StellarMart

SALES ANALYSIS REPORT

EXCEL DASHBOARD & INSIGHTS

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Problem Statement



You are tasked with analyzing StellarMart's business data to provide actionable insights for strategic growth. StellarMart is a mid-sized retail chain specializing in Electronics, Clothing, Home Appliances, Books, and Groceries. Faced with growing competition and shifting customer preferences, the company aims to leverage data-driven insights to optimize operations and boost profitability.

Business Problem

- Sales Decline in Categories: Some categories thrive, other stagnate.
- Seasonal Trends: Suspected but not clearly visible.
- **Regional Performance:** Unequal contribution, management need clarity.



Project Objectives

- Identify sales trends (monthly & seasonal).
- 2. Compare sales across product categories, find underperformers.
- 3. Analyze category-wise regional contributions.
- 4. Build dashboards to visualize trends & insights.



Dataset Overview

• **Period**: 2023–2024

• Orders: 5,000

• **Total Sales**: \$13.32M

• **Fields**: Transaction ID, Date of Sale, Product Name, Category, Region, Quantity Sold, Sale Price, Total sale



Methodology

- Data Cleaning → Date formatting, missing values handled
- **Pivot Tables** → For KPIs (Sales, Profit, Orders, Quantity)
- QA Analysis → Anwer the questions with Insights.
- **Dashboards** → Built two interactive dashboards with slicers & charts



Dataset Snapshot: Before & After Cleaning

Transaction ID	Date of Sale	Product Name	Category	Region	Quantity Sold	Sale Price	Total Sales	
TID000033	2024-05-16	Biographies	Books	East	5	140.93	704.65	
TID000053	2023-03-01	Biographies	Books	West	20	449.21	8984.2	
TID000068	2023-03-27	Biographies	Books	East	10	69.62	696.2	
TID000143	2024-10-08	Biographies	Books	East	2	211	422	
TID000154	2023-01-22	Biographies	Books	West	14	253.58	3550.12	
TID000168	2024-08-30	Biographies	Books	North	20	347.44	6948.8	
TID000199	2024-06-12	Biographies	Books	South	3	243.29	729.87	
TID000232	2023-01-13	Biographies	Books	North	11	166.55	1832.05	
TID000246	2023-10-18	Biographies	Books	East	1	483.2	483.2	
TID000263	2023-05-31	Biographies	Books	East	8	425.6	3404.8	
TID000341	2024-08-13	Biographies	Books	West	9	194.04	1746.36	
TID000412	2023-08-17	Biographies	Books	East	13	469.42	6102.46	
TID000424	2024-08-08	Biographies	Books	East	18	316.26	5692.68	
TID000463	2023-10-13	Biographies	Books	East	17	58.23	989.91	
TID000473	2023-01-02	Biographies	Books	East	7	293.45	2054.15	
TID000501	2023-10-07	Biographies	Books	East	14	321.74	4504.36	
TID000526	2024-06-04	Biographies	Books	South	13	204.08	2653.04	
TID000539	2024-05-25	Biographies	Books	North	20	408.17	8163.4	

