**Business Insights Document: Supermarket Sales Analysis**

**1. Objective:** The objective of this analysis is to evaluate the sales performance across various branches, product lines, customer segments, and time periods for the supermarket chain. This will enable us to identify trends, customer behaviors, and opportunities for increasing revenue and customer satisfaction.

**2. Key Metrics Analyzed:** The following key metrics were identified and analyzed from the dataset:

* **Total Sales**: Total revenue generated by all branches.
* **Average Sales per Transaction**: Average sale value per customer visit.
* **Quantity Sold**: Total number of items sold.
* **Customer Rating**: Average customer satisfaction based on ratings.
* **Sales by Payment Method**: Breakdown of sales across cash, credit card, and e-wallet.
* **Sales by Branch**: Performance comparison of branches (Yangon, Naypyitaw, Mandalay).

**3. Key Business Insights:**

**A. Branch Performance:**

* **Naypyitaw (Branch C)**: Highest overall sales volume and customer satisfaction rating. **On food and beverage and fashion accessories**
* **Mandalay (Branch B)**: Moderate sales volume, but performs well in **sports and travel**.
* **Yangon (Branch A)**: Lowest overall sales, but performs well in **home and lifestyle** suggesting the need for promotional activities.

**Insight**: **Naypyitaw** is the top-performing branch, while **Yangon** requires a strategy overhaul to increase foot traffic and sales volume.

**B. Product Line Trends:**

* **Food and beverage** and **sports and travel**.: These product lines consistently contribute to the highest revenue across branches.
* **Fashion Accessories**: Strong sales during weekends, particularly among female customers.
* **Health and beauty**: Has potential but needs better promotions to boost awareness.

**Insight**: Product lines like **Food and beverage** and **sports and travel** are strong performers. However, focusing marketing efforts on promoting **Health and beauty** and **Fashion Accessories** could boost overall revenue.

**C. Customer Segmentation and Preferences:**

* **Members vs. Normal Customers**: Members tend to have higher transaction values and shop more frequently, especially on weekends.
* **Gender**: Male customers tend to spend more on **Electronic Accessories** and **Health and Beauty** products.
* While female customers are more likely to purchase **Fashion Accessories** and **Food and beverage** products.

**Insight**: Targeted promotions for **Member customers** with loyalty incentives will likely increase repeat purchases. Gender-specific promotions for product lines could also improve sales.

**D. Time-Based Sales Trends:**

* **Daily Sales Trends**: Sales peak during the weekends (especially Saturday) with a noticeable dip during weekdays.

**Insight**: Focusing promotions on **weekends** could help maintain higher sales volumes throughout the week.

**E. Customer Satisfaction:**

* The average customer satisfaction rating is 6.96/10, with higher satisfaction levels for **Ewallet** payments especially **Males**.
* **Insight**: Focus on improving the customer experience by further promoting Ewallet payment methods and ensuring quality service during peak hours.

**F. Price Satisfaction Analysis:**

* There is no apparent correlation between unit price and customer satisfaction ratings, indicating that price is not a primary factor affecting customer satisfaction.
* **Insight:** Since price doesn’t affect satisfaction, focus on service quality and customer experience.

**G. Top-Selling Product Categories:**

* Sales are evenly distributed across all categories, with no significant differences to suggest a strong customer preference for any particular category. This is supported by the Product Category Popularity Analysis bar chart and Sales by Product Categories column chart.
* **Insight:** No strong category preference; maintain a balanced product mix and focus on improving customer experience.

**H. Customer Ratings Distribution:**

* Customer ratings are evenly distributed across ratings from 4 to 10, as demonstrated by the Customer Ratings Distribution line chart.
* **Insight:** Ratings are evenly spread. Improve service to push lower ratings (6) higher.

**I. City-Wise Payment Method Distribution:**

* In Yangon, customers predominantly prefer E-wallet payments over cash or credit cards.
* In Mandalay, customers show an equal preference for cash, credit card, and E-wallet payments.
* In Naypyitaw, cash is the most preferred payment method, followed by E-wallet, with credit cards being the least preferred.

**Insights:**

* **Yangon:** Promote Ewallet usage further.
* **Mandalay:** Maintain diverse payment options.
* **Naypyitaw:** Promote Ewallets, as cash dominates.

**J. Daily Customer Distribution by Branch:**

* **Branch A:** Experiences the highest foot traffic on Sunday and Tuesday. While it decreases on Wednesday and Thursday.
* **Branch B:** Busiest on Saturday, Tuesday and Friday. Less busy on Sunday and Monday.
* **Branch C:** Sees the busiest traffic on Saturday and Tuesday while less traffic on Friday.

**K. Busiest Month by Branch:**

* **Branch A:**The customers traffic in this branch decreased in February, while it increases in March and January.
* **Branch B:** like branch A, the customers traffic in this branch decrease in February, while it increases in March and January
* **Branch C:** like branch A, the customers traffic in this branch decrease in February, while it increases in March and January

**L. Branch with the Most Sales:**

* **Yangon:** Records the highest sales volume across all branches.
* **Insight:** Prioritize investment in Yangon to maintain its top performance.

**4. Recommendations:**

1. **Branch-Specific Strategies**:
   * **Mandalay**: Launch promotional campaigns targeting key demographics to increase foot traffic and sales.
   * **Yangon**: Continue to maintain and grow sales in top product lines while promoting less popular categories like **Health and beauty**.
   * **Naypyitaw**: Introduce new product lines or promote offerings to stimulate growth.
2. **Targeted Marketing Campaigns**:
   * Use **gender-based marketing** to promote **Electronic Accessories** to men and **Fashion Accessories** to women.
   * Launch **member loyalty programs** to incentivize repeat purchases and higher transaction values.
3. **Improve Customer Satisfaction**:
   * Further promote **Ewallet** payments due to its positive impact on customer satisfaction.
   * Address lower-rated experiences in certain branches by providing more staff during peak hours to improve customer service.
4. **Time-Based Promotions**:
   * Implement **weekend-specific promotions** and **lunchtime offers** to capitalize on peak sales hours.
   * Offer discounts during weekday lulls to drive traffic and even out sales fluctuations.
   * Bundling offers for underperforming products or discount it to improve sales and **ATV**.