

1. Customer Analysis

Business Insights:

- **Customer Distribution by Region:** Asia and South America have the largest customer bases, indicating these are key markets. These regions should receive targeted marketing efforts. Conversely, regions like North America and Europe could be potential areas for growth.
- **Signup Trends Over Time:** Signups have steadily increased, especially in 2024. This indicates successful marketing and acquisition strategies. The business should explore expanding resources to support this growth.
- **Monthly Signup Peaks:** Signups peak between May and July, suggesting a seasonal trend. This could align with special promotions or events, allowing the company to plan targeted marketing campaigns.
- **Regional Growth Potential:** South America and other less populated regions represent potential growth areas. By offering region-specific products or promotions, the company could tap into these emerging markets.

2. Product Analysis

Business Insights:

- **Product Distribution by Category:** Electronics and Clothing dominate, indicating high customer demand. The company should continue focusing on these categories while considering diversifying other segments like Home Decor and Books to expand offerings.
- **Price Distribution:** Most products are priced between \$10 and \$60, but some high-priced items indicate opportunities for premium offerings. Electronics show a higher average price, suggesting they appeal to customers willing to invest more.
- **Top Expensive Products:** Electronics, like Smartwatches, are the top earners in terms of price, indicating that premium products are central to revenue. The company should expand premium offerings to maintain competitive advantage.
- **Price Variance by Category:** Categories like Home Decor and Sports show a high price variance, appealing to diverse customer budgets. This

variance can help attract a wide customer base and aid in pricing strategies.

3. Transaction Analysis

Business Insights:

- **Transaction Trends Over Time:** Transaction volume fluctuates throughout the year, with peaks likely due to holidays or promotions. Recognizing these trends helps in stock management, promotional planning, and customer support.
- **Top Customers by Transaction Value:** A small segment of customers contributes heavily to revenue. Focused loyalty programs or targeted offers for these high-value customers could enhance retention and further increase sales.
- **Top Products by Quantity Sold:** High-quantity items often correspond to customer preferences. Ensuring stock availability and bundling these products with others can increase sales.
- **Revenue Contribution by Product:** High-price, high-volume products are key revenue generators. Focusing on these products in marketing campaigns could maximize returns.
- **Average Transaction Value:** Fluctuations in average transaction value reflect customer spending behavior. Identifying periods of high spending helps optimize marketing and forecasting strategies.