Visualization with Tableau

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Agenda

- Understanding the Data source
- Defining data points using Mapbox©
- Checking the trend of key elements
- Plotting the correlation of data
- In Depth Analysis
- Dashboard
- Story

Understanding the Data Source

- The Data Source is the parent tab that formulates the data flow.

- In this demonstration, a simple extract of a data sheet is considered to perform the visualization process.

- The first pane captures the connections from multiple data sources.

- Multiple Information Sources can be merged to form a logical data set as depicted in the second pane.

- The data source can either be captured live, or can be formulated offline using the 2 radio buttons on the top right.

- The third pane renders the output.

Defining data points using Mapbox©
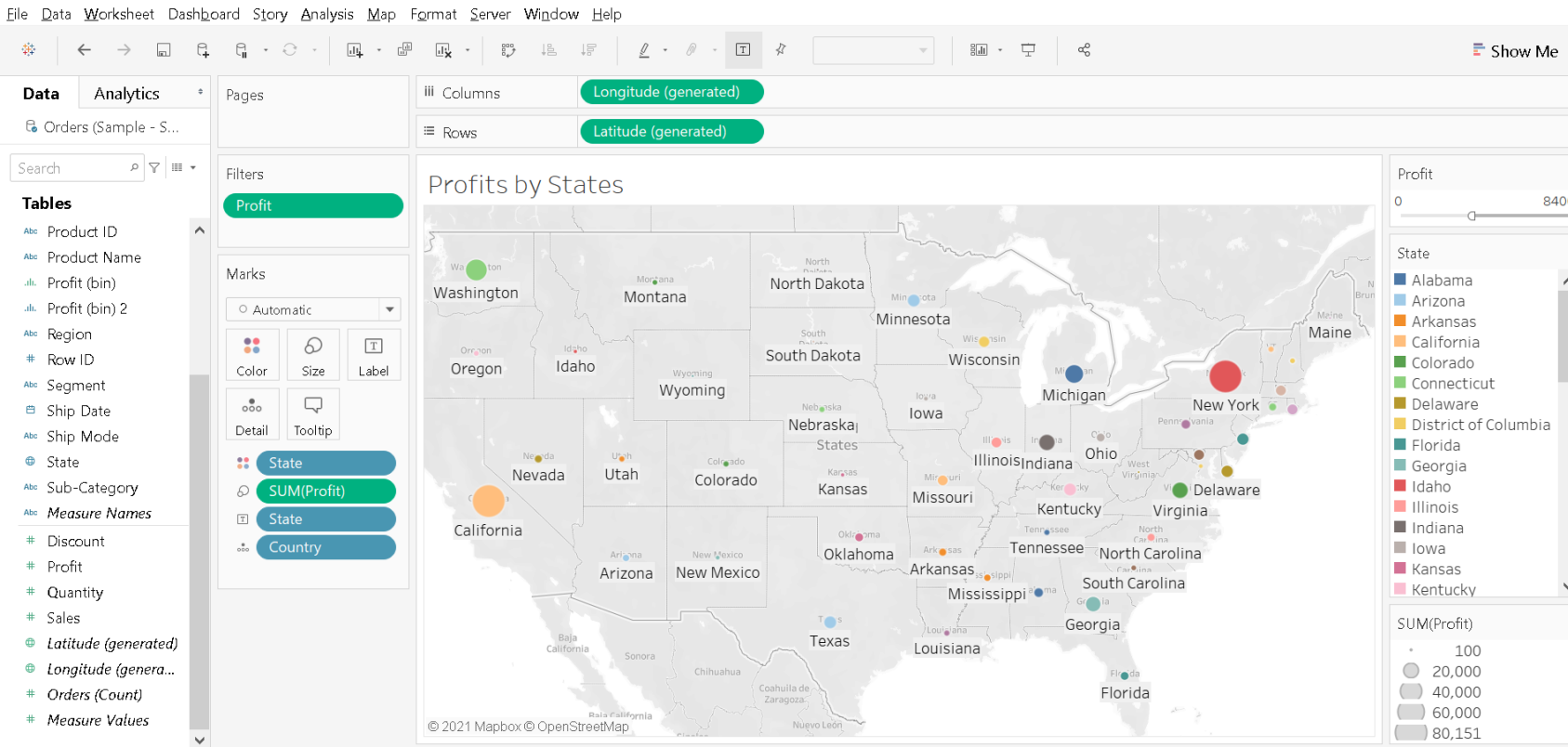
- The Mapbox provides a holistic view as to how the data is defined from the geographical perspective.

