

The background of the image shows two blue ceramic coffee cups on matching saucers, placed on a rustic wooden table. The cup in the foreground is in sharp focus, showing a detailed latte art design of a heart with radiating lines. The cup in the background is slightly out of focus. The text is overlaid on the image in a bold, black, distressed font.

CAFÉ HARMONY

**EXCEL CAPSTONE PROJECT
10ALYTICS**

OUTLINE

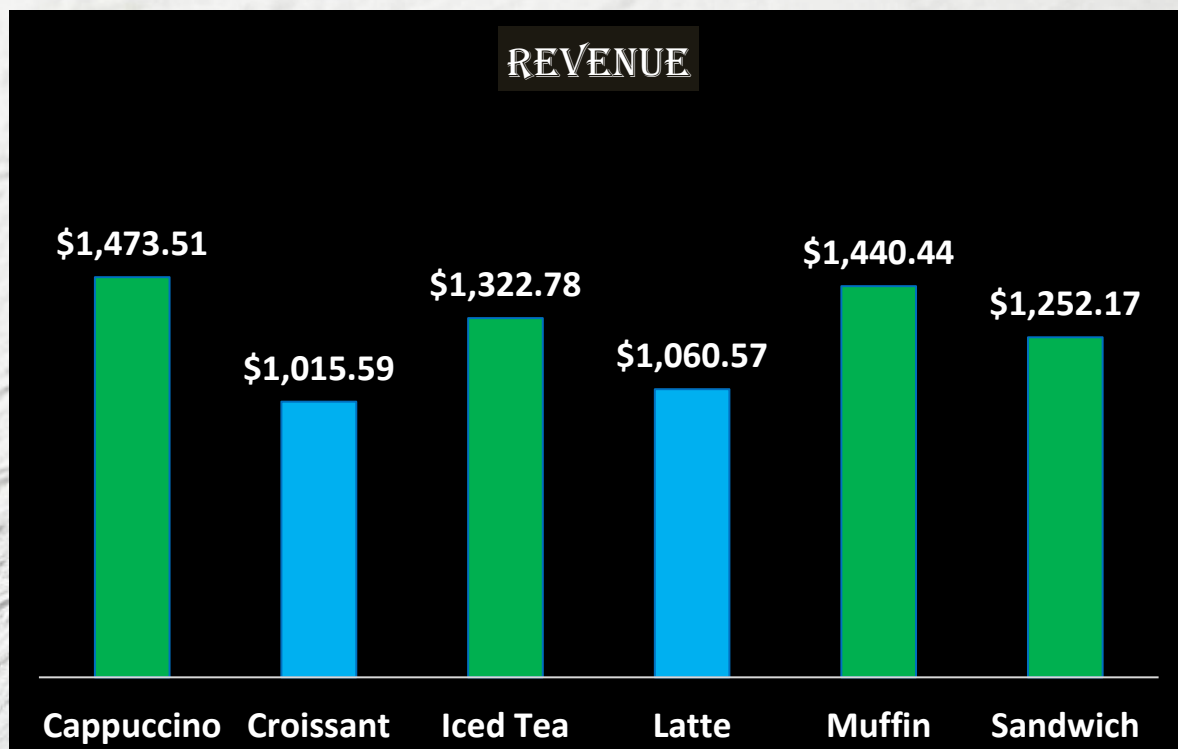
- Business overview
- Analysis of Revenue, Age, Gender, Stock Management, Employee Performance and Customer Ratings and Sentiments.
- Recommendations.

BUSINESS OVERVIEW

- **Welcome to Café Harmony, a new and exciting virtual café chain! The café specializes in offering a variety of drinks, snacks, and light meals to customers. Over the past year, Café Harmony has seen impressive growth but now faces new challenges as the company is scaling to meet customer demand.**
- **The café operates across four key locations in the city—Uptown, Airport, Suburbs, and Downtown—each with unique customer preferences and performance metrics. With a total customer base of 1,000 and a dedicated workforce of 1,000 employees. They are committed to delivering high-quality products and exceptional service.**
- **For this business analysis, I utilized a master sample of 608 based on sales and customer feedback responses, providing valuable insights into sales, stock management, product satisfaction, and consumption trends. These findings will help guide the business's strategic decisions to continue enhancing its offerings and overall customer experience.**



TOP-SELLING PRODUCT BASED ON REVENUE



REVENUE ANALYSIS OF CAFÉ HARMONY PRODUCTS

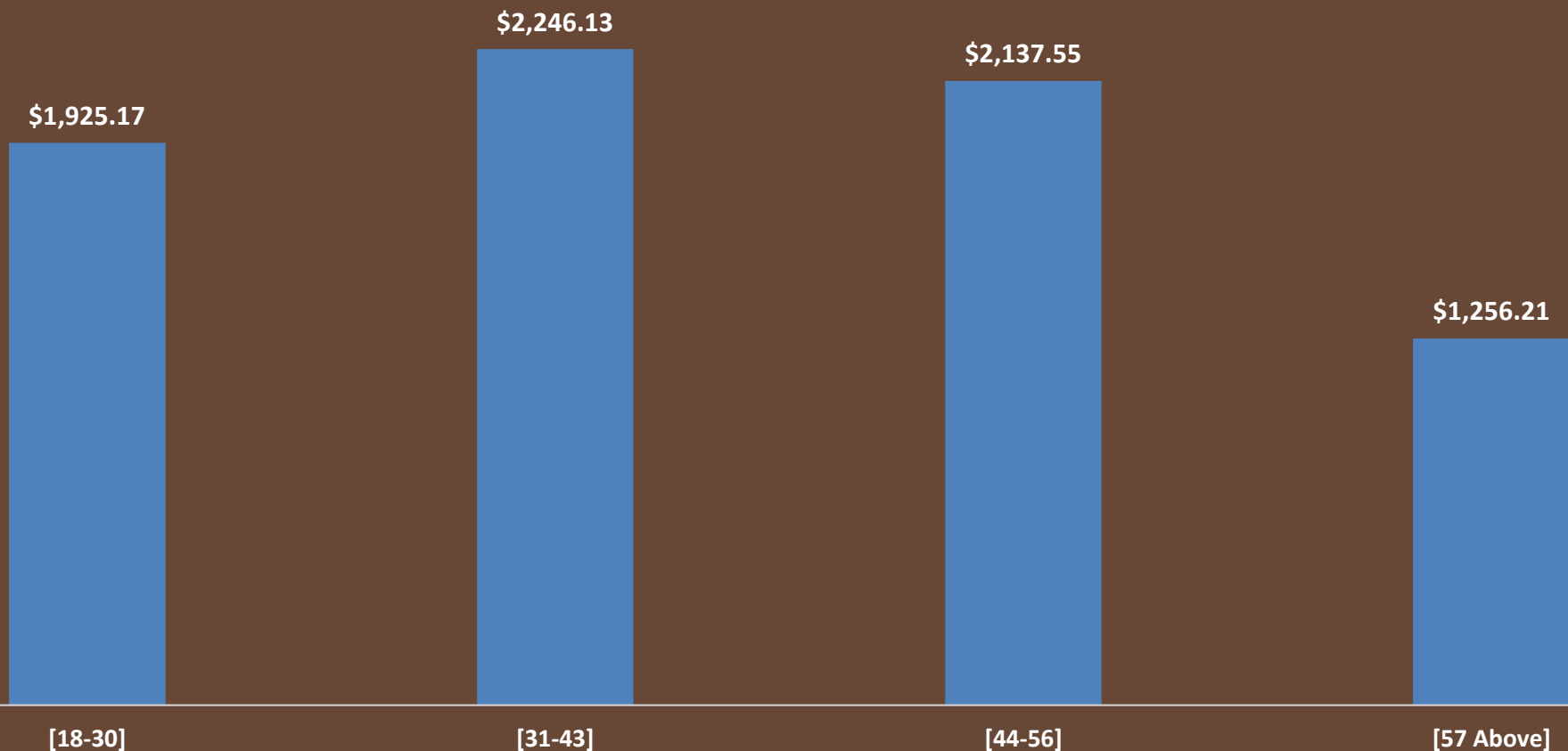
The Line graph shows the revenue generated from different products at Café Harmony. Below is a breakdown of key insights:

- 1. Cappuccino** generated the highest revenue at **\$1,473.51**, making it the most profitable item on the menu.
- 2. Revenue Fluctuations**
 - ❖ The revenue trend shows that **Iced Tea (\$1,322.78)** and **Muffin (\$1,440.44)** are performing well.
 - ❖ **Sandwich (\$1,252.17)** achieved moderate revenue.
 - ❖ **Latte (\$1,060.57)**, despite being a popular coffee choice, had relatively lower revenue, possibly due to pricing, quality, or customer preference.
- 3. Croissant** had the lowest revenue at **\$1,015.59**, indicating a lower demand, which might be due to the low quality of the product or the price.



CUSTOMER DEMOGRAPHIC (AGE, GENDER) DRIVING SALES

THE AGE DEMOGRAPHY SALES



ANALYSIS OF AGE DEMOGRAPHY SALES

The graph presents sales distribution across different age groups at Café Harmony. Below are key observations and insights:

1. Highest Sales Group

- ❖ The **31-43 age group** generated the highest sales at **\$2,246.13**, indicating they are the most engaged customers.

2. Second and Third Best Performing Groups

- ❖ The **44-56 age group** follows with **\$2,137.55** in sales.
- ❖ The **18-30 age group** recorded **\$1,925.17**, suggesting younger customers also contribute significantly to sales.

3. Lowest Sales Group

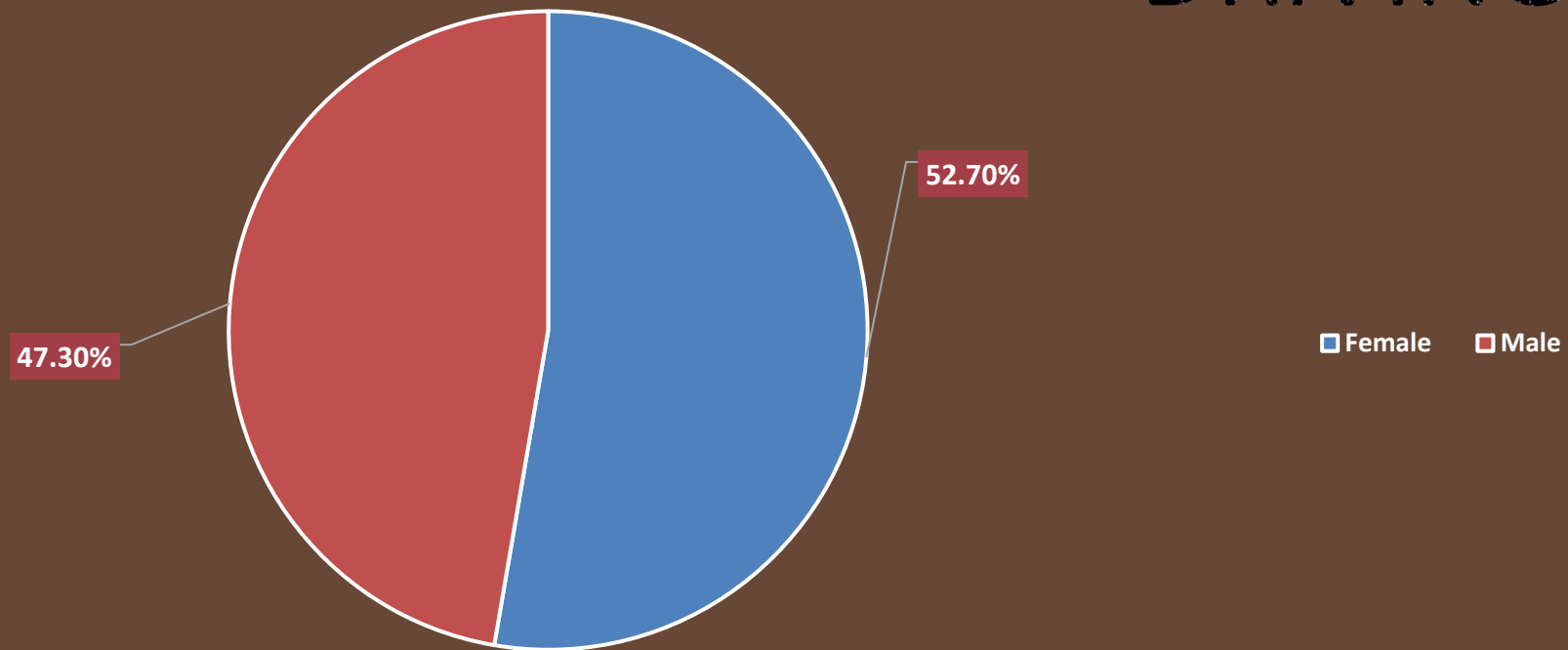
- ❖ Customers aged **57 and above** had the lowest sales at **\$1,256.21**, which could indicate lower engagement.





