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ZeoTap Business Insights

1. Top Customers By Revenue

- **Observation** : I identified the top 10 customers who generated the highest revenue
- **Insight** :
  - Focusing on these high-value customers can help in creating targeted marketing campaign and loyalty program to retain them and encourage repeat purchases.

```python
n = 10
top_customers = product_bought.groupby('CustomerName')['TotalValue'].sum().sort_values(ascending=False).head(n)
top_customers
```

```
CustomerName
Paul Parsons           10673.87
Bruce Rhodes            8040.39
Gerald Hines            7663.70
William Adams           7634.45
Aimee Taylor            7572.91
Anna Ball               7111.32
Mrs. Kimberly Wright    7073.28
Jennifer Pena           6819.57
Rodney Eaton            6715.72
Juan Mcdaniel           6708.10
Name: TotalValue, dtype: float64
```

  - ## According to derived information
    - **High-Value Customers** : Top 10 customers contribute significantly to revenue, with the highest spending over $10,000. Personalised offers and loyalty programs can help retain these high-value customers.
    - A significant portion of revenue comes from a few top customers. Analyzing their purchasing patterns can help attracts similar high-value profiles.
    - Retention strategies like personalised recommendation can strengthen their loyalty.

2. Best Selling Products

- **Observation** : Best selling products with highest revenue
- **Insights** :
  - These products serve as key revenue drivers and reflect customer preferences.
  - We can use these products by featuring them in advertisements , also we can bundle any other small product with them or offer discounts which can boost sales.

Revenue by Products
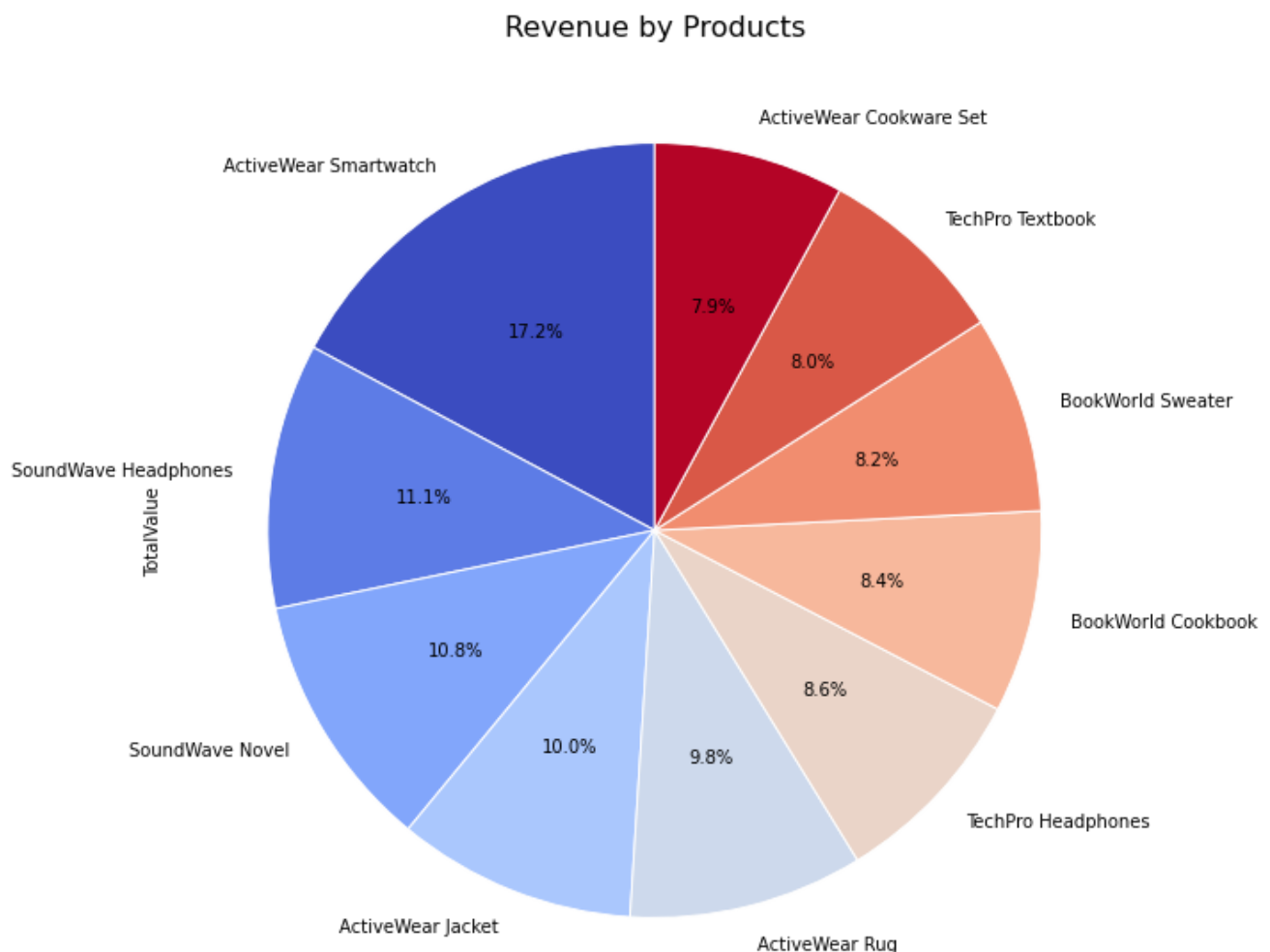
- ### According To This Data
- Most of the best selling products are from ActiveWear. Around 45% (44.9% exactly) of the products are sold by this company . So we should use this brand in our advertisements and marketing campaigns.
- We should also sign a deal with the manufacturer or distributor of these products to create monopoly and exclusivity on our platform.

