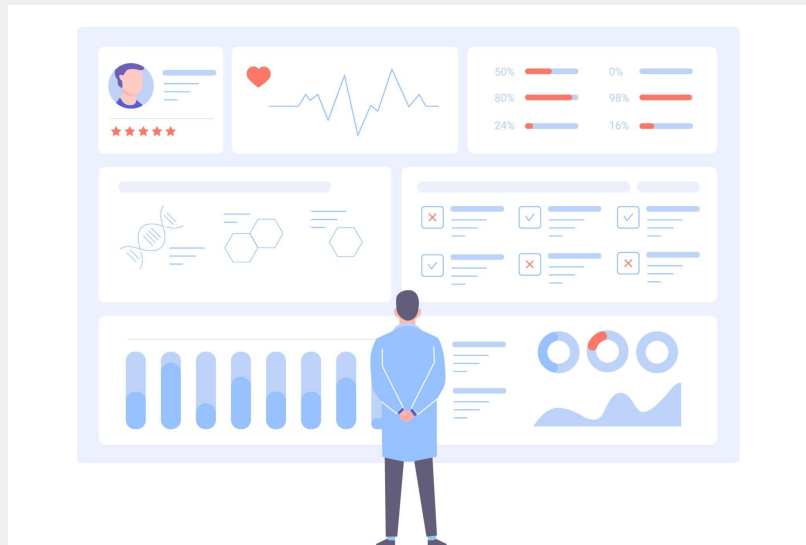


Tableau

Building Your First Interactive Dashboard





DOWNLOADS

tableau.com/products/public/download

github.com/Samuel-Lawrence495/Workshop-Tutorial.git

Contents

What is Tableau

INTRODUCTION

Visualizing Data

LAB 1

EXERCISE 1

Dashboard Creation

LAB 2

EXERCISE 2

Dashboard Refinement

LAB 3

EXERCISE 3

Introduction to Tableau

- What is Tableau?
- Why use Tableau for data visualization?
- Key features and capabilities

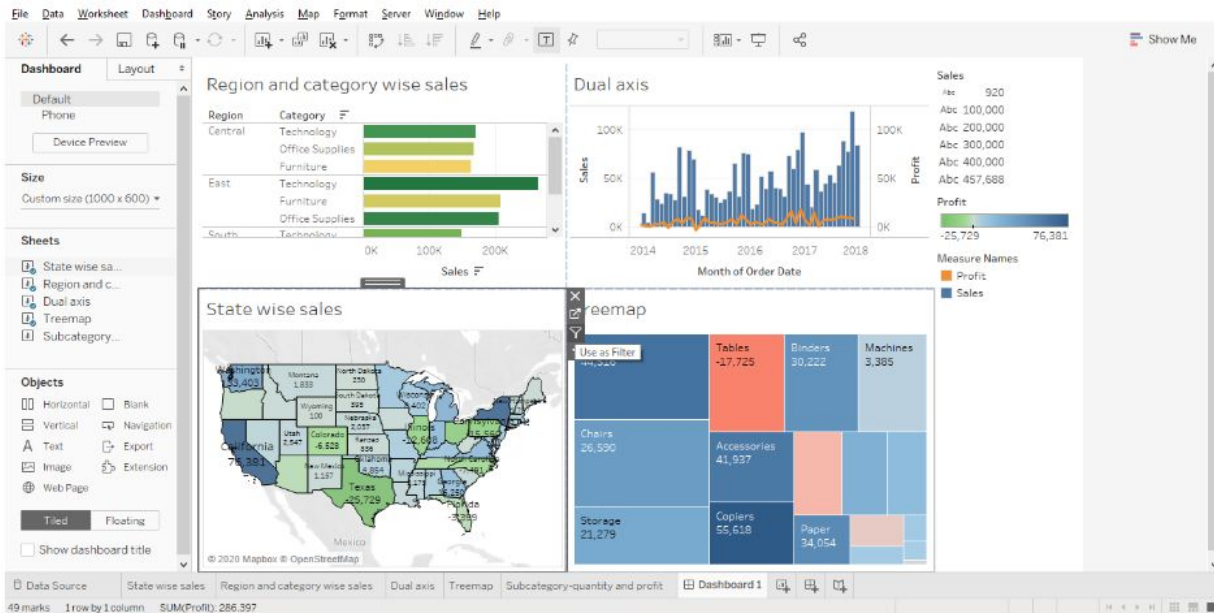
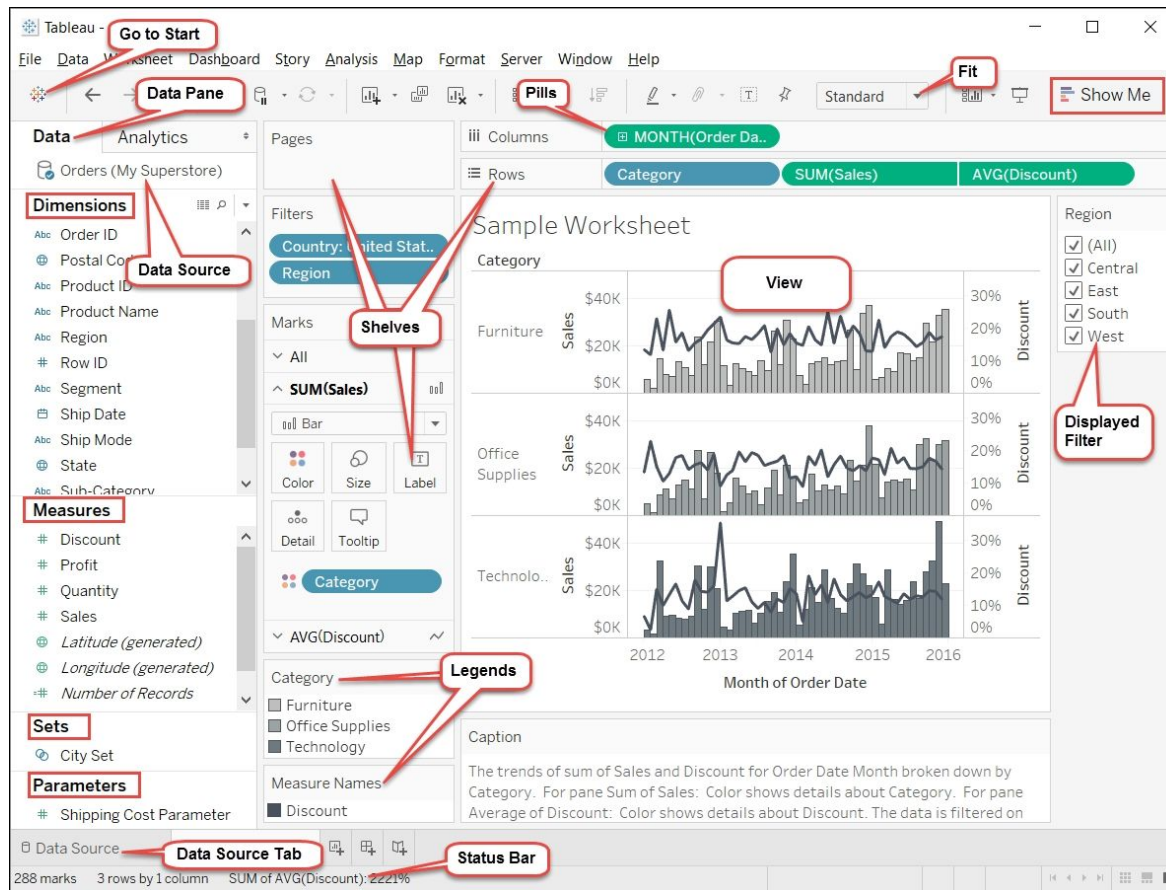