CUSTOMER DEMOGRAPHIC (GENDER) DRIVING SALES

GENDER



ANALYSIS OF GENDER DISTRIBUTION

The pie chart illustrates the gender demographics of customers at Café Harmony based on master data.

Key Observations:

1. Female Customer (52.70%)

- ❖ The majority of the customers are female. This suggests that the café's strongest customer base is female.

2. Male Customers (47.30%)

- ❖ Male customers also form a substantial portion, meaning their needs and preferences should not be ignored.



STOCK MANAGEMENT (HIGH/LOW PRODUCTS)



ANALYSIS OF STOCK MANAGEMENT CHART

This **Stock Management** chart visually represents the inventory levels of different ingredients in a café. The values indicate stock surpluses (positive values) and shortages (negative values).

Key Observations:

1. Stock Surpluses (Positive Values, Green Bars)

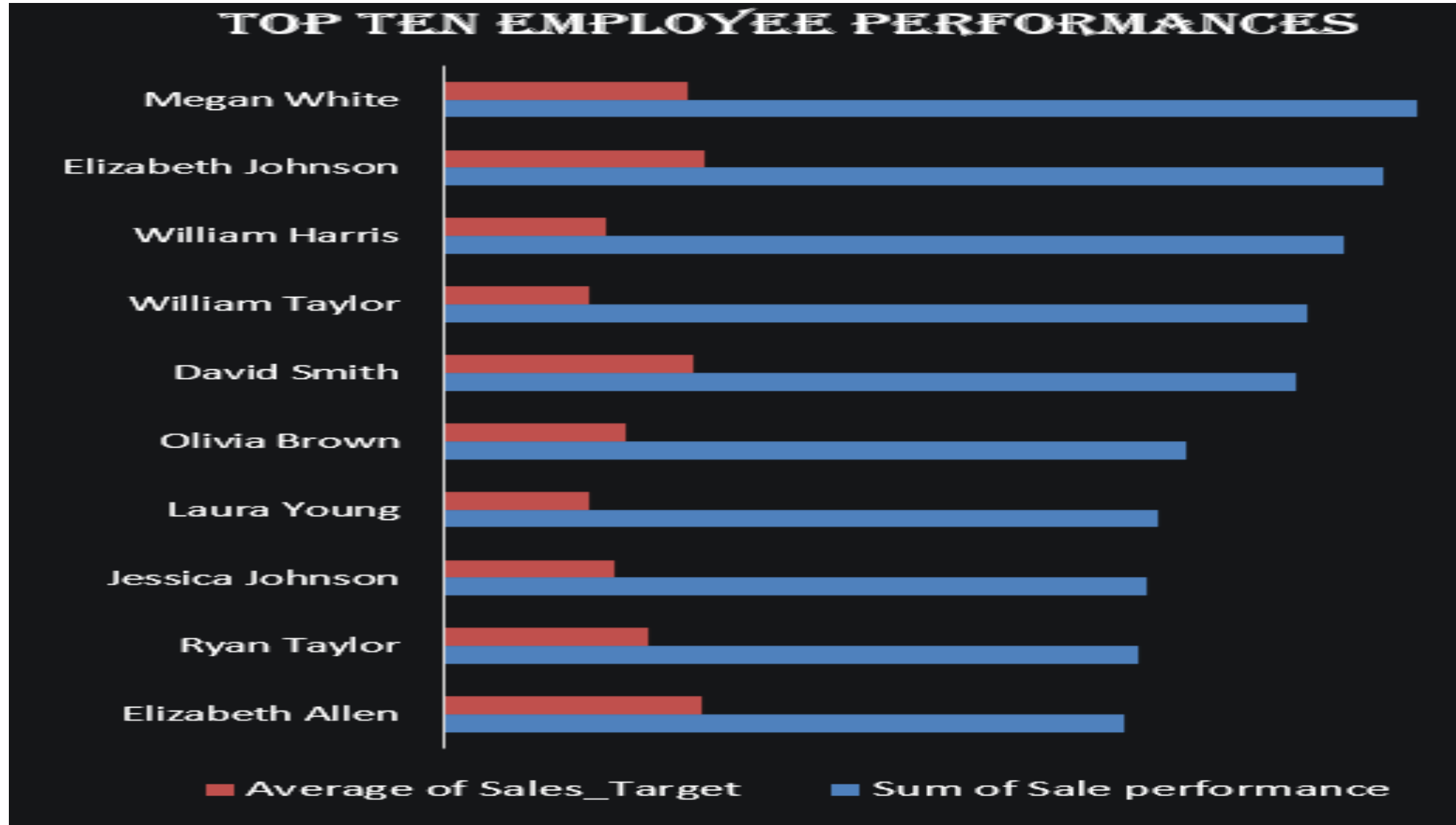
- ❖ **Sandwich Bread (+45)**: Highest surplus. In the revenue chart, it shows that sandwiches had the third lowest revenue from sales. This suggests that demand for the product might be lower than supply.
- ❖ **Sugar (+35)**: Well-stocked, the revenue chart shows that cappuccino, iced tea, and muffins are their highest selling product. It indicates that sugar should be stocked at all times to meet this product preference but should be monitored for excess storage.
- ❖ **Coffee Beans (+27)**: There is a Slight surplus due to customer preference being "cappuccino". The café should ensure constant availability because of the high demand for cappuccino and its being the highest sale revenue.
- ❖ **Lemon (+13)**: Available but should be checked to avoid spoilage.

2. Stock Shortages (Negative Values, White Bars)

- ❖ **Milk (-79)**: Most critically low; urgent restocking needed. This shows that the low supply for milk might also suggest why the latte revenue is low and not among the top sellers across locations.
- ❖ **Croissant Dough (-74) & Iced Tea Bags (-74)**: Severe shortages, indicating high demand due to ice tea being the third most preferred product or supply issues from their distributor.
- ❖ **Muffin Mix (-66)**: Running low. The muffins are the second highest in demand. This means the demand is high, and the suppliers aren't meeting up (supply is low). It also means that revenue might be higher if the supply was ideal.
- ❖ **Tea Bags (-31)**: Minimal stock, which may affect customer demand for tea-based beverages. This means that due to low demand for tea beverage products, the stock is low.