Transaction ID 📢	Date of Sale ▼	Month_num ▼ Month ▼	Month-Year ▼	Year ▼	Quarter Vear	▼ Product Name	▼ Category	Region 🔻	Quantity Sold 🔻	Sale Price 💌	Total Sales ▼
TID000001	2023-10-15	10 Oct	Oct 2023	2023 Q4	Q4 2023	Non-fiction	Books	South	9	272.4	2451.6
TID000002	2023-11-01	11 Nov	Nov 2023	2023 Q4	Q4 2023	Microwave	Home Appliance	East	20	103.38	2067.6
TID000003	2024-04-13	4 Apr	Apr 2024	2024 Q2	Q2 2024	Jacket	Clothing	South	7	236.66	1656.62
TID000004	2024-12-23	12 Dec	Dec 2024	2024 Q4	Q4 2024	Eggs	Groceries	East	8	267.14	2137.12
TID000005	2024-08-16	8 Aug	Aug 2024	2024 Q3	Q3 2024	Milk	Groceries	West	19	303.81	5772.39
TID000006	2024-08-09	8 Aug	Aug 2024	2024 Q3	Q3 2024	Milk	Groceries	North	4	11.82	47.28
TID000007	2024-07-17	7 Jul	Jul 2024	2024 Q3	Q3 2024	Non-fiction	Books	West	6	263.09	1578.54
TID000008	2023-01-13	1 Jan	Jan 2023	2023 Q1	Q1 2023	Milk	Groceries	North	3	223.43	670.29
TID000009	2023-03-12	3 Mar	Mar 2023	2023 Q1	Q1 2023	Refrigerator	Home Appliance	West	9	82.86	745.74
TID000010	2023-07-20	7 Jul	Jul 2023	2023 Q3	Q3 2023	Jeans	Clothing	East	20	364.45	7289
TID000011	2023-04-01	4 Apr	Apr 2023	2023 Q2	Q2 2023	Microwave	Home Appliance	West	9	70.69	636.21
TID000012	2024-09-20	9 Sep	Sep 2024	2024 Q3	Q3 2024	Tablet	Electronics	North	4	184.07	736.28

Full Dataset:

Analysis & Insights (Q&A)

1. Sales Trends (Time-based)

Q1. How have total sales changed quarter by quarter over the last two years?



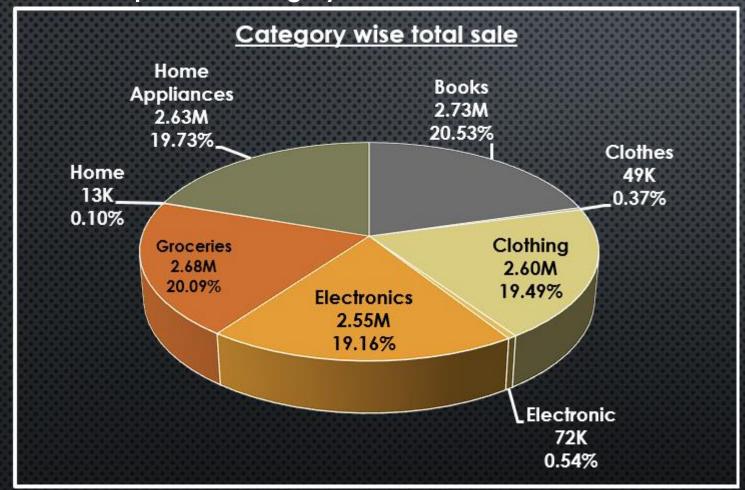
- 2024 higher than 2023 across all quarters
- Q2 is the strongest quarter in both years.

- Q2. Which month had the highest sales and which had the lowest?
- November 2024 recorded the peak sales at \$667K
- February 2023 had the lowest sales at \$427K

By Raj Singh

2. Category Performance

Q3. Which product category contributes the most to total sales?



Books are the top-selling category, contributing the highest share (20.53%).

3. Regional Insights

Q4. Which region generates the most revenue overall?

West leads with **25.54% of revenue**, making it StellarMart's strongest market.

Q5. Which category is most popular in each region?