Tableau Interface





Lab

Dataset

Features:

- Bookings
- Guests
- Financials

Goal:

- Analyze revenue
- Analyze cancellations



Connect

To a File

Microsoft Excel

Text file

JSON file

Microsoft Access

PDF file

Spatial file

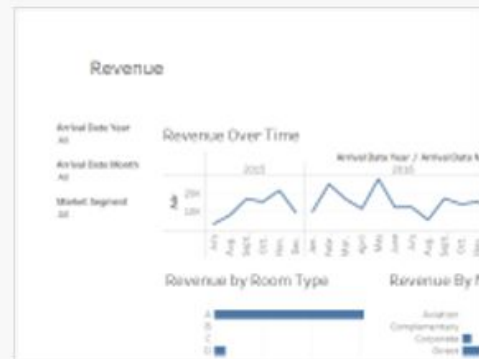
Statistical file

To a Server

OData

More...

Open



Book1

Create a Visualization

Features:

- Bookings
- Guests
- Financials

Goal:

- Analyze revenue
- Analyze cancellations

Tableau Desktop Public Edition

Connections

Files

☒ Loading...
Data Interpreter might be able to clean your Text file workbook.

hotel_booking.csv

New Union

New Table Extension

hotel_booking.csv

36 fields 119390 rows

Name
hotel_booking.csv

Fields

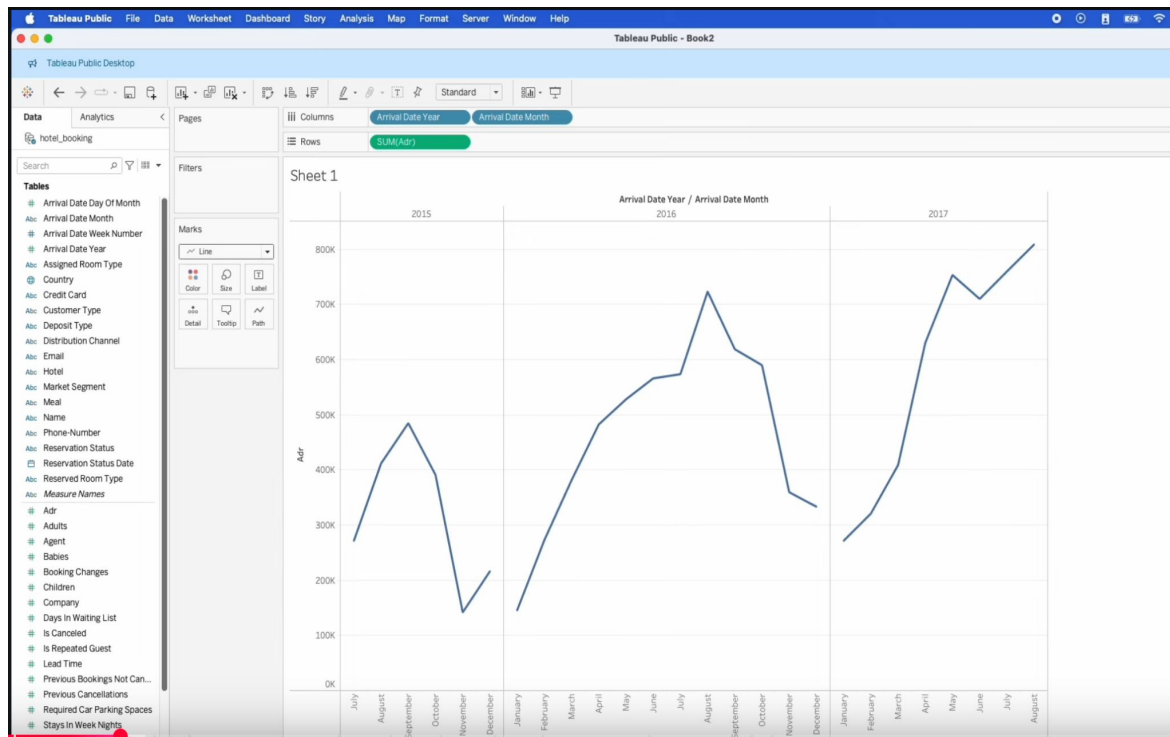
| Type | Field Name | Physical ... | Rem... |
|------|-------------|--------------|-----------|
| Abc | Hotel | hotel_bo... | hotel |
| # | Is Canceled | hotel_bo... | is_can... |

Data Source

Sheet 1

Lab 1 - Connecting our Data & Creating First Chart

Goal: Connect to our data and create a basic line chart showing revenue over time.



1. Drag Adr (Measure) to Rows (becomes SUM(Adr)).
2. Drag Arrival Date Year (Dimension) to Columns.
3. Drag Arrival Date Month (Dimension) to Columns (after Year).
4. Set Marks type to "Line".
5. Double-click "Sheet 1" tab.
6. Rename to Revenue Trend. Press Enter.



Lab

Creating a Dashboard

Tableau Tutorial

Arrival Date Month

(All)

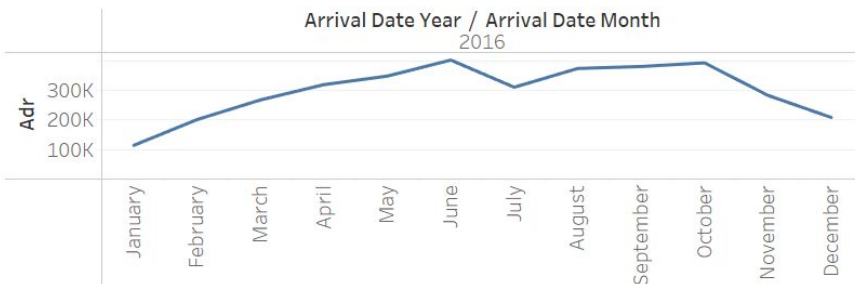
Arrival Date Year

2016

Action (Market Segme..