EMPLOYEE PERFORMANCE BASED SALES



EMPLOYEE PERFORMANCE BASED ON ABOVE/BELOW SALES EXPECTATION

ABOVE SALES TARGET



BELOW SALES TARGET



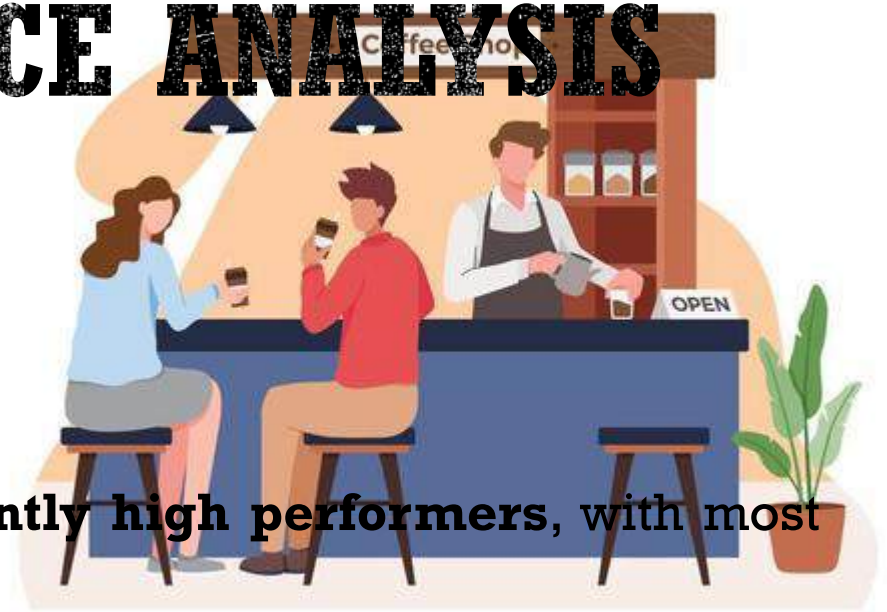
EMPLOYEE PERFORMANCE ANALYSIS

The workplace consists of 1,000 Employees:

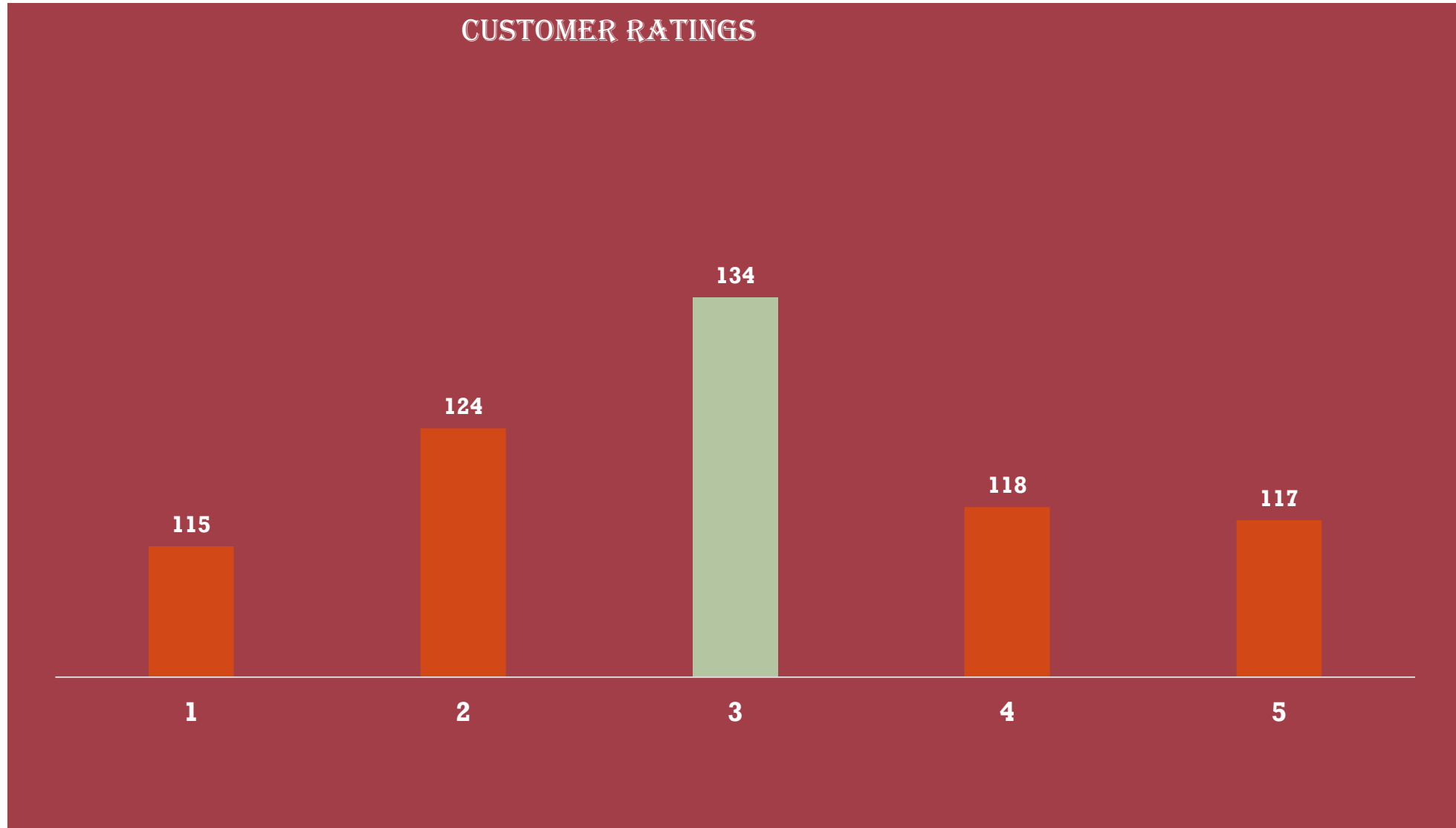
- **Total Employees Above Target: 578**
- **Total Employees Below Target: 422**

Insights on the graph:

- The (**Above Sales Target**) chart has **more consistently high performers**, with most employees exceeding targets.
- The second chart contains **low performers**, with employee like Michael Lee not meeting their sales targets and some performing below expectations.
- **Megan White, Elizabeth Johnson, and Willian Harris** were among the most consistently high performers on both top performers and above sales target chart.



