DASHBOARD ACTIONS & ANALYSIS IN TABLEAU

LEARNING OBJECTIVES

After this lesson, you'll be able to:

1. Develop interactive Tableau dashboards.
2. Practice analyzing data in Tableau.
3. Connect to data and build dashboards in Tableau.
4. Apply your new skills to analyze some sample call records data.

GUIDED PRACTICE: DASHBOARD ACTIONS

DASHBOARD ACTIONS AND ANALYSIS IN TABLEAU

Actions allow us to add interactivity to a dashboard so users can drill into the data via mouse clicking, hovering, and selecting data in a visualization.

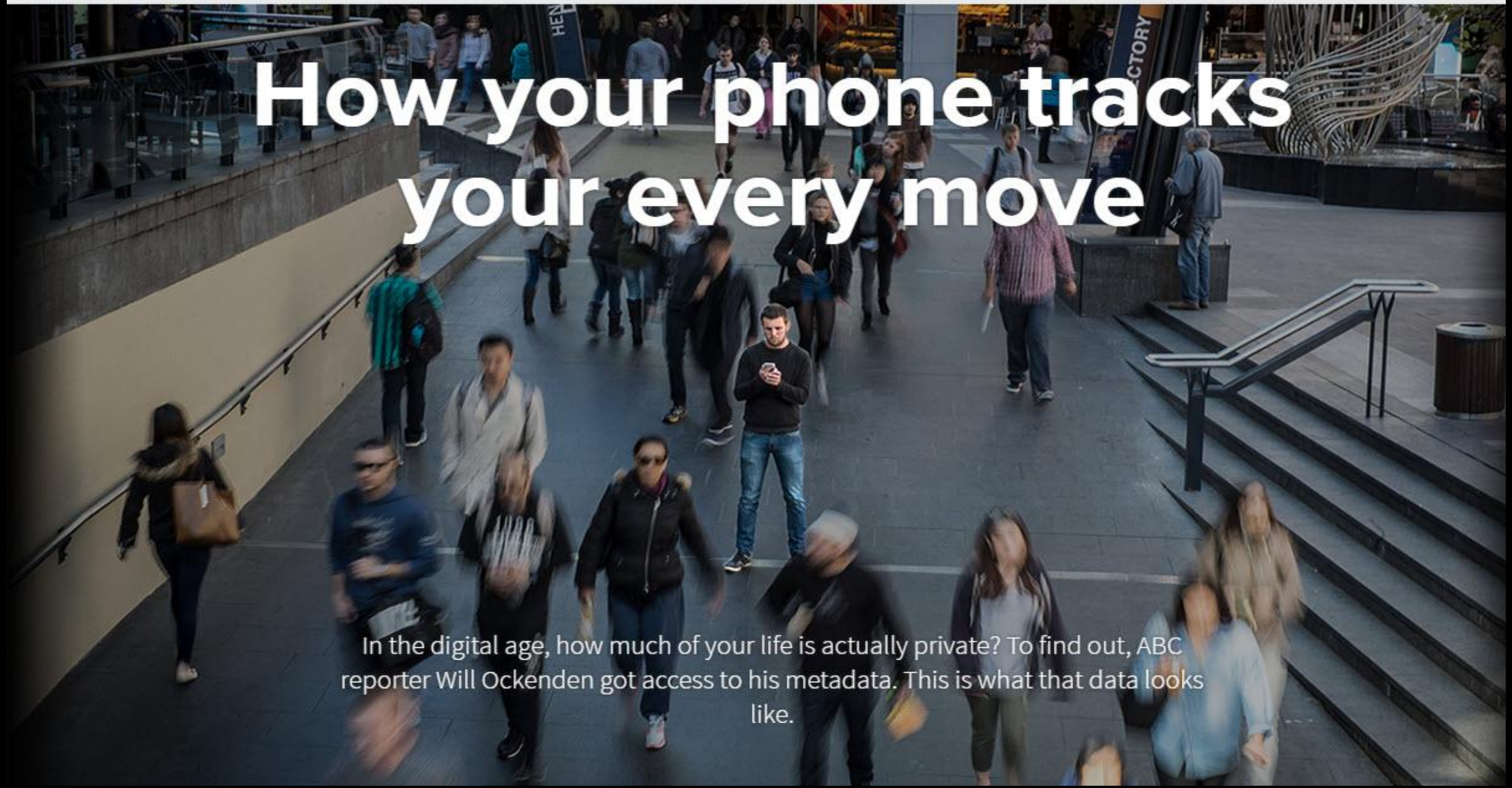
In this guided practice, we will work through the data workflow, starting by connecting to data and eventually building out an **interactive dashboard.**

