Data Visualization Assignment - 1

Submitted By: Yusuf Pipalrawanwala

**College:** Avantika University

Assignment Overview

This project involves the analysis of a historical sales dataset from a supermarket company. The data covers a three-month period from January to March 2019 across three different branches. The primary objective is to use Tableau to process and analyse this data. The assignment requires the creation of five distinct visualizations—a Bar Chart, Pie Chart, Stacked Bar Chart, Line Chart, and Bubble Chart—to uncover and represent key insights from the sales data. The final deliverable consists of screenshots of these visualizations, each accompanied by a brief explanation.


Public Tableau Link –

https://public.tableau.com/views/Assignment12and3YusufPipalrawanwala/Dashboard1?:language=en-US&publish=yes&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

https://public.tableau.com/views/Assignment12and3YusufPipalrawanwala/Dashboard1?:language=en-US&publish=yes&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

**Page 2: Bar Chart - Total Sales by Product Line**

Chart Explanation This bar chart illustrates the total sales generated by each product line. The vertical axis represents the total sales amount, while the horizontal axis lists the different product categories. From the visualization, it is evident that "Food and beverages" is the top-performing category with sales of ₹56,145. The "Health and beauty" category recorded the lowest sales at ₹49,194. This chart provides a clear comparison of sales performance across the various product lines offered by the supermarket.

Page 3: Pie Chart - Sales by Payment Method
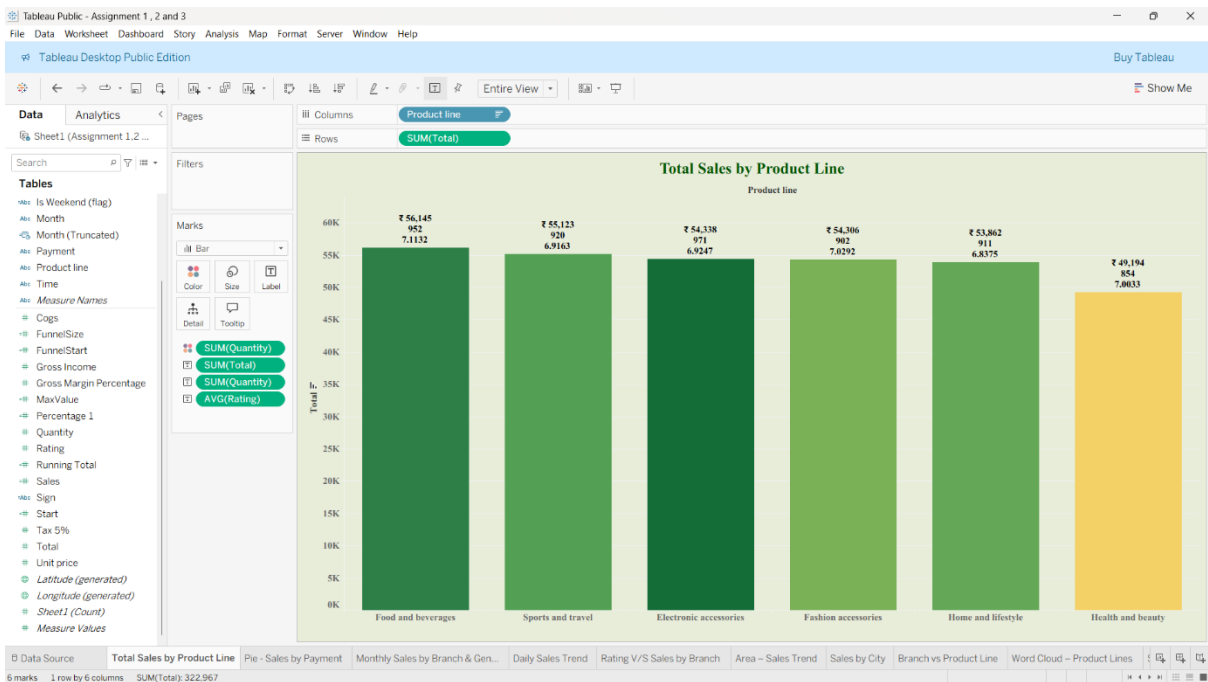
Chart Explanation This pie chart displays the distribution of total sales across different payment methods. The three segments represent the payment options available: Cash, Credit card, and Ewallet. The size of each slice corresponds to the total sales amount for that payment type. "Ewallet" is the most popular payment method, accounting for ₹112,207 in sales. "Cash" follows with ₹109,993, and "Credit card" payments total ₹100,767. This indicates a customer preference for digital payment methods.

