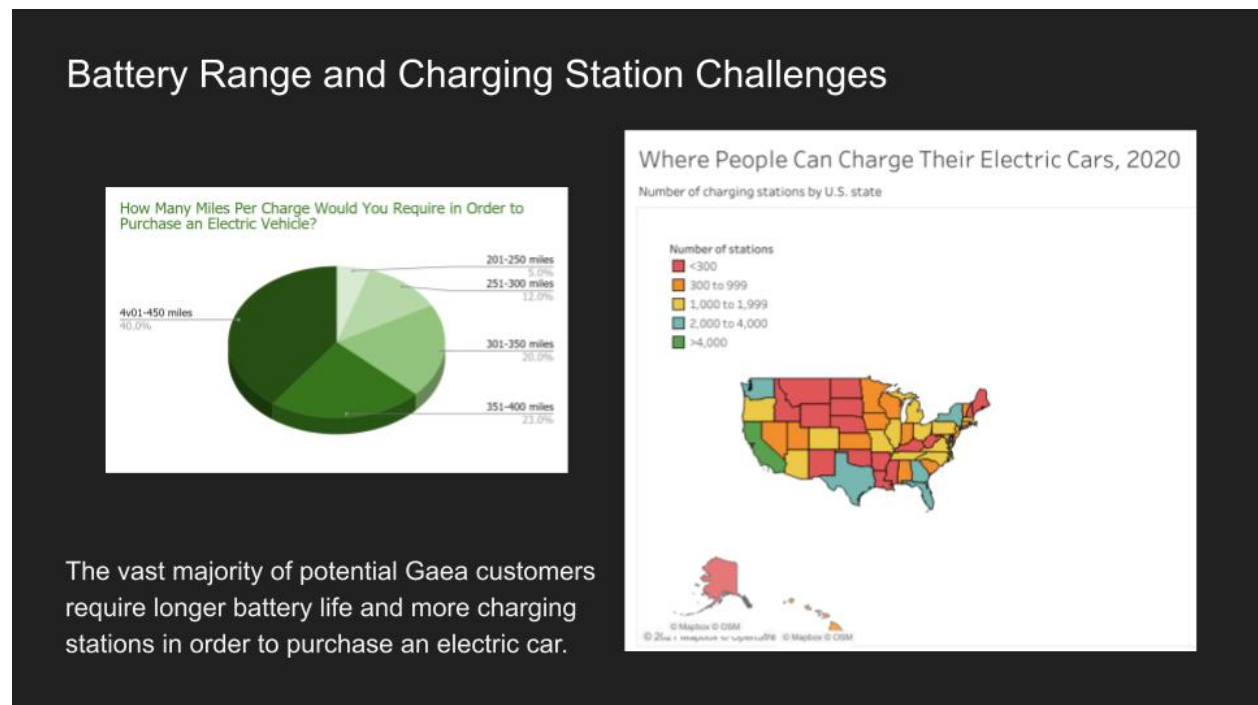
You didn't select all the correct answers

11.

Question 11

Scenario 2, continued

You then create the following slide to demonstrate the challenges associated with battery range and charging stations:



After reviewing your slide, you realize that the visual elements could be improved. You do this by first choosing one data visualization to share on this slide, then create another slide for the second data visualization.

Fill in the blank: In addition, you make sure to use _____ font sizes and colors for all of your data visualization titles.

1 / 1 point



unique



different



colorful



consistent



Correct

12.

Question 12

Scenario 2, continued

You complete your slideshow and share it with your team. Once it is approved by your supervisor, you begin preparing to give your presentation. You consider maintaining good posture, being aware of nervous habits, and making eye contact. In addition, you think about how you will speak.

What strategies can help you speak effectively? Select all that apply.

1 / 1 point



Using short words and sentences



Correct



Speaking quickly so you are sure to have time to include all important data points



Building in intentional pauses to give your audience time to think about what you have just said



Correct



Keeping the pitch of your sentences level so that your statements are not confused for questions



Correct

13.

Question 13

Scenario 2, continued

Next, you prepare for the question-and-answer session that will follow your presentation. What methods help you consider any limitations of your data? Select all that apply.

1 / 1 point



Look at the context



Correct



Understand the strengths and weaknesses of the tools



Correct



Critically analyze the correlations



Correct



Eliminate the outliers

14.

Question 14

Scenario 2, continued

Now that you have some idea of the questions the stakeholders will ask, you and a team member consider different objections that might arise.

Your team member asks you how you will respond if someone from Gaea questions your data-cleaning process. How do you prepare for this objection? Select all that apply.

1 / 1 point



Practice answering questions about your data-cleaning process



Correct





Keep a detailed log of your data-cleaning process



Correct



Add your data-cleaning log to the slideshow appendix



Correct



Be prepared to explain why data cleaning is not relevant at this stage of the project

15.

Question 15

Scenario 2, continued

The big day has arrived, and you have just finished giving your presentation to the Gaea team. It's now time for the question-and-answer session, and a stakeholder asks you a very detailed question about one specific electric vehicle charging station initiative.

You listen to the whole question, then repeat it. For what reasons is this important? Select all that apply.

0.75 / 1 point



It helps you confirm that you understand the question



Correct



It enables you to rephrase it in a way that is easier to answer

☐☐

It gives the stakeholder a chance to correct you if you misunderstand

☒☒

It ensures the entire audience has heard the question, in case they did not when it was originally asked



Correct

You didn't select all the correct answers