

Business Insights from the EDA:

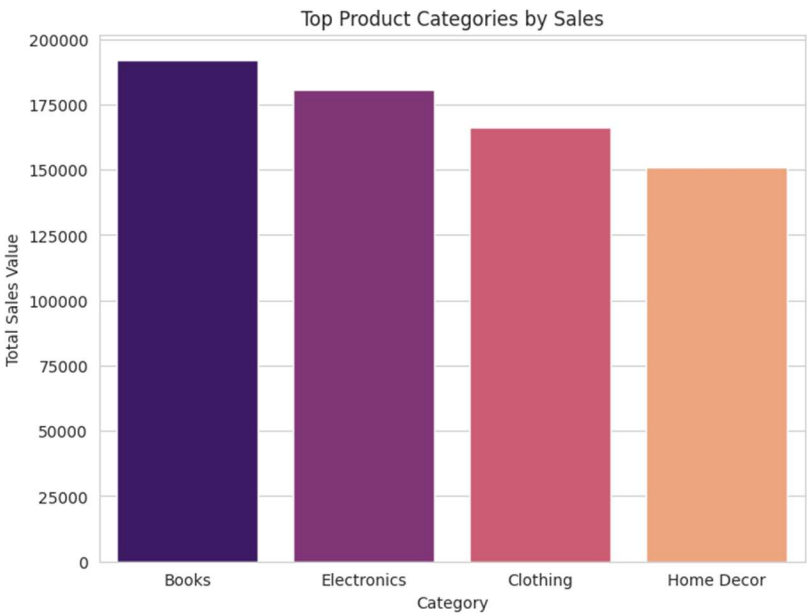
1. Monthly Sales Growth:

- Total monthly sales show steady growth, indicating positive overall business health and increasing customer engagement. This can guide scaling efforts and forecasting.



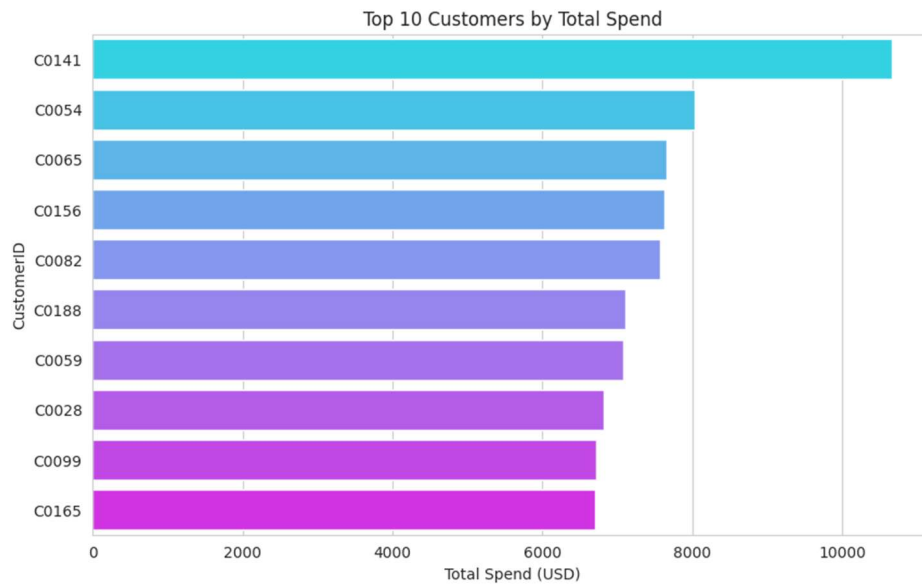
2. Top Product Categories by Sales:

- A few product categories dominate sales revenue, indicating that customer preferences are concentrated on specific product types. Optimizing inventory and marketing efforts in these categories could further boost sales.



