

Lab 1: connecting and visualizing data

Lab 2: bar charts and initial dashboard

Lab 3: dashboard refinement

Exercise 1: create a visualization about cancellations on your own

Exercise 2: 2nd viz & dashboard for cancellations

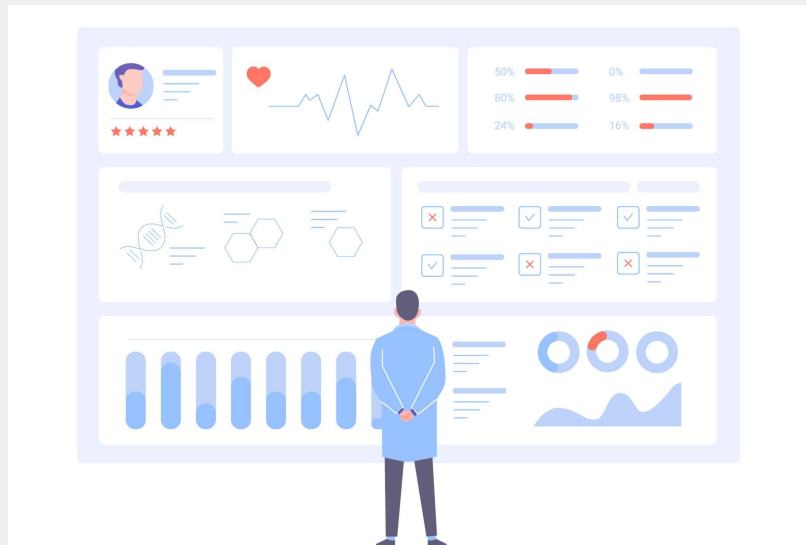
Exercise 3: complete cancellations dashboard

DIRECTIONS ON SLIDES OUTLINE DOC

.....

Tableau

Building Your First Interactive Dashboard





DOWNLOADS

tableau.com/products/public/download

GitHub

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

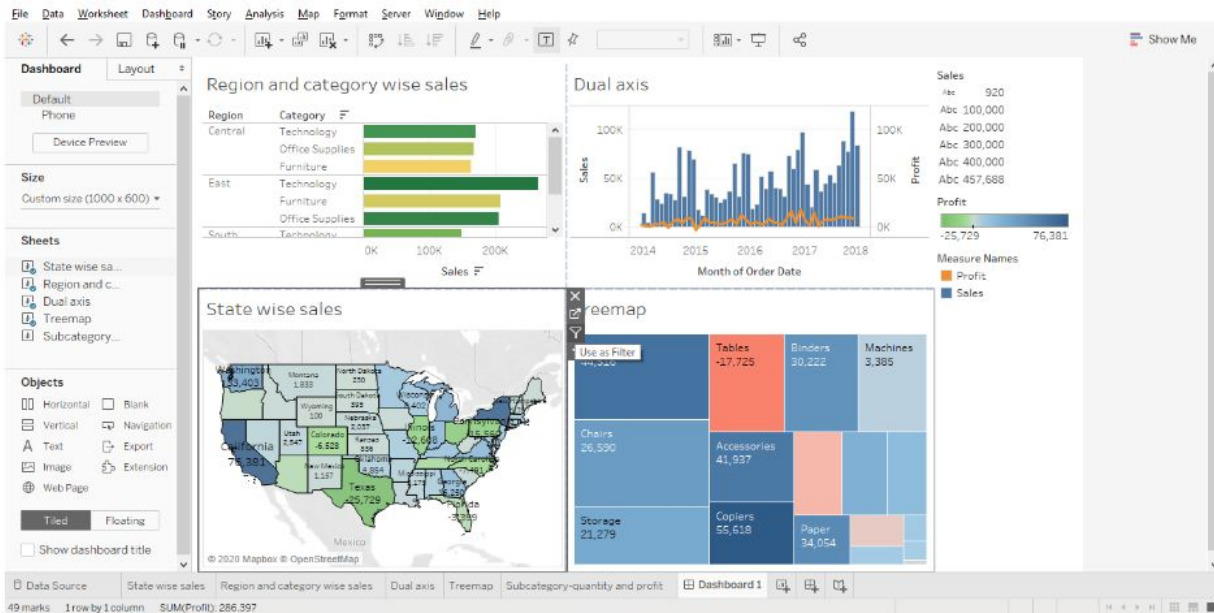
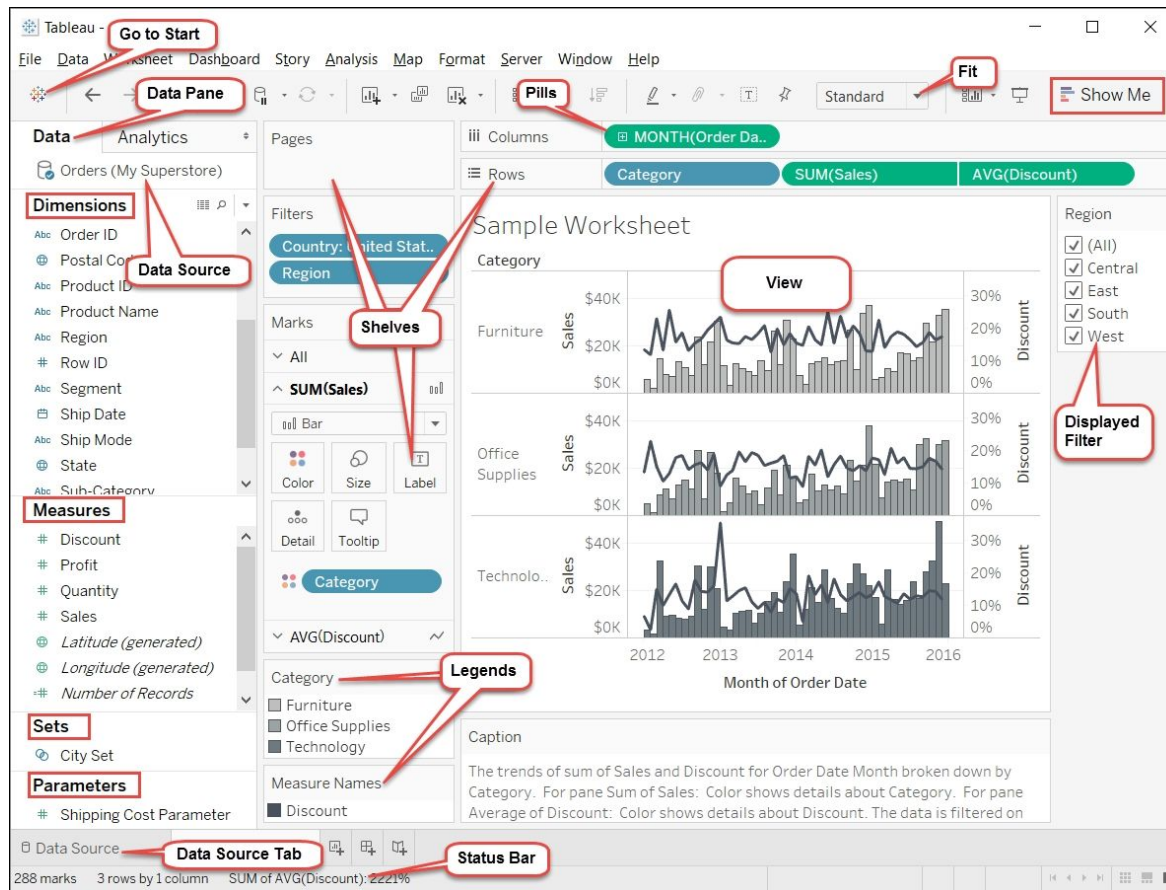


