

FUTURE INTERNS
DATA SCIENCE & ANALYTICS
INTERNSHIP

TASK 1 REPORT

E-Commerce Sales Dashboard (Superstore Dataset)

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For this task, I worked with the Superstore dataset to explore sales performance and create a dashboard in Power BI.

The goal was to understand how the business is doing overall, which products are selling the most, how sales change over time, and which categories or regions perform better.

I used **Power BI Desktop** for modelling and visualization, and **Excel** for quick checks on the data. I also created a few DAX measures, such as Total Profit and Profit Margin %, to help with the analysis.

Key Performance Indicators (KPIs)

From the dataset, I calculated the following:

- **Total Sales:** \$2.30M
- **Total Profit:** \$286.40K
- **Total Orders:** 5,009
- **Total Quantity Sold:** 37,873 units
- **Average Order Value:** \$458.61
- **Profit Margin:** 12%

These values give a quick picture of how the business is performing.

Insights & Analysis

1. Overall Performance

The business generated **\$2.30M in sales** across several years and processed over **5,000 orders**.

The average order value of **\$458.61** shows that customers tend to buy more than one item per transaction.

A **12% profit margin** indicates moderate profitability, though there is room for optimization in some areas.

2. Sales Trend Over Time

The line chart shows that sales fluctuate throughout the year, with higher activity toward the end of each year.

This suggests seasonal demand, most likely due to holiday shopping periods.

There are also some sudden spikes, which may be due to bulk purchases or promotions.

Understanding these patterns can help the business prepare better for peak months.

3. Category Performance

The dataset contains three main product categories: **Technology, Furniture, and Office Supplies**.

- **Technology:** Brings in the highest revenue.
- **Furniture:** Decent revenue but lower profit margin (possibly due to shipping or discounting).
- **Office Supplies:** Steady sales, but lower revenue per order.

Suggestions:

- Explore bundle deals for Office Supplies.
- Review pricing and shipping costs for Furniture.
- Continue investing in Technology products since they perform strongly.

4. Top Products

When looking at the top-selling products, brands such as **Canon, Cisco, and Fellowes** appear frequently.

These few products contribute a significant portion of revenue.

Suggestion:

Focus marketing and stock management around top performers. Products with consistently low sales may need to be reviewed.

5. Regional Observations

The dataset groups customers into four regions: **West, East, Central, and South**.

- **West** performs best in both sales and profit.
- **East** also performs well, though not as high as the West.
- **Central** has noticeably weaker results and lower margins.

Suggestion:

Central region may need targeted strategies such as promotions, improved logistics, or customer engagement efforts.

Conclusion

This dashboard helped transform raw data into useful insights about sales trends, product performance, and profitability.

It highlights key opportunities such as focusing on top products, improving margins in certain categories, and supporting weaker regions.

Using Power BI and DAX made it possible to build a clear, interactive tool that can support better decision-making.

Dashboard Screenshot

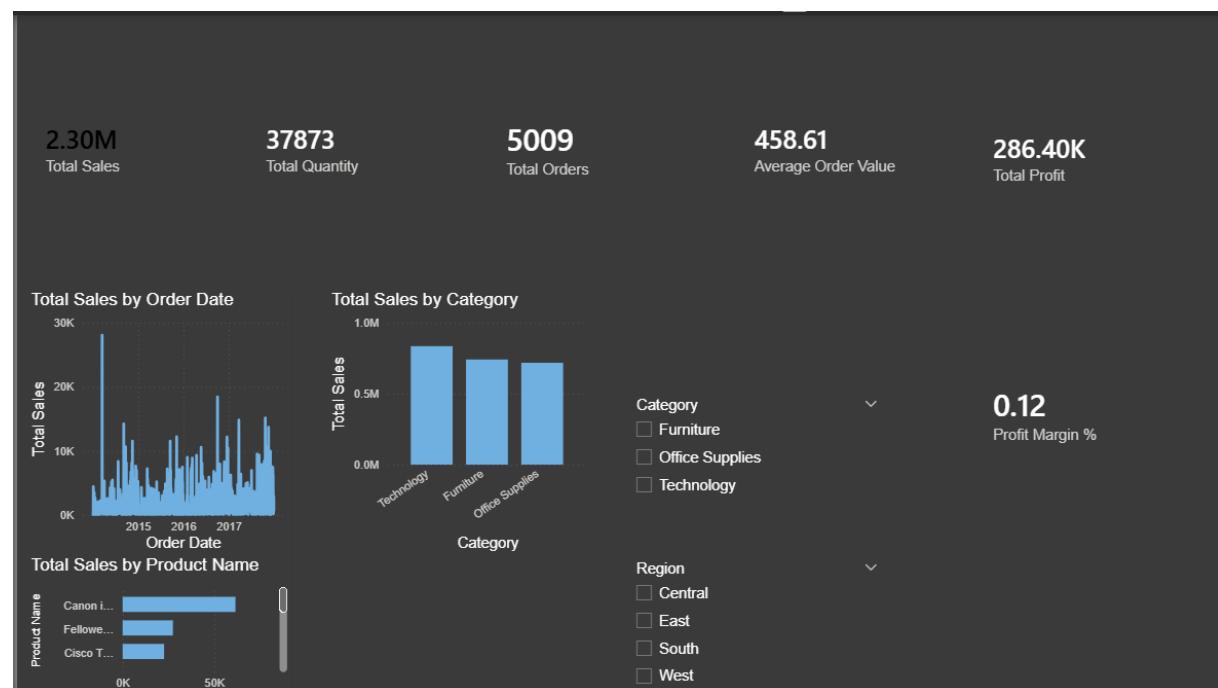


Figure 1: E-Commerce Sales Dashboard (Superstore Dataset)