(All)

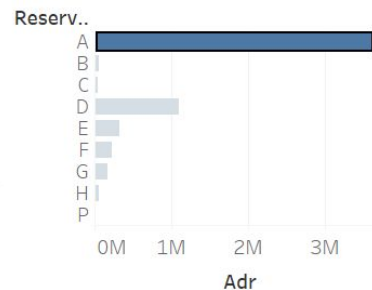
Revenue Over Time



Revenue by Market Segment



Revenue by Room Type





Standard



Show Me

Data Analytics

hotel_booking

Search

Tables

Arrival Date Year

Assigned Room Type

Country

Credit Card

Customer Type

Deposit Type

Distribution Channel

Email

Hotel

Market Segment

Meal

Name

Phone-Number

Reservation Status

Reservation Status Date

Reserved Room Type

Measure Names

Adr

Adults

Pages

Columns

Rows

Filters

Marks

Automatic

Color

Size

Text




















Detail

Tooltip

Sheet 4

Drop field here

Drop field here



Data

Analytics

hotel_booking

Search

Filter

Columns

Tables

Arrival Date Year

Assigned Room Type

Country

Credit Card

Customer Type

Deposit Type

Distribution Channel

Email

Hotel

Market Segment

Meal

Name

Phone-Number

Reservation Status

Reservation Status Date

Reserved Room Type

Measure Names

Adr

Adults

Columns

Rows

Filters

Sheet 4

Marks

Automatic

Color

Size

Text

Detail

Tooltip

Drop field here

Drop field here

Tableau Light

15

B

I

U

Insert

Revenue my Market Segment

Reset

OK

Cancel

Apply

Data Source

Revenue Over Time

Revenue by Market Segment

Revenue by Room Type

Dashboard 1

Sheet 4



Standard



Data

Analytics

hotel_booking

Search

Tables

Distribution Channel

Email

Hotel

Market Segment

Meal

Name

Phone-Number

Reservation Status

Reservation Status Date

Reserved Room Type

Measure Names

Adr

Adults

Agent

Babies

Booking Changes

Children

Company

Days In Waiting List

Pages

Columns

SUM(Adr)

Rows

Market Segment

Filters

Arrival Date Mon..

Arrival Date Year

Market Segment

Marks

Automatic



Color



Size



Label



Detail



Tooltip

Revenue my Market Segment

Market Segment

Aviation

Complementary

Corporate

Direct

Groups

Offline TA/TO

Online TA

Undefined

0K 500K 1000K 1500K 2000K 2500K 3000K 3500K 4000K 4500K 5000K

Adr



Data Analytics

hotel_booking

Search

Tables

- Abc Distribution Channel
- Abc Email
- Abc Hotel
- Abc Market Segment
- Abc Meal
- Abc Name
- Abc Phone-Number
- Abc Reservation Status
- Abc Reservation Status Date
- Abc Reserved Room Type
- Abc Measure Names
- # Adr
- # Adults
- # Agent
- # Babies
- # Booking Changes
- # Children
- # Company
- # Days In Waiting List

Pages

Filters

- Arrival Date Mon..
- Arrival Date Year
- Market Segment

Marks

Automatic

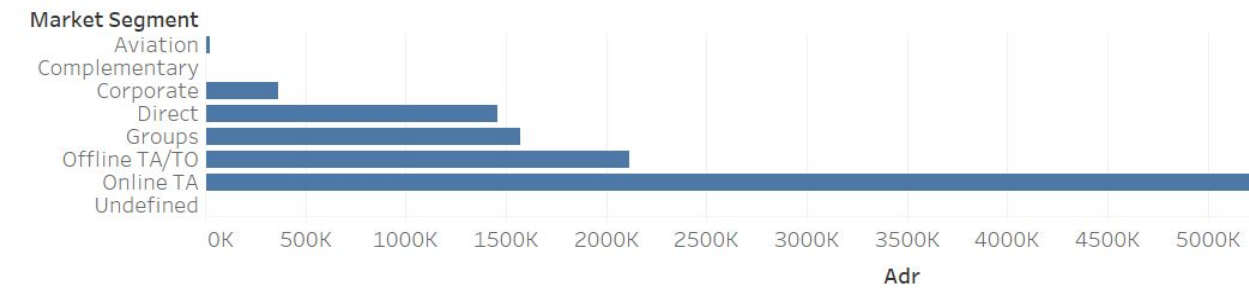
Color Size Label

Detail Tooltip

Columns SUM(Adr)

Rows Market Segment

Revenue my Market Segment



The screenshot shows the Tableau Desktop interface. On the left, the 'Data' pane lists fields from the 'hotel_booking' dataset, including 'Distribution Channel', 'Email', 'Hotel', 'Market Segment', 'Meal', 'Name', 'Phone-Number', 'Reservation Status', 'Reservation Status Date', 'Reserved Room Type', and 'Measure Names'. The 'Marks' card is set to 'Automatic'. The main workspace is titled 'Sheet 5', which is circled in red. The 'Columns' and 'Rows' shelves are empty. The 'Drop field here' text is visible in the workspace. An 'Edit Title' dialog box is open in the center, with the title 'Revenue by Room Type' entered and underlined in red. The 'OK' button in the dialog is also circled in red. The dialog includes a font family dropdown (Tableau Light), a font size dropdown (15), and buttons for Bold (B), Italic (I), Underline (U), and Insert. The 'Reset', 'OK', 'Cancel', and 'Apply' buttons are at the bottom of the dialog.

Tableau Desktop Public Edition

Buy

hotel_booking

Search

Tables

- Distribution Channel
- Email
- Hotel
- Market Segment
- Meal
- Name
- Phone-Number
- Reservation Status
- Reservation Status Date
- Reserved Room Type
- Measure Names

ADR

Adults

Agent

Babies

Booking Changes

Analytics

Pages

Columns

Rows

Filters

Marks

Automatic

Color

Size

Text

Detail

Tooltip

Drop field here

Sheet 5

Drop field here

Edit Title

Tableau Light 15 B I U Insert

Revenue by Room Type

Reset OK Cancel Apply

Select or drag data

Use the Shift or Ctrl keys to select multiple fields

←
→
↶
↷
↺
↻
↱
↲
↳
↴
↵
↶
↷
↺
↻
↱
↲
↳
↴
↵
Standard
↶
↷
↺
↻
↱
↲
↳
↴
↵

Show Me

Data Analytics

hotel_booking

Search

Tables

- Abc Distribution Channel
- Abc Email
- Abc Hotel
- Abc Market Segment
- Abc Meal
- Abc Name
- Abc Phone-Number
- Abc Reservation Status
- Abc Reservation Status Date
- Abc Reserved Room Type
- Abc Measure Names
- # Adr
- # Adults
- # Agent
- # Babies
- # Booking Changes
- # Children
- # Company
- # Days In Waiting List

