Salary Data Analysis – Advanced Excel Project

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Tools Used: Excel

# Introduction

This project focuses on analyzing a comprehensive retail sales dataset to gain business insights and improve decision-making using advanced Excel tools. The dataset includes thousands of transactions across various sales channels, product types, and customer segments. By applying features like Power Query, PivotTables, What-If Analysis, Goal Seek, Macros, and Power Pivot, the project aims to:  
- Identify trends and patterns in sales performance  
- Evaluate the impact of returns and discounts  
- Highlight top-performing products and channels  
- Build an interactive, automated sales dashboard

# Data Description and Preparation

Dataset: ~10,000 rows (Order ID, Product, Customer, Date, Sales)

* Cleaning Steps:
* Removed duplicates & blanks
* Formatted dates and currencies
* Resolved outliers and ensured valid “Net Quantity” values
* Applied data validation rules

# Key Metrics & Calculations

Adjusted Sales = Gross Sales – (Discounts + Returns + Shipping + Taxes)

* Metrics:
* Total Revenue, Avg Order Value, Discount %
* Excel Functions:
* SUM, IF, IFERROR, AVERAGEIF, COUNTIFS

# PivotTables & Charts

PivotTables: Analyzed Product Types, Channels, Regions, Time

PivotCharts: Visualized trends and performance

# Dashboard

* KPIs:
* Total Sales, Adjusted Sales, Average Order Value, Total Returns, Profit Margin
* Charts:
* Line Chart: Monthly Sales Trend  
  Bar Charts: Sales by Region and Category  
  Pie Chart: Product-wise Sales Distribution

Interactivity: Slicers for filtering by Date (Month/Year), Product Category, Region, Sales Channel

Conditional formatting highlights negative profits

Automation: Macros used to refresh data and visuals. Dashboard updates instantly with user input.

# What-If Analysis & Goal Seek

* What-If Analysis:
* Used Excel’s Scenario Manager and Data Tables to simulate business outcomes by adjusting key variables like price, return rate, and quantity sold.
* Scenarios Tested:
* 10% increase in sales price → Revenue boost  
  5% decrease in return rate → Higher net sales  
  20% rise in quantity sold → Greater total revenue
* Goal Seek:
* Applied Goal Seek to determine required values for reaching business targets.
* Examples:  
  - Units needed to hit ₹5,00,000 in Net Sales  
  - Price needed to generate ₹1,00,000 profit

# Macros & Automation

Description: Automated key tasks to enhance workflow and reporting speed using VBA.

* Implemented Macros:
* 1. Refresh All PivotTables  
  2. Generate Sales Trend Chart  
  3. Export Dashboard to PDF  
  4. Insert Last Updated Timestamp

# Insights & Recommendations

* Insights:
* Top Channel: Online  
  Best Sellers: Phones, Chairs  
  Weak Area: Furniture returns
* Recommendations:
* Review discount policies  
  Promote top performers  
  Improve quality for high-return items

# Conclusion

Complete Excel-based analysis  
Dynamic dashboard & automation  
Clear