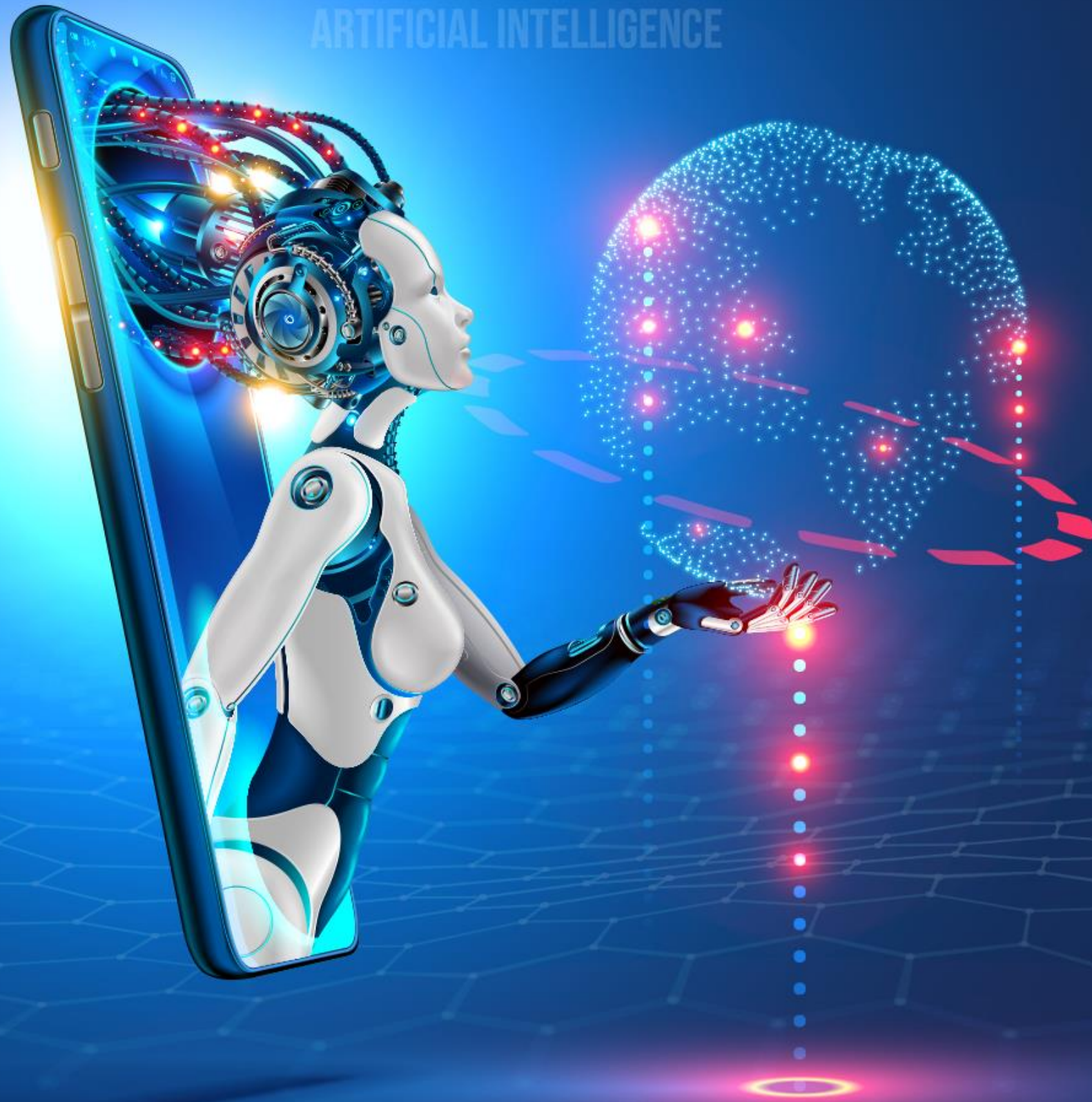


DATA AND ARTIFICIAL INTELLIGENCE



simplilearn

PURDUE
UNIVERSITY

Tableau 10



Creating Dashboards in Tableau

What's In It For Me

At the end of this lesson, you will be able to:

- Explain how to build interactive dashboards
- List the best practices for creating effective dashboards
- Explain dashboard and running actions
- Describe stories and how to build them
- Explain how to share your dashboards with others

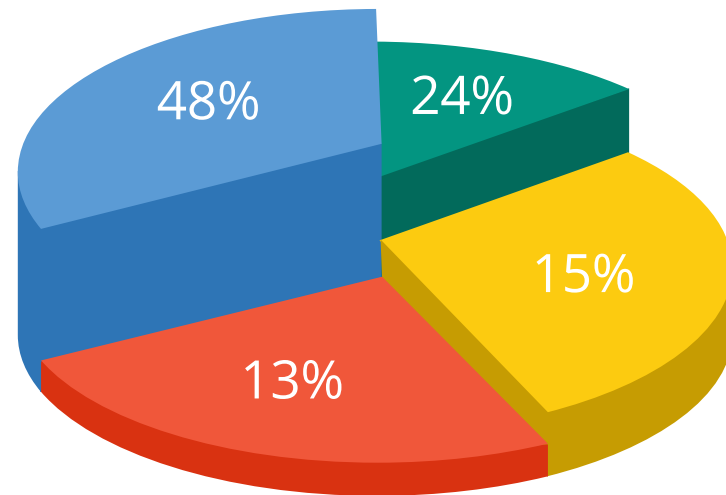


Creating Dashboards in Tableau

Topic 1: Building Interactive Dashboards

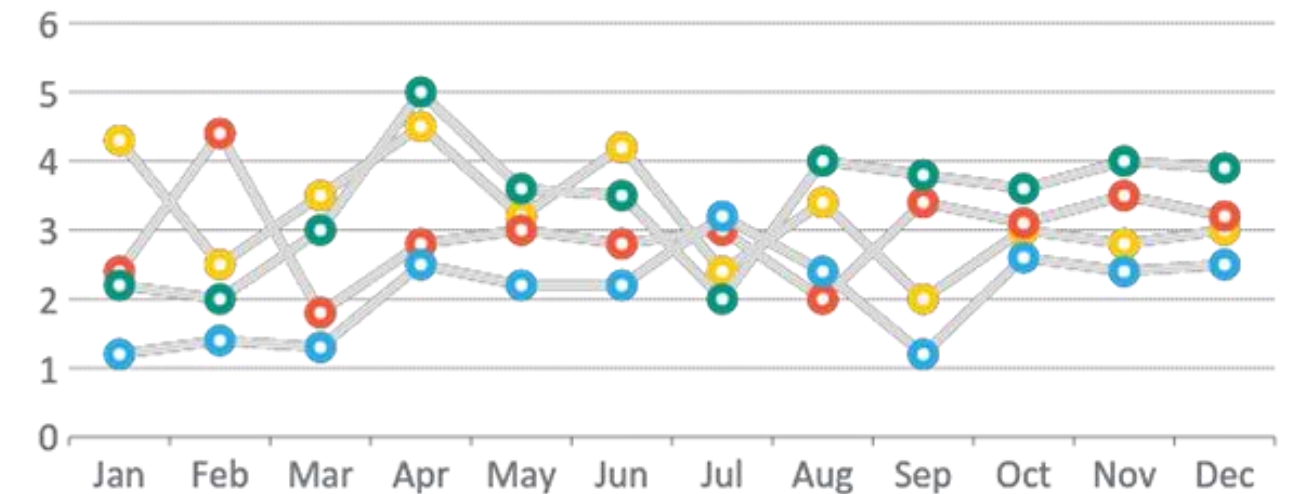
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What Is a Dashboard



A dashboard is a real-time, easy-to-read user interface that presents data graphically.

Dashboards provide users with concise, visually appealing, and interactive views of data to enable quick, data-driven decisions.

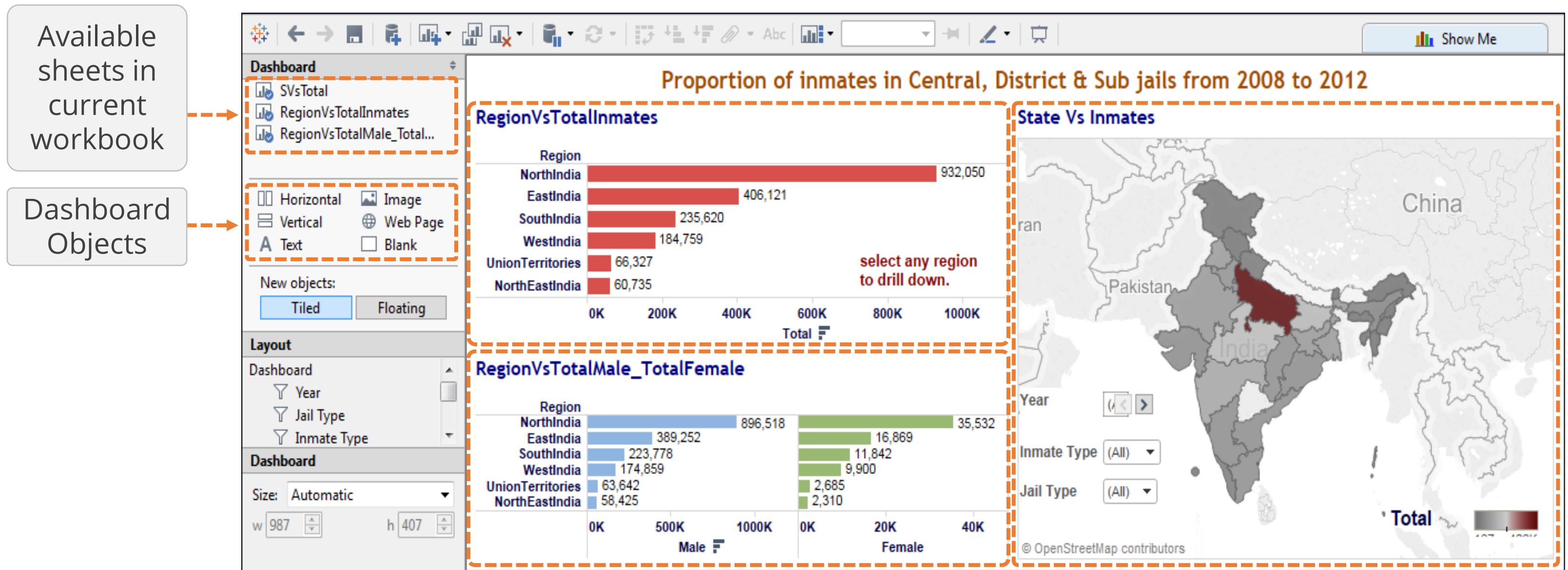


A dashboard consists of multiple worksheets arranged in layout containers (tiles).

A dashboard also includes filters and actions that impact some or all worksheets in the dashboard.

Building Dashboards

Dashboards are built by dragging and dropping worksheets into a layout container with the Dashboard. In this example, three worksheets have been added to the Dashboard.



Creating Dashboards in Tableau

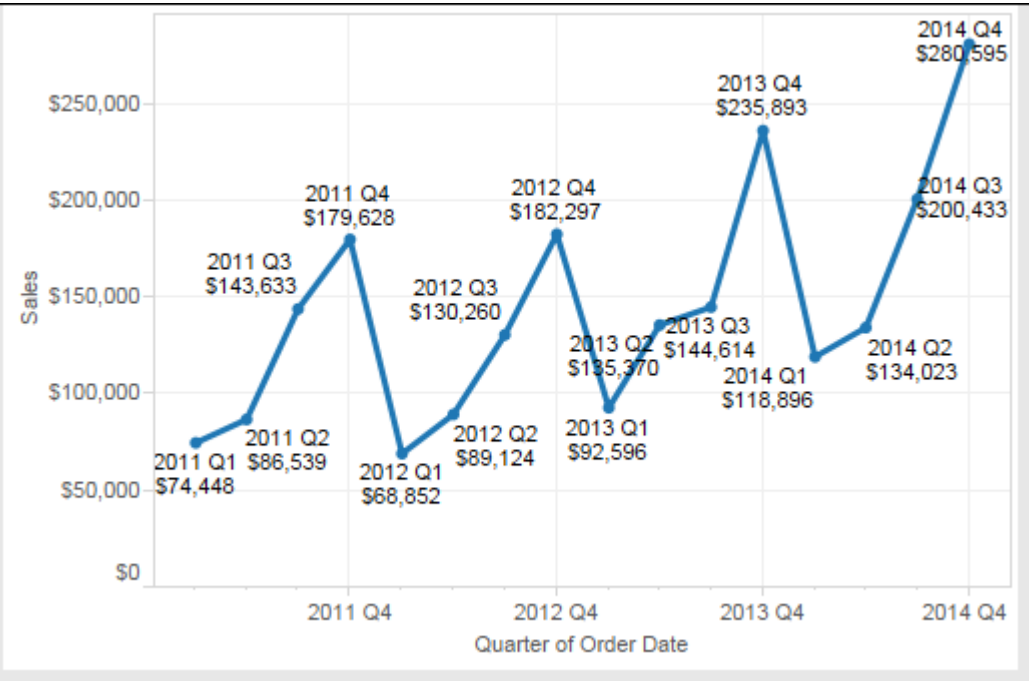
Topic 2: Best Practices for Creating Effective Dashboards