Filter by

- Arrival Date Mon..
- Arrival Date Year
- Market Segment

Marks

Automatic

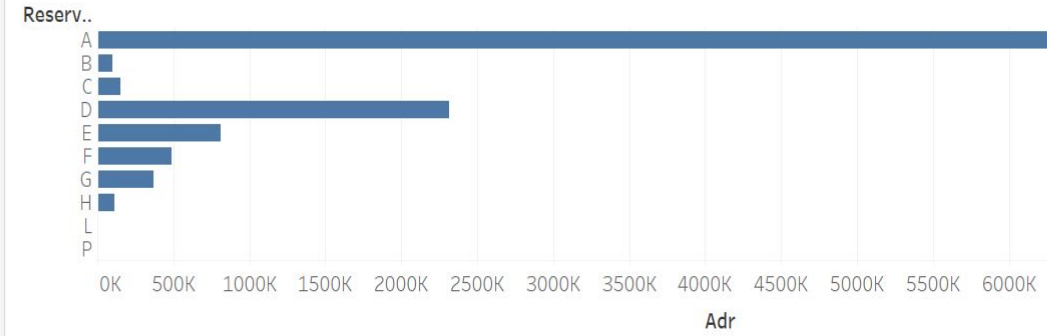
Columns

SUM(Adr)

Rows

Reserved Room Type

Revenue by Room Type



For horizontal bars try

0 or more Dimensions

1 or more Measures



Data Analytics

hotel_booking

Search

Tables

- Abc Distribution Channel
- Abc Email
- Abc Hotel
- Abc Market Segment
- Abc Meal
- Abc Name
- Abc Phone-Number
- Abc Reservation Status
- Abc Reservation Status Date
- Abc Reserved Room Type
- Abc Measure Names
- # Adr
- # Adults
- # Agent
- # Babies
- # Booking Changes
- # Children
- # Company
- # Days In Waiting List

Pages

Filters

- Arrival Date Mon..
- Arrival Date Year
- Market Segment

Marks

Automatic

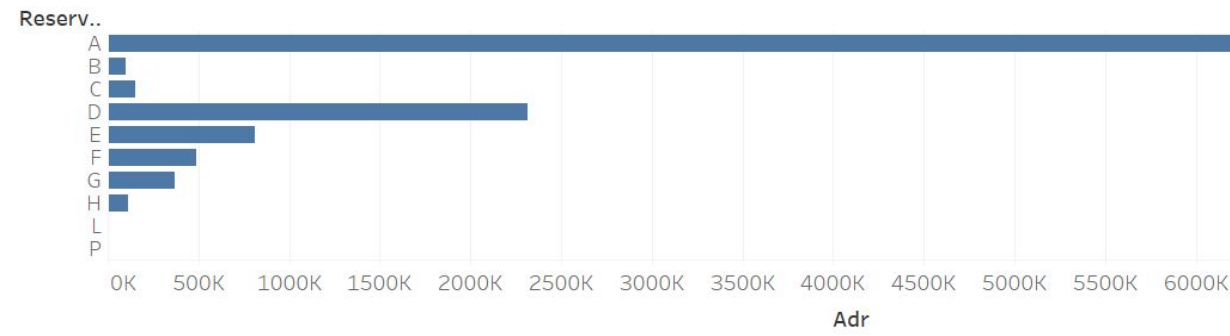
Color Size Label

Detail Tooltip

Columns SUM(Adr)

Rows Reserved Room Type

Revenue by Room Type





Dashboard Layout

Default
Phone

Device Preview

Size
min 420x560 - max 650x860

- Sheets
- Revenue Over ...
 - Revenue by ...
 - Revenue by ...

- Objects
- Horizontal Container
 - Vertical Container
 - Text
 - Extension
- Tiled** Floating
- Show dashboard title

Drop sheets here



Standard



Dashboard

Layout

Default

Phone

Device Preview

Size

min 420x560 - max 650x860

Sheets

Revenue Over ...

Revenue by ...

Revenue by ...

Objects

Horizontal Container

Vertical Container

Text

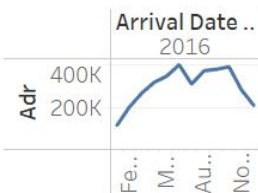
Extension

Tiled

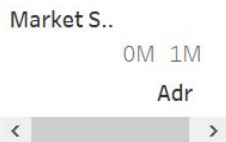
Floating

Show dashboard title

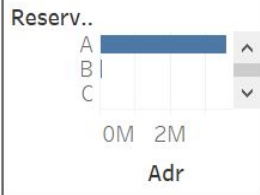
Revenue Over Time



Revenue by Market Segment



Revenue by Room Type





Lab

Adding a Title

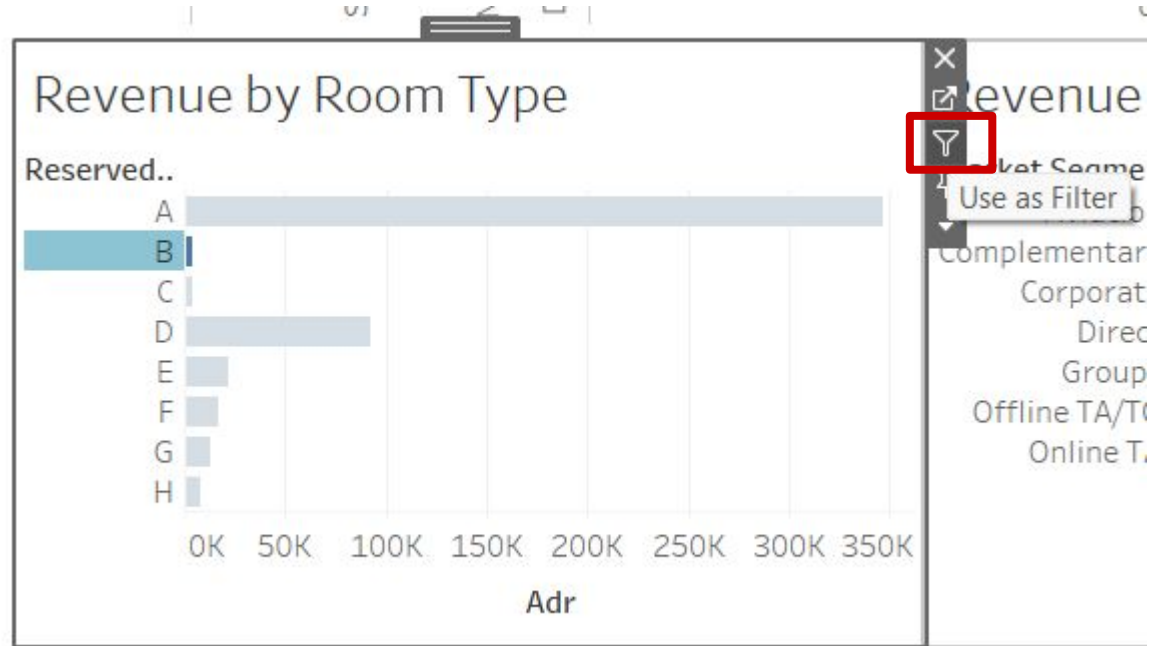
- Navigate to the bottom of the Dashboard tab
- Check show dashboard title
- Change the title name