- The Latitude and Longitude are the key parameters (rows and columns) used, to define the range of locations.

- The Filters are primarily used to select a particular chunk of data.

- The Marks help us define as to how the information must be depicted.

- In this example, we have used the Color, Size, Label and Detail components to configure the Marks.

- To the right, is the output based on the points described above.

Checking the trend of key elements
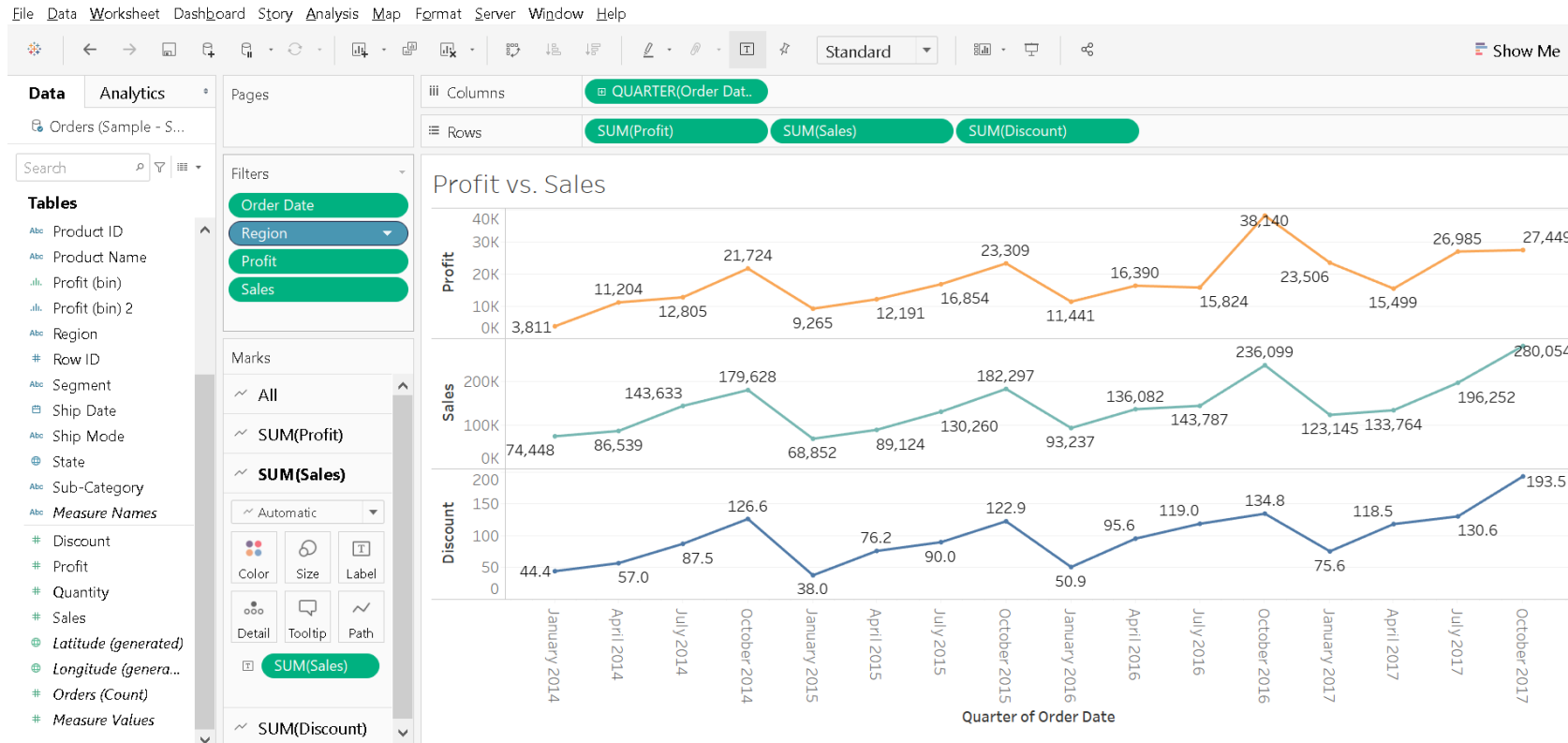
- The Filters, Marks, Rows and Columns would act as a basic input criteria to define and design the visualization.
- The "Show Me" to the top right is a smart tool by Tableau to decide as to which kind of chart can fit into the formulated data.
- In this example, the line chart is considered to check the trend of the multiple features in the data set.
- It helps us to perceive a broader picture of the cause-and-effect parameters.