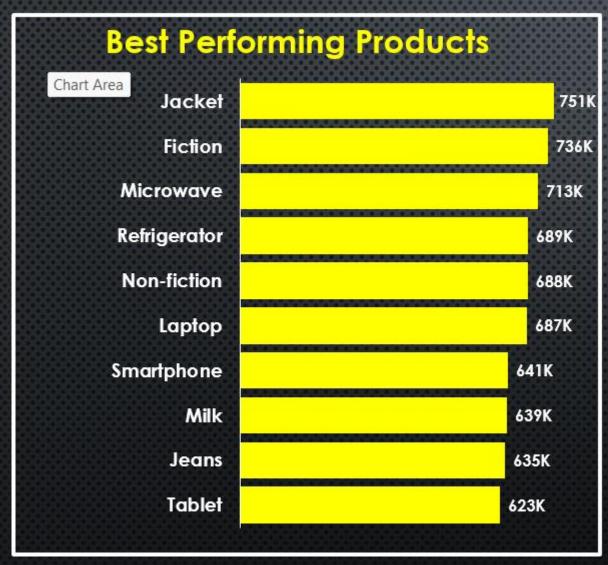
East \rightarrow Clothing (\$6,95,626.82) dominates sales. North \rightarrow Electronics (\$6,61,493.11) leads the region. South \rightarrow Groceries (\$7,45,149.39) are the top-selling category.

West \rightarrow Electronics (\$6,69,885.65) generates the most revenue.

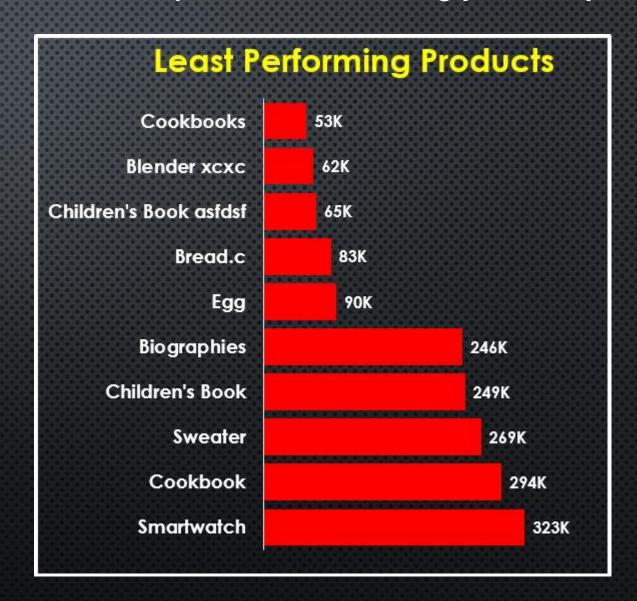


4. Product Analysis

Q6. What are the Top 10 products by sales?

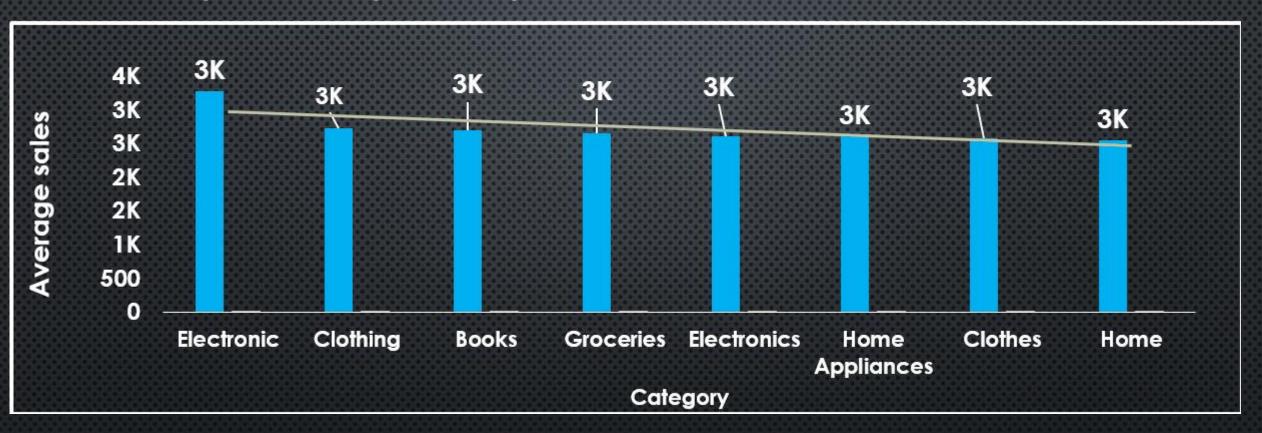


Q7. Which products are low-selling (bottom 10)?