The screenshot displays the Tableau interface with the following elements:

- Dashboard Tab:** Located at the top left, it contains a 'Default' button, a 'Phone' button, and a 'Device Preview' button.
- Size:** A dropdown menu set to 'Custom size (1200 x 800)'.
- Sheets:** A list of sheets including 'Revenue Over ...', 'Revenue By ...', and 'Revenue by Roo...'. The 'Revenue by Roo...' sheet is currently selected.
- Objects:** A list of objects including 'Horizontal Container', 'Vertical Container', 'Text', 'Extension', 'Pulse Metric', and 'Image'.
- Layout:** A dropdown menu set to 'Layout'.
- Dashboard Title:** A text box at the top right containing the text 'Dashboard 1', which is highlighted with a red rectangle.
- Edit Title Dialog:** A dialog box on the right side of the screen with the title 'Edit Title'. It contains a dropdown menu set to 'Tableau Book', a dropdown menu set to '18', and a text box containing '<Sheet Name>'. A 'Reset' button is located at the bottom of the dialog.
- Buttons:** At the bottom of the interface, there are two buttons: 'Tiled' and 'Floating'. The 'Tiled' button is highlighted with a blue background. Below these buttons, there is a checkbox labeled 'Show dashboard title' which is checked and highlighted with a red rectangle.

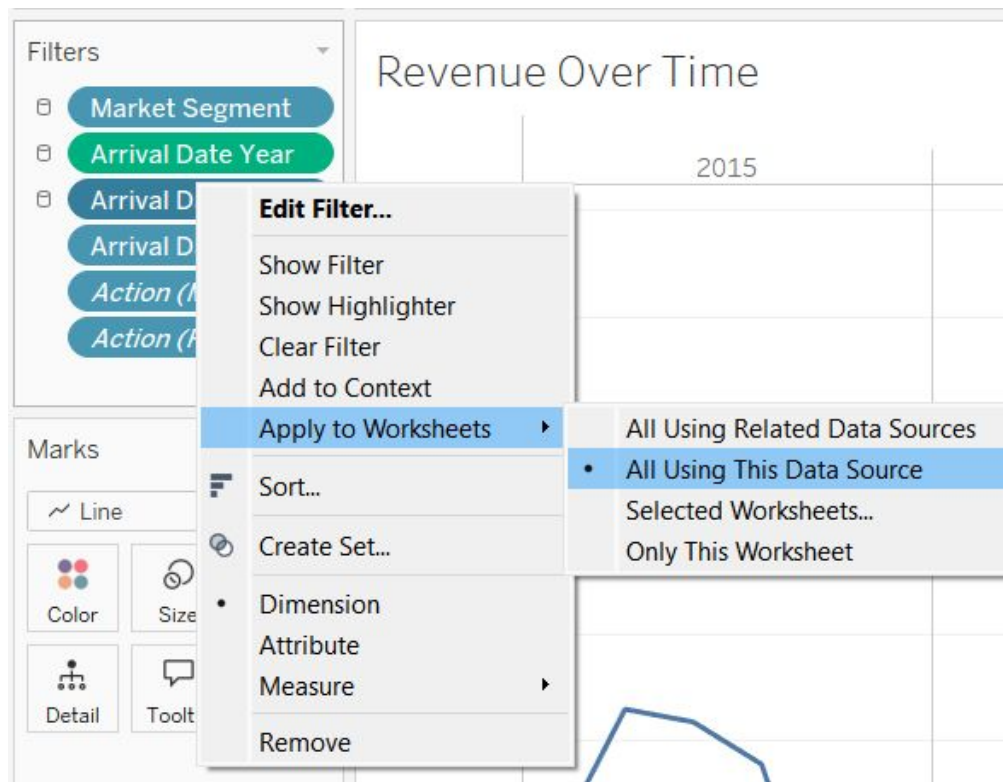
Add Filter Actions

- Select each sheet (Revenue Trend, Revenue by Market Segment, Revenue by Room Type)
- Click Funnel icon (“Use as Filter”)
- Test interactivity.



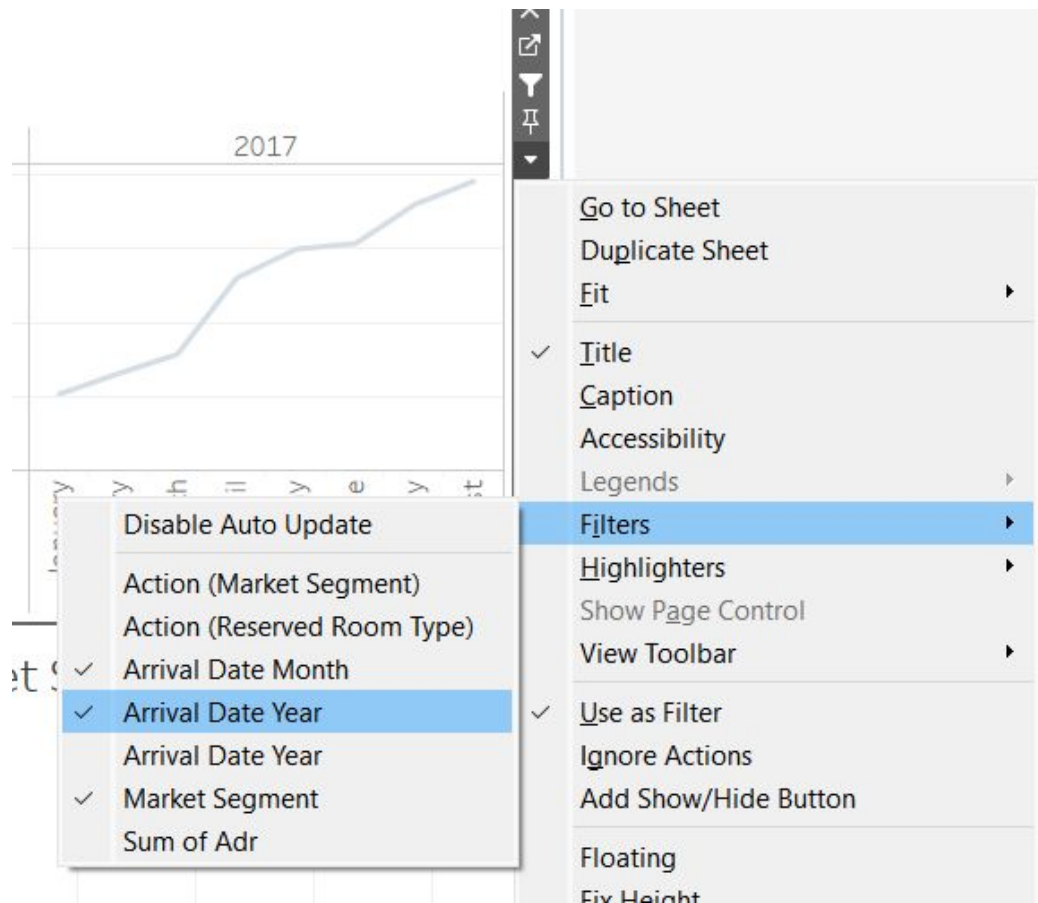
Add & Configure Filters

- Add filters: Arrival Date Year, Month, Market Segment
- Configure filters: Apply to All Worksheets, display as Multiple Values (dropdown)
- Optional: "Show Apply Button" via Customize.