**Page 4: Stacked Bar Chart - Monthly Sales by City & Gender**
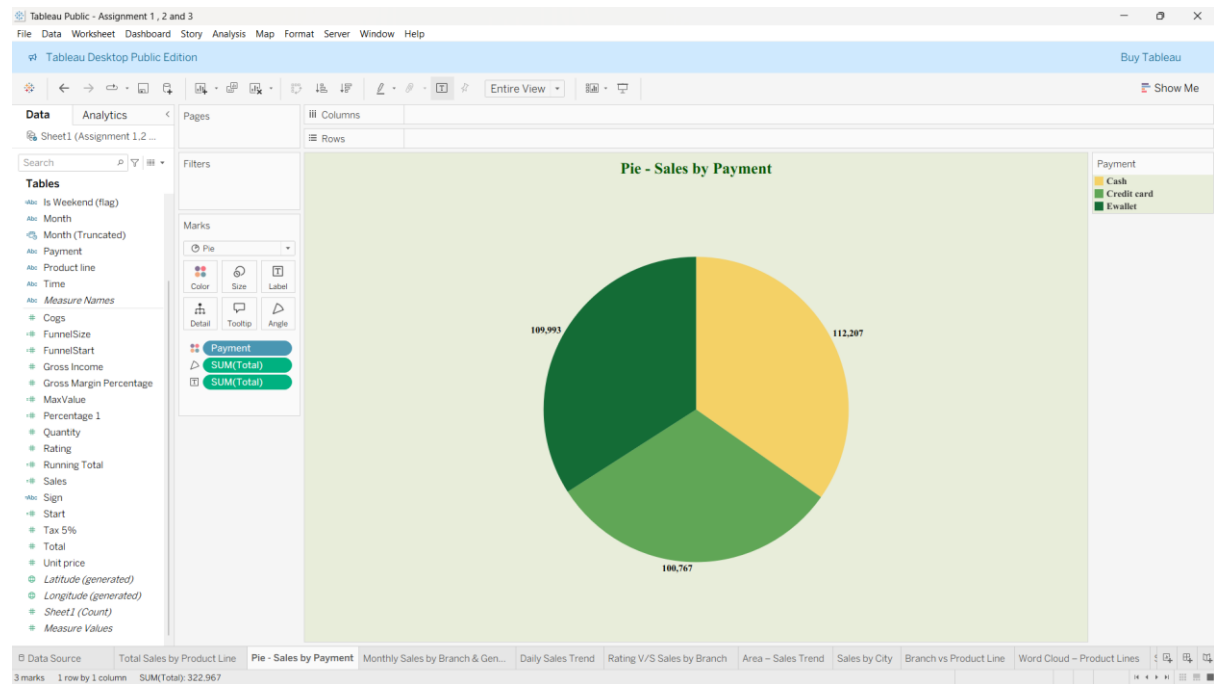
Chart Explanation This stacked bar chart presents a detailed breakdown of monthly sales, segmented by both city and gender. Each primary bar represents a month in the first quarter of 2019. The segments within each bar are color-coded by city (Naypyitaw, Yangon, Mandalay) and further detailed with sales figures for each gender. For example, in January 2019 (2019-01), total sales were highest, driven significantly by sales in Yangon. This visualization allows for a multi-layered analysis, showing not only which month was most profitable but also which cities and customer genders contributed most to the sales in that period.
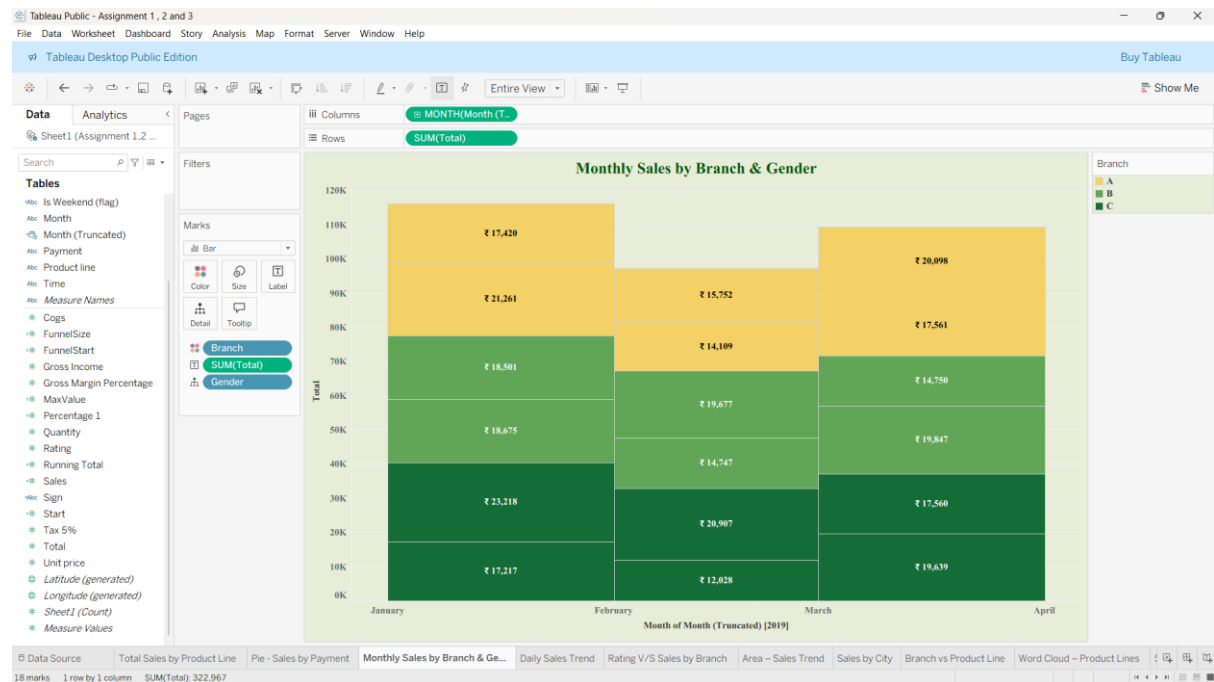
Page 5: Line Chart - Daily Sales Trend