3. Quantity & Pricing Insights

Q8. Which category has the highest average sale price per product?



Electronics dominate with the highest average price per product.

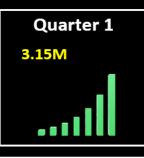
Dashboard 1

Sales Trends: (Time-based) Category **Performance Total Sales** 13.32M **Filter Panel** Year 2023 2024 Quarter # 01 **Q2 Q3 Q4**



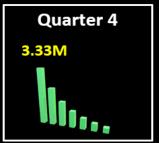
Average Sales

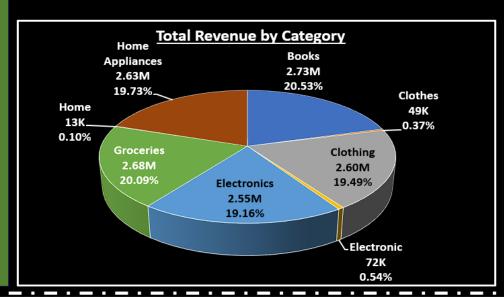
3K



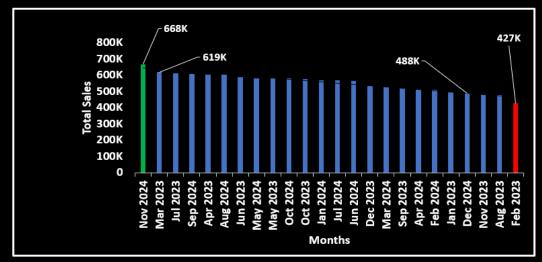








Monthly Sales Performance



Quarterly Sales Performance



<u>Time-Based and Category-Wise Sales Performance Dashboard 1</u>

1. KPIs (Top-left Section)

Total Orders (5000) \rightarrow Shows the total number of customer orders in the selected period.

Average Sales (3K) \rightarrow Average revenue per order or transaction.

Total Sales (13.32M) \rightarrow Key metric showing the overall revenue across the dataset.

Quarterly Sales Cards (Q1: 3.15M, Q2: 3.44M, Q3: 3.40M, Q4: 3.33M) \rightarrow Snapshot of revenue performance across quarters. Helps compare which quarter performed best (Q2 leads at 3.44M).

3. Filters (Left Panel)

Year Filter (2023, 2024) \rightarrow Lets users view sales metrics for specific years or compare both.

Quarter Filter (Q1–Q4) \rightarrow Allows drilling into quarterly performance dynamically.

2. Charts

Monthly Sales Performance (Top-right)

A bar chart showing month-by-month sales.

Labels highlight highest month (668K) and lowest month (427K) for easy comparison.

Quarterly Sales Performance (Bottom-right)

A line chart comparing quarterly sales trends across two years (2023 vs 2024).

Helps spot year-over-year growth and seasonal patterns.

Total Revenue by Category (Bottom-left)

A pie chart showing contribution of each category (Books 20.53%, Groceries 20.09%, etc.).

Makes it easy to identify leading contributors (Books, Groceries) and weaker ones (Clothes, Home).

4. Insights Enabled

Sales Trends (Time-based): Quarterly & monthly sales patterns.

Category Performance: Which categories contribute most to revenue.

KPI Tracking: Total sales, total orders, and average sales at a glance.

Comparisons: Sales trend across years (2023 vs 2024). Filtering Power: Interactivity to analyze year-wise and quarter-wise.

