

ADIDAS SALES ANALYTICS – RETAIL & PROFIT INSIGHT

Domain: Finance – Profitability by Product or Region

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PROJECT OVERVIEW

- Objective: Analyze Adidas sales data to derive insights
- Scope: Profitability by region, retailer, and product
- Dataset: Adidas US Sales Data (Kaggle)
- Records: ~700 rows, 14 columns
- Tools Used: Python, Pandas, Seaborn, Matplotlib

PROBLEM STATEMENT

- Adidas wants to improve decision-making by analyzing:
- Sales performance across retailers, regions, and products
- Profitability by product category and sales channels
- Seasonal trends in sales and operating profit
- Impact of pricing and sales methods on profitability

PROBLEM-SOLVING APPROACH

1. Data Collection from Kaggle
2. Data Cleaning & Pre-processing
3. Exploratory Data Analysis (EDA)
4. Visualization & Trend Analysis
5. Insight Generation
6. Strategic Recommendations

DATASET DETAILS

- Source: Kaggle – Adidas Sales Dataset
- Records: ~700
- Columns: 14
- Categorical Variables: Retailer, Region, City, Product, Sales Method
- Numerical Variables: Units Sold, Price per Unit, Total Sales, Operating Profit, Operating Margin
- Time Feature: Invoice Date

DATA PREPROCESSING

- Handled missing values
- Removed duplicates
- Standardized data types (dates, numbers)
- Created derived features: Profit Margin, Year, Month
- Aggregated sales by category and region

EDA & VISUALIZATIONS

- Univariate Analysis – sales, units sold, profit
- Bivariate Analysis – sales vs region, retailer, product
- Multivariate Analysis – pricing, sales method, profit
- Heatmaps for correlations and trends
- Distribution plots for identifying outliers

KEY INSIGHTS

- Certain regions outperform others in profitability
- Sales method impacts profit margins
- Seasonal patterns in monthly sales observed
- Some retailers consistently outperform others
- Product category drives large share of revenue

STRATEGIC IMPACT OF INSIGHTS

- Focus on expanding in high-profit regions
- Optimize pricing and sales strategies
- Monitor underperforming retailers/products
- Leverage seasonal peaks for promotions
- Improve forecasting using trends

CONCLUSION

- Adidas sales dataset provided valuable insights
- Key drivers of sales and profitability identified
- Data-driven strategies can enhance performance
- Future work: Forecasting & deeper customer analysis

THANKYOU