CUSTOMER FEEDBACK ANALYSIS

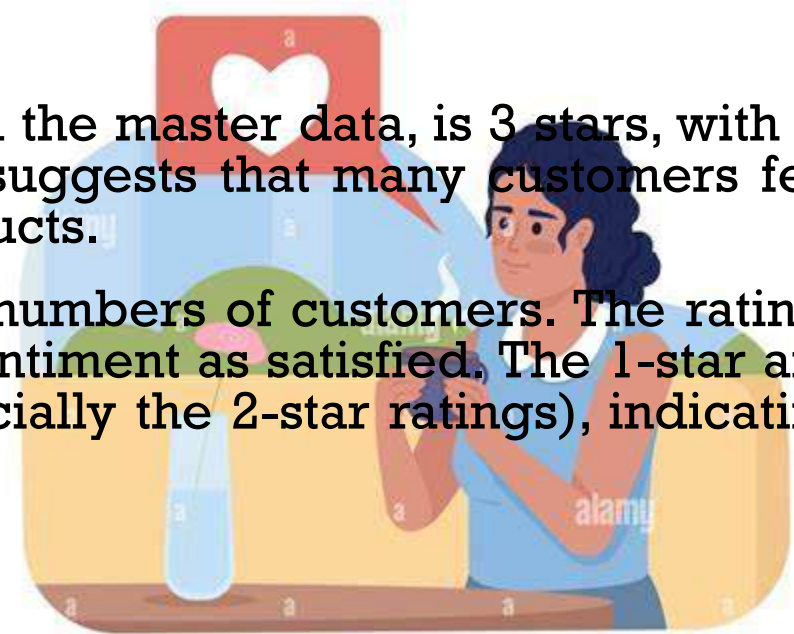


ANALYSIS OF CUSTOMER RATINGS CHART

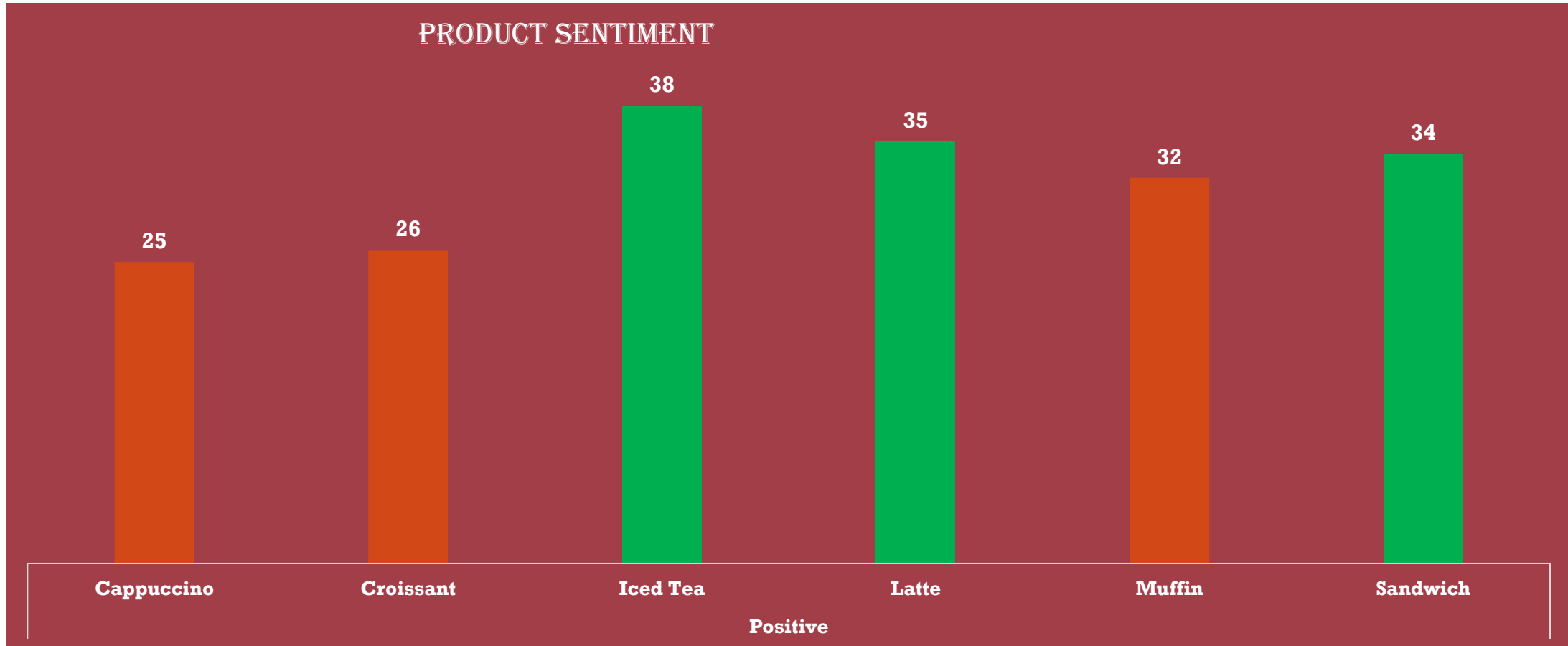
The chart displays customer ratings (1-5) as follows:

- ★ 1-star → 115 customers
- ★★ 2-star → 124 customers
- ★★★ 3-star → 134 customers (most common rating)
- ★★★★ 4-star → 118 customers
- ★★★★★ 5-star → 117 customers

- ❖ The most common rating in the chart, and based on the master data, is 3 stars, with an actual count shown as 134. The high 3-star count suggests that many customers feel average about their experience with the café's products.
- ❖ However, 4-star and 5-star ratings have low rating numbers of customers. The ratings suggest a small positive distribution of customer sentiment as satisfied. The 1-star and 2-star ratings have a high number of ratings (especially the 2-star ratings), indicating dissatisfied customers.



POSITIVE SENTIMENT ON PRODUCT



ANALYSIS OF PRODUCT SENTIMENT BASED ON CHART)