Tableau Interface





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

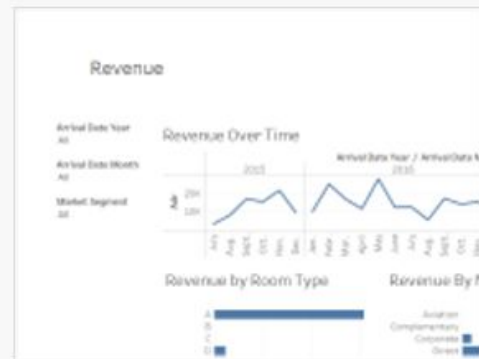
Statistical file

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

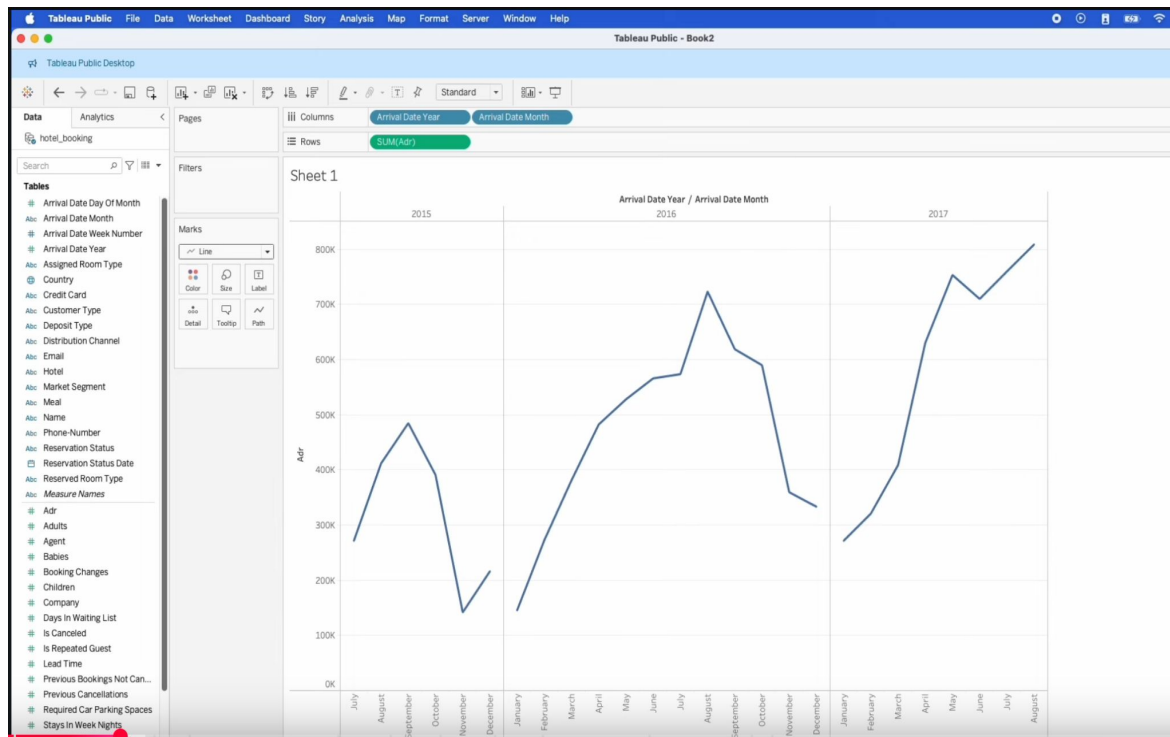
Type	Field Name	Physical ...	Rem...
Abc	Hotel	hotel_bo...	hotel
#	Is Canceled	hotel_bo...	is_can...

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)

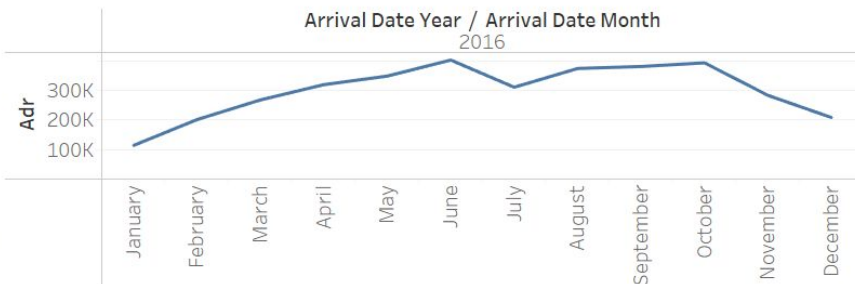
Arrival Date Year

2016

Action (Market Segme..