TABLEAU
DESKTOP 10

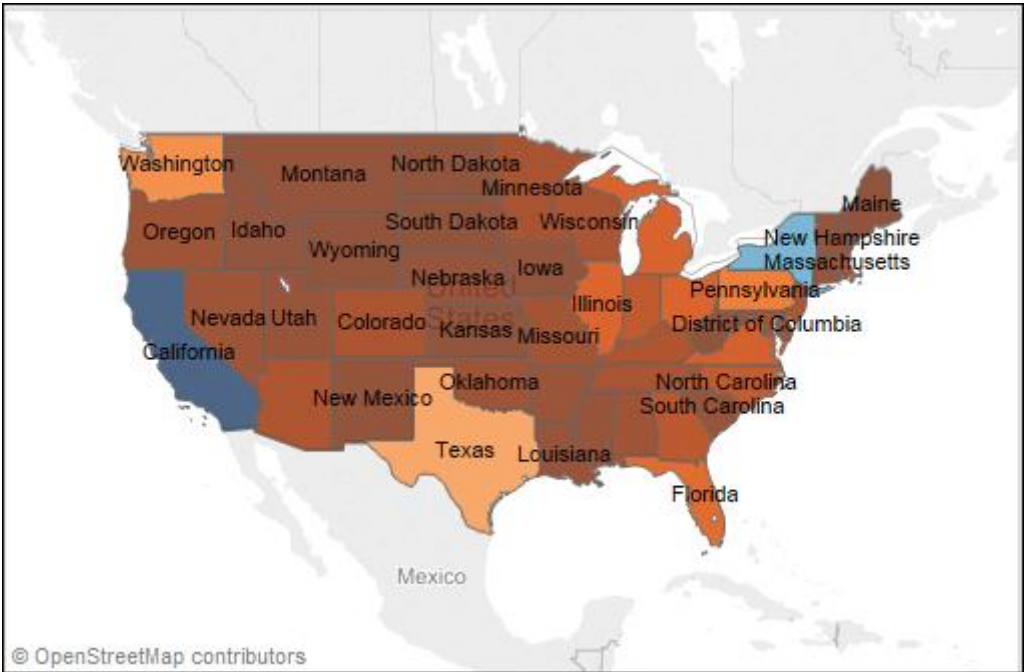
Best Practices for Creating Effective Dashboards

CHOOSE AN APPROPRIATE VISUALIZATION

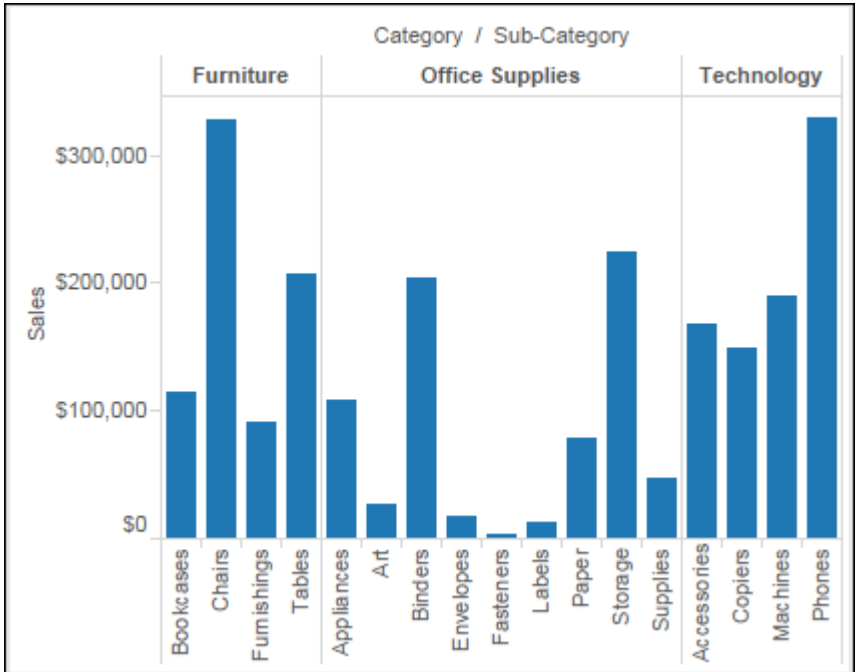
You can make your analysis more effective by choosing an appropriate type of visualization.
For example:



When you want to display change over time, use a line chart.



When you want to analyze geographic data, maps prove to be the best choice of visualization.

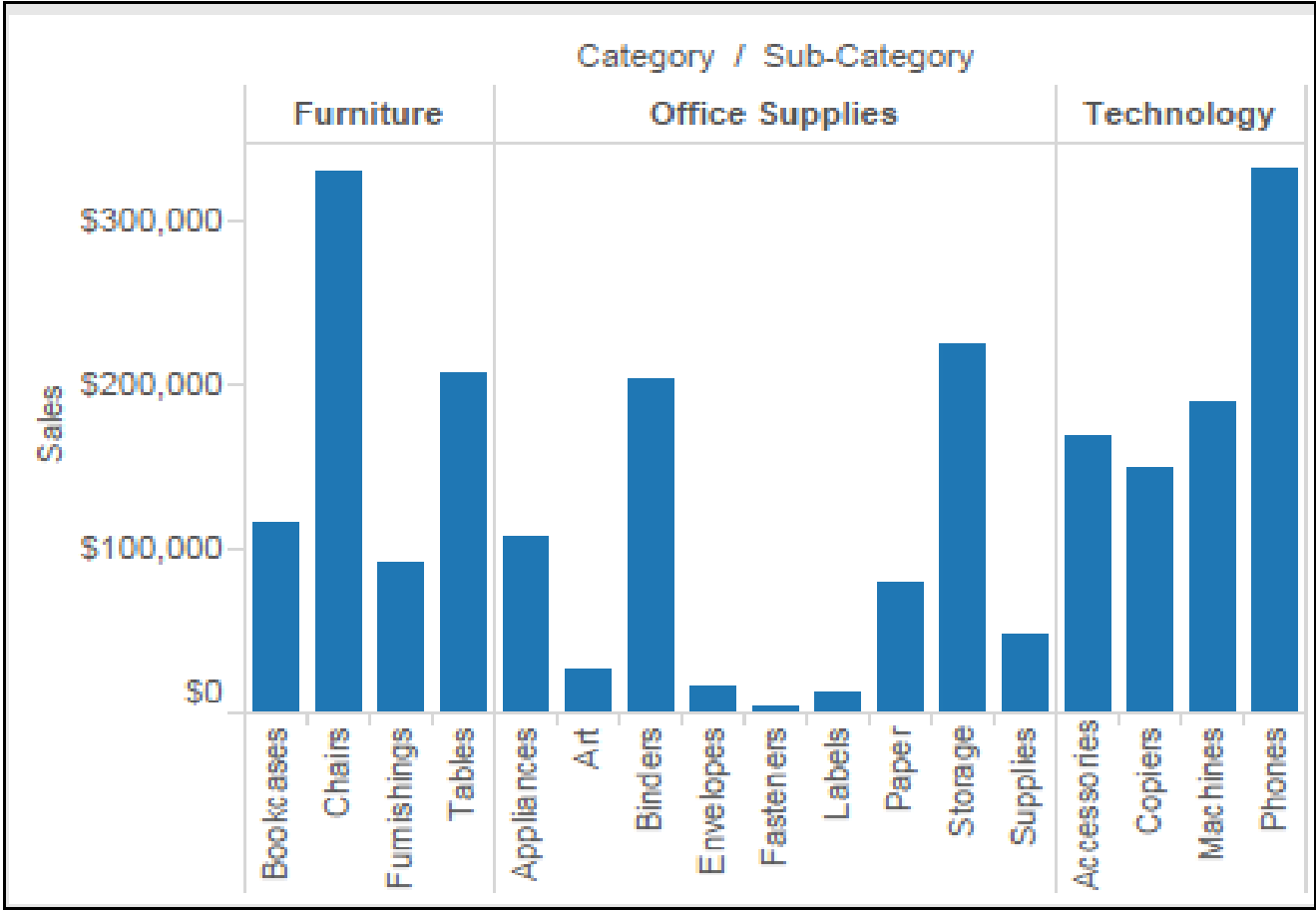


When you want to display the highest to lowest comparison, use a bar chart.

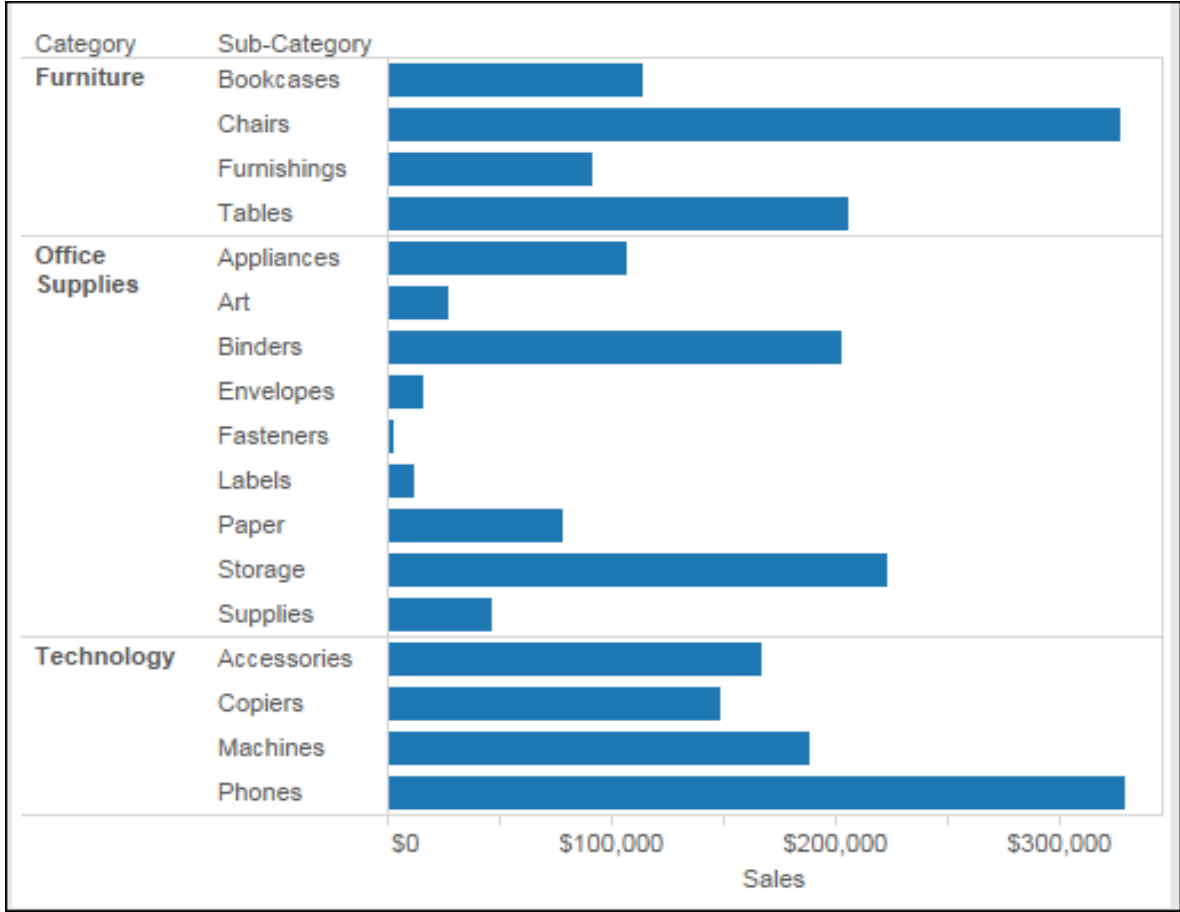
Best Practices for Creating Effective Dashboards

CHOOSE AN APPROPRIATE ORIENTATION

You can make your data more readable by choosing an appropriate type of orientation, based on the type of data you are analyzing. For example:



It is difficult to read long names vertically.

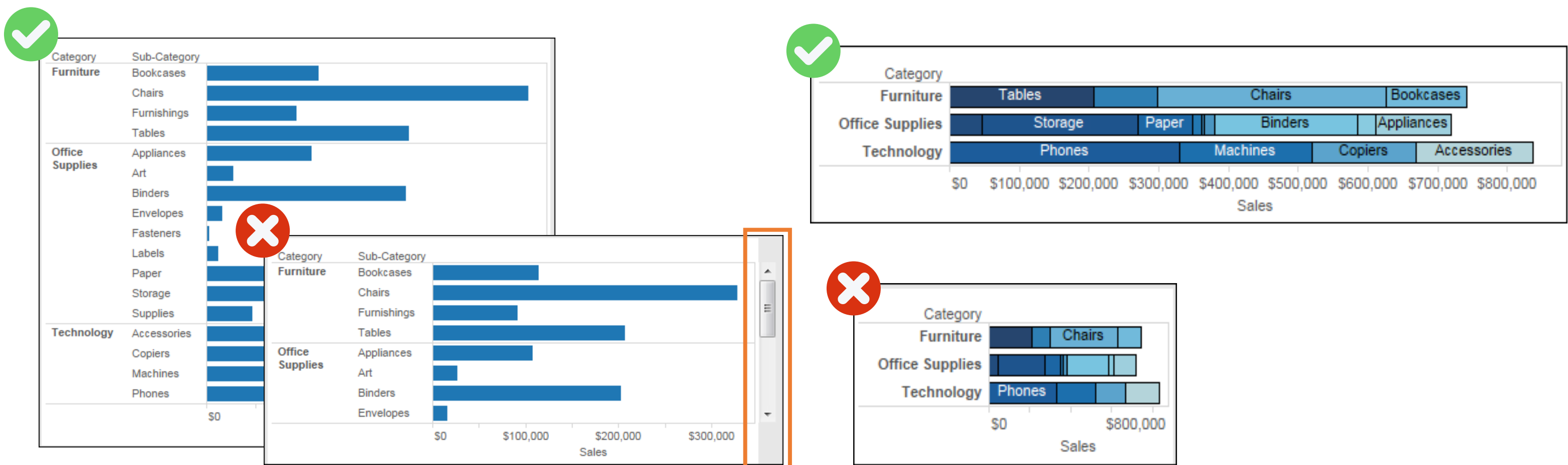


It's much easier to read the names horizontally.

