2024

BUSINESS PROPOSAL

Shop

Company Sales

Customers Sales

Shop Center

Sales & Customer Performance Dashboard for SHOP Center

PREPARED BY

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Data Analyst

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Title

Sales & Customer Performance Dashboard for SHOP Center | Power BI

Context

SHOP Center, a multi-department retail entity, needed a unified view of sales and customer behavior across various regions and product categories. The project aimed to transform scattered transactional data into actionable insights for category management and customer segmentation.

Problem / Question

How can SHOP Center effectively monitor sales performance across different dimensions (region, category, customer demographics) to identify top performing products, optimize marketing strategies, and improve overall profitability?

Tools Used

· Power BI: Interactive dashboard development and visualization
· DAX: For creating calculated measures and key performance indicators
· Power Query: For data cleaning, transformation, and preparation

Process Walk-through

1. Data Preparation: Connected to multiple raw data sources (sales transactions, customer database, product catalog). Used Power Query to clean inconsistencies in customer demographics, product categories, and regional data.

2. Data Modeling: Established a relational data model with fact tables for sales and customer transactions, linked to dimension tables for Products, Customers, Dates, and Regions.

3. DAX Calculations:
  · Total Sales = SUM(Sales[Amount])
  · Profit Margin = DIVIDE([Total Profit], [Total Sales])
  · Customer Count = DISTINCTCOUNT(Customers[CustomerID])
  · Average Transaction Value = DIVIDE([Total Sales], [Transaction Count])
  · Target Achievement % = DIVIDE([Actual Sales], [Sales Target])
4. Visualization Development: Created interactive reports focusing on sales trends, customer demographics, product performance, and regional analysis.

Key Findings

· Gender Analysis: Female customers contributed 65% of total sales, with particularly strong performance in apparel and beauty categories.
· Regional Performance: The Northern region outperformed others by 25% in sales volume, while the Southern region showed the highest profit margins.
· Product Category Insights: Electronics had the highest sales volume, but Home Goods showed the best profit margins at 35%.
· Customer Behavior: Repeat customers (25% of customer base) generated 60% of total revenue, highlighting the value of customer retention.
· Seasonal Trends: Sales peaked during holiday seasons, with a 40% increase during Q4 compared to quarterly averages.

Visuals with a Purpose

· Sales Trend Line Chart: To track performance over time and identify seasonal patterns.
· Regional Performance Map: To visualize geographic distribution of sales and profitability.

· Gender-wise Sales Donut Chart: To quickly understand demographic contributions.
· Product Category Profit Margin Bar Chart: To identify the most profitable product lines.
· Customer Segmentation Matrix: To classify customers by purchase frequency and value.

All test results must be duly documented with the signatures of the software testers and developers. The test result must be submitted and presented within 72 hours from the hour of the test completion. During the presentation of the findings, the testers must provide a printed copy of the software test report, detailing the testing activity and its test results.

Main Takeaway

The dashboard revealed that while
Electronics drive sales volume; the real profitability lies in Home Goods and targeted female-centric categories. SHOP Center should rebalance marketing spending toward high-margin categories and develop loyalty programs to capitalize on the valuable repeat customer segment.

What I Learned from this Case Study

· The importance of demographic analysis in retail for targeted marketing strategies.
· How to effectively segment customers based on both value and behavior patterns.
· The critical difference between sales volume and profitability in category management.

Reflection and Next Steps

· Reflection: The project successfully

identified key revenue drivers and customer patterns. Future enhancements could include real-time inventory integration.

· Next Steps:

1. Integrate inventory data to analyze stock turnover rates alongside sales performance.
2. Add customer satisfaction metrics from feedback systems to correlate with sales data.
3. Develop predictive analytics for customer lifetime value and churn probability.
4. Create automated alerts for when sales fall below targets in specific regions or categories.

Invite Feedback

- **Clarity & Usability:** Are the key findings (e.g., profitability of Home Goods vs. Electronics) presented clearly?
- **Relevance:** Do the visualizations (regional maps, customer segmentation) effectively answer your team's key questions?
- **Actionability:** Based on the "Main Takeaway," can you see a clear path to optimizing marketing strategies or customer loyalty programs?

Your input will directly influence the final enhancements and the planned "Next Steps," such as integrating inventory data and predictive analytics.

