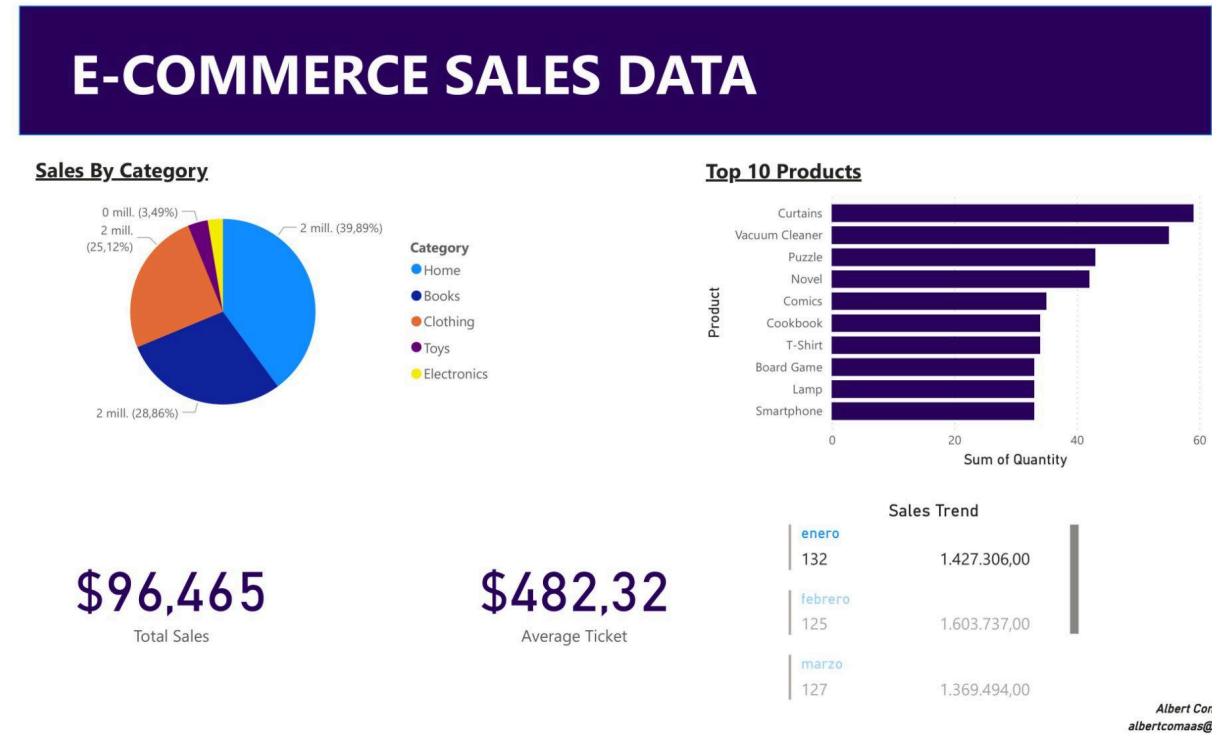


E-Commerce Sales Data Analysis

Overview

In this project, I conducted a comprehensive analysis of a fictional e-commerce platform’s sales performance, focusing on product categories, top-selling items, monthly trends, and average ticket values. I extracted key insights from the sales data and created visualizations to highlight important patterns and business-critical metrics. The main goal was to generate actionable insights to support strategic decision-making in areas such as product management, marketing, and revenue optimization.

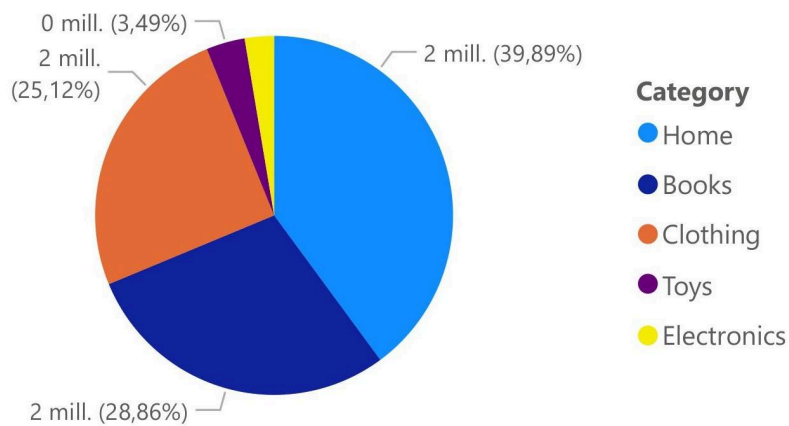


1. Sales by Category

A pie chart visualizes the distribution of total sales across five key product categories:

- **Home:** 39.89%
- **Books:** 28.86%
- **Clothing:** 25.12%
- **Toys:** 3.49%
- **Electronics:** Minimal, below 3%

Sales By Category.