3. Most Selling Categories

- **Observation** : The product categories that generates the highest revenue were identified.
- **Insights** :
  - Popular Categories indicate broader customer preferences ,offering opportunities to expand product offerings within these areas.

Revenue by Categories
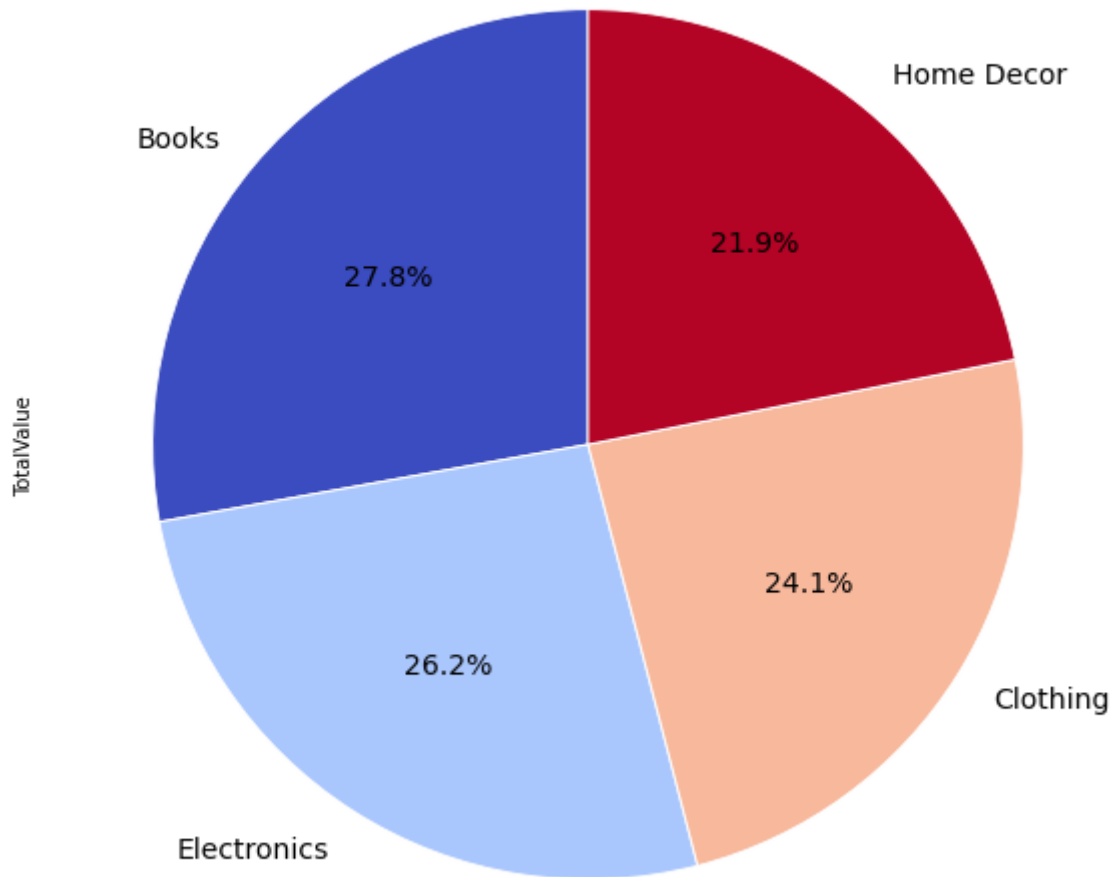
-
- ### Here Dominating Categories are books and electronics
    - **Books** : Focus on best sellers and niche genres to cater to diverse audiences. Offer personalized recommendations and bulk discounts to boost sales and customer engagement.
    - **Electronics** : Highlight popular brands and high-demand gadgets. Use bundle offers extended warranties, and seasonal discounts to attract teach-savvy customers and maximize revenues.