(All)

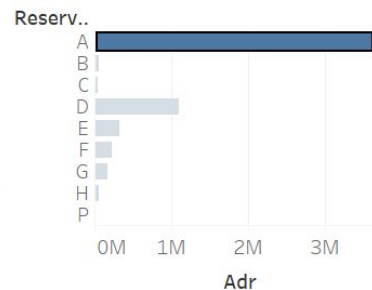
Revenue Over Time



Revenue by Market Segment



Revenue by Room Type





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

Sheet 4

Marks

Automatic

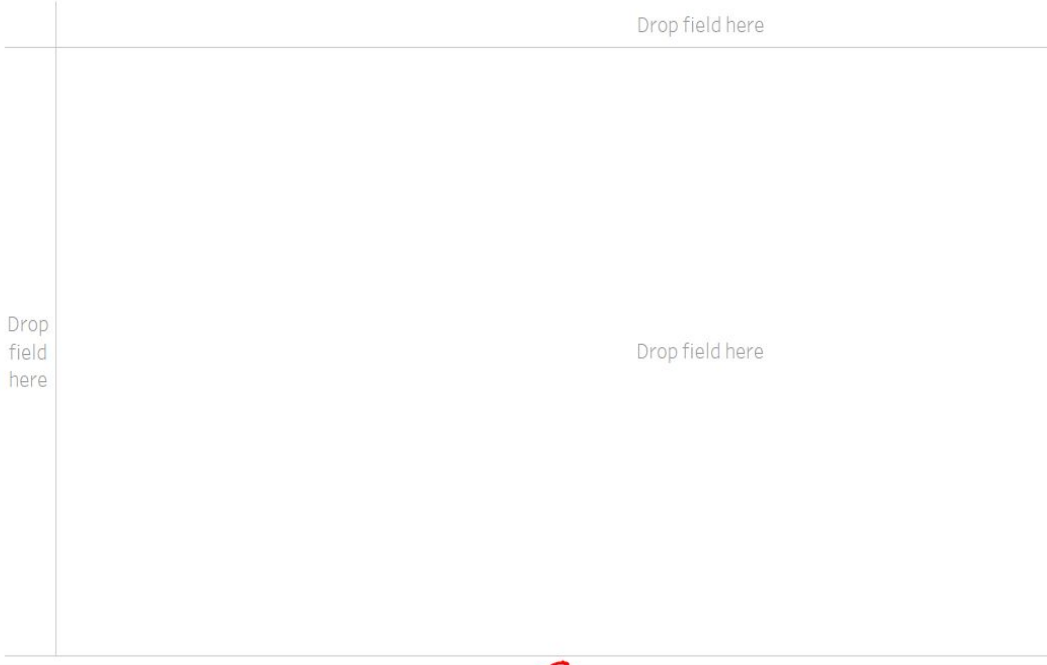
Color

Size

Text

Detail

Tooltip



Select or drag data
Use the Shift or Ctrl key to select multiple fields



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

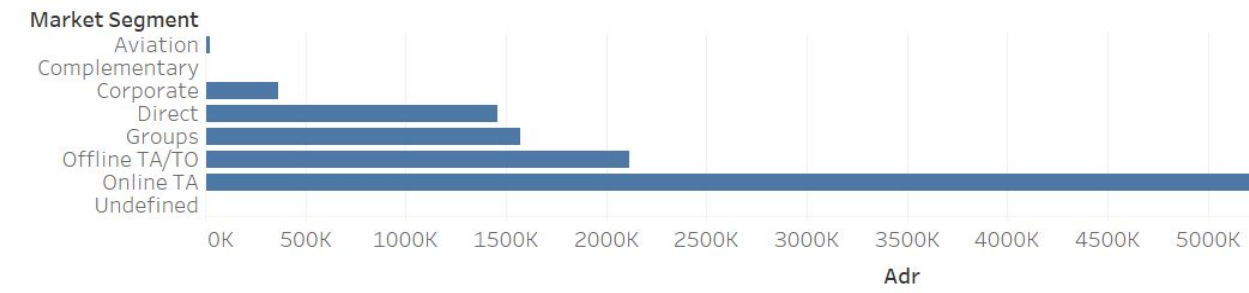
Color Size Label

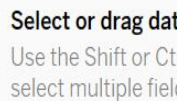
Detail Tooltip

Columns SUM(Adr)