Best Practices for Creating Effective Dashboards

CHOOSE AN APPROPRIATE SIZE

While creating dashboards, choosing the appropriate size of view is another important consideration.



Avoid the use of scroll bars

Avoid scrunched views

Use Case 1



After analyzing the sales and profit of the company's phones across all the states, Genelia now wants to propose the product launch strategy to the CEOs.

For this, she needs a dashboard that will display the entire analysis in a single sheet. This will offer an overall view that will help the CEOs to make effective decisions.

Let's understand this with the help of a demonstration!



Demo—Creating a dashboard and Importing sheets

Demonstrate the use of Sales and Profitability Analysis, creating a dashboard, and import sheets.

**TABLEAU
DESKTOP 10**

Creating Dashboards in Tableau

Topic 3: Explore Dashboard Actions


TABLEAU
DESKTOP 10

Exploring Dashboard Actions

WHAT ARE ACTIONS?

Tableau allows you to add context and interactivity to your data through the use of Actions.

An Action is when a user clicks, selects, or hovers over a dashboard item, and something happens to one or more of the views in the dashboard.



For example, clicking a URL within the view could create the action of a website opening in a new browser window.

Exploring Dashboard Actions

USING ACTIONS

Actions can be used to:

Filter views in a
Dashboard

Highlight data in
Dashboard

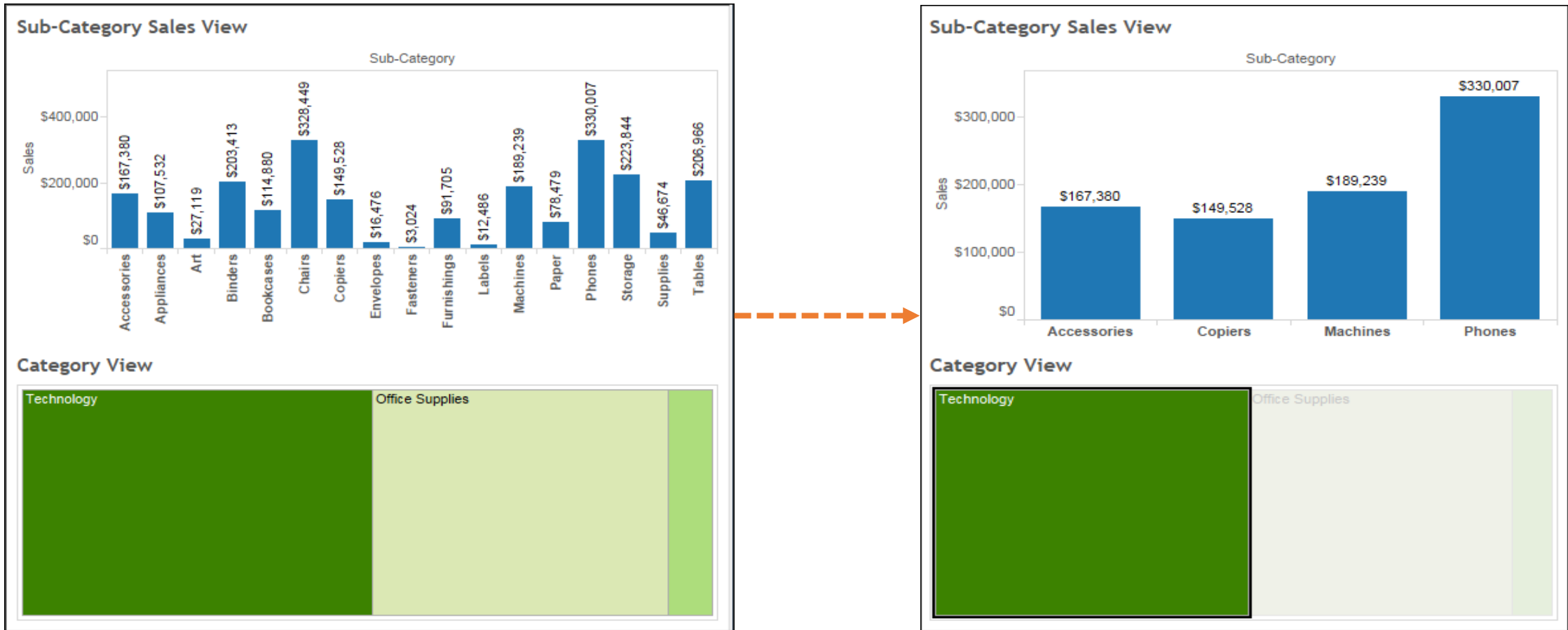
Launch a
webpage (URL)

Exploring Dashboard Actions

FILTER ACTION

Filter actions are used to send information from a selected mark to another sheet showing related information.

- Filter views in a Dashboard
- Highlight data in Dashboard
- Launch a webpage (URL)



Exploring Dashboard Actions

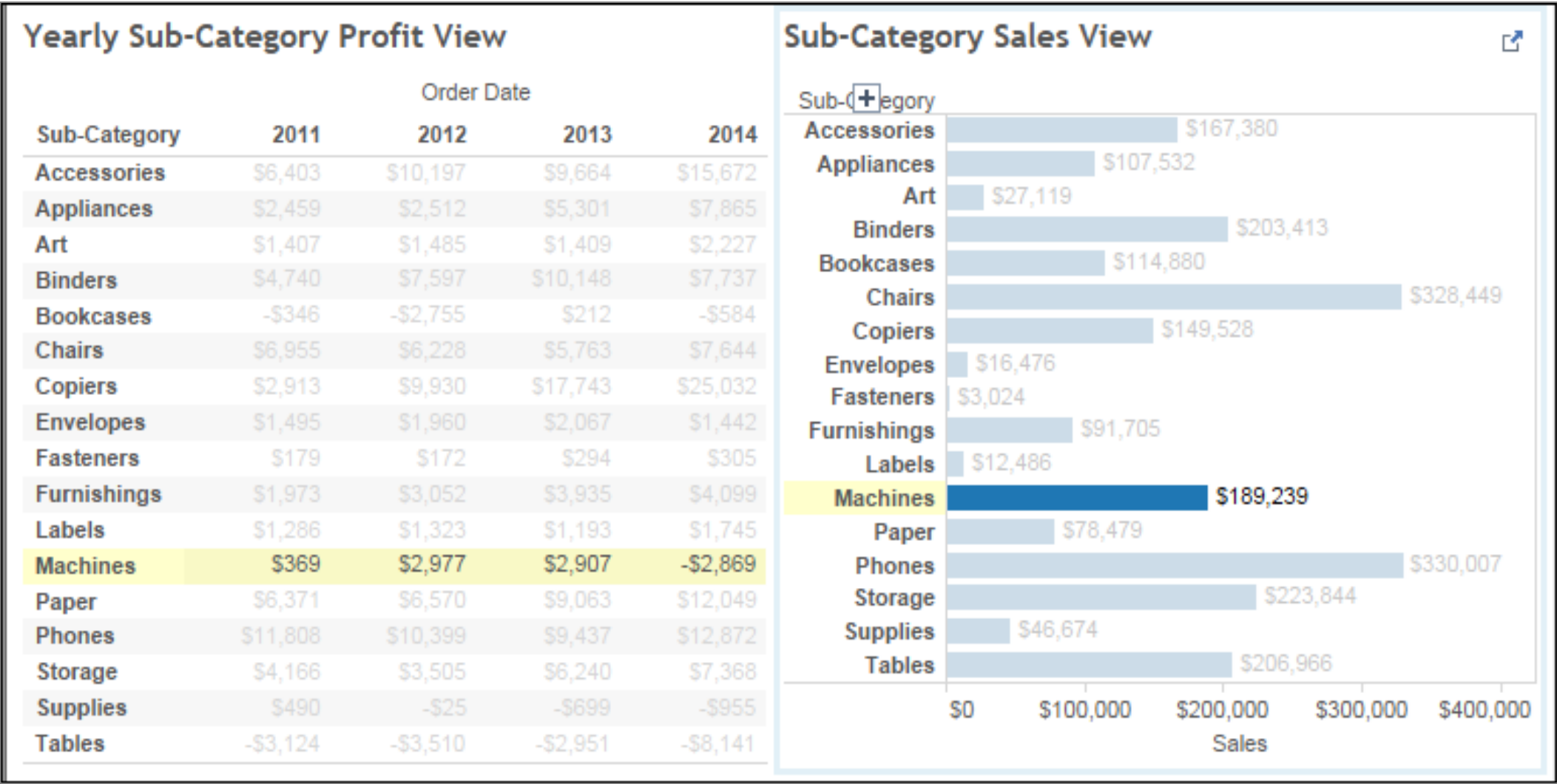
HIGHLIGHT ACTION

Highlight actions allow you to call attention to marks of interest by highlighting selected marks and dimming all others.

Filter views
in a
Dashboard

Highlight
data in
Dashboard

Launch a
webpage
(URL)



Exploring Dashboard Actions

URL ACTION

A URL action is a hyperlink that points to a web page, or a file, for more information about your data.

- Filter views in a Dashboard
- Highlight data in Dashboard
- Launch a webpage (URL)

Yearly Sub-Category Profit View

Sub-Category	2011	2012	2013	2014
Accessories	\$10,197	\$9,664	\$15,672	
Appliances	\$2,512	\$5,301	\$7,865	
Art	\$1,485	\$1,409	\$2,227	
Binders	\$7,597	\$10,148	\$7,737	
Books	\$2,755	\$212	-\$584	
Chairs	\$6,228	\$5,763	\$7,644	
Copiers	\$9,930	\$17,743	\$25,032	
Envelopes	\$1,960	\$2,067	\$1,442	
Fasteners	\$172	\$294	\$305	
Furniture	\$3,052	\$3,935	\$4,099	
Labels	\$1,323	\$1,193	\$1,745	
Machines	\$2,977	\$2,907	-\$2,869	
Paper	\$6,570	\$9,063	\$12,049	
Phones	\$0,399	\$9,437	\$12,872	
Storage	\$3,505	\$6,240	\$7,368	
Supplies	\$490	-\$25	-\$699	-\$955
Tables	-\$3,124	-\$3,510	-\$2,951	-\$8,141

WIKIPEDIA

The Free Encyclopedia

Main page

Contents

Featured content

Current events

Random article

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Interaction

Help

About Wikipedia

Community portal

Recent changes

Contact page

Create account Not logged in Talk Contributions Log in

Article Talk Read Edit View history Search

Accessory

From Wikipedia, the free encyclopedia

(Redirected from Accessories)

Accessory may refer to:

Wiktionary

Look up accessories or accessory in Wiktionary, the free dictionary.

- Accessory (legal term), a person who assists a criminal
- Accessory (band), with members Dirk Steyer and Ivo Lottig
- Fashion accessory, i.e. an item used to complement a fashion or style
- Video game accessory, a piece of hardware used in conjunction with a video game console for playing video games
- Accessory bone
- Accessory muscle
- Accessory nucleus, in anatomy, a cranial nerve nucleus
- Accessory nerve
- Accessory suite, a secondary dwelling on a parcel of land

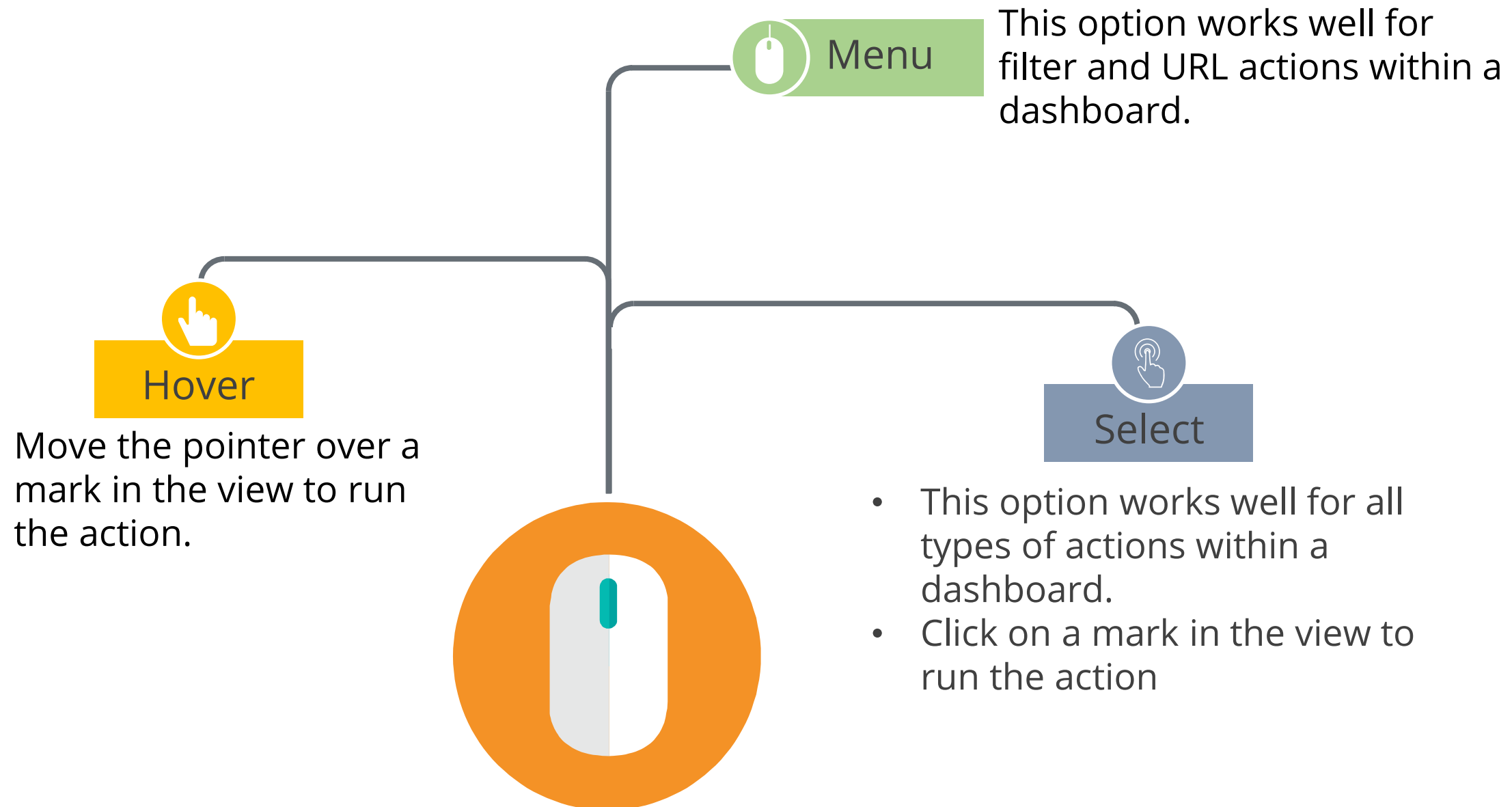
Creating Dashboards in Tableau

Topic 4: Running Actions

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Running Actions

An action can be triggered by multiple ways.