Chart Explanation This line chart visualizes the daily sales trend over a month, highlighting the fluctuation in total sales from day to day. The vertical axis shows the total sales amount,

and the horizontal axis represents the days of the month. The chart uses color to distinguish between weekdays (blue) and weekends (orange). There is significant volatility in daily sales, with a major peak reaching ₹15,717 around the 13th of the month. This chart is effective for identifying patterns, such as potential sales spikes on specific days or differences in sales performance between weekdays and weekends.
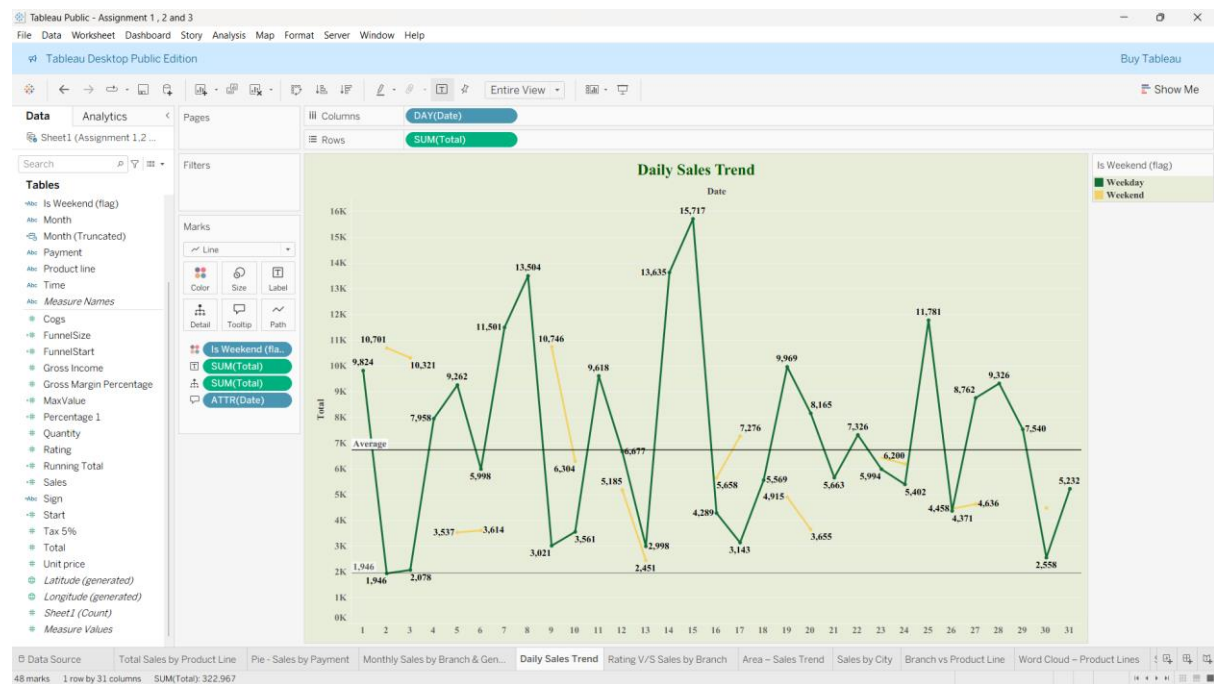
Page 6: Bubble Chart - Rating V/S Sales by City

Chart Explanation This bubble chart plots the relationship between average customer rating and total sales, segmented by city. The horizontal axis represents the average customer rating (from 1 to 10), and the vertical axis represents total sales. Each bubble corresponds to a city, and its size indicates the total quantity of items sold. The city of

Yangon shows the highest average rating at approximately 7.0, corresponding with high total sales. In contrast, Mandalay has a slightly lower average rating, but the highest total quantity sold, as indicated by its larger bubble size. This chart helps in understanding the correlation between customer satisfaction, sales volume, and quantity sold in different locations.