Rows Market Segment

Revenue my Market Segment





← → ↶ ↷ ↸ ↹ ↺ ↻
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

Color

Size

Label

Detail

Tooltip

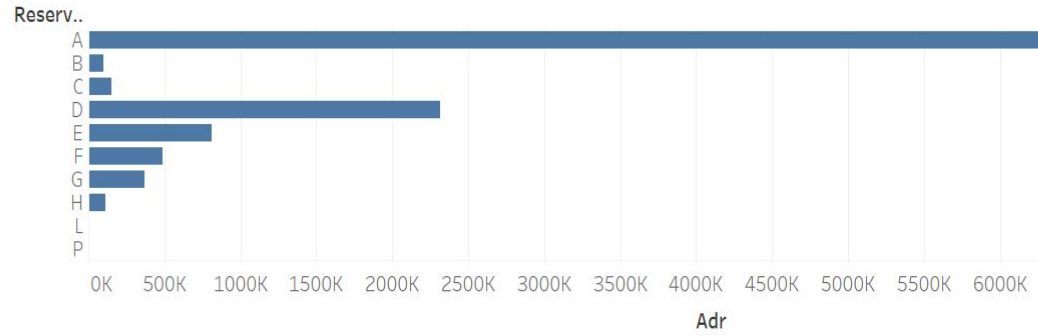
Columns

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

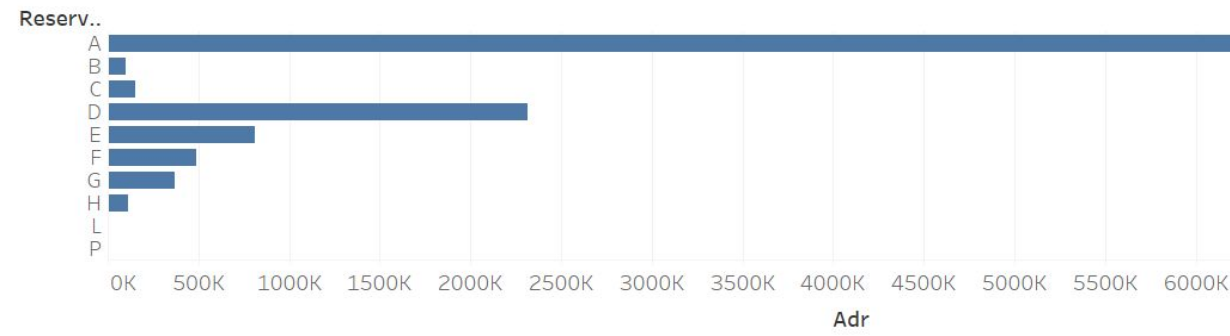
Color Size Label

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 ...