Shop

Product line	%GT Sum of Quantity
Health and beauty	33.02%
Sports and travel	18.59%
Fashion accessories	16.56%
Home and lifestyle	15.98%
Electronic accessories	15.86%

Number of units sold

KPI for the 1st quarter of 2025

$20.75M ✓

Goal: 20M (+3.76%)

Total Sales by Locations

Quantity sold by gender

Female 3963

Male 2300

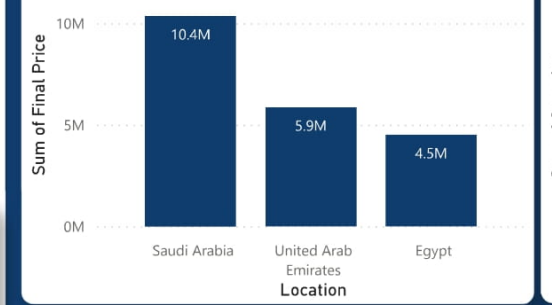
Company Sales

Month

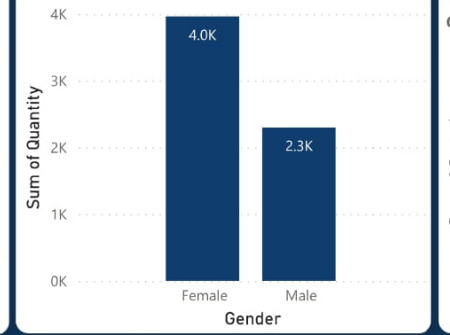
- January
- February
- March

Customers Sales

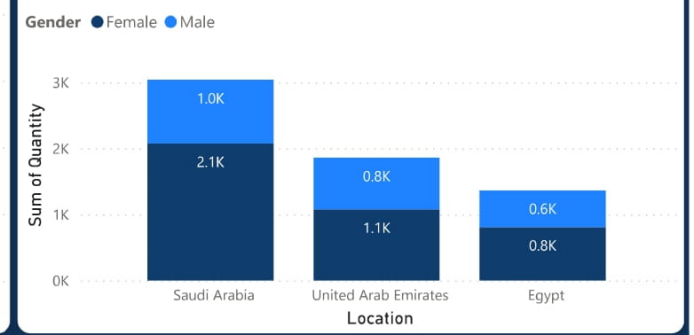
Sum of Final Price by Location



Sum of Quantity by Gender

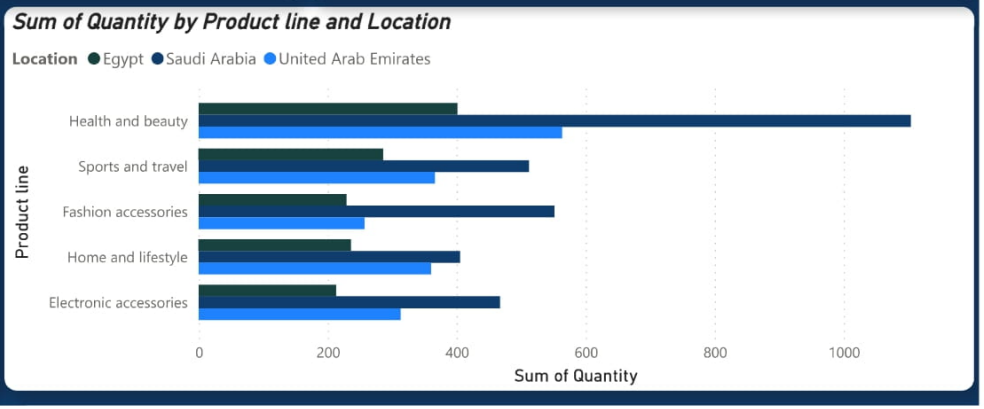


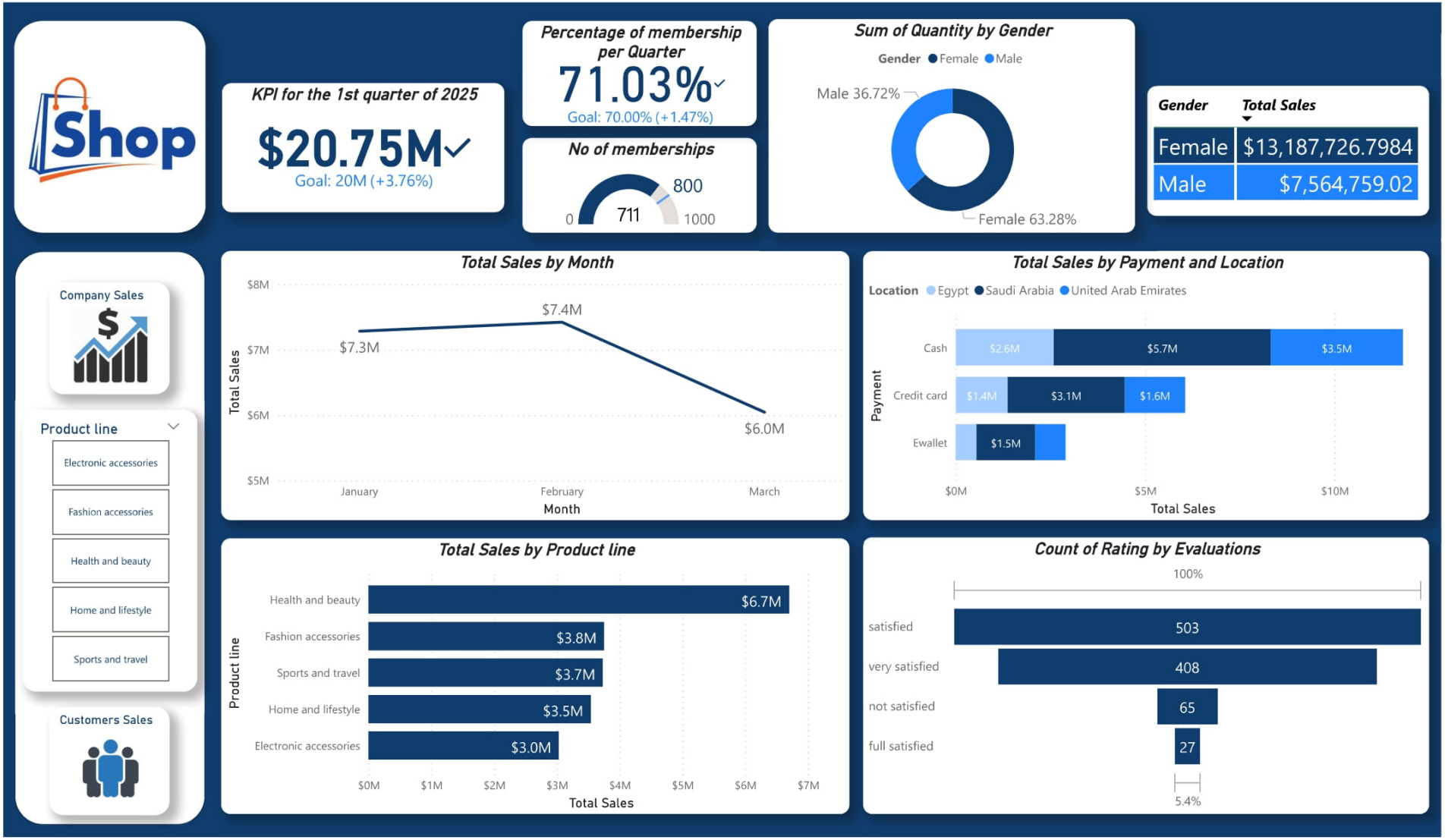
Sum of Quantity by Location and Gender



Sum of Final Price by Product line

Sum of Quantity by Product line and Location




Shop
KPI for the 1st quarter of 2025
$20.75M
Goal: 20M (+3.76%)
Percentage of membership per Quarter
71.03%
Goal: 70.00% (+1.47%)
No of memberships
0
711
800
1000
Sum of Quantity by Gender
Gender Female Male
Male 36.72%
Female 63.28%
Gender
Total Sales
Female
$13,187,726.7984
Male
$7,564,759.02
Company Sales
Product line
Electronic accessories
Fashion accessories
Health and beauty
Home and lifestyle
Sports and travel
Customers Sales
Total Sales by Month
$8M
$7M
$6M
$5M
Total Sales
$7.3M
$7.4M
$6.0M
January
February
March
Month
Total Sales by Payment and Location
Location Egypt Saudi Arabia United Arab Emirates
Payment
Cash
$2.6M
$5.7M
$3.5M
Credit card
$1.4M
$3.1M
$1.6M
Ewallet
$1.5M
$0M
$5M
$10M
Total Sales
Total Sales by Product line
Product line
Health and beauty
$6.7M
Fashion accessories
$3.8M
Sports and travel
$3.7M
Home and lifestyle
$3.5M
Electronic accessories
$3.0M
$0M
$1M
$2M
$3M
$4M
$5M
$6M
$7M
Total Sales
Count of Rating by Evaluations
100%
satisfied
503
very satisfied
408
not satisfied
65
full satisfied
27
5.4%