Use Case 2



The CEOs need a state search functionality to be implemented in Genelia's existing dashboard.

This will help them study the population and additional details of the selected states where the new product is to be launched.

Based on further analysis, they can decide the product quantity to be included in the first launch process.

Let's understand how this can be done in Tableau through a demonstration.



Demo—Using Dashboard Actions

Demonstrate how to use the phone analysis dashboard and add highlight action, URL action, and web page dashboard action.

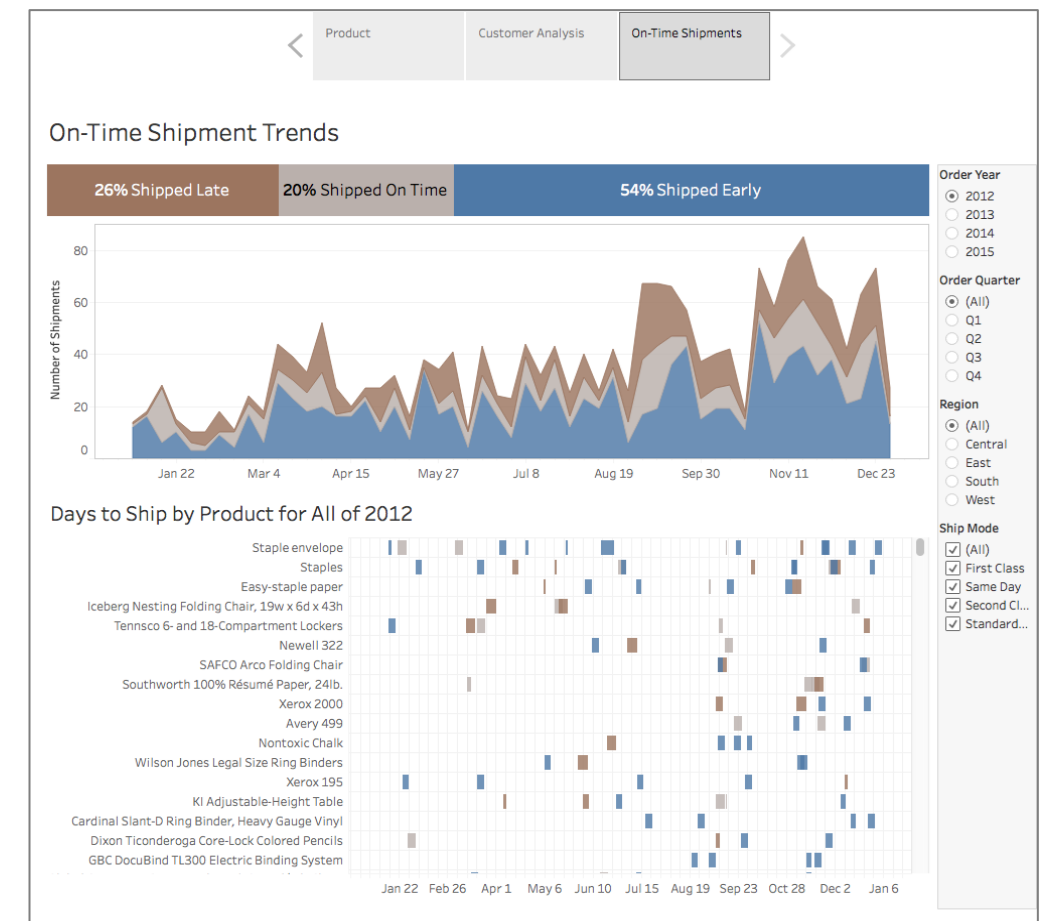
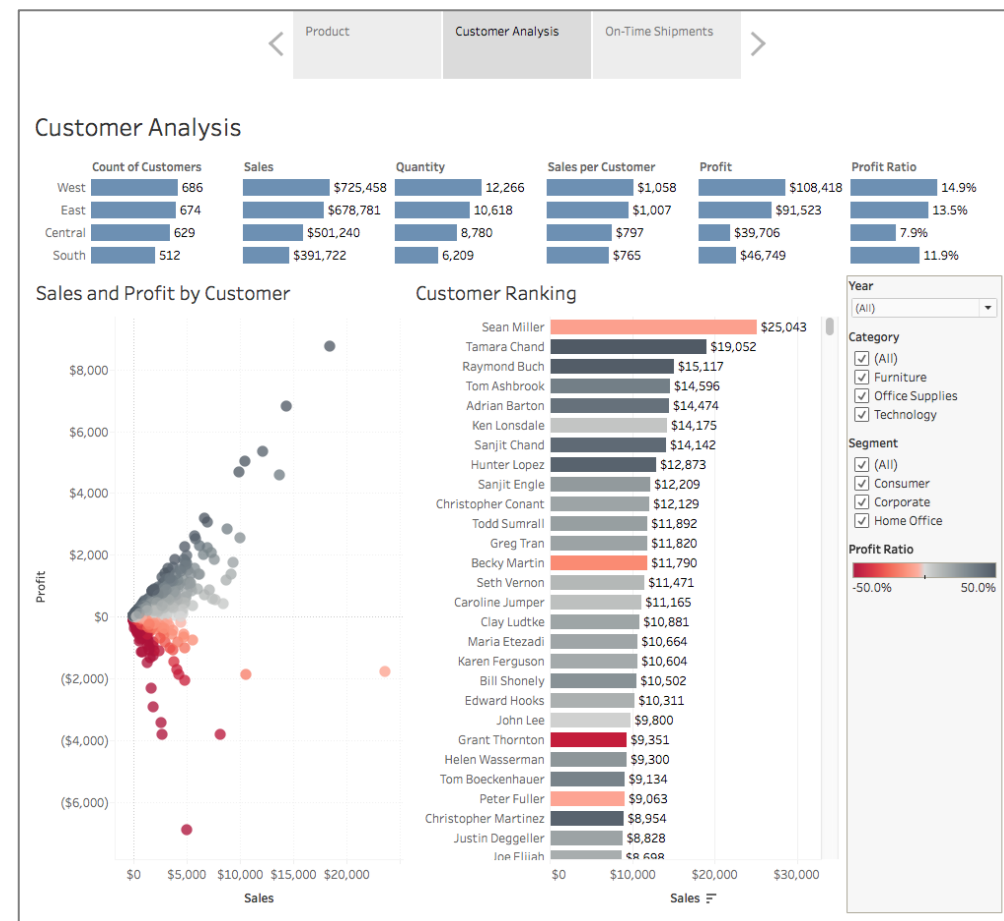
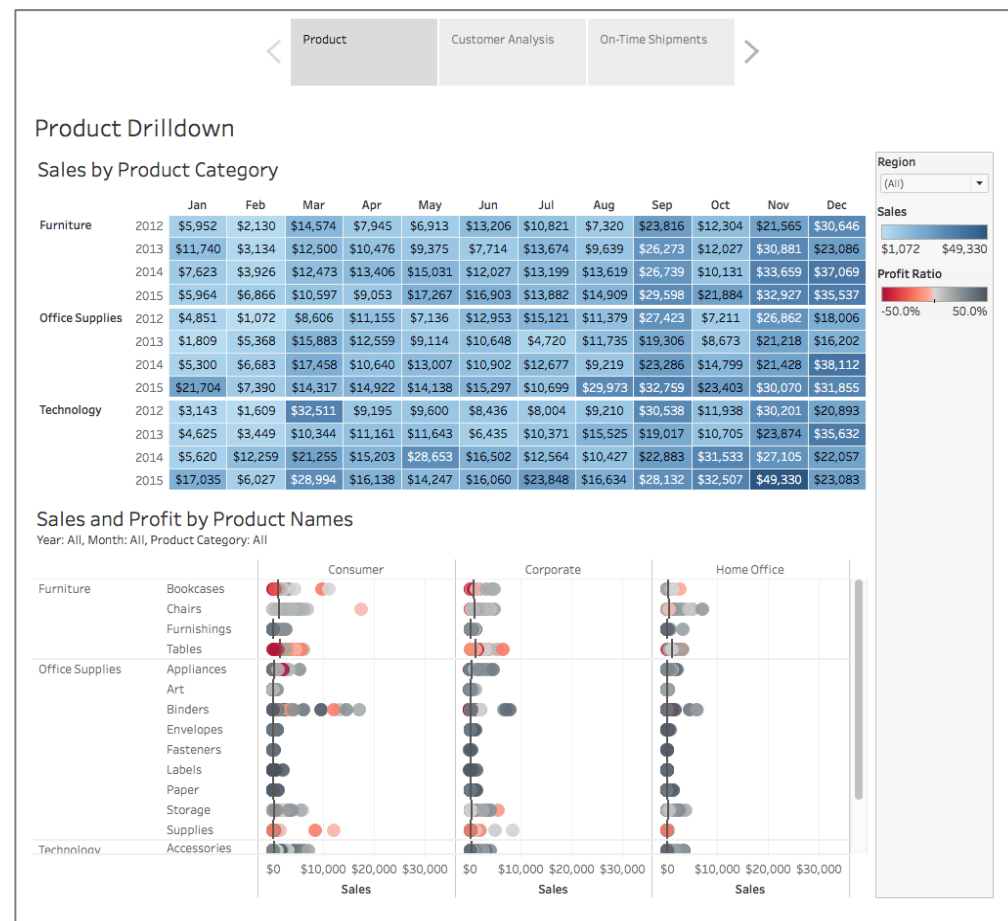
Creating Dashboards in Tableau

Topic 5: Building Stories

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What Is a Story?

- A Story is a collection of dashboards and/or worksheets.
- Stories are a series of visualizations that are organized in a sequence to convey information (to “tell a story”).
- Stories were designed specifically to make static powerpoint presentations obsolete - the presenter can guide a discussion where she wants it to go, but can quickly pivot and answer questions on the fly.