Significance:

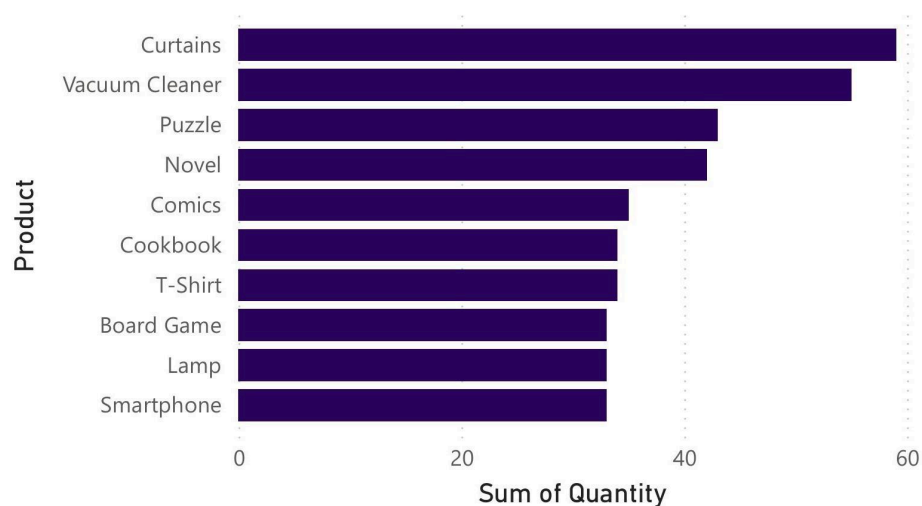
The *Home* and *Books* categories dominate the revenue share, accounting for nearly 70% of total sales. This suggests a strong consumer preference for home essentials and reading material, and may indicate a post-pandemic behavioral shift toward home improvement and leisure learning.

2. Top 10 Products

A bar chart illustrates the top-selling individual products by quantity sold:

1. **Curtains**
2. **Vacuum Cleaner**
3. **Puzzle**
4. **Novel**
5. **Comics**
6. **Cookbook**
7. **T-Shirt**
8. **Board Game**
9. **Lamp**
10. **Smartphone**

Top 10 Products



Insight:

Products tied to home decor, utility, and leisure dominate. The presence of books (novel, comics, cookbook) and board games also suggests that customers value at-home entertainment and lifestyle enrichment.

3. Total Sales and Average Ticket

- **Total Sales:** \$96,465
- **Average Ticket Size:** \$482.32

\$96,465

Total Sales

\$482,32

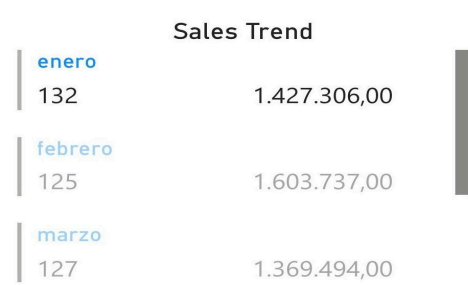
Average Ticket

Interpretation:

With a high average ticket size, the business appears to cater to a mid-to-premium market segment. This metric helps gauge purchasing power and supports pricing strategy decisions.

4. Monthly Sales Trend (Q1)

Month	Orders	Revenue
Enero	132	\$1,427,306.00
Febrero	125	\$1,603,737.00
Marzo	127	\$1,369,494.00



Analysis:

Sales volume remained relatively stable over Q1. However, February outperformed in revenue, hinting at higher-ticket purchases that month. This could correlate with seasonal campaigns or promotional events.

Conclusion

This project showcases essential KPIs and sales drivers in an e-commerce context. Key findings include:

- The dominance of home and book categories.
- A focus on value-rich, lifestyle-driven products.
- High-value customer transactions.
- Month-to-month revenue consistency with spikes likely tied to marketing actions.

The insights derived from this analysis can be used to guide inventory planning, targeted promotions, and category expansion.

Tools Used

- Power BI for data visualization
- Excel/Python for data preprocessing
- Domain knowledge in consumer analytics and e-commerce trends