Sheet 4

Objects

Horizontal Container

Vertical Container

Text

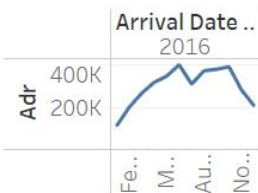
Extension

Tiled

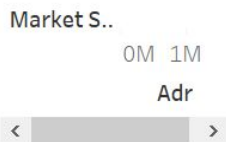
Floating

Show dashboard title

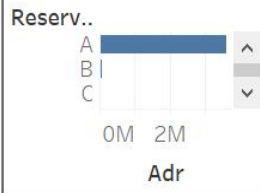
Revenue Over Time



Revenue by Market Segment



Revenue by Room Type

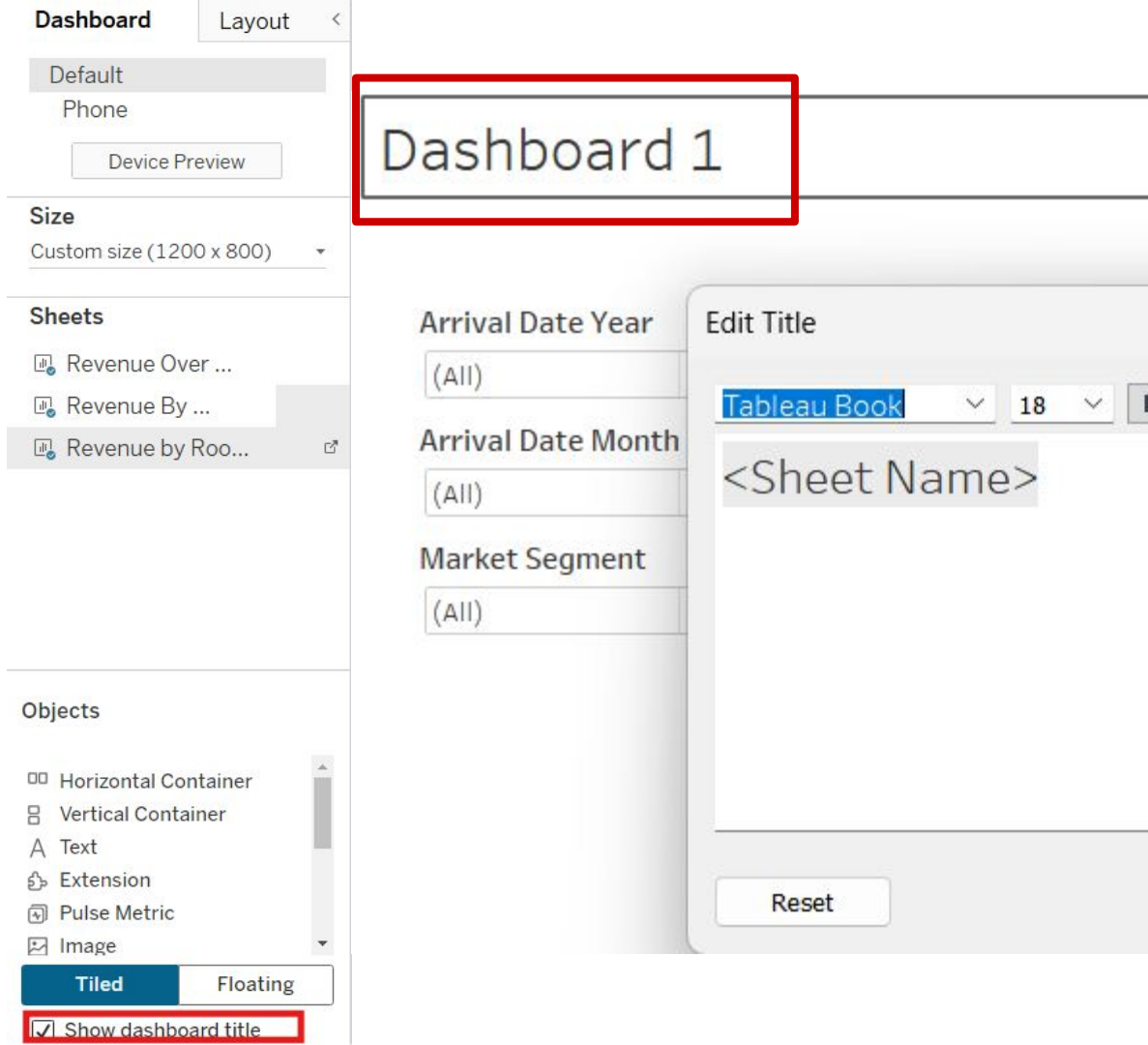




Lab

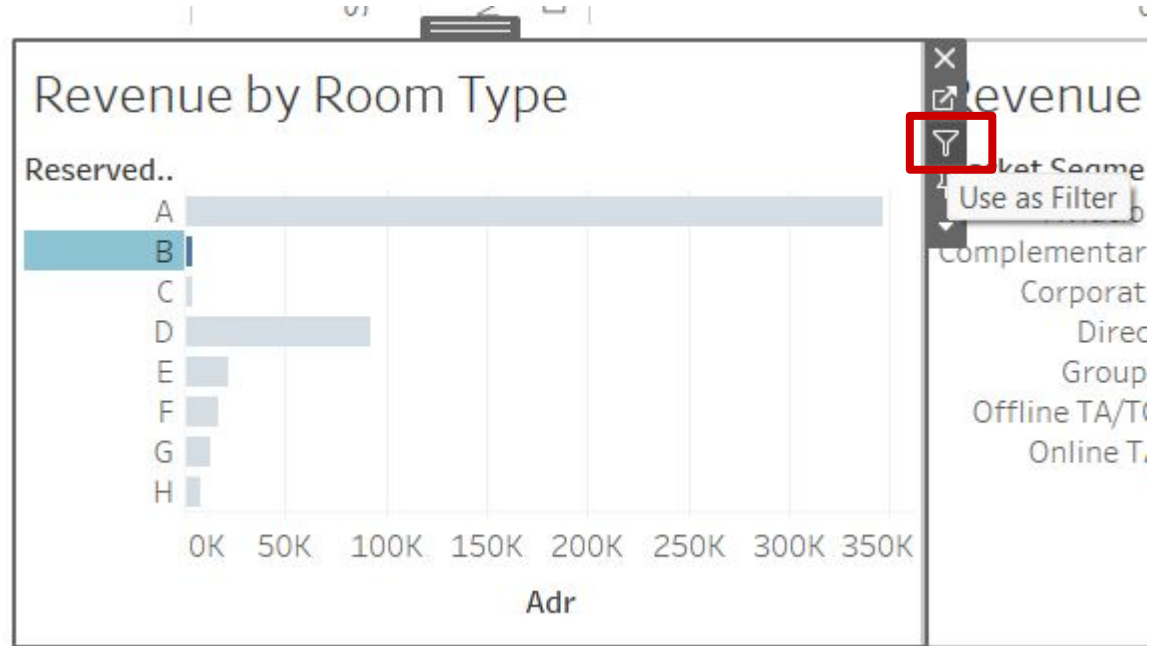
Adding a Title

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