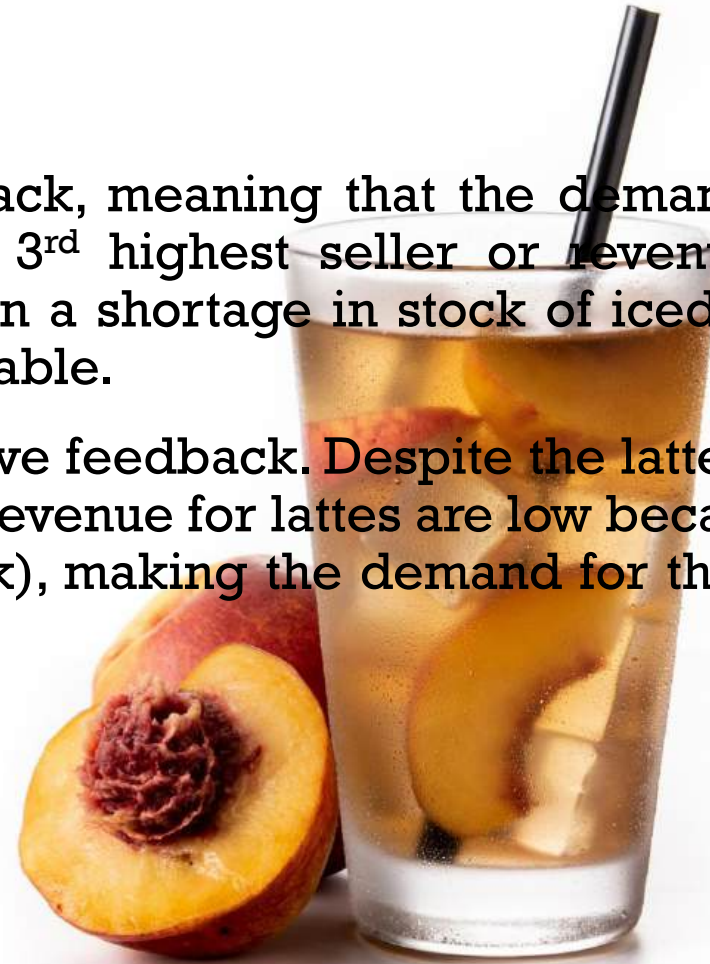
Key Insights

- **Iced Tea** has the highest positive sentiment (38), meaning customers enjoy it the most.
- **Latte and Sandwich** also have strong positive feedback (35 and 34 respectively). This means they are well-received products.
- **Muffin** has moderate positive feedback (32).
- **Cappuccino and Croissant** have the lowest positive sentiment (25 and 26), indicating that customers may not be fully satisfied with these products.

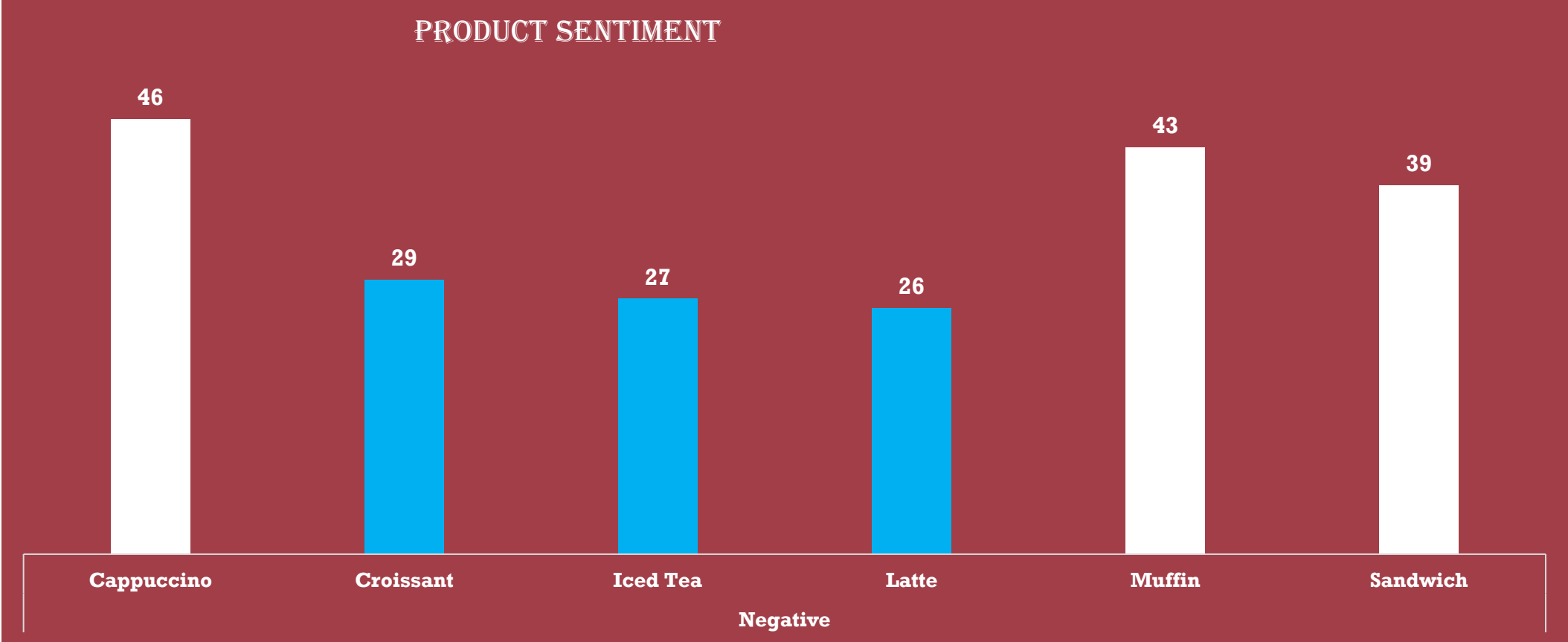


ANALYSIS OF PRODUCT SENTIMENT BASED ON CHART (BARS IN GREEN)

- **The Iced tea** has the most positive feedback, meaning that the demand for the product is high, resulting in it being the 3rd highest seller or revenue maker amongst other products. This has resulted in a shortage in stock of iced tea bags due to the demand by customers when available.
- **Latte and Sandwich** also have strong positive feedback. Despite the latte having a strong positive feedback. The demand and revenue for lattes are low because there is a shortage in its ingredients (such as milk), making the demand for the product low because it is never available.



NEGATIVE SENTIMENT ON PRODUCT



NEGATIVE SENTIMENT ANALYSIS

Key Observations

- **Cappuccino** has the highest negative sentiment (46), suggesting major dissatisfaction.
- **Muffin** with 43 negative reviews.
- **Sandwich** also has a significant negative sentiment (39) surpassing the positive feedback (34) slightly, which means it needs a bit of attention.
- **Croissant (29), Iced Tea (27), and Latte (26)** have relatively lower negative sentiment, meaning they are better received by customers.

