Analysis Report – Sales Performance & Order Insights Dashboard
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Project Overview

This project analyzes sales performance, customer behavior, and order status patterns using a 6,000-row synthetic sales dataset. The objective is to identify opportunities for improving sales, reducing cancellations, and understanding customer trends through a multi-page Power BI dashboard.

Dataset Summary

• 6,000 rows, 11 columns

• Contains product, customer, order, and payment details

• Cleaning steps included standardizing product/category names, validating total_sales calculations, fixing date formats, and ensuring consistency across text fields.

Column-wise Assessment Summary

A detailed data quality assessment identified no missing values, moderate text inconsistencies, and the need for product/category normalization. total_sales required recomputation to ensure accuracy.

Data Model Overview

The model includes a Fact table (fact_sales) and Dimension tables: dim_product, dim_customer, dim_location, dim_payment, dim_status, dim_date.

Relationships: Many-to-one between fact_sales and all dimensions. Measures include Total Sales, Completed Sales, Lost Revenue, Profit, Order Counts, and Status Percentages.

Analysis & Insights

• Cancellation rates are high, leading to substantial lost revenue (~2M).

• Profit is dependent on completed orders and calculated using a 25% margin (~502K).

• Smartphones, Refrigerators, and Smartwatches represent a large portion of cancellations.

• Books and Clothing show higher completion rates.

• Geographic patterns show variations in cancellations and pending orders.

Conclusions

The business faces significant operational inefficiencies due to high cancellations. However, strong completed sales in specific categories indicate stable customer demand.

Recommendations

• Reduce cancellations by improving payment reliability and delivery workflows.

• Prioritize product availability in high-demand categories.

• Address location-specific delays affecting pending orders.

• Monitor customer segments driving the most revenue.

Dashboard Overview

The dashboard consists of 3 pages:

1. Sales Overview – KPIs, trends, category breakdowns

2. Product & Customer Insights – top products, customer behavior

3. Order Performance – cancellations, pending trends, revenue impact

Notes / Limitations

• Synthetic dataset (not real business data)

• Profit margin assumed (25%)

• Cancellation reasons not provided

• Customer demographics unavailable