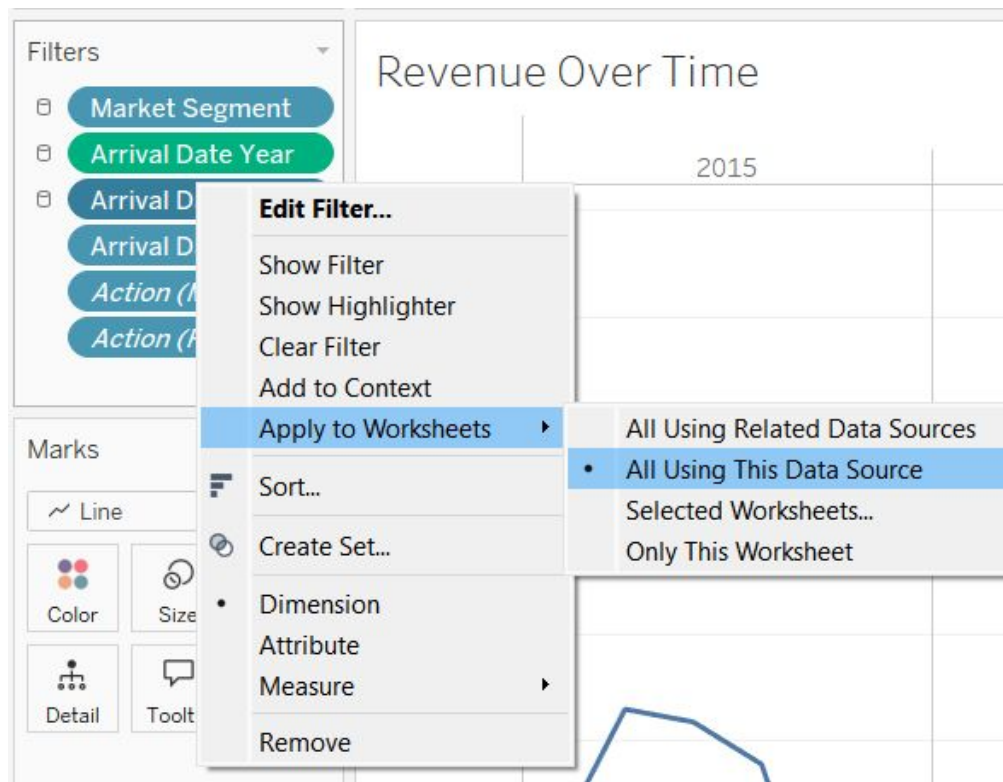
Add Filter Actions

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



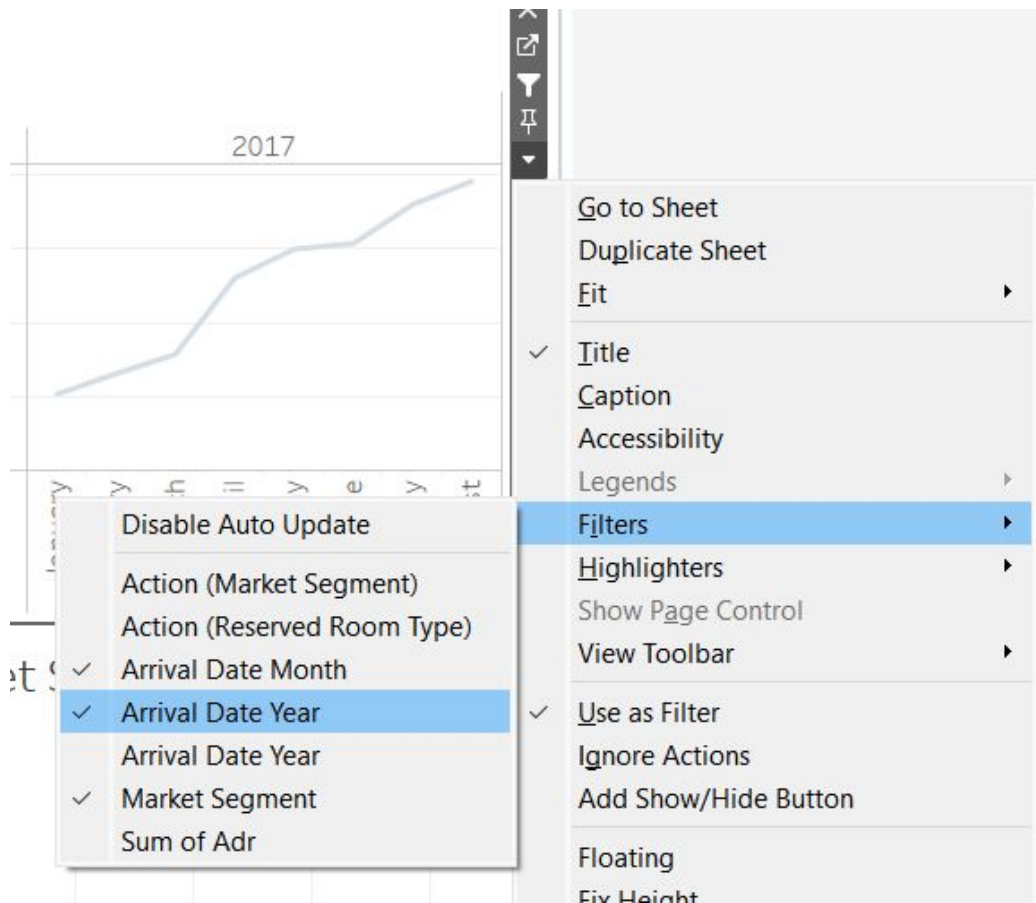
Add & Configure Filters

- 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.



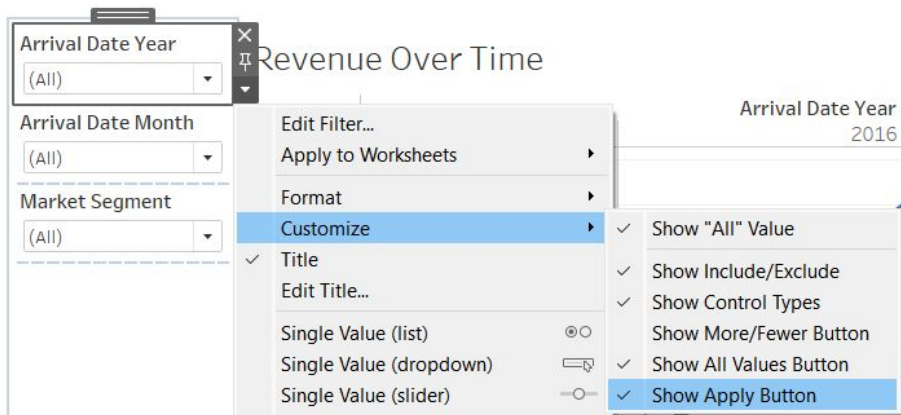
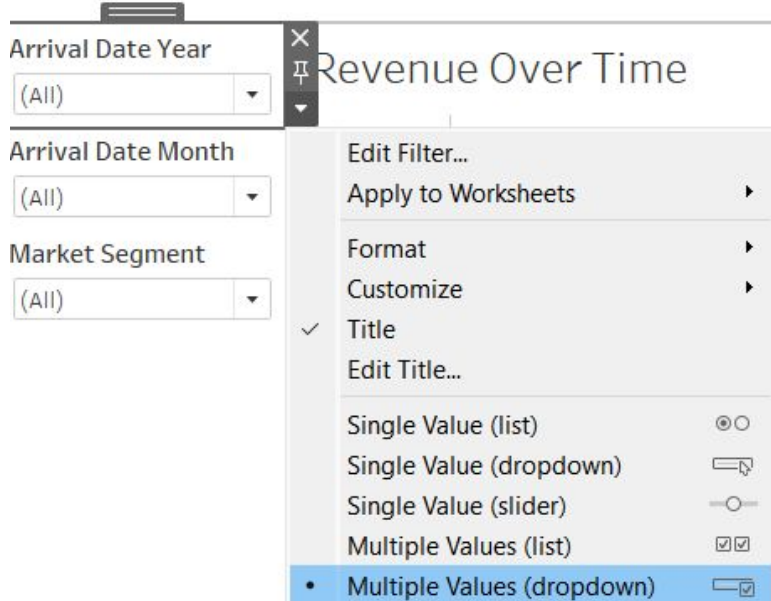
Add & Configure Filters

- Add filters: Arrival Date Year, Month, Market Segment
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- Optional: "Show Apply Button" via Customize.