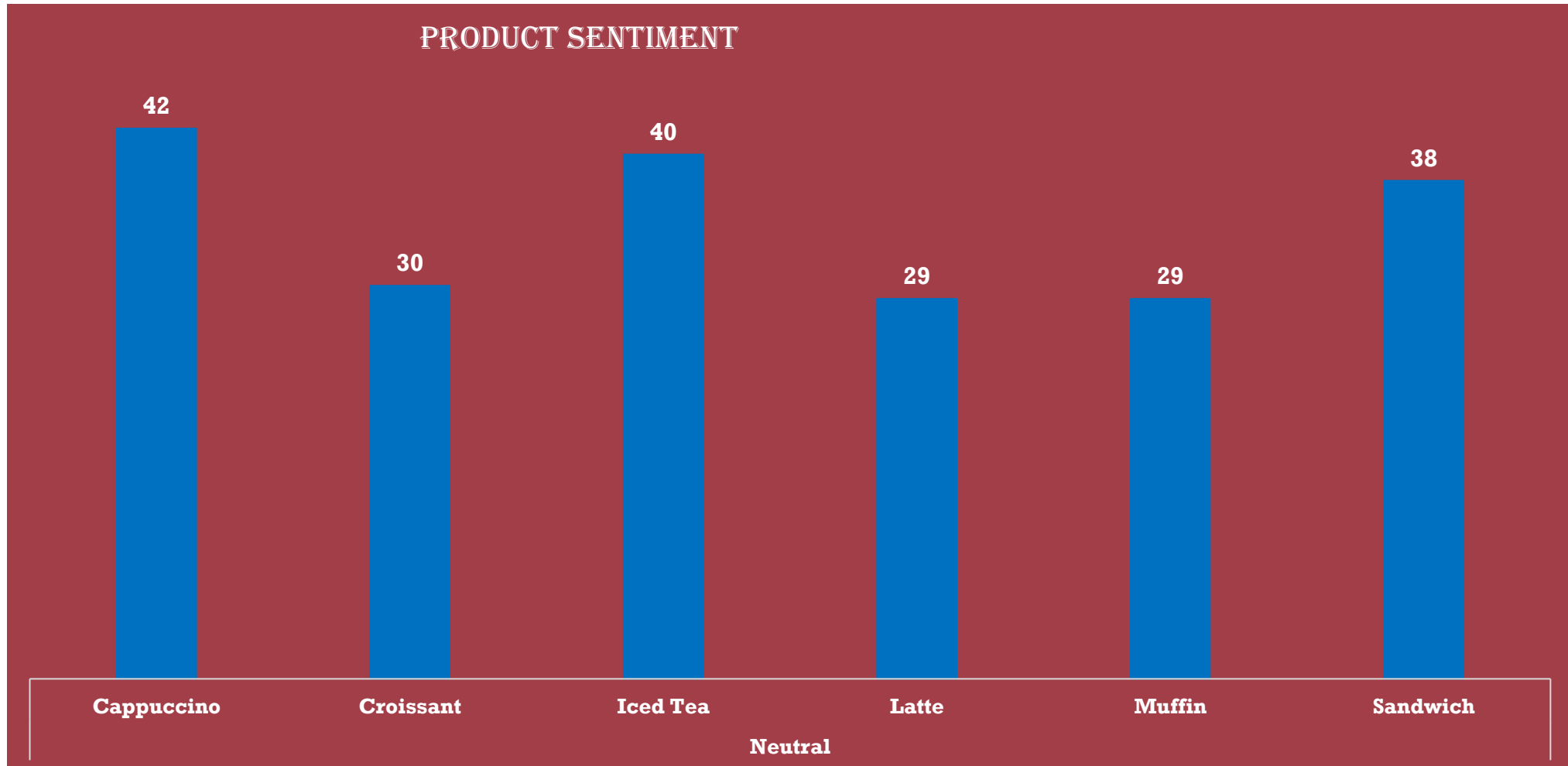


NEGATIVE SENTIMENT ANALYSIS (BAR IN WHITE)

- **Cappuccino** has the most negative feedback, although the demand for the product is high, resulting in it being the highest seller or revenue maker amongst other products. This could be because the product is always available to customers against their preference. There is also a shortage in stock of milk, and even though the coffee beans are above the ideal stock by (27), the quantity in stock is still low, affecting the quality and taste of the cappuccino because the café is managing the quantities left.
- **Muffins** also have strong Negative feedback, despite the product having the 2nd highest revenue. This might be due to the demand for the product when it is available in the café. The negative aspect might come from the quality and taste of the product being low due to a shortage in its ingredients (such as muffin mix and milk).
- **Sandwich** (34 positive vs. 39 negative) indicates that Sandwich needs a little improvement despite its moderate popularity.



NEUTRAL SENTIMENT ON PRODUCT



NEUTRAL SENTIMENT ANALYSIS

Key Observations:

1. **Cappuccino (42)** and Iced Tea (40) have the highest neutral sentiment, suggesting that a large portion of customers have a balanced perception of these products. Although the cappuccino has a high neutral sentiment, the negative sentiment (46) overshadows this rating.
2. **The Sandwich** and **Croissant** have a balanced sentiment score across all the product remarks(positive, negative, and neutral).



RECOMMENDATIONS ON REVENUE

- Since Cappuccino & Muffins generates high revenue, café harmony should consider promotional offers by pairing them together to increase sales significantly.
- To Boost Croissant and latte Sales, consider promoting them by pairing (Bundle offer) them with cappuccino or Iced tea and muffins to improve sales. Make the promotion trendy and offer discounts on the product to make it appealing to the age groups of (18-30 and 31-43).
- Based on the analysis, it's clear that the Latte Performance is low because of low stock in milk. Café harmony should get new milk suppliers with rich quality, adjust the price and also market the new and improved latte to improve sales.
- café harmony should focus its efforts on weaker products (croissants and Latte) by always making them regularly available on the menu.



RECOMMENDATIONS ON AGE AND GENDER

- The (31-56) Age Groups contribute to the highest sales. café harmony should implement a loyalty card that also offers (discounts) to their customers in this age group. Also, their marketing awareness should focus on this targeted group. This will further increase their spending and boost revenue.
- Café harmony can tap into the age group of (18-30) by coming up with trendy beverages and posting them on social media (Twitter, Instagram, and Facebook) while also offering student discounts. This will appeal to the age group of 18-30 and improve sales in that category.
- For the 57 above Age Group, café harmony should consider promoting healthier options and products that cater to this group's preferences.
- Given that the highest percentage of sales are from female customers, I will suggest loyalty cards should be given to women on international celebration days, for example (women's and mother's day), social media engagement such as (female-oriented podcast) commercial break advert may increase their spending while also increase sales. Male customers also make up a significant portion of the market, so introducing a sports-themed coffee could enhance male engagement.



RECOMMENDATIONS ON STOCK MANAGEMENT

- Café harmony should have multiple suppliers, especially for products like Milk, Muffin Mix, Iced Tea Bags, and croissant Dough, to avoid disruptions. Having multiple suppliers will help increase demand for this product and also boost sales.
- Occasionally rotate Stock like lemon and juice concentrate to accommodate other ingredients like coffee beans, iced tea bags, croissant dough and milk to intensively meet customer demands and improve sales for this product (Latte and croissant).
- Monitor overstocked items and adjust procurement to reduce waste and improve cash flow.