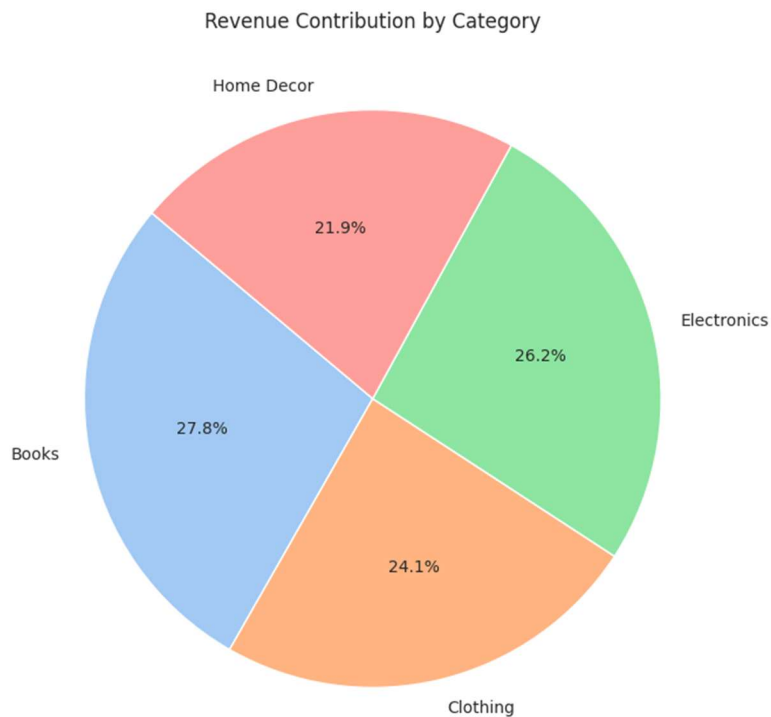
3. Top Customers by Total Spend:

- A small group of customers generates a significant portion of total revenue, highlighting the importance of customer loyalty and retention, suggesting the need to prioritize these customers with loyalty programs or personalized offers.



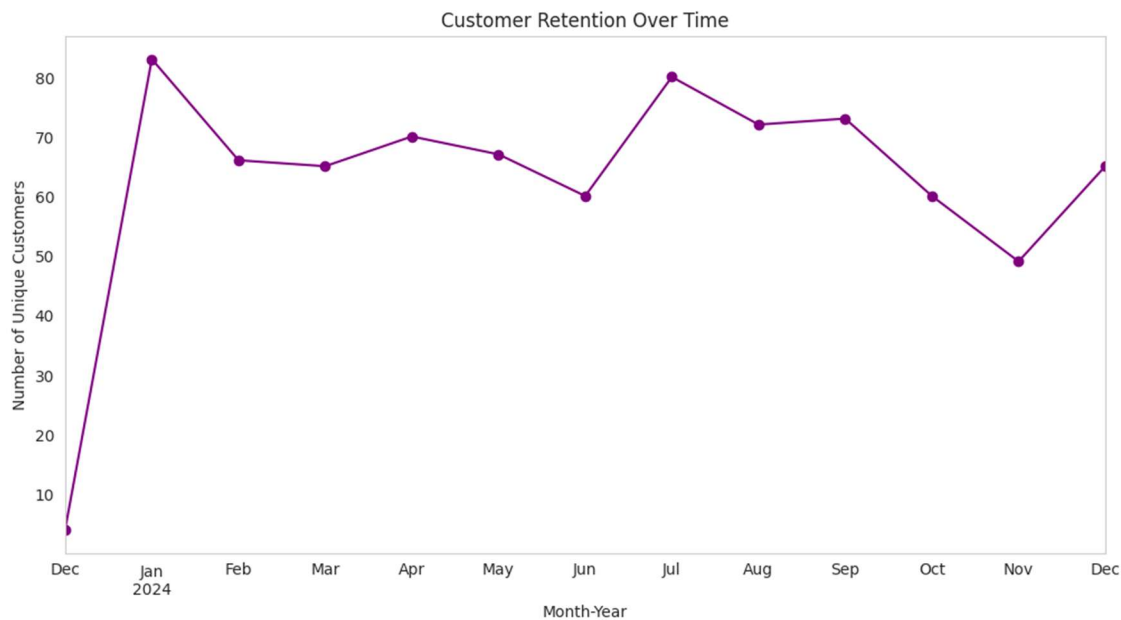
4. Revenue Contribution by Product Category:

- Some categories contribute disproportionately to revenue, suggesting they should be prioritized in promotions and marketing strategies.



5. Customer Retention Over Time:

- The number of unique monthly customers is growing steadily, showing a positive retention trend. Enhancing customer experience can sustain this growth.



6. Regional Customer Distribution:

- Certain regions have a significantly higher customer base. Targeting these regions with localized campaigns can improve overall revenue.