Plotting the correlation of data
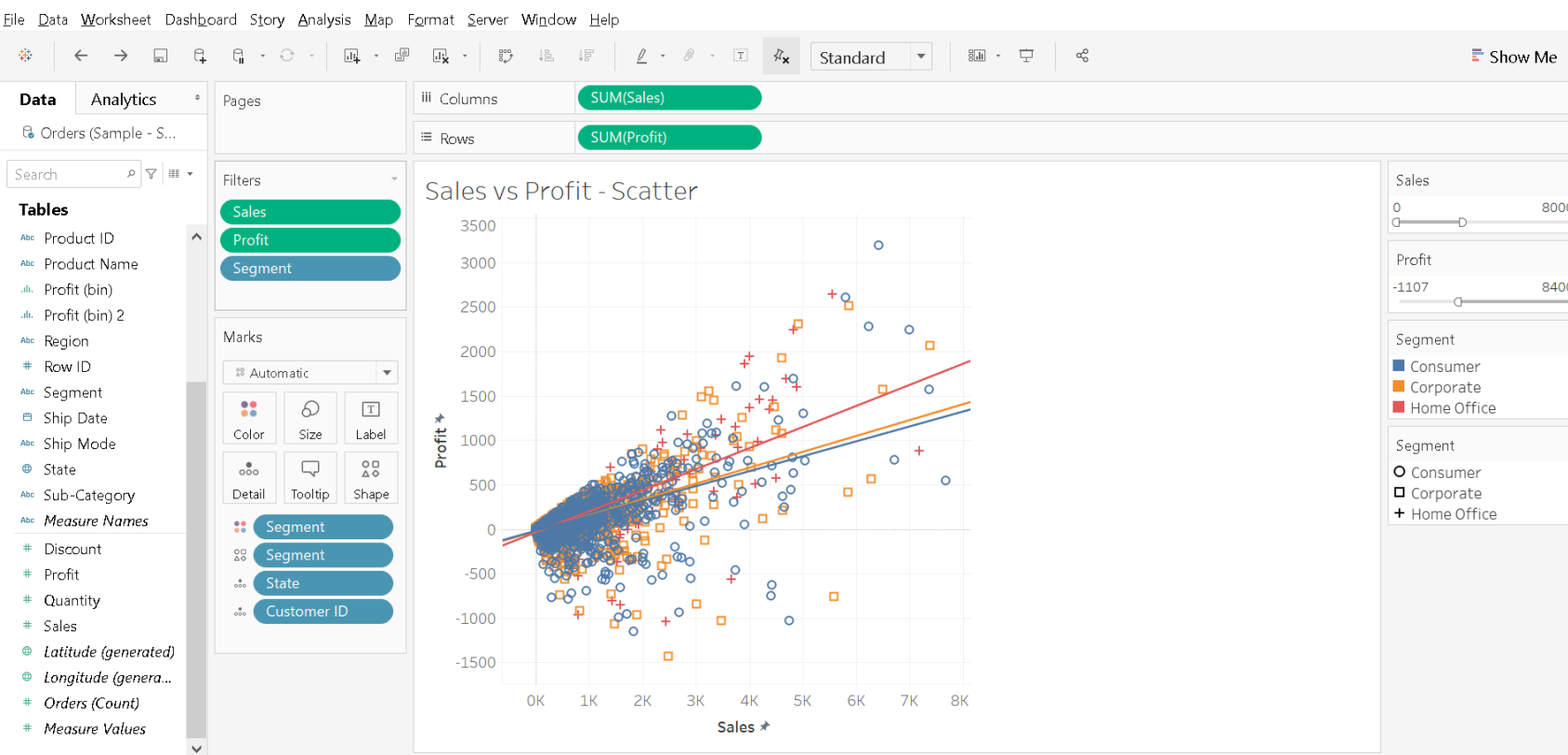
- To identify the correlation between the effort and outcome of a business, a scatter plot would be an ideal option.

- If the correlation is positive, then it gives us an intuition of the progressive business.

- This chart also encompasses the Shape component from the Marks which classifies the categories in that segment.

In Depth Analysis

- The Tableau has the dynamic ability to accommodate plethora of visualizations based on the input parameters.