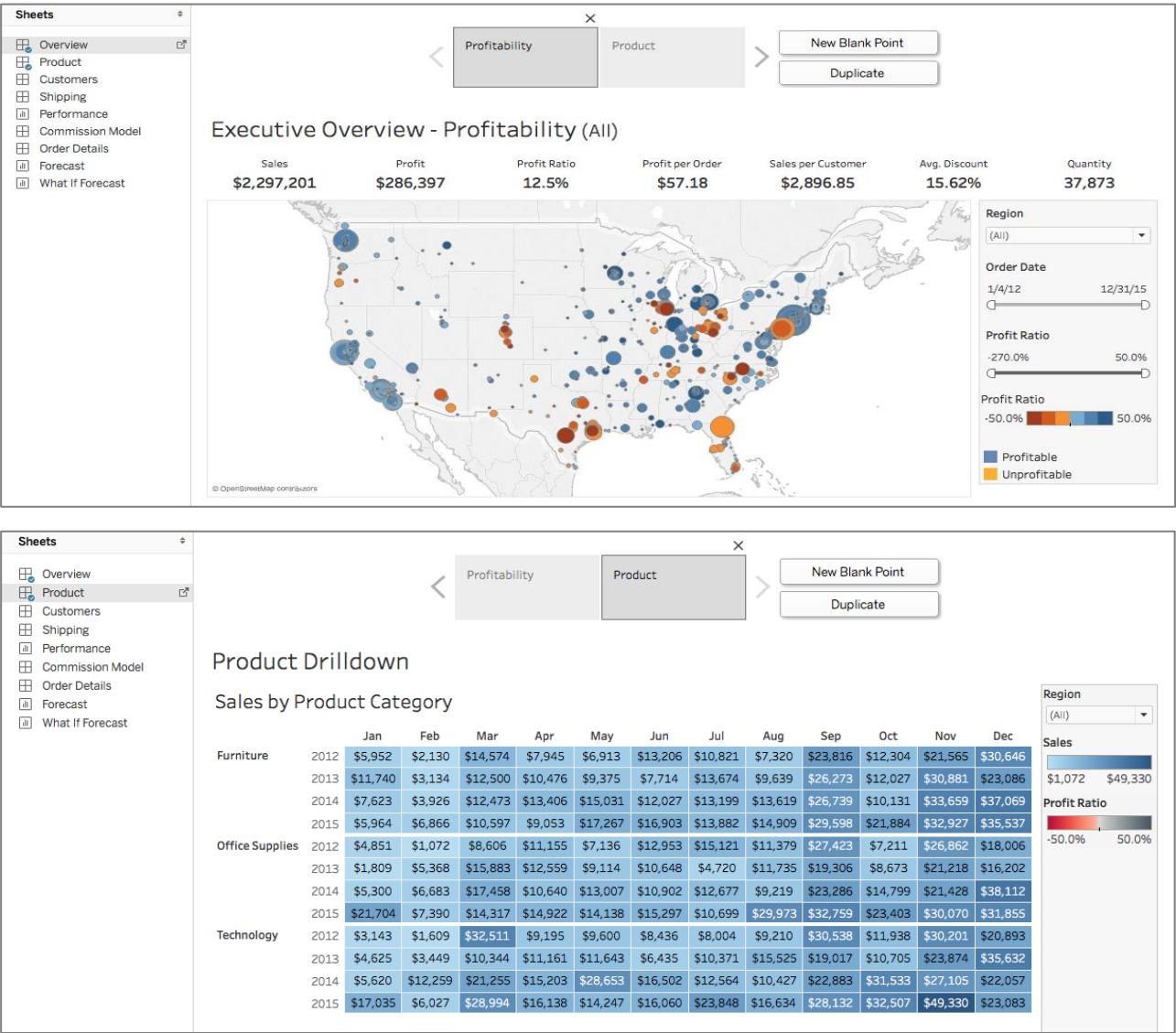
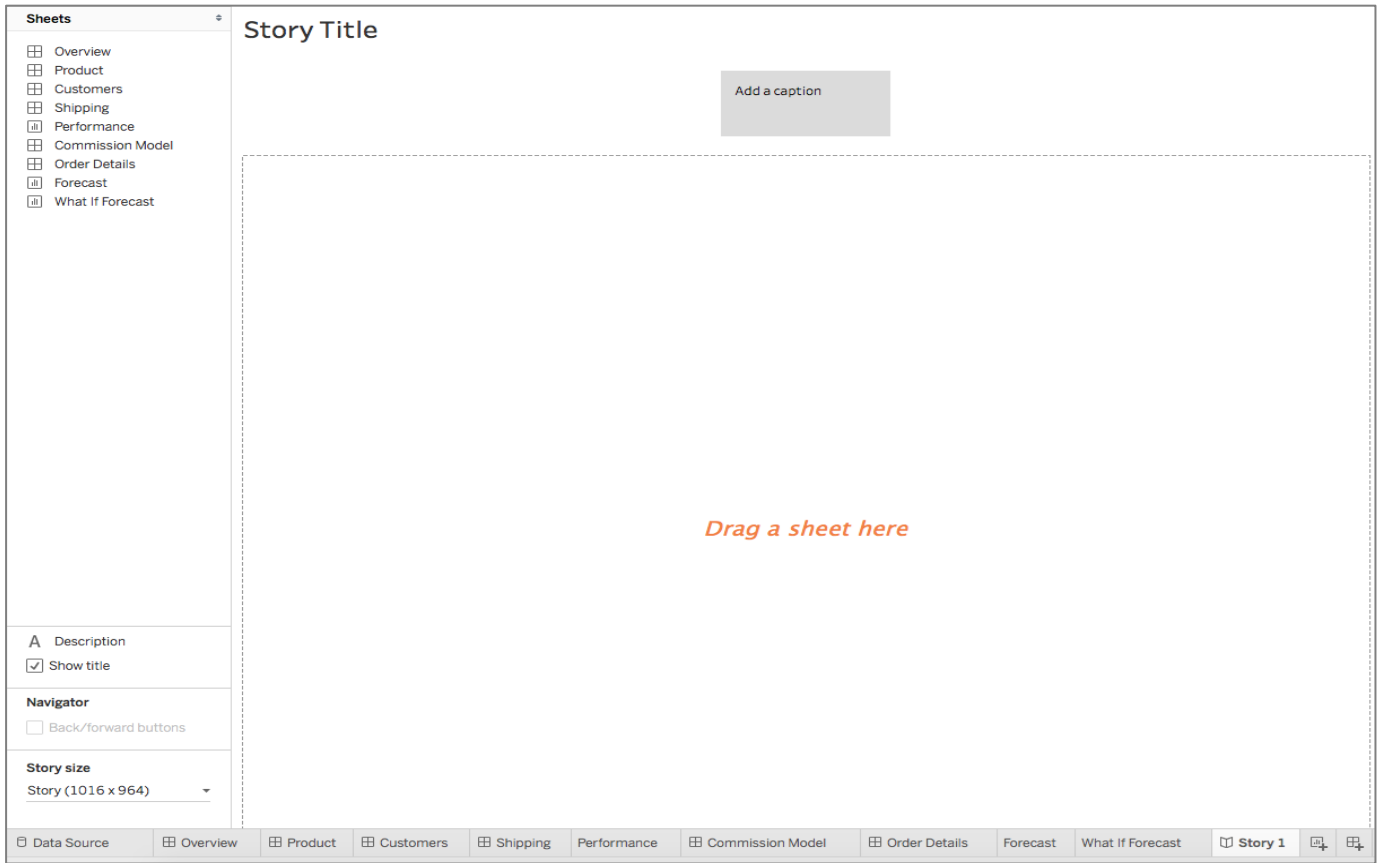


How to Build a Story

Stories are built like Dashboards - through drag and drop.

In this example, the user dragged the “Overview” Dashboard and the “Product” dashboard into a story.

Now, the user can click from one Dashboard to the next with the buttons at the top of the Story.



Creating Dashboards in Tableau

Topic 6: Sharing Dashboards

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Sharing Your Dashboards in Tableau

You can share your dashboards with others in the following ways:

- Via Tableau Public / Server
- Via Tableau Reader
- Exporting the Dashboards

Sharing Your Dashboards in Tableau

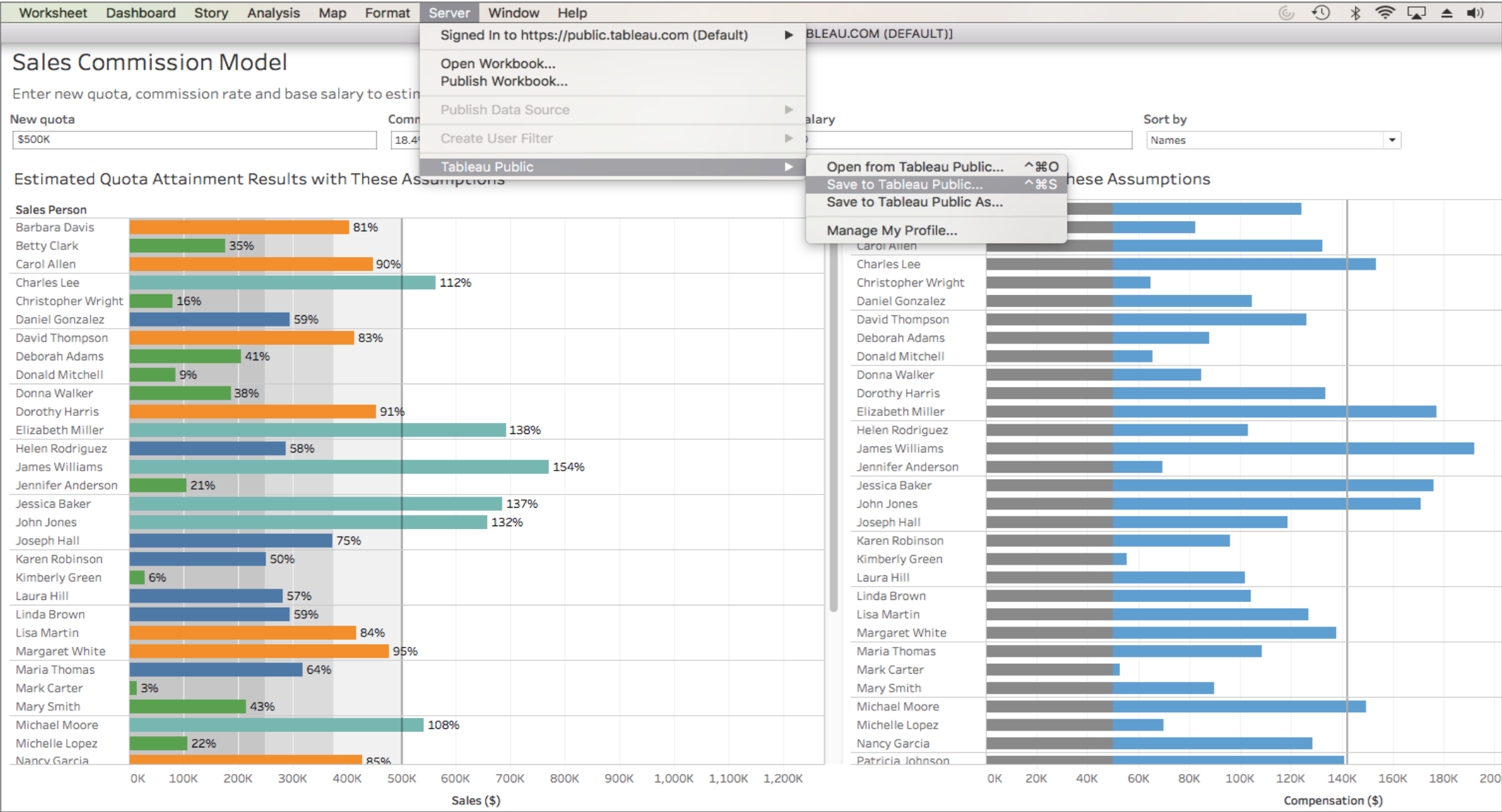
SHARING YOUR DASHBOARD VIA TABLEAU PUBLIC

Saving your Dashboard to Tableau Public (or Tableau Server) is quick and easy:

Sharing via
Tableau
public

Sharing via
Tableau
reader

Exporting
Dashboards



Sharing Your Dashboards in Tableau

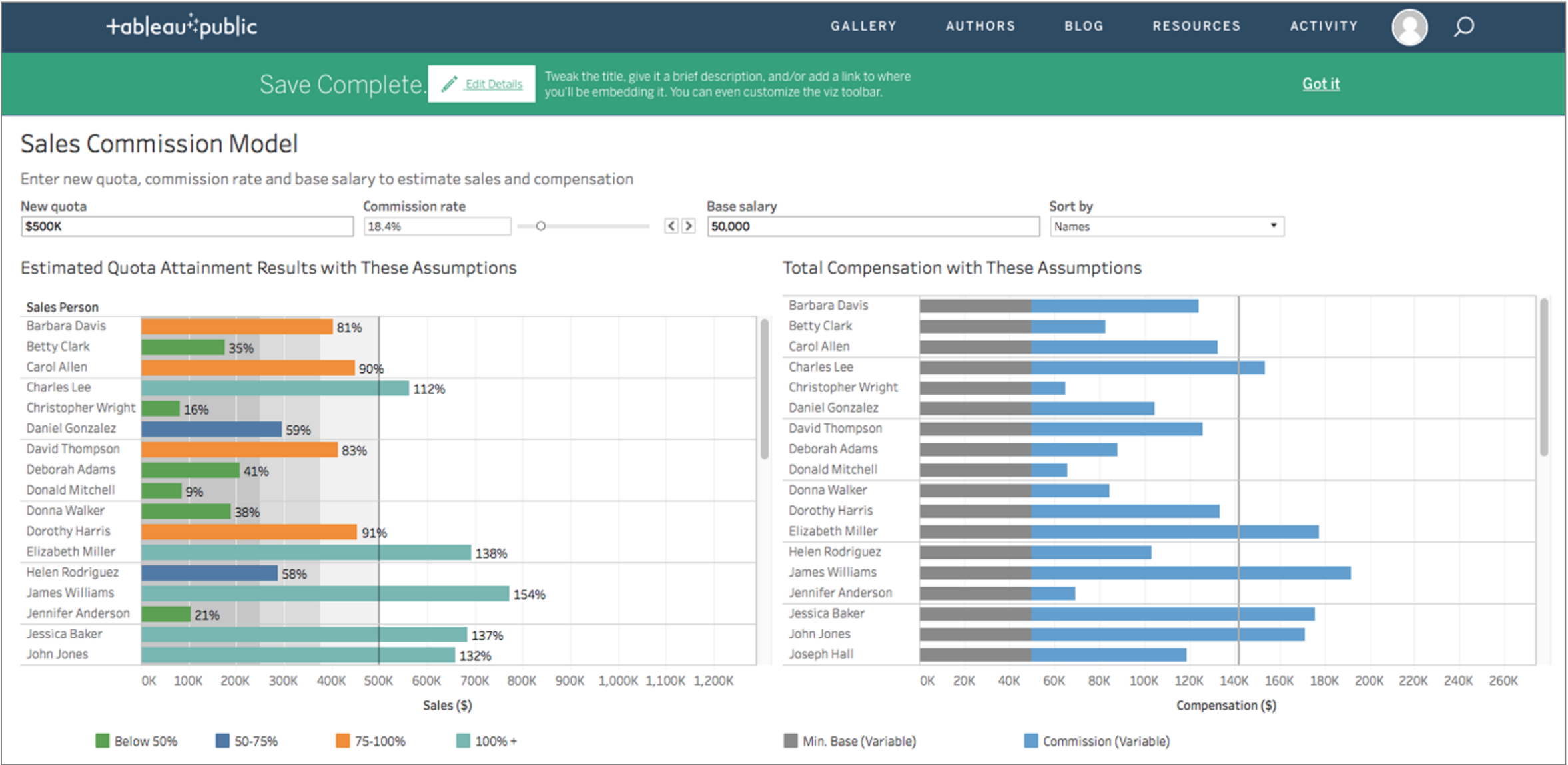
SHARING YOUR DASHBOARD VIA TABLEAU PUBLIC

Your Dashboard is posted to a webpage; email the URL to colleagues to share your work:

Sharing via
Tableau
public

Sharing via
Tableau
reader

Exporting
Dashboards



Sharing Your Dashboards in Tableau

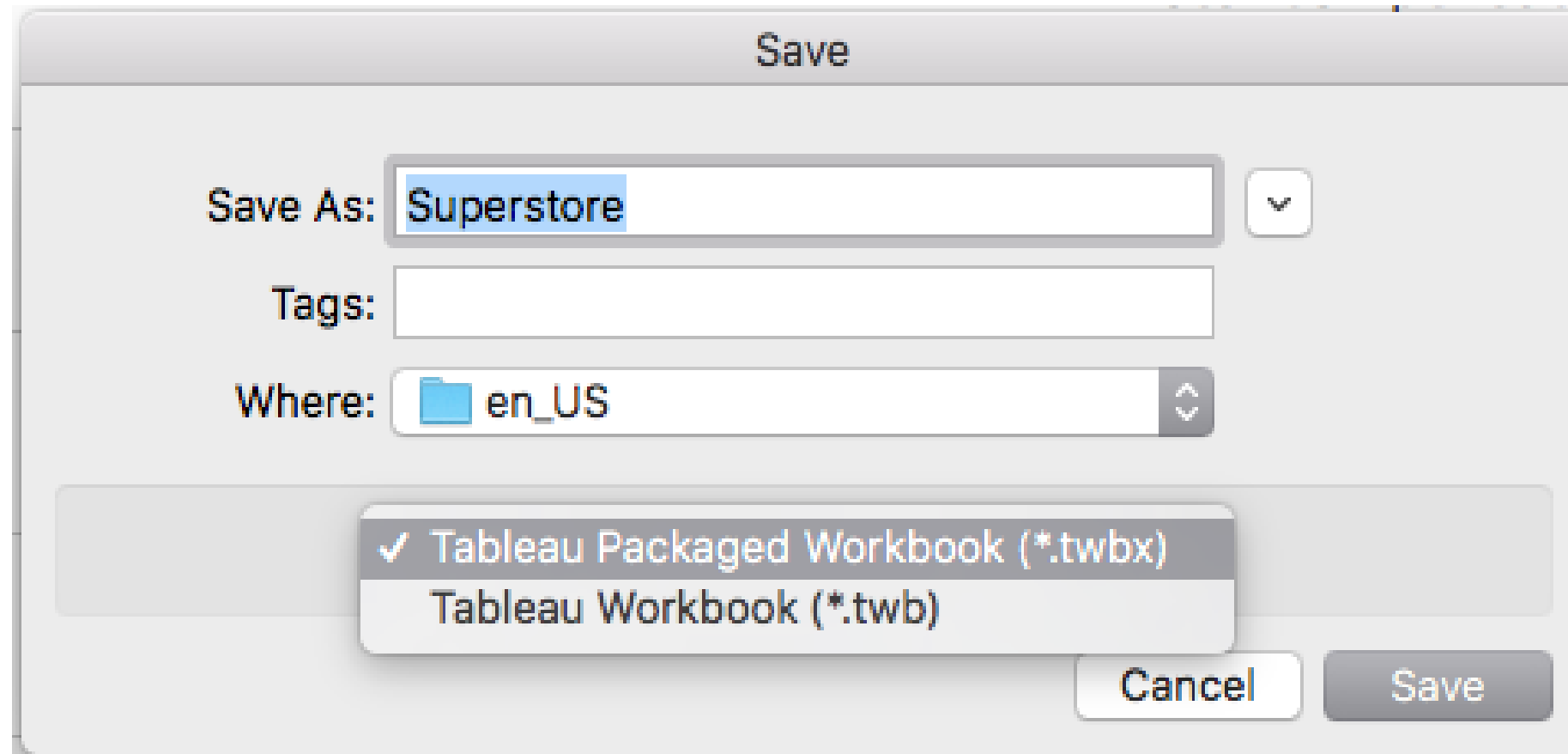
SHARING YOUR DASHBOARD VIA TABLEAU READER

Save your Dashboard as a Tableau Packaged Workbook; then email it to your colleagues (requires that the recipients have Tableau Reader installed on their PC):