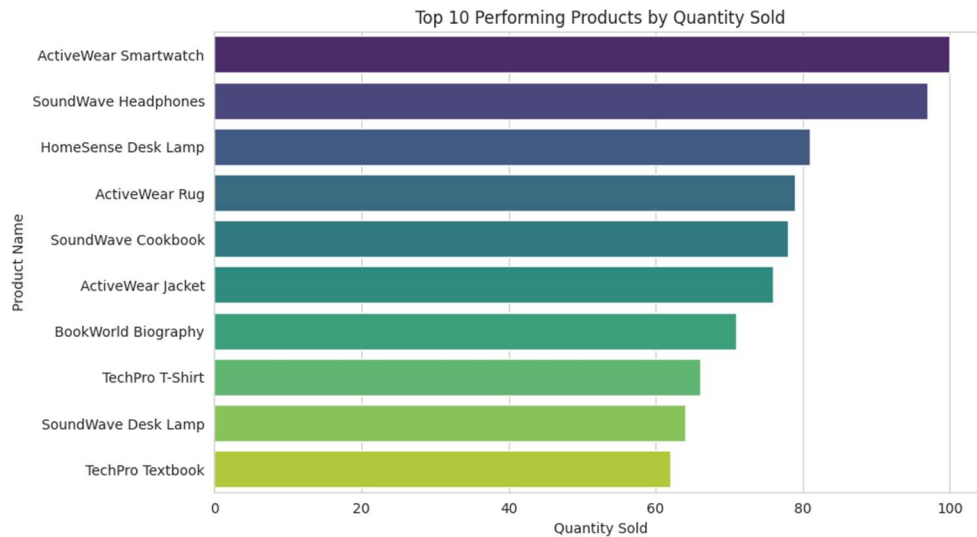
7. Customer Purchase Behavior (Quantity vs. Total Value):

- A clear positive correlation exists between the quantity purchased and total transaction value. Bundle offers and volume discounts can drive sales.



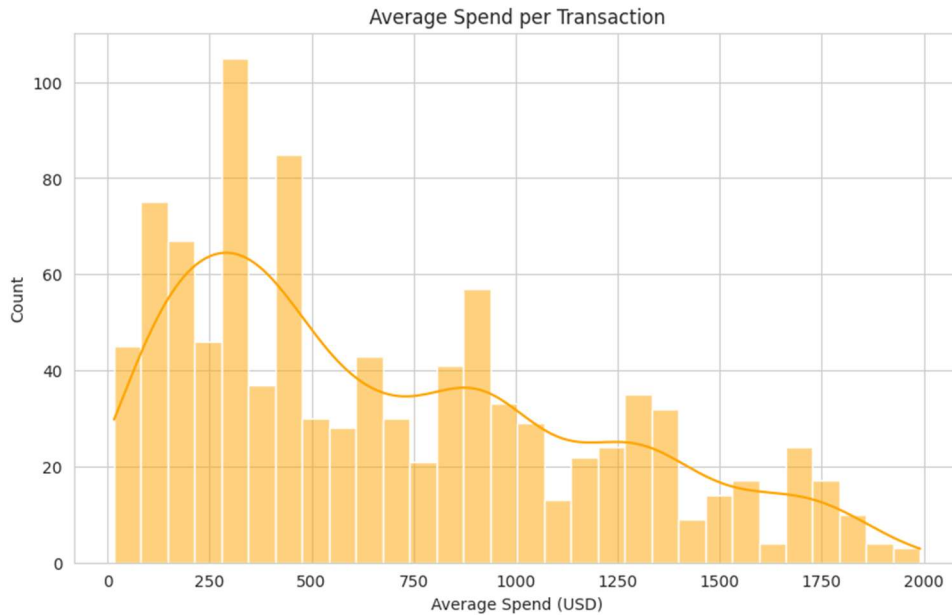
8. Top Performing Products by Quantity:

- The top 10 products account for a substantial share of the total quantity sold. Stocking these products adequately can prevent lost sales.



9. Average Spend per Transaction:

- The average customer spend per transaction highlights spending patterns, which can guide upselling or cross-selling strategies.



10. Sales Trends by Day of the Week:

- Sales are unevenly distributed across weekdays, with higher revenue observed on specific days. Running promotions on low-sales days could improve overall revenue.