Add & Configure Filters

- Add filters: Arrival Date Year, Month, Market Segment
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- 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

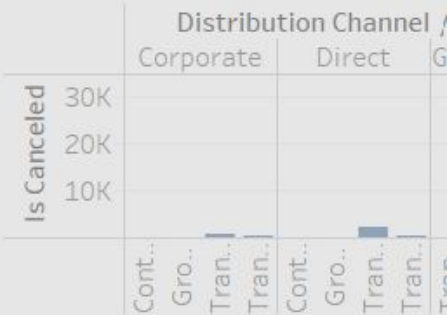
Image

Tiled

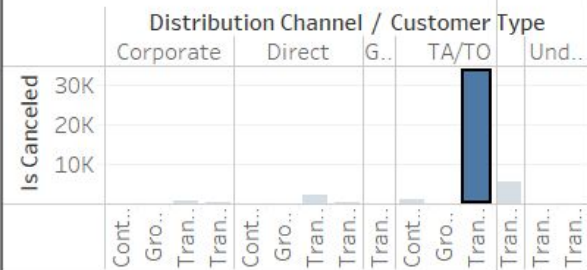
Floating

☐ Show dashboard title

Channel & Type



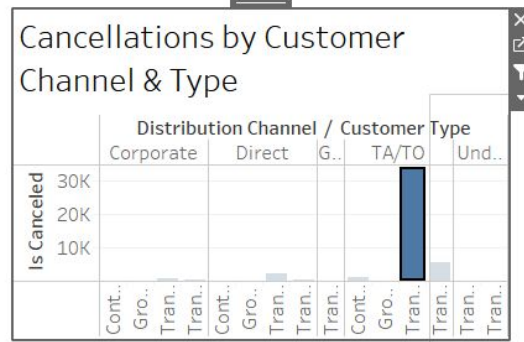
Cancellations by Customer Channel & Type