4. Frequent Customers

- **Observation** : Transaction frequency of all customer was analysed
- **Insights** :
  - Frequent Customer Indicate a high level of engagement and loyalty . These customers are prime candidates for personalized marketing campaigns , subscription models, or exclusive discounts to strengthen the relationship.
  - Monitoring their purchase trends also helps predict future buying behavior, enabling proactive engagement strategies to prevent churn.

Transactions by Customers Over Time

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- ## According to this data
  - **Engaged Customers** : Focus on the 3-6 transaction group , as they represent the most active and engaged customers. This group have a potential to be a loyal customer.
  - Target them with personalised offers to encourage more purchases.
  - **Low Activity Customers** : Around 12 (one transaction) + 9 (two transactions) are very less active. Before the number of these kind customers increase , we need to create strategies (discounts , incentive , or personalised advertisement) to re-engage them.
  - **High Loyalty Customers:** The customers with transaction 8-to-11 are highly valuable. Strengthen their loyalty with exclusive perks, early access to new products, or VIP rewards programs.

5. Sales during Particular Time (Season)

- **Observation** : Monthly revenue trends were analyzed to identify seasonal sales patterns.
- **Insights**
  - Seasonal trends highlight peak revenue periods, guiding inventory planning , staffing , and promotional activities. Offering targeted campaigns ,such as holiday-themed discounts , limited-time bundles , or festive promotions during peak seasons , can maximize revenue.

Monthly Revenue by Product Category
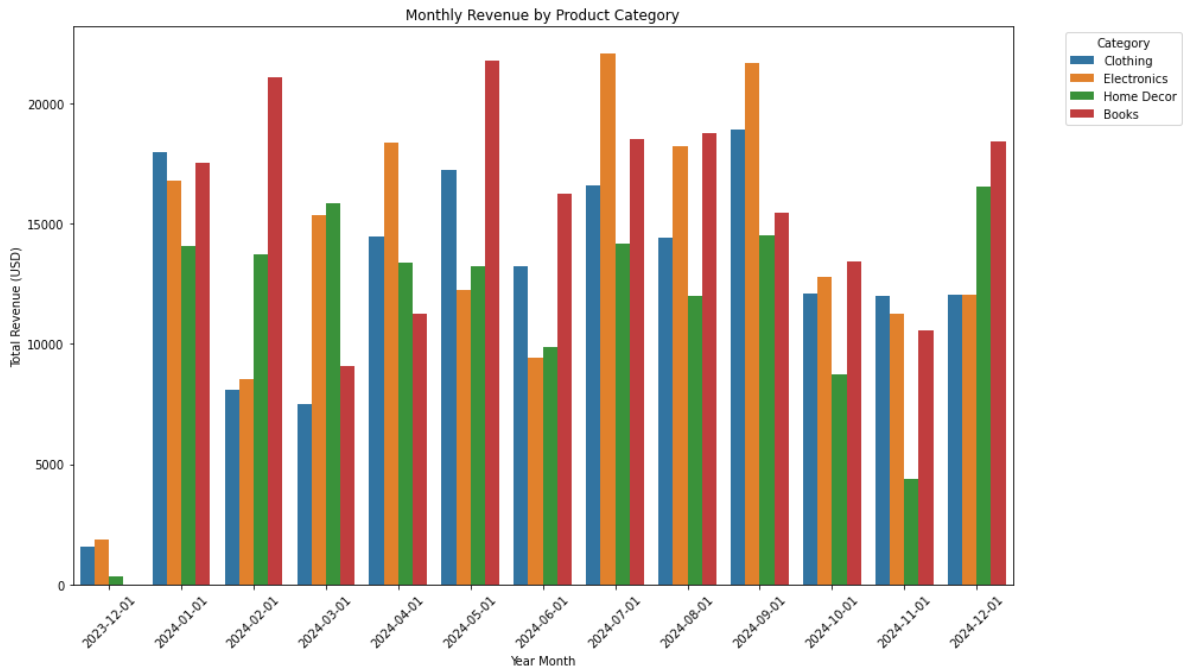
  - ## According To This Information
    - **Electronics** revenue peaks mid-year and end-year , likely due to sales. for example Apple student discount in June and Diwali sales in India during November and Christmas sales in December.
    - **Clothing** maintains a steady revenue but peaks during the season changes. Special promotions time with seasonal changes can hekp maintain and boost clothing sales.
    - **Home Decor** revenue is steady also peaks at early and mid-year. Most of the people renovate their home at any time in a year so it shows a steady behaviour.
    - **Books** : Books show sporadic revenue spikes , notably in Jan , Feb , May and December. Promoting books during these periods and offering bundled deals can enhance sales.