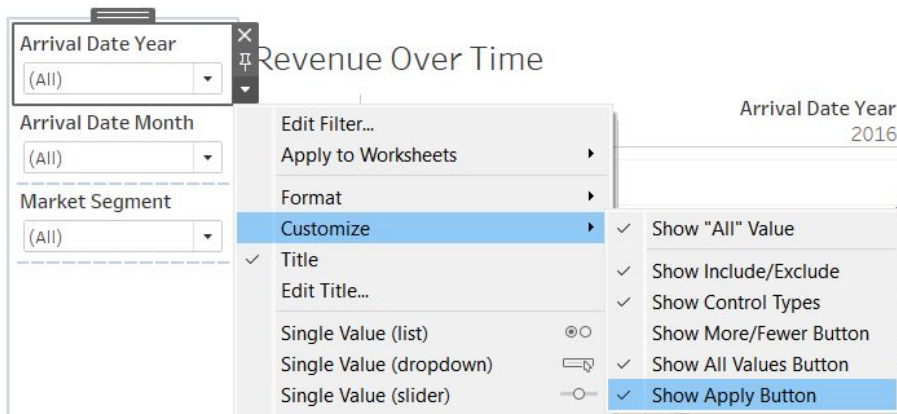
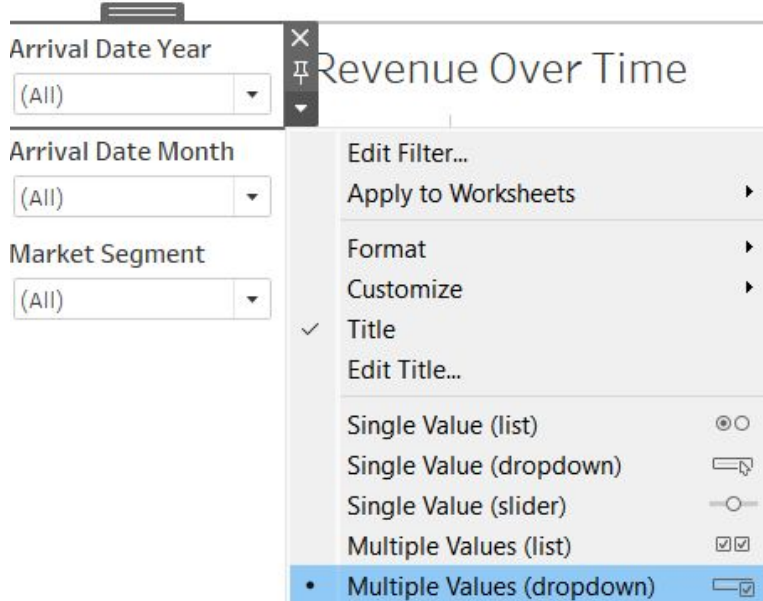
Add & Configure Filters

- Add filters: Arrival Date Year, Month, Market Segment
- Configure filters: Apply to All Worksheets, display as Multiple Values (dropdown)
- Optional: "Show Apply Button" via Customize.



Add & Configure Filters

- Add filters: Arrival Date Year, Month, Market Segment
- Configure filters: Apply to All Worksheets, display as Multiple Values (dropdown)
- Optional: "Show Apply Button" via Customize.



Organize with Containers

- Switch to "Layout" tab
- Drag Vertical container onto canvas
- Move Dashboard Title into top of Vertical container.


Objects

 Horizontal Container

 Vertical Container

 Text

 Extension

 Pulse Metric

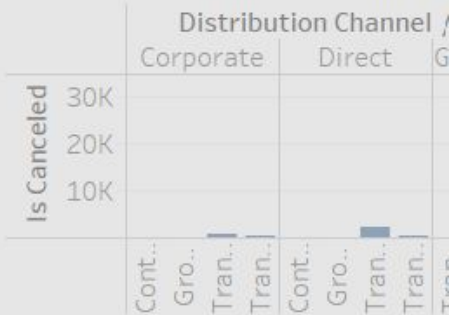
 Image

Tiled

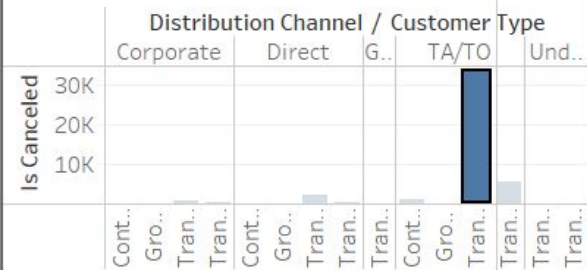
Floating

☐ Show dashboard title

Channel & Type

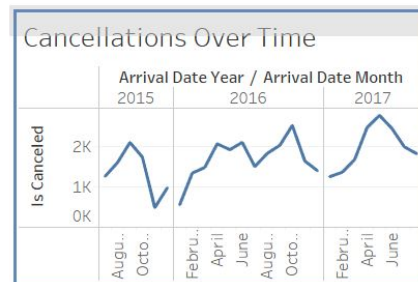
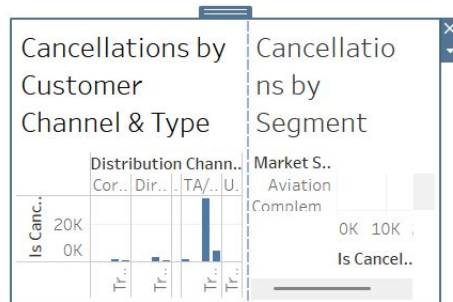
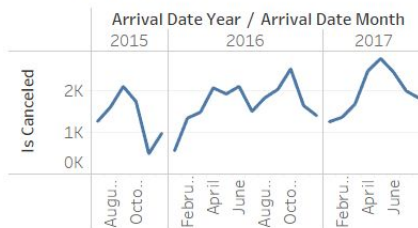
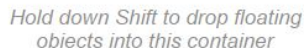