RECOMMENDATIONS ON EMPLOYEE PERFORMANCE

- Café harmony should introduce and compensate the top performer with sales commission to drive sales and improve those underperforming.
- Adequate training should be done monthly or quarterly to improve employees performance and sales.



RECOMMENDATIONS ON CUSTOMER RATINGS

- **The café should analyze** feedback comments (**1 & 2 ratings**) to help pinpoint issues and devise means to improve the rating through improving areas in service quality, menu variety, or pricing.
- The business should focus on converting 3 ratings into 4 or 5 ratings experiences by improving some of its products, like Latte and iced tea, and also enhancing advertising and providing better service.



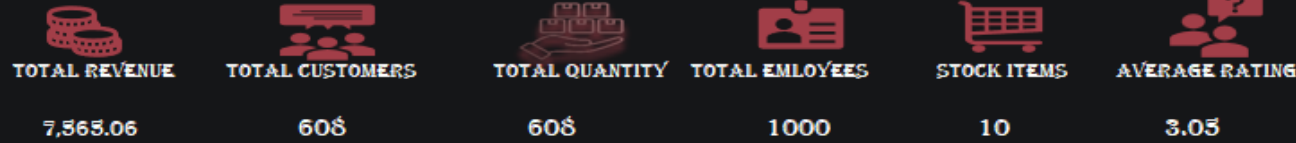
RECOMMENDATION ON PRODUCT SENTIMENTS

- **Iced Tea, Latte, and Sandwich** should be featured as best-sellers in promotions campaign offering discounts and loyalty cards.
- **The Cappuccino** ingredients should be reviewed by conducting a customer survey to identify the specific complaint. **The** Taste and price might be the problem.
- The café should hire a coffee brewer or conduct taste tests to find the best formula. The café should also be scouting for a quality supplier for the cappuccino ingredients(coffee beans and milk).
- **Muffin Quality Improvement** – Focus on quantity and quality of the ingredients, and freshness to increase satisfaction.

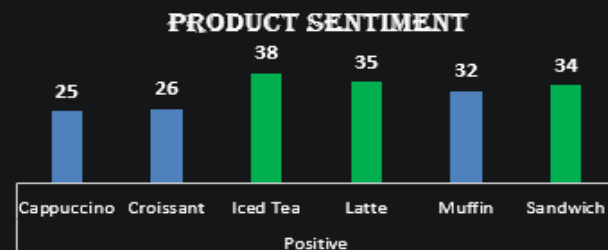
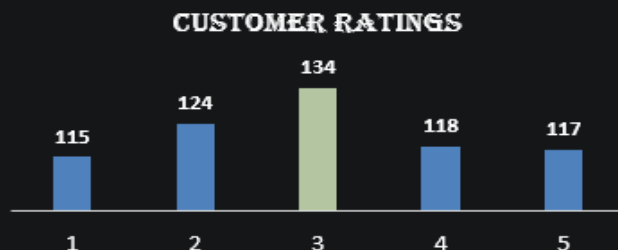
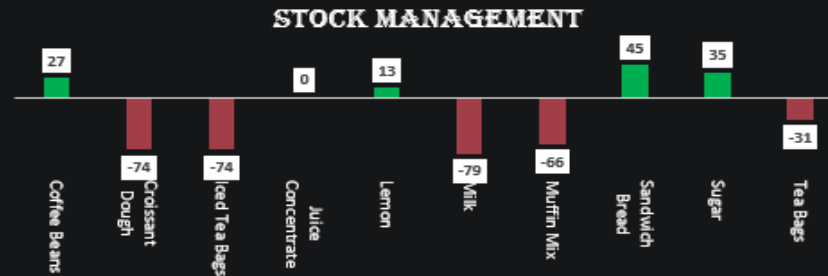
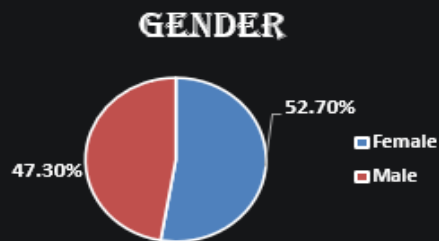
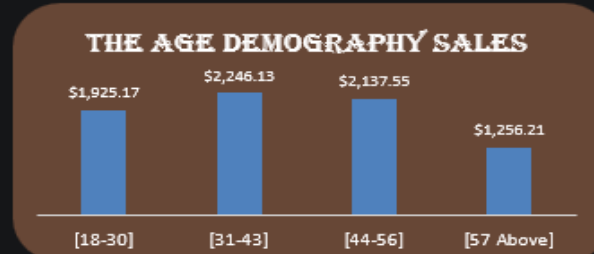


DASHBOARD

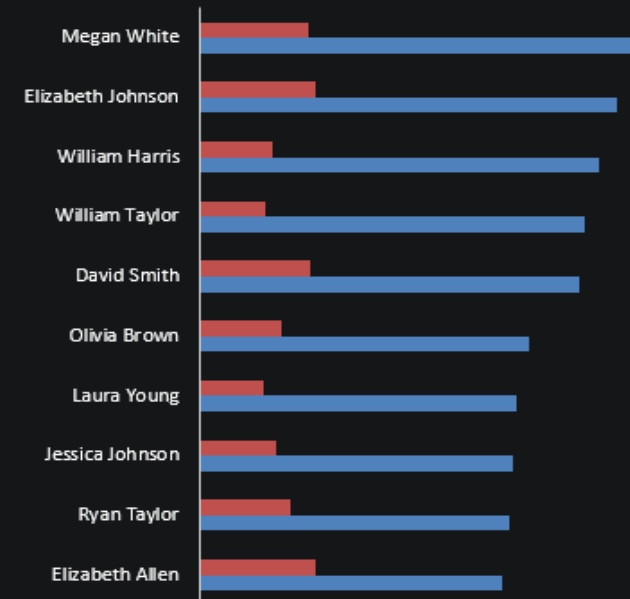
CAFE HARMONY



| | |
|-------------|-------------|
| Coffee B... | Croissa... |
| Iced Te... | Juice Co... |
| Lemon | Milk |
| Muffin ... | Sandwic... |
| Sugar | Tea Bags |



TOP TEN EMPLOYEE PERFORMANCES



■ Average of Sales_Target ■ Sum of Sale performance

DASHBOARD

