14.2.4

Using and Portraying Data to Answer Questions

You know that you want to use Tableau to create effective visualizations from the Citi Bike data, which Kate can then use to impress potential investors. You also know that the key to getting a good visualization—and, really, any good data analysis—is to start with a question. But what is the right question to ask and how do you portray the answer accurately?

Generally speaking, when we think about all of the data we have available to us from Citi Bike, we can come up with several questions that we would want a Tableau visualization to help answer. We need to think critically about which questions are the most important for our analysis. This is an important skill to master.

The core issue we need to think about is what we absolutely need to know in order to create our bike-sharing program in Des Moines.

Once you know the questions you want to ask, the next thing you need to think about is how your audience will perceive the data you present. You want to share your findings in a way that reduces your personal bias and accurately represents what the data is saying.

Honesty and integrity in regard to your data is an important concept in data science. A person's opinion can be swayed based on how the data is represented, so you need to consider how your audience will perceive and interpret the results and visualization that you show them.

This skill won't come right away; it takes practice. Eventually, you'll be able to determine how others will perceive your work. As you begin creating visualizations in this module, ask your peers how they perceive your designs. Having input from others will help you understand what works and what you may need to change.

SKILL DRILL

What questions would you want answered if you were opening a bike-sharing business? Write the questions down.