Sharing via
Tableau
public

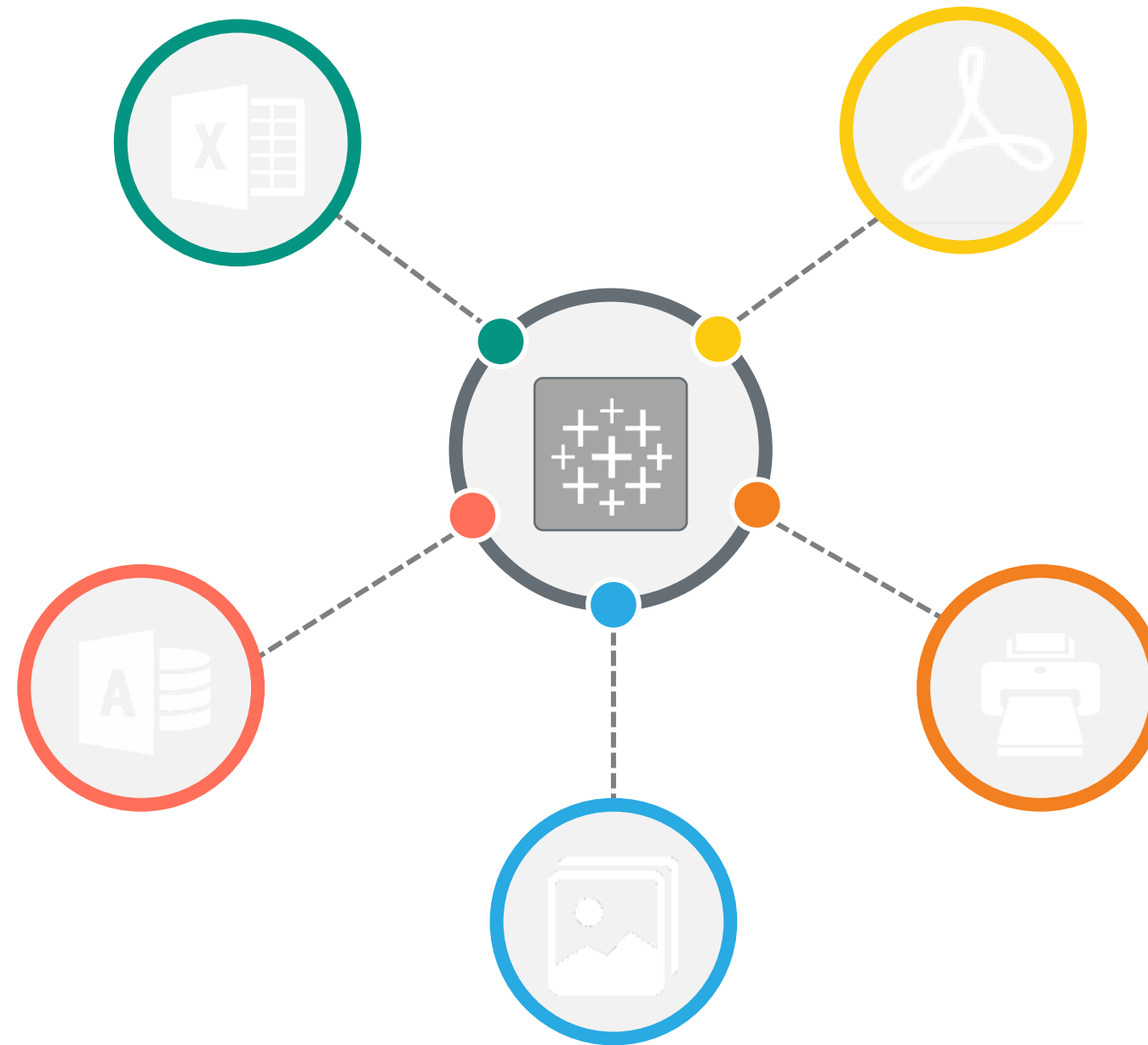
Sharing via
Tableau
reader

Exporting
Dashboards



Sharing Your Dashboards in Tableau

EXPORTING DASHBOARDS: FORMATS



Sharing via
Tableau
public

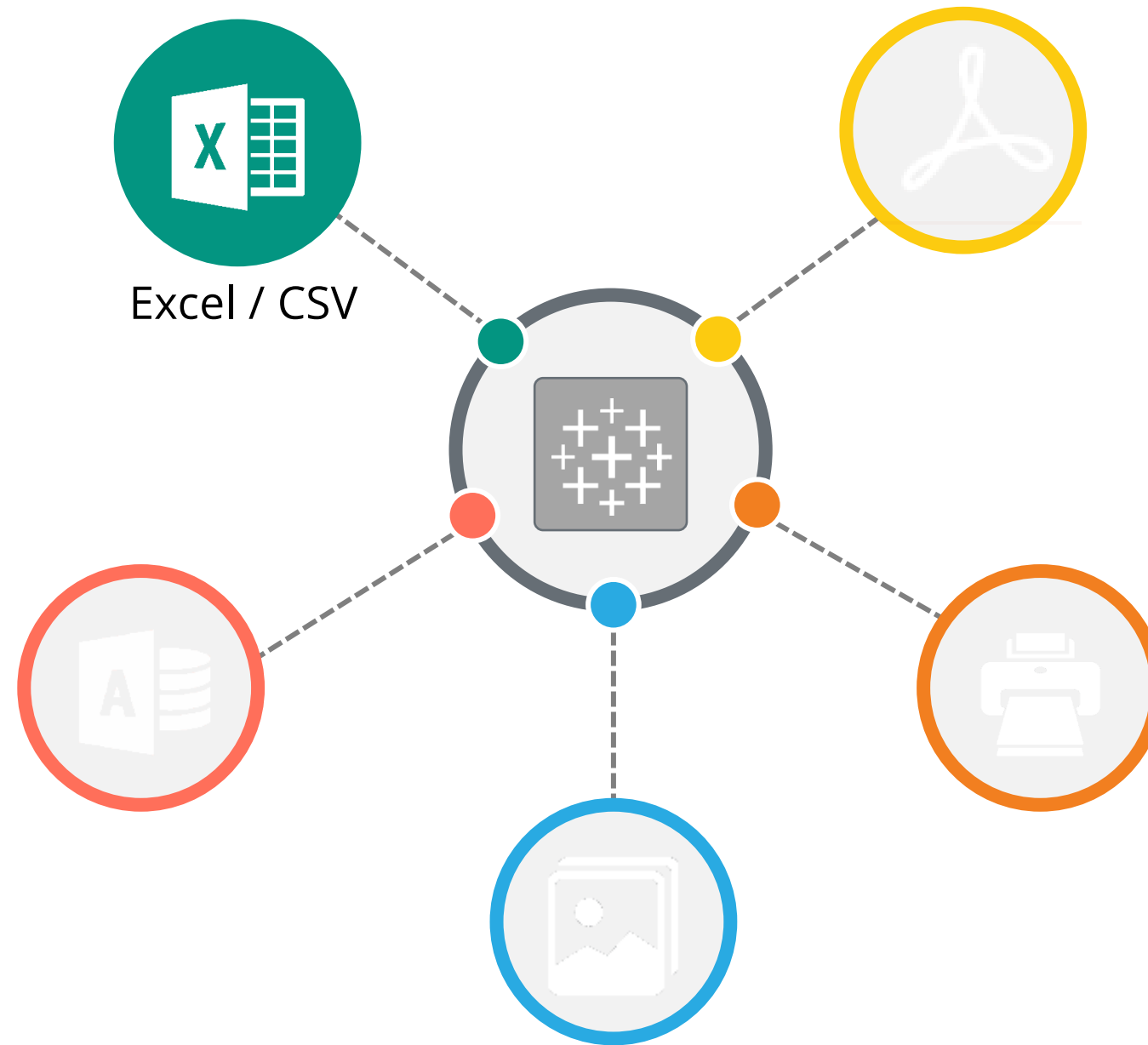
Sharing via
Tableau
reader

Exporting
Dashboards

Sharing Your Dashboards in Tableau

EXPORTING DASHBOARDS: FORMATS

- Sharing via Tableau public
- Sharing via Tableau reader
- Exporting Dashboards



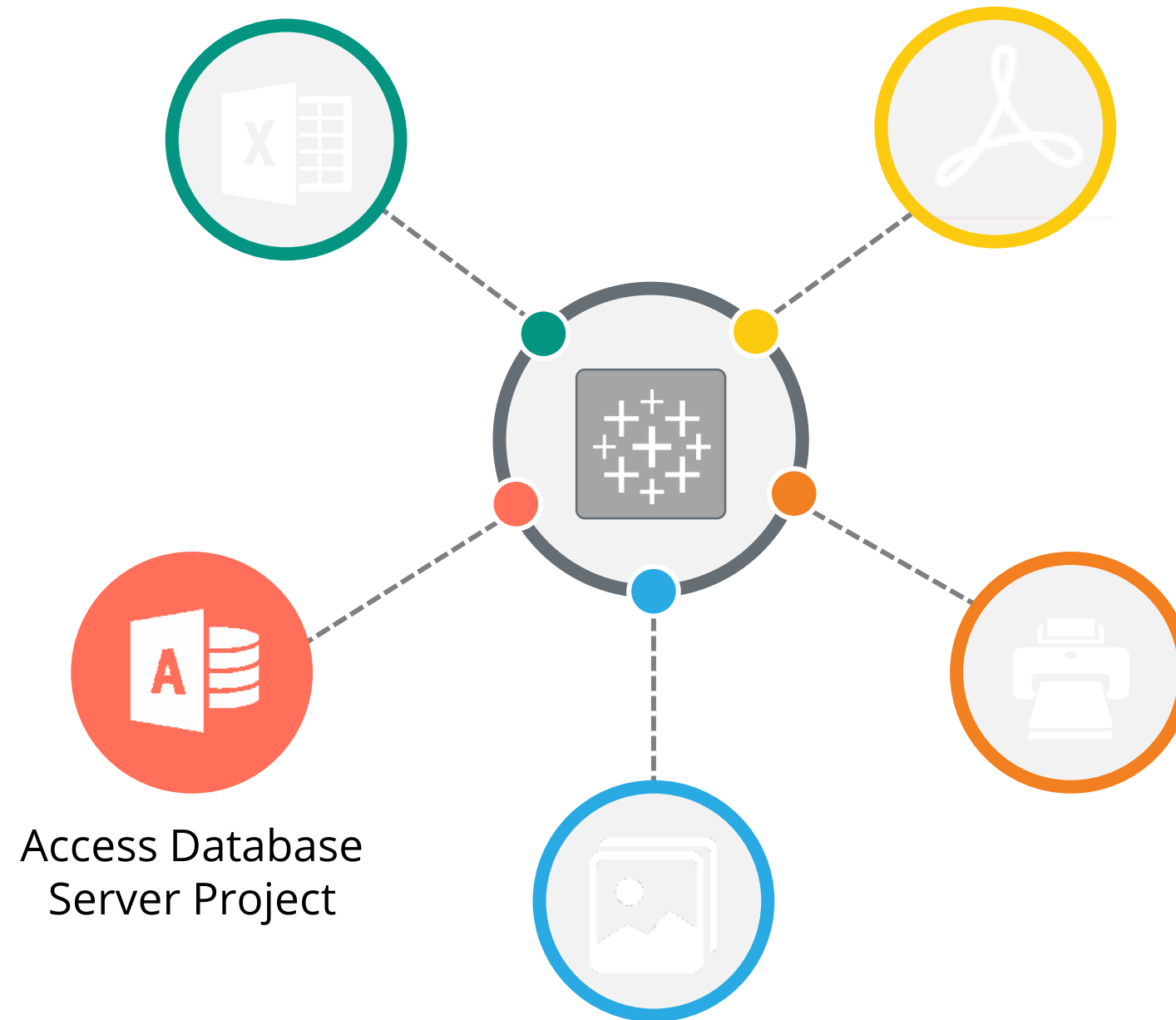
Sharing Your Dashboards in Tableau

EXPORTING DASHBOARDS: FORMATS

Sharing via
Tableau
public

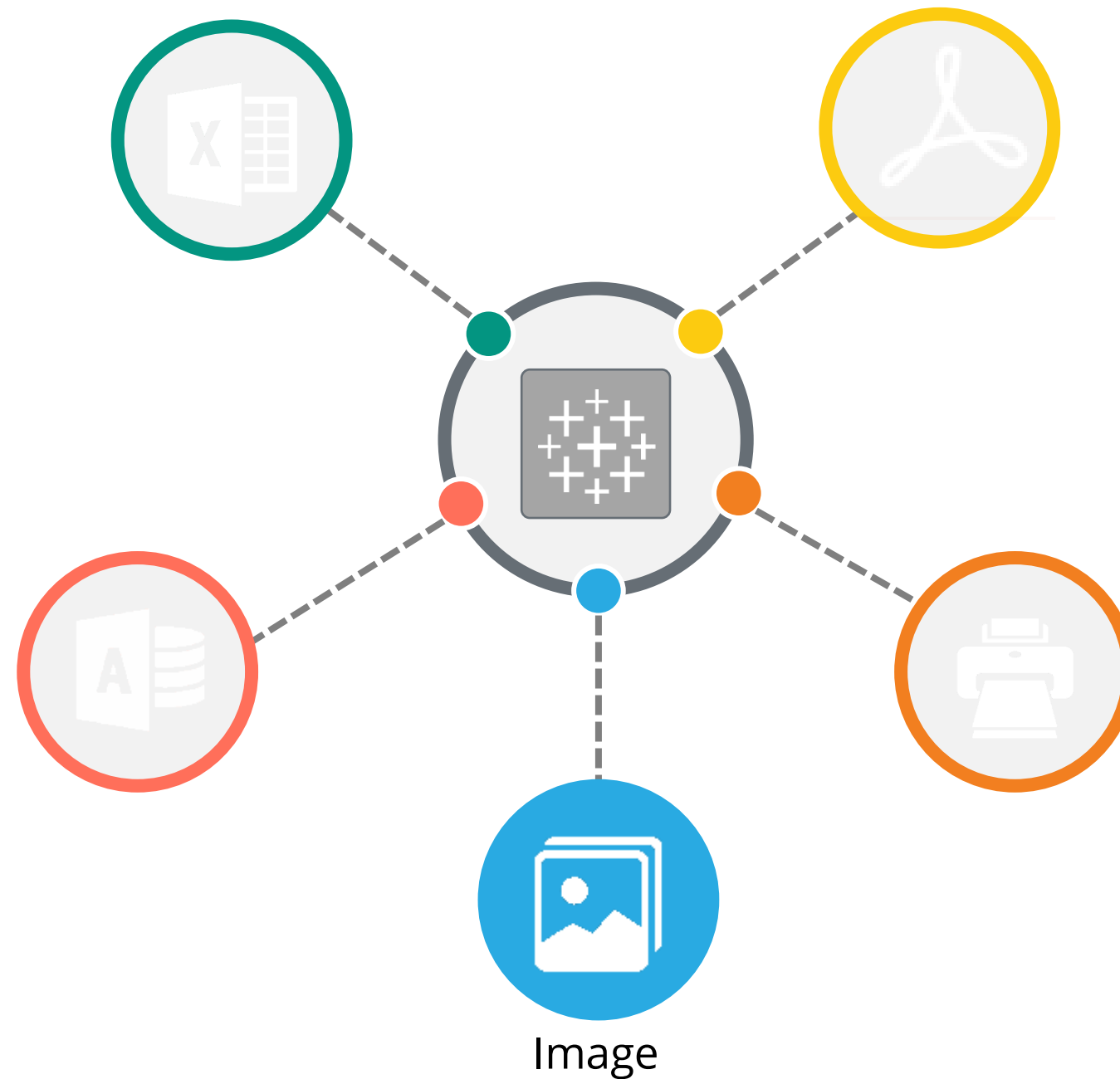
Sharing via
Tableau
reader

Exporting
Dashboards



Sharing Your Dashboards in Tableau

EXPORTING DASHBOARDS: FORMATS



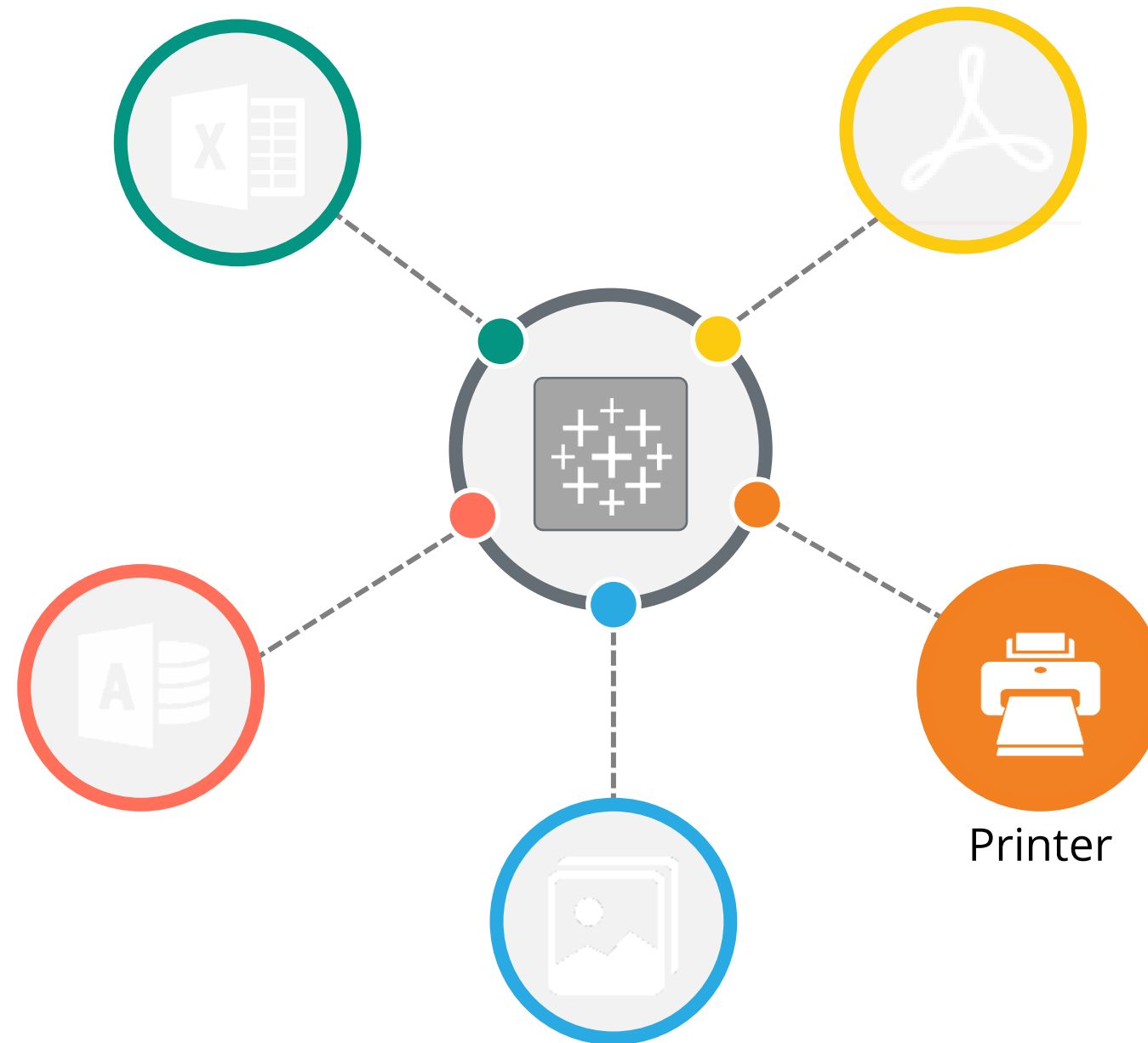
Sharing via
Tableau
public

Sharing via
Tableau
reader

Exporting
Dashboards

Sharing Your Dashboards in Tableau

EXPORTING DASHBOARDS: FORMATS



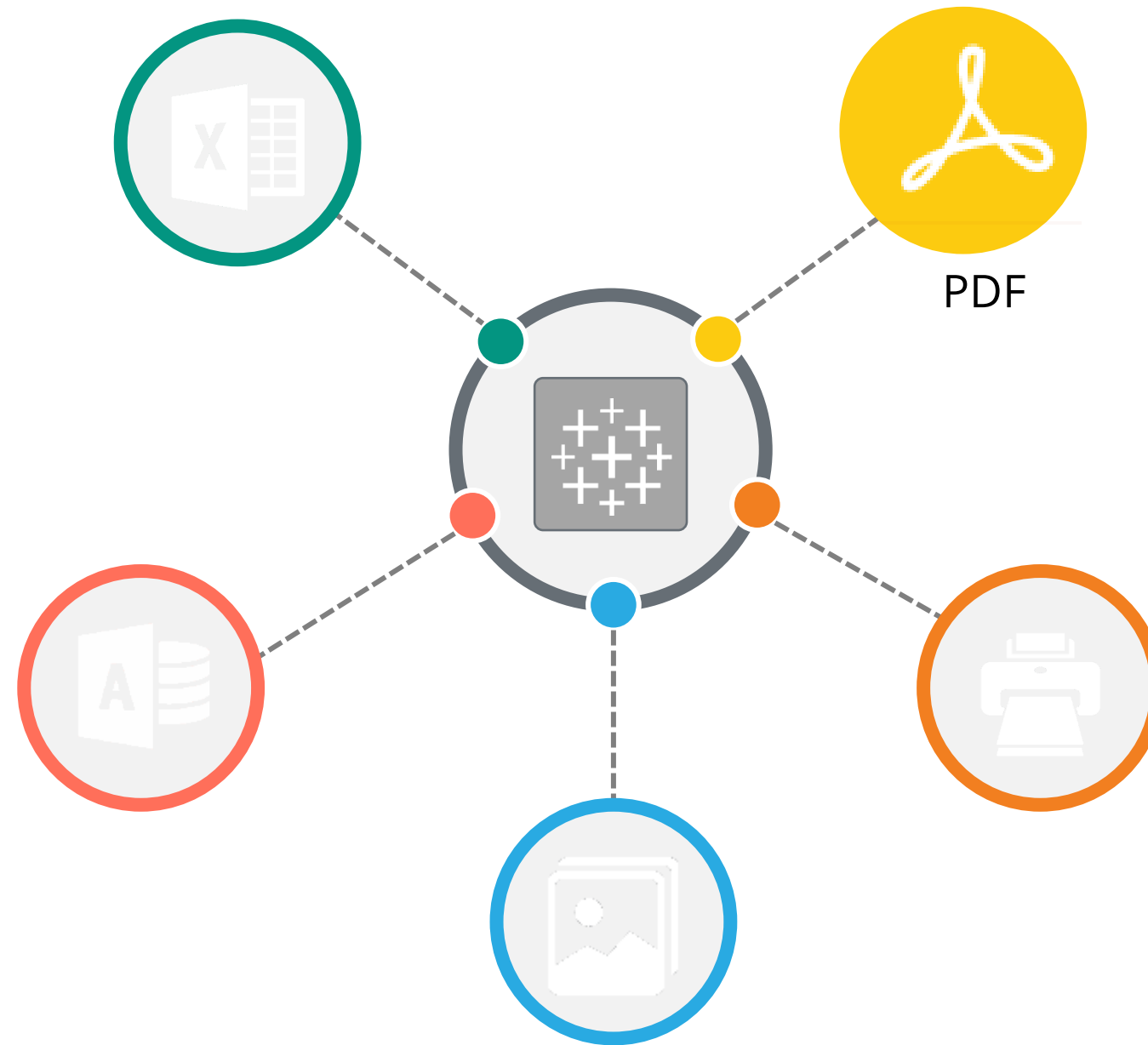
Sharing via
Tableau
public

Sharing via
Tableau
reader

Exporting
Dashboards

Sharing Your Dashboards in Tableau

EXPORTING DASHBOARDS: FORMATS



Sharing via
Tableau
public

Sharing via
Tableau
reader

Exporting
Dashboards



Quiz

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QUIZ 1

_____ actions are used to send information from a selected mark to another sheet showing related information.

- a. Filter
- b. Highlight
- c. URL
- d. None of the above



QUIZ 1

_____ actions are used to send information from a selected mark to another sheet showing related information.

- a. Filter
- b. Highlight
- c. URL
- d. None of the above



The correct answer is **a.**

Filter actions are used to send information from a selected mark to another sheet showing related information.