Dashboard 2

StellarMart

- Regional Insights
- Product Analysis
- Quantity and Pricing Insights



Filter Panel

Region East
North
South
West

Total Categories

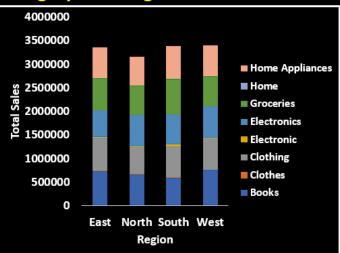
Total Products

33

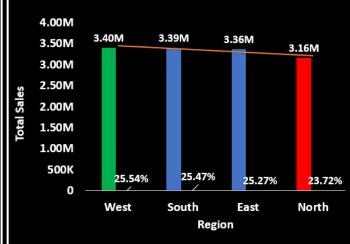
Regional Average Sales

3K

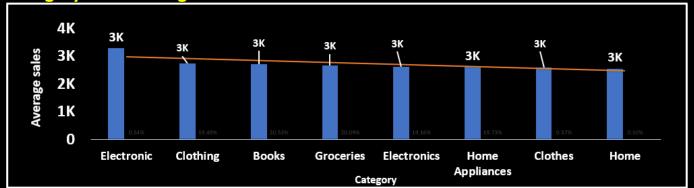
Category-wise Regional Sales

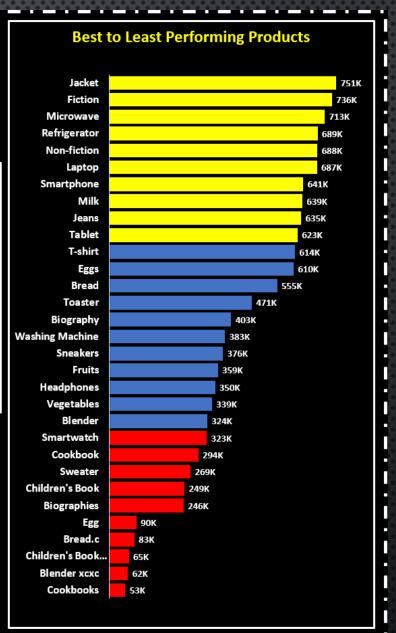


Regional Sales Overview



Category-wise Average Sales





Sales Insights: Regional, Category, and Product Analysis

1. KPIs (Top Section)

Total Categories (8) → Number of product categories being analyzed.

Total Products (33) \rightarrow Total distinct products in the dataset.

Regional Average Sales (3K) \rightarrow Average sales value per product across regions.

3. Filters (Left Sidebar)

Year Filter (2023, 2024) \rightarrow Allows selection of single or multiple years.

Region Filter (East, North, South, West) \rightarrow Enables region-level drilldowns for all charts/KPIs.

2. Charts

- Category-wise Regional Sales (Top-left): Shows category contribution by region.
- Regional Sales Overview (Top-middle): Compares total revenue across 5 regions.
- Best to Least Performing Products (Top-right): Ranks products from best to worst.
- Category-wise Average Sales (Bottom): Displays average sales per category.

4. Insights Enabled

Regional Insights: Which region contributes the most sales.

Product Analysis: Best & worst performing products. Category Insights: Sales contribution and average performance by category.

Quantity & Pricing Insights: Products/categories that sell high volumes but generate lower revenue.

Interactivity: Year and region slicers allow dynamic filtering for customized views.

Conclusion

Key Takeaways

- •West region is the strongest market, contributing the highest share of total revenue.
- •Electronics and Books are leading categories, driving consistent sales growth.
- •Clothing and Home categories underperform, showing weak revenue contribution.
- •Top products (Jacket, Fiction, Microwave) are major sales drivers, while several low-performing products may not be profitable.

Recommendations

- •Expand in the West region and replicate its strategies in underperforming regions like North.
- •Revisit pricing strategies to improve revenue from high-quantity but low-value products.
- •Optimize product portfolio by focusing on top-performing categories and considering discontinuation of consistently low-selling products.
- •Promote mid-performing categories (Groceries, Home Appliances) with targeted marketing to unlock additional growth potential.