Hold down Shift to drop floating objects into this container

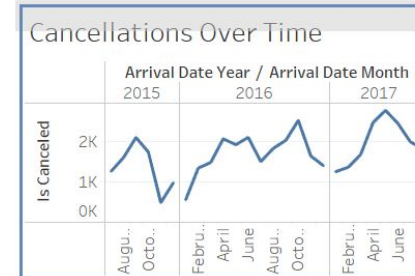
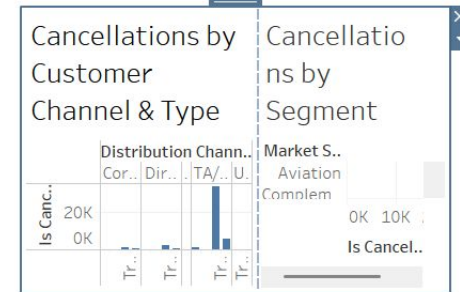
Nest Containers

- 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



Hold down Shift to drop floating objects into this container

Cancellations Over Time



Exercise

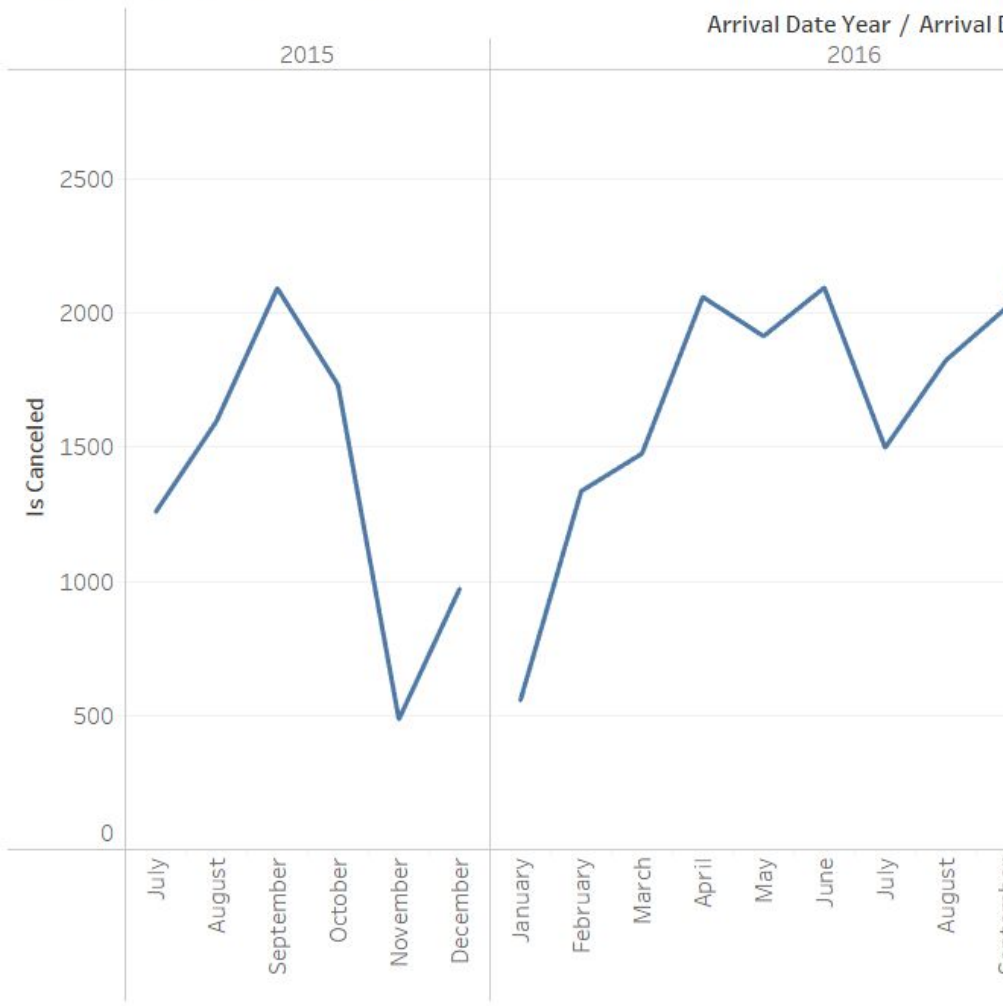
1



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

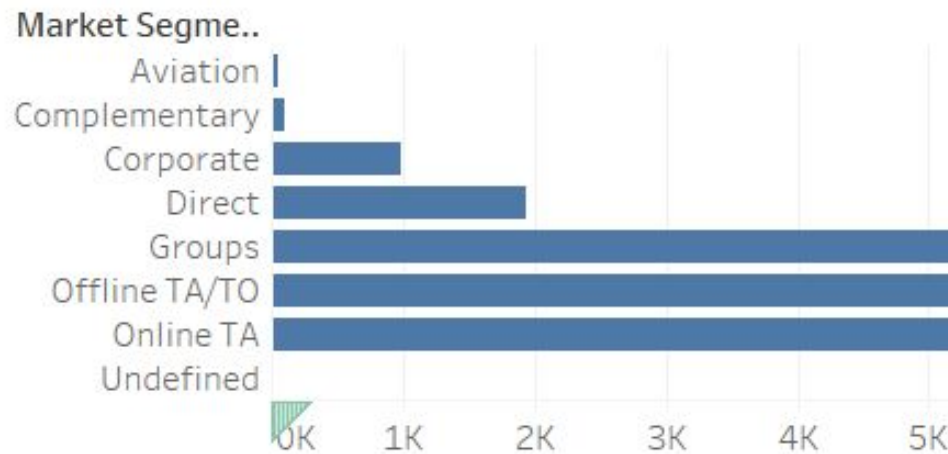
2



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

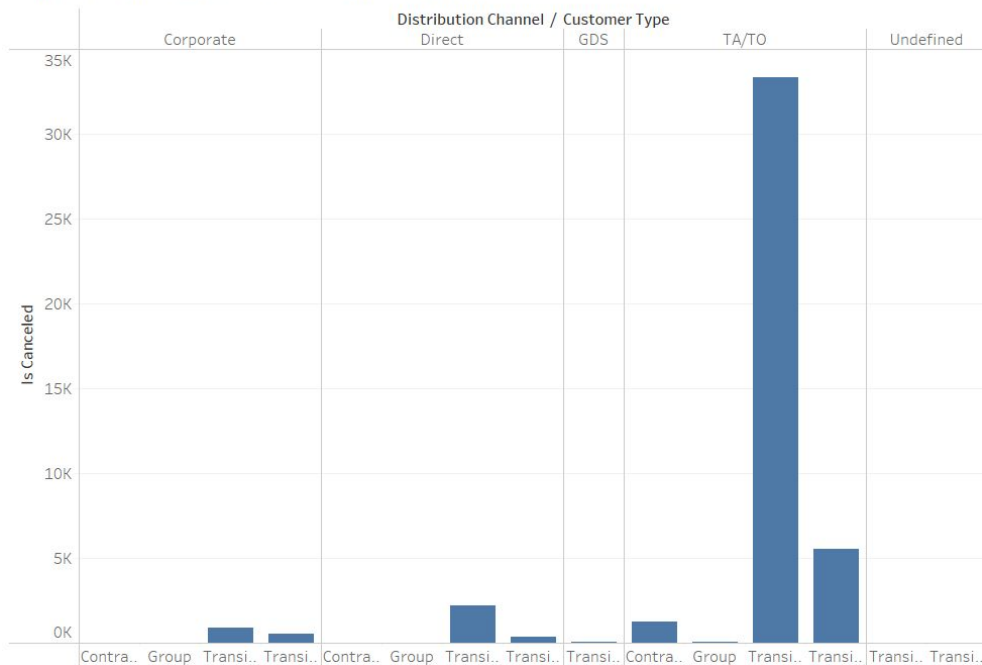
Cancellations by Segment



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

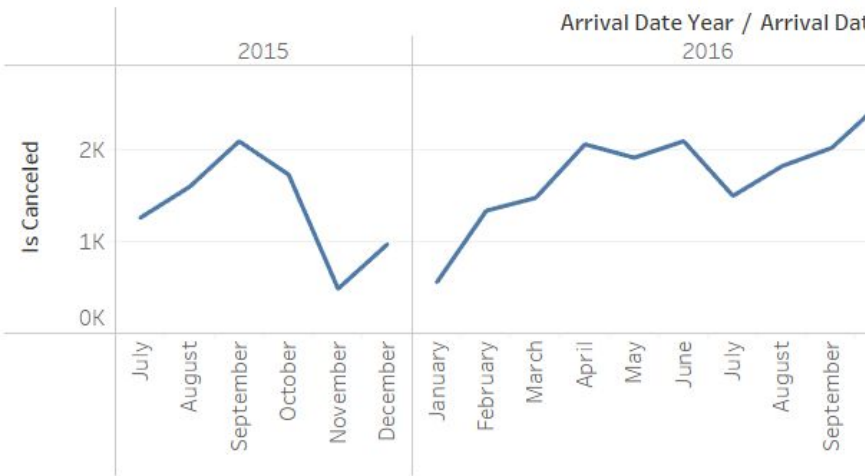
Cancellations by Customer Channel & Type



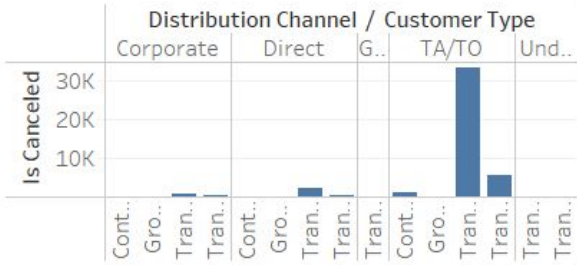
Part 3: Dashboard

- 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
- Complement
- Corporate
- Direct
- Group
- Offline TA/T
- Online T

Exercise

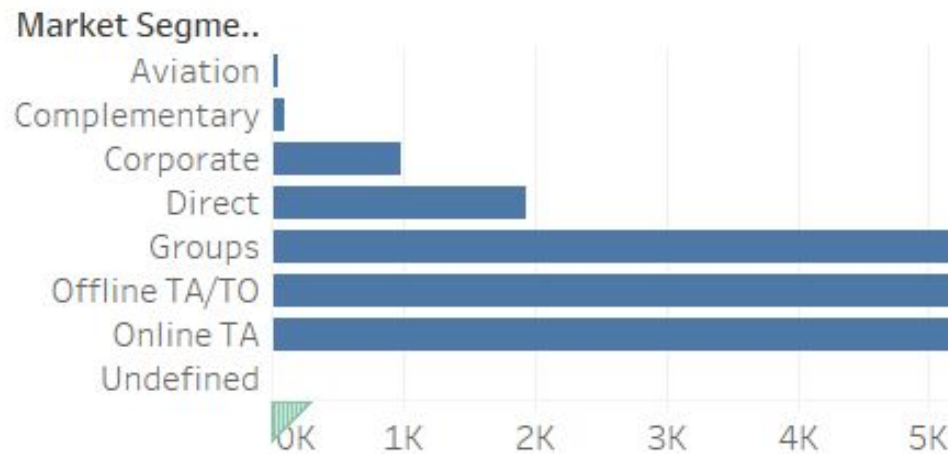
3



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.



Thank You!