We will also learn how and why to use **action filters** when creating our dashboards.

ANALYSIS PROMPT

Context:
Australia's new data retention laws mean phone and internet companies have to save this information for two years — that's every time you call someone, where you call them from, which cell tower your phone pings every time it connects to the internet, and more.

Prompt:
On a mission to find out what that data might reveal, reporter **Will Ockenden** took a "surveillance selfie" and requested access to his own metadata. Using his sample, we can gain an understanding of the types of metadata individuals provide to cell phone carriers.



How your phone tracks your every move

In the digital age, how much of your life is actually private? To find out, ABC reporter Will Ockenden got access to his metadata. This is what that data looks like.

EXERCISE DATA SET

Description of the "wills_metadata.xlsx" dataset:

1. **Comm type:** Communication type (internet, call, SMS).
2. **Cell tower location**: Name of the cell tower that the signal went through.
3. **Comm timedate string:** The date and time of the record.
4. **Comm identifier:** Masked number to which the call/SMS was made.
5. **Latitude/longitude:** Coordinates of the cell tower location.

INDEPENDENT PRACTICE: ANALYZE DATA

CALL RECORDS ANALYSIS

1. For the remainder of the class, we will use the “wills_metadata.xlsx”data set to uncover information about Will.

2. The goal is to make a best guess at answering the following questions and use data and visualizations in Tableau to inform your answer.

3. Start by clicking on the “Connecting to Data” button in the Tableau main screen, using the “Excel file” option.

ACTIVITY: ANALYZE DATA

DIRECTIONS: PART 1

1. Take 15 minutes to answer this question:

    a. Why do you believe the call records increase so dramatically in September 2014?
    b. Create Tableau visualization(s) to support your answer.

ACTIVITY: ANALYZE DATA

DIRECTIONS : PART 2

1. In groups, choose a single question from below about Will.

2. Take 20 minutes to develop a set of dashboards and Story Points to inform your answers.

3. Each group must present its dashboards and stories to rest of the class.
   a. Where does Will work?
   b. Where does Will live?
   c. Where does Will's family live (*speculate*)?

CONCLUSION

RECAP

In this lesson, we learned how to:

1. Analyze data visually in Tableau.
2. Join data to build visualizations and a dashboard.
3. Apply action filters to create powerful dashboards.
4. Analyze sample data.
5. Create visualizations, dashboards, and Story Points to answer questions.

DASHBOARD ACTIONS AND ANALYSIS IN TABLEAU

Q&A

RESOURCES

RESOURCES

- Creating Dynamic Titles Using Actions (Tableau): http://kb.tableau.com/articles/howto/creating-dynamic-titles-based-on-filters

- Building a Story Point Analysis to Examine a Trend (Tableau): https://onlinehelp.tableau.com/current/pro/desktop/en-us/story_example.html

- Gallery of Featured Tableau Visualizations (Tableau Public): https://public.tableau.com/en-us/s/gallery?qt-overview_gallery=1

ADDITIONAL RESOURCES: TABLEAU

- Tableau has a vast library of resources and a global community.
- If you have questions around usage, try community.tableau.com or reddit.com/r/tableau.
- There is also a public repository of Tableau workbooks for inspiration on visualization techniques.
- Lectures and workshops from TableauCon are available online.