

Supermarket Sales Data: Exploratory Data Analysis

Prepared for: The Supermarket Chain Leadership Team

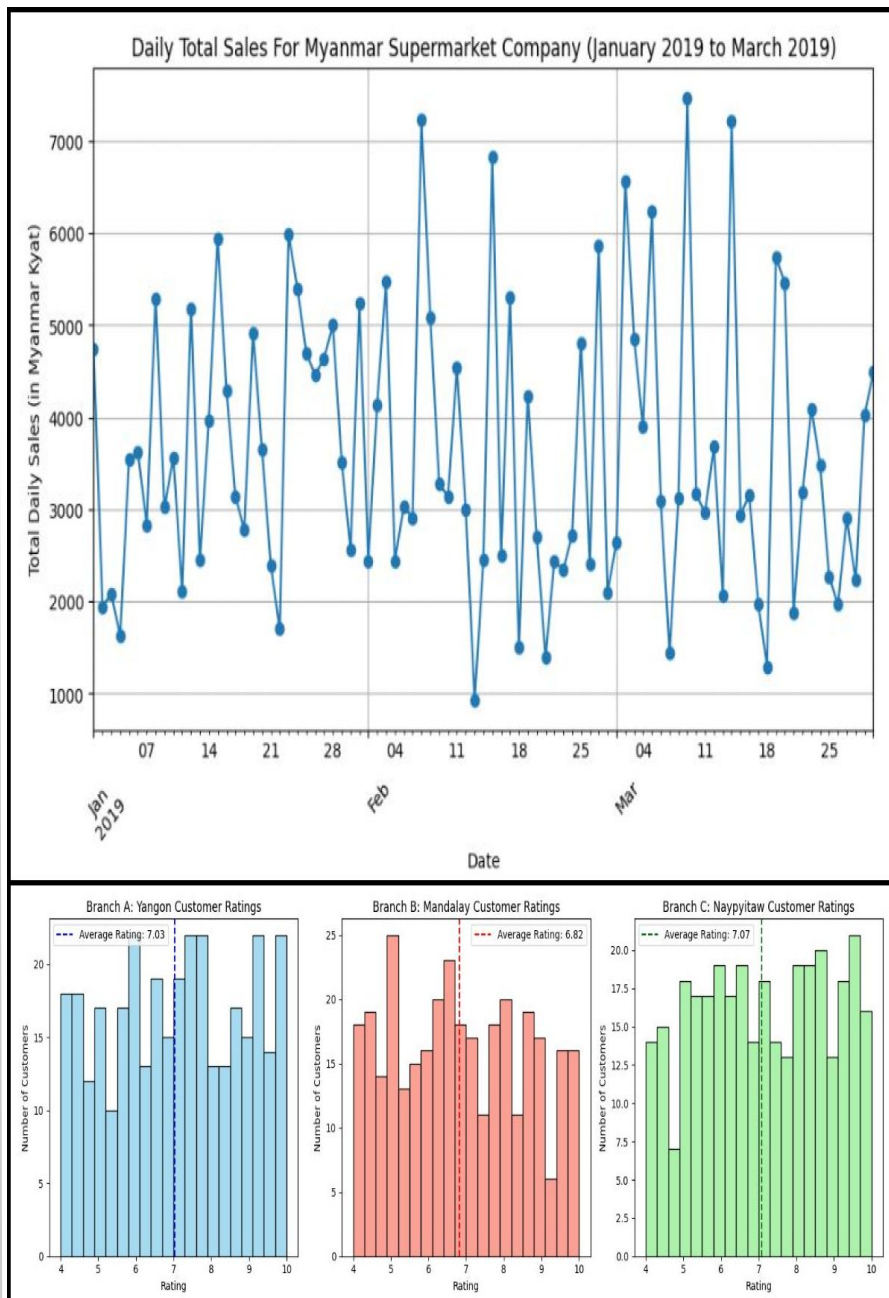
ISSUE / PROBLEM

A supermarket chain wants to expand their business by examining performance metrics.

RESPONSE

A historical sales dataset was used to answer questions such as:

- 1) What is the average overall customer rating?
- 2) What is the best selling product line?
- 3) Do members tend to spend more money than non-members?
- 4) Which days of the week have the highest sales?



KEY INSIGHTS

- Customer ratings were evenly distributed from 4.0 to 10.0. Customer surveys could help explain which factors are negatively impacting the customer experience.
- The best selling product line was “Food and Beverages”.
- Members only spend slightly more than non-members.
- The dataset had some quality issues with incorrect calculations. Obtaining data with correct information for the cost of goods sold would allow for further analysis of profit margins across product lines.
- Obtaining more recent datasets with a longer time frame could help the company better understand current consumer trends and how sales fluctuate throughout the year.
- Saturday was the day of the week with the highest sales. Monday had the lowest sales. The company can use this information along with other data to help optimize staffing.