- Since this use case demands to determine the outcome of the Sale vs. Profit, a horizontal bar chart with appropriate Filters and Marks coupled with the below identifiers are considered to visualize an in-depth analysis of Sales vs. Profit:

  o Rows: Categories, Sub-Categories

  o Column: Profit
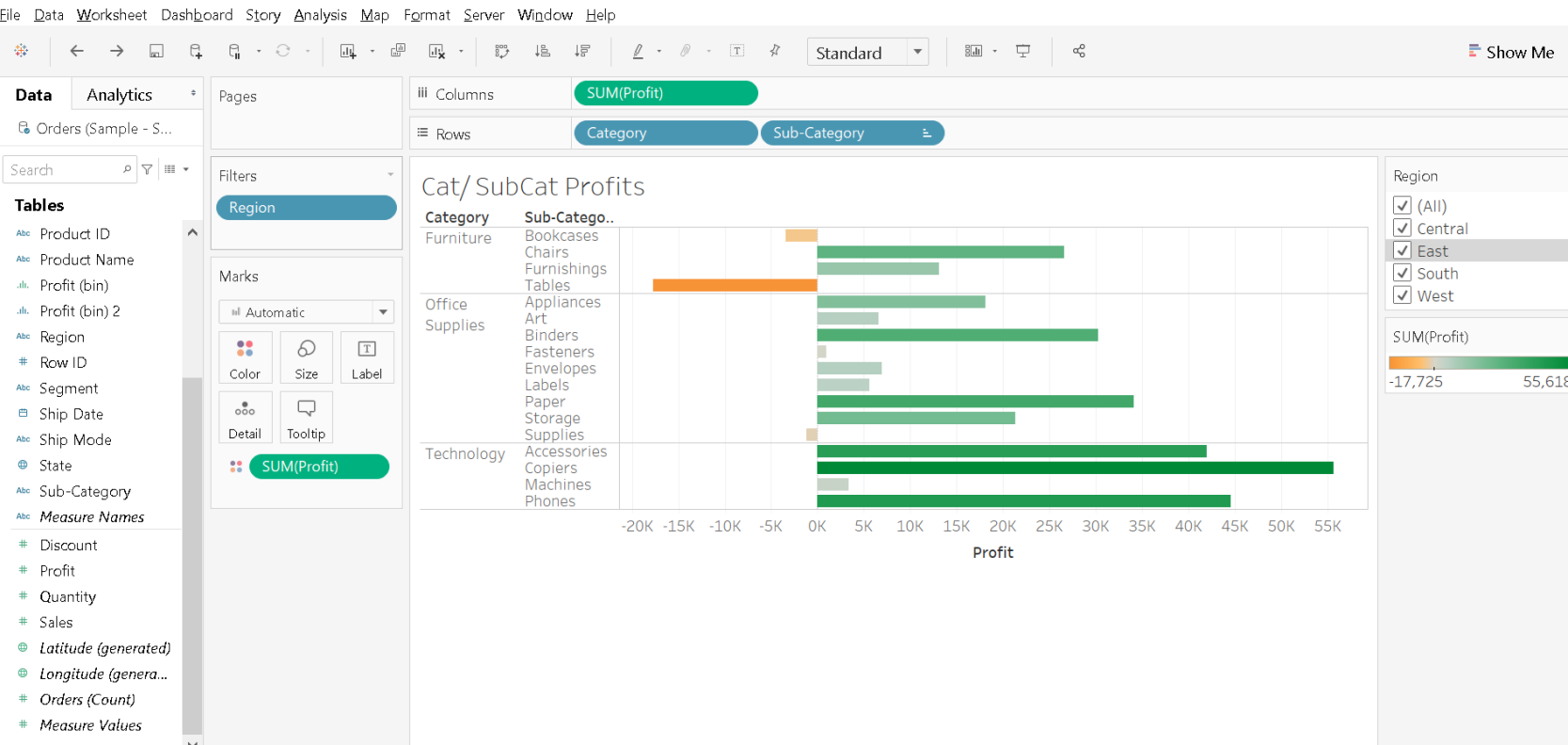
Dashboard

- Dashboard is a powerful way of putting all the numbers in one view.

- The sheets that we work on might be from perspective of analysis and not all the sheets are required to be visualized frequently.

- Dashboard becomes a comprehensive tool to depict what is required and that needs continuous attention.

- The Size can be altered as per the Display size of the dashboard (TV, Projector etc.).

- The Sheets are the individual pages that are analyzed with different visualizing components to determine a relation or a potential outcome from a feature (or) a set of features..

- The Objects are primarily the add-ons that can be used in the Dashboard to enable accessibility and readability.

- The filters of each chart are placed on the top for high level analysis.
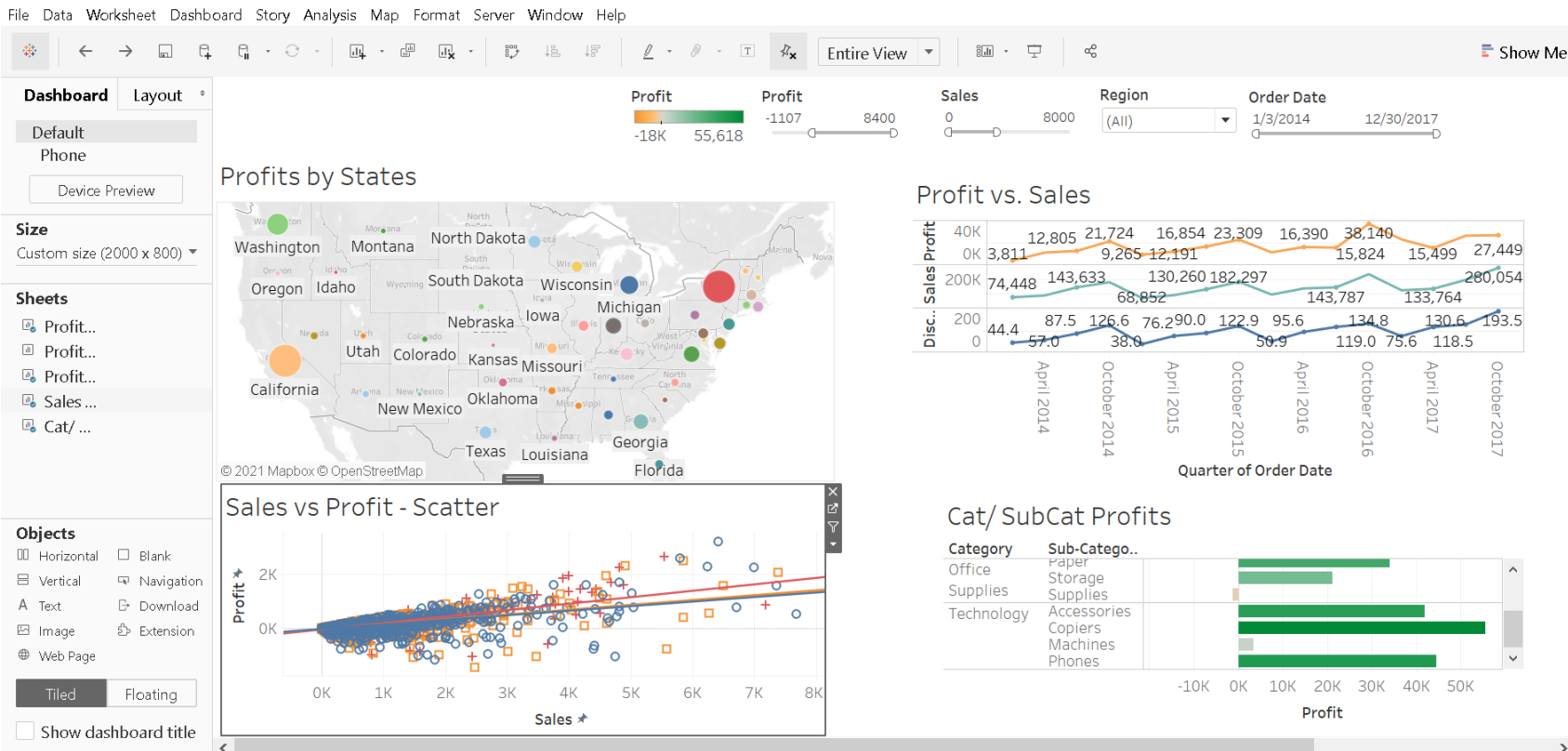
Story
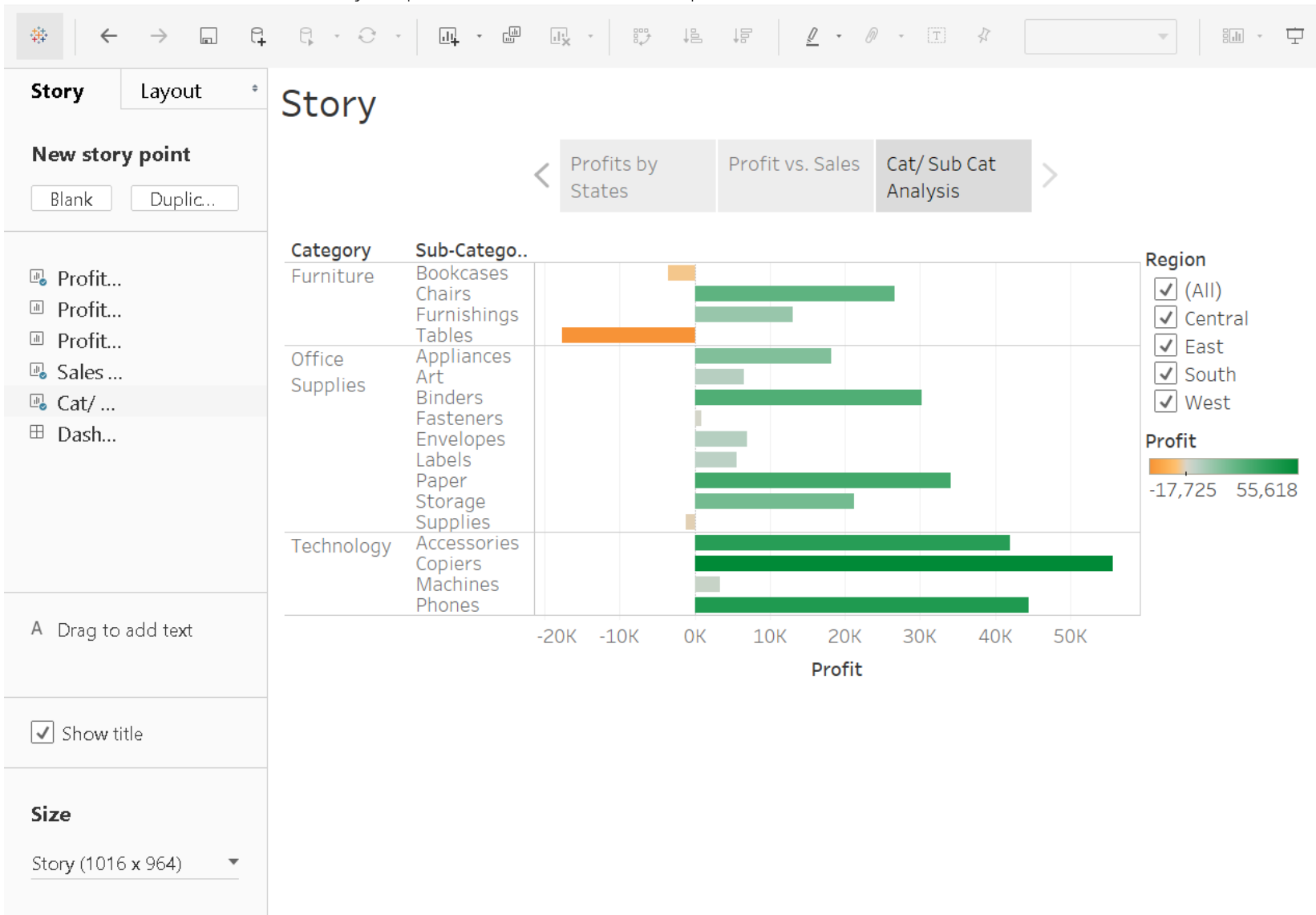
- The story is a presentation module that enables the presenter to selectively choose the Sheets that needs to projected.

- The slide navigation are placed on the top of the visualization.

- The filters are available for each depiction making the easy access for quick analysis.

THE DATA SOURCE PULLS IN THE INFORMATION FROM VARIOUS AVAILABLE OPTIONS.

THE SOURCE CAN BE LINKED TO A LIVE CONNECTION, OR CAN BE ANALYZED ON OFFLINE COPIES.

THE SHEETS ARE GENERALLY INDIVIDUAL PAGES TO VISUALIZE POTENTIAL FEATURES IN THE DATASET

THE DASHBOARD IS A ONE STOP SHOP FOR DEPICTING THE STRATEGIC AND CRITICAL FEATURES IN THE DATA SET THAT TARGETS AN INTENDED YIELD.

THE STORY IS A PRESENTATION MODULE THAT SELECTIVELY PRESENTS THE SHEETS THAT NEEDS TO PROJECTED.

Summary

THANK YOU