Datal Analytics Balestad

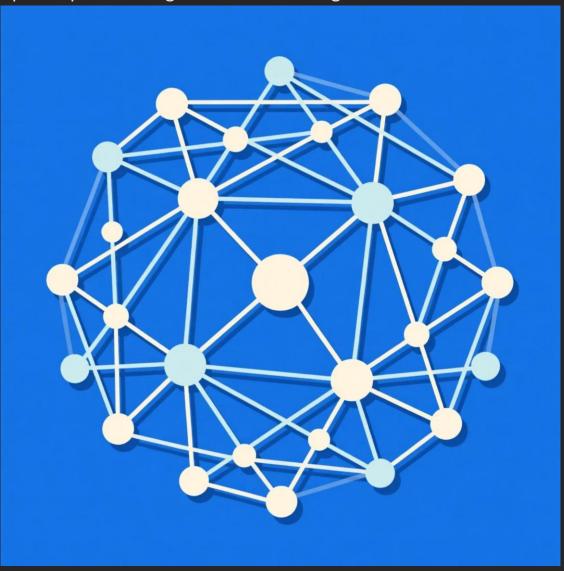
Guvi Galgotia's 5-Day Internship Internship Project Board

Power BI Internship Project E-Commerce Sales Dashboard

Applying Data Analytics to Real-World Business Problems

Problem Statement & Objective

Problem Statement: Our client, an e-commerce organization, needed a robust needed a robust business insights dashboard to effectively analyze their vast their vast sales data. Existing methods lacked the interactivity and depth depth required for agile decision-making.



Project Task: Design and implement a comprehensive, interactive Power BI Power BI dashboard focused on sales performance, profit analysis, and and operational efficiency monitoring.

Key Objective: Empower stakeholders with immediate access to critical data, enabling them to make informed, data-driven decisions by identifying trends, tracking key performance indicators (KPIs), and generating reliable forecasts.

Data & Methodology



Dataset Acquisition & Cleaning

Utilised a multi-year e-commerce sales dataset (200+ rows across multiple multiple tables). Performed extensive data cleaning and transformation transformation using Power Query to ensure data integrity and usability. usability.



Data Modeling & DAX Implementation

Established robust data models with appropriate relationships between between tables. Created calculated columns and complex measures using measures using DAX (Data Analysis Expressions) for advanced calculations calculations and aggregations.



Dynamic Visualizations & Interactivity

Designed a range of dynamic visualizations including cards, bar charts, line graphs, donut charts, and map visuals. Integrated slicers, drill-down capabilities, and cross-filtering for enhanced user interaction.



Tools Utilized

The entire project was developed leveraging Microsoft Power BI, with a with a strong focus on DAX for calculations and Power Query for data data preparation and transformation.

Dashboard Overview



Our interactive Power BI dashboard provides a holistic view of e-commerce performance. Key highlights include:

- Key Performance Indicators (KPIs): Sales ₹1.57M
 ₹1.57M | Profit ₹175K | Quantity Sold 22K |
 Average Delivery Time 4 Days
- Segment Split: Consumer 48% | Corporate 33% |
 Home Office 19%
- Top Regions by Sales: California (₹0.34M), New
 New York, Texas
- Payment Modes: Cash on Delivery (COD) 43% |
 Online Transactions 35% | Card Payments 22%

Key Insights & Business Value

The dashboard revealed critical insights enabling strategic business decisions:

Top Performing Categories

• Office Supplies: ₹0.64M

• **Technology:** ₹0.47M

• Furniture: ₹0.45M

Shipping Efficiency

Standard Class: Dominates with ₹0.33M in sales, highlighting customer preference for cost-effective shipping.

High-Value Subcategories

• **Phones:** ₹0.20M

• **Chairs:** ₹0.18M

• **Binders:** ₹0.17M

Sales Trends & Forecast

Consistent growth observed with pronounced seasonal peaks towards year-end, indicating predictable high-demand periods. Forecasts project continued positive growth trajectory.

These insights directly inform inventory management, marketing campaigns, and regional expansion strategies.

Learnings & Outcomes

1 Deepened Power BI Proficiency

Gained hands-on expertise in end-to-end Power BI development, including advanced data cleaning, robust data modeling, and complex DAX formula creation.

2 Interactive Dashboard Development

Successfully built a fully interactive dashboard featuring slicers, drill-downs, and integrated forecasting capabilities for dynamic data exploration.

3 Enhanced Analytical Skills

Developed critical problem-solving, analytical thinking, and effective data visualization skills, crucial for translating raw data into actionable business actionable business intelligence.

4 Industry-Ready Portfolio Project

This internship provided invaluable experience, strengthening industry-relevant skills and resulting in a tangible, portfolio-ready project showcasing showcasing practical data analytics application.

5 Delivered Actionable Insights

The project culminated in delivering clear, actionable insights that directly support the client's decision-making processes, demonstrating the real-world impact of data analytics.