Cancellations by Customer Channel & Type



Hold down Shift to drop floating objects into this container

- Drag Horizontal container into main Vertical container
- Move filters and charts into containers:
- Filters into left Vertical container
- Revenue Trend into top right Vertical container
- Revenue by Market Segment & Revenue by Room Type into Horizontal container (bottom right)
- Adjust borders/layout



Exercise

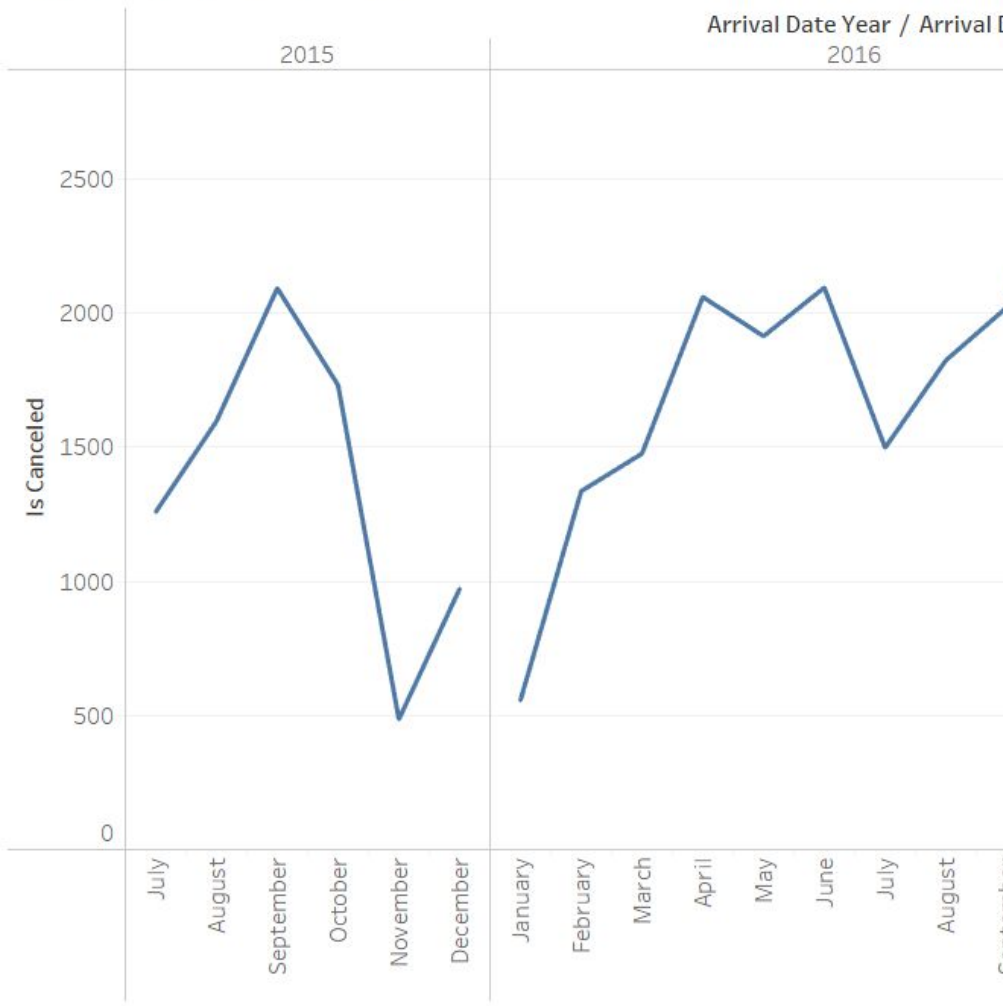
1



Cancellations

- Create new worksheet.
- Build a Line Chart: Count cancellations over time.
- Hint: SUM(Is Canceled) on Rows, Arrival Date Year & Month on Columns.
- Rename to Cancellations Over Time.

Cancellations Over Time



Exercise

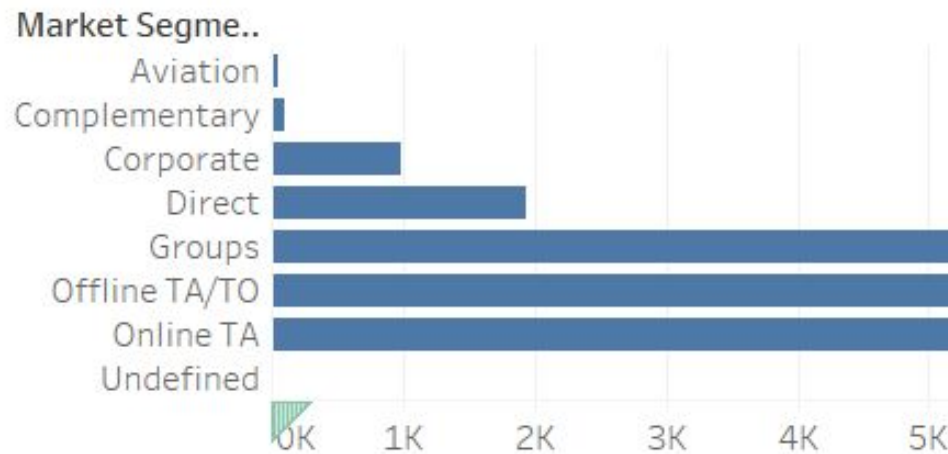
2



Part 1: Second Visualization

- Create new worksheet.
- Build Bar Chart: Count cancellations by Market Segment.
- Hint: SUM(Is Canceled) on Columns, Market Segment on Rows (Optional sort).
- Rename to Cancellations by Segment

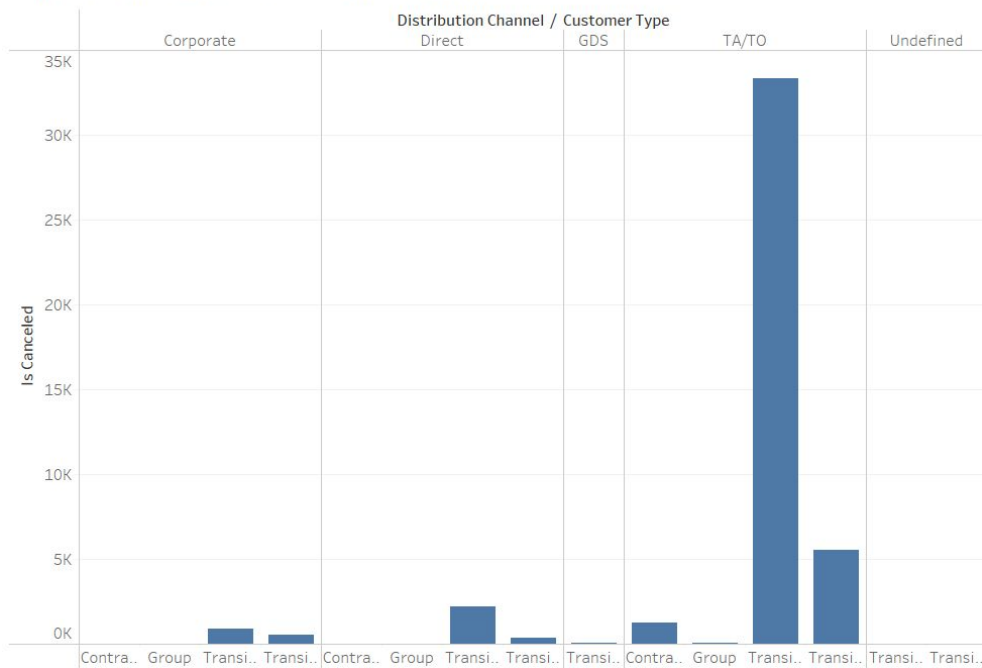
Cancellations by Segment



Part 1: Third Visualization

- Create new worksheet.
- Build Bar Chart: Count cancellations by Market Segment.
- Hint: SUM(Is Canceled) on Rows, Distribution Channel & Customer Type on Columns.
- Rename to Cancellations by Customer Channel & Type

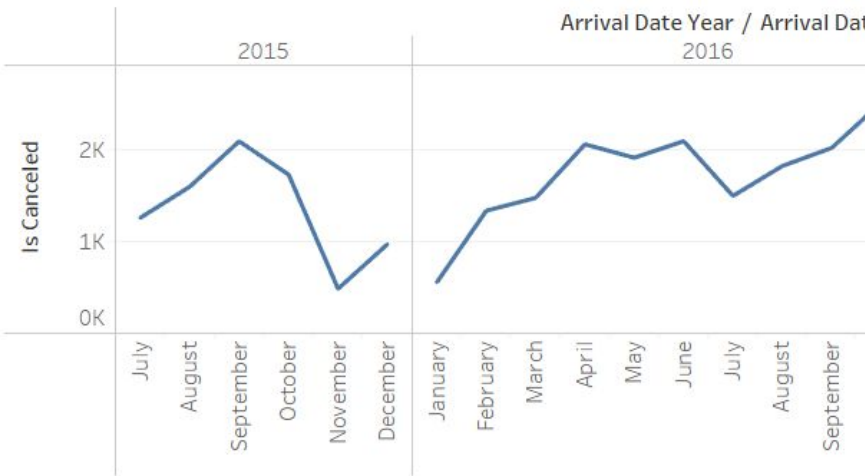
Cancellations by Customer Channel & Type



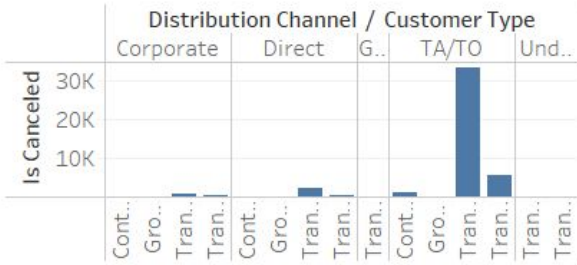
Part 3: Dashboard

- Create new dashboard, name tab: Cancellation Analysis.
- Add sheets: Cancellations Over Time & Cancellations by Segment.
- Arrange using Tiled layout (side-by-side or top/bottom).
- Add Market Segment dashboard filter: Apply to All Worksheets using datasource.

Cancellations Over Time



Cancellations by Customer Channel & Type



Cancellations by Market Segment

- Market Segment
- Aviation
- Complemental
- Corporate
- Direct
- Group
- Offline TA/TO
- Online TA/TO

Exercise

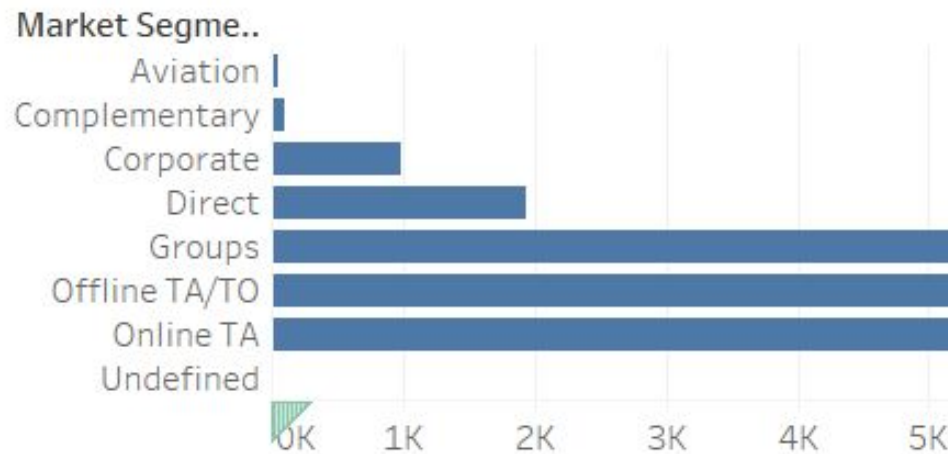
3



Finish Cancellation Dashboard

- Enable "Use as Filter" for cancellation charts.
- Add Arrival Date Year and Month filters (dropdowns, apply to all worksheets).
- Add main title (e.g., "Hotel Cancellation Insights").
- Bonus: Organize using Vertical & Horizontal containers.

Cancellations by Segment



Glossary

Dashboard – A collection of visualizations shown on a single screen.

Worksheet – A single view or chart in Tableau.

Data Source – The file or database Tableau connects to for data.

Dimension – Categorical fields like country, product, or date.

Measure – Numeric values that can be aggregated (e.g., sales, profit).

Filter – A tool to narrow down the data shown.

Mark – The visual representation of data (e.g., bars, dots, lines).

Tooltip – Info that appears when you hover over a data point.

Tips and Tricks

Data Types: Double-check data types in the Data Source pane or Data pane (click icon). Tableau sometimes misinterprets numbers as strings or vice versa.

Discrete vs. Continuous Dates: Blue date pills treat parts (Year, Month) as categories. Green date pills treat dates as a continuous timeline. Choose based on the analysis needed.

Floating Shortcut: Hold Shift while dragging a sheet onto the dashboard to make it floating instead of tiled.

Filter "Apply" Button: Use Customize -> Show Apply Button on filters (especially multi-select) with large datasets or complex dashboards to avoid slow updates after each individual selection.

Layout Pane Hierarchy: Use the "Layout" tab on the dashboard pane to understand how items are nested in containers and to easily select/move specific containers or items.

Editing Titles: Double-click titles directly on the dashboard/worksheet, or right-click -> Edit Title. Remove <Sheet Name> if you want a completely custom title.

"Use as Filter" Icon: Quickest way to add basic filter actions, but the Dashboard -> Actions menu offers more configuration options.



Thank You!