QUIZ 2

_____ actions allow you to call attention to marks of interest in the related view within a dashboard.

- a. Filter
- b. Highlight
- c. URL
- d. None of the above



QUIZ 2

_____ actions allow you to call attention to marks of interest in the related view within a dashboard.

- a. Filter
- b. Highlight
- c. URL
- d. None of the above



The correct answer is **b.**

Highlight actions allow you to call attention to marks of interest in the related view within a dashboard.

QUIZ 3

A sequence of visualizations arranged in a sequence to convey information is called a ____

- a. Dashboard
- b. Story
- c. Worksheet
- d. Action



QUIZ 3

A sequence of visualizations arranged in a sequence to convey information is called a ____

- a. Dashboard
- b. Story
- c. Worksheet
- d. Action



The correct answer is **b.**

A Story is a sequence of visualizations arranged in a sequence to “tell a story” to the user.

QUIZ 4

Which of the following formats will you use to save your work with a local copy of the dataset?

- a. Workbook
- b. Bookmark
- c. Packaged workbook
- d. Crosstab to excel



QUIZ 4

Which of the following formats will you use to save your work with a local copy of the dataset?

- a. Workbook
- b. Bookmark
- c. Packaged workbook
- d. Crosstab to excel



The correct answer is **c.**

Packaged workbook will be used to save the work with a local copy of the dataset.

Guided Exercise

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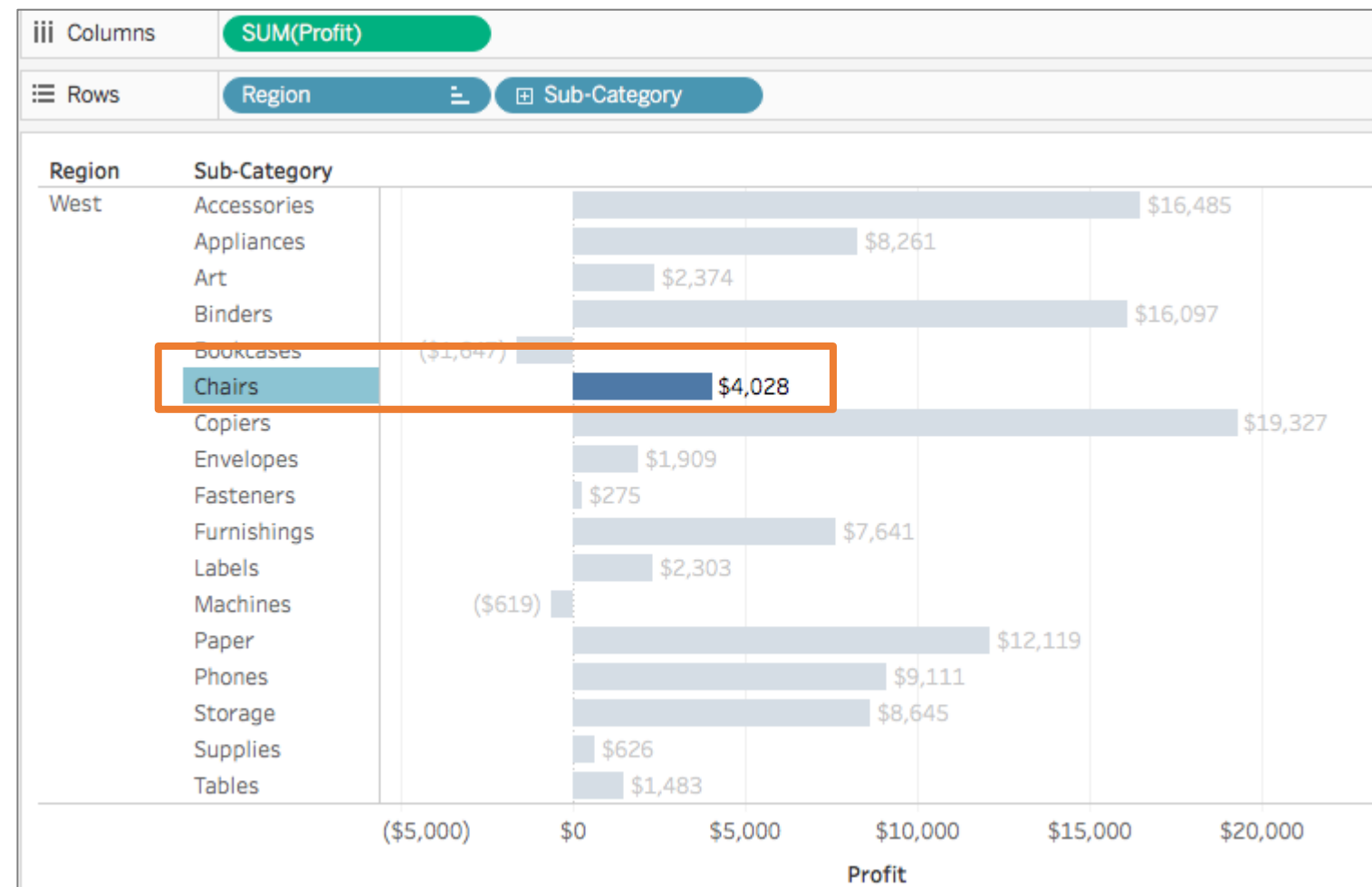
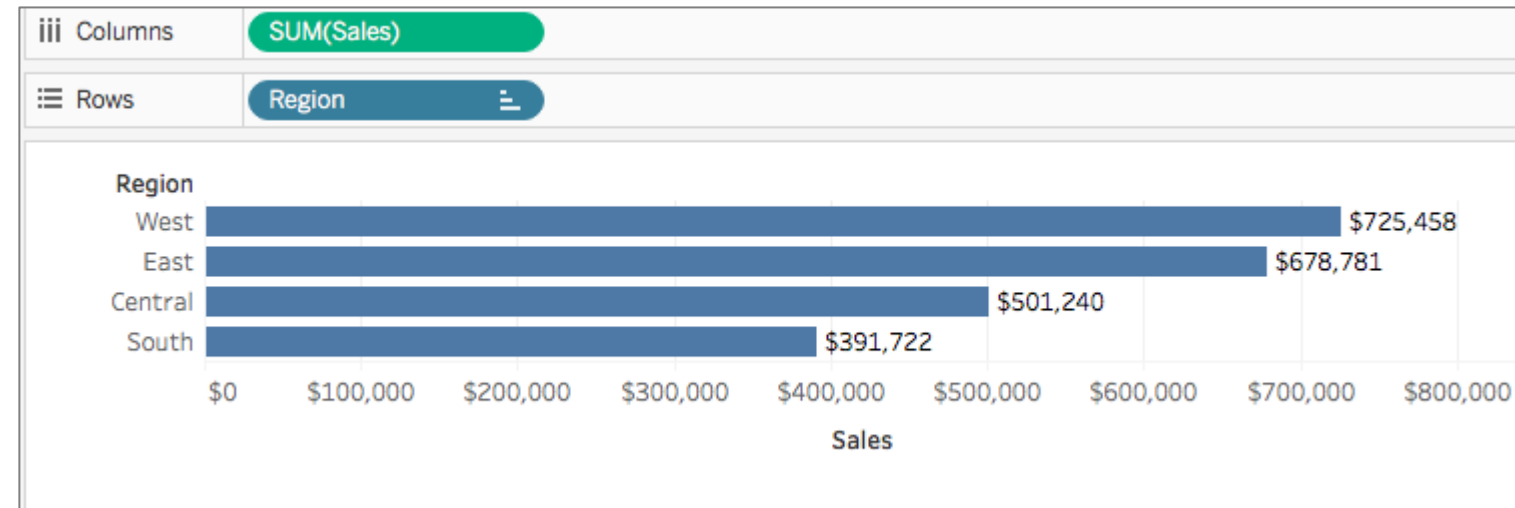
Problem Statement

In today's business world, maintaining steady economic growth has become the most important factor for any enterprise. Keeping this in mind, a U.S.-based retail company is strategizing to improve business in low performing areas as well as extend its outlets in areas that contribute the maximum to sales and profit. For this, Mark Anthony, the general manager of the company, needs a 360-degree view of region, state, subcategory, sales, and profit. This will help him determine the regions and states eligible for concession campaigns and loyalty programs.

- What is the profit of the chairs sub-category in the region with the highest sales?
(Hint-Sort region with respect to sales in descending order, select the region with highest sales, observe profit made by chairs sub-category)
- In East Region, which subcategory recorded the highest sales?
(Hint-Select East Region in the Sales contribution sheet)

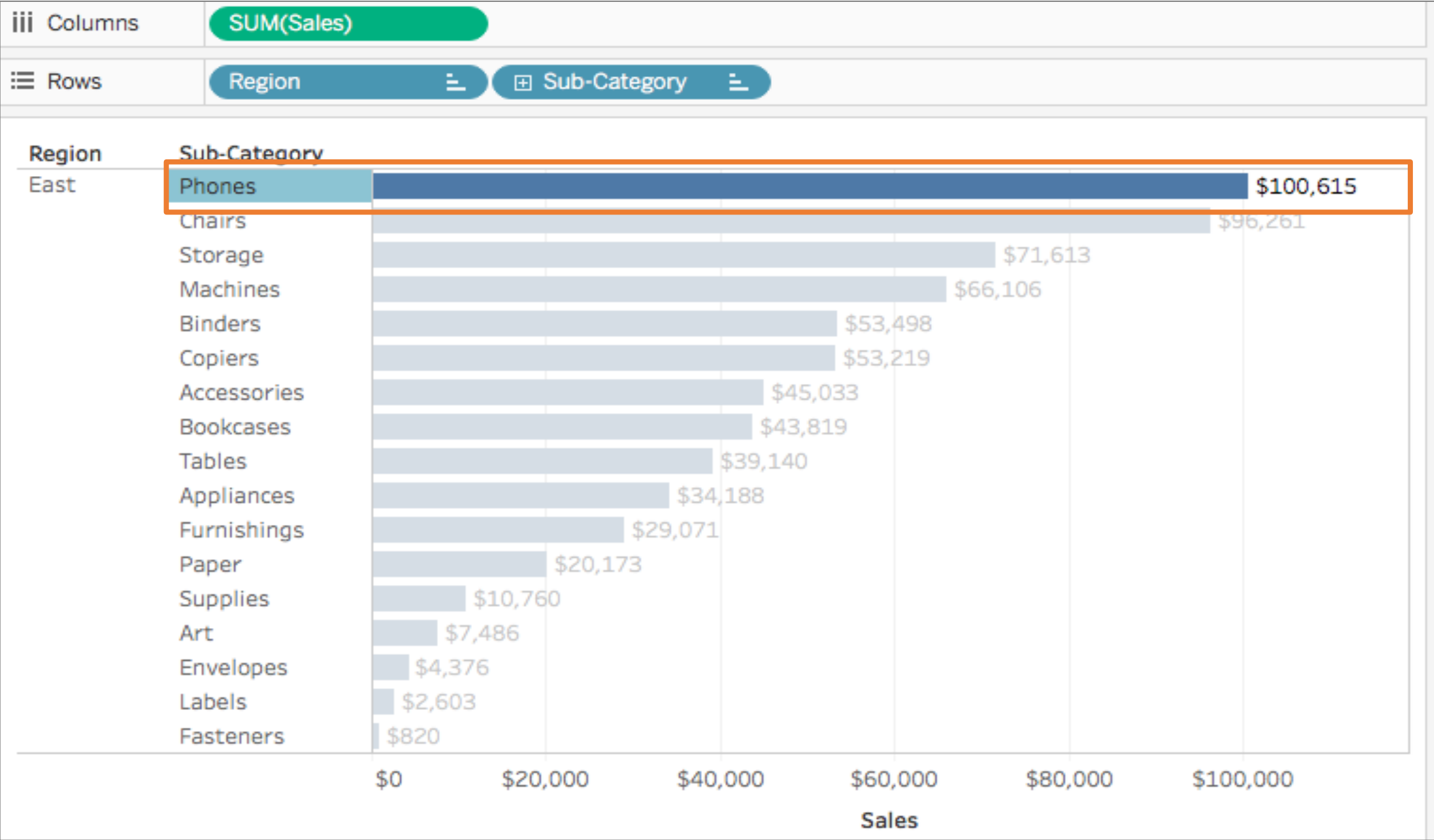
Solution

What is the profit of the chairs sub-category in the region with the highest sales?



Solution

In the East Region, which subcategory recorded the highest sales?



Key Takeaways

- A dashboard is created with multiple worksheets.
- Tableau allows you to add context and interactivity to your data using actions like filtering, highlighting, and linking via URL actions.
- Depending on the way the action is created, you can trigger an action by using the hover, click, or menu option.
- Your work can be saved either as a workbook, packaged workbook, or as a bookmark.

This concludes “Creating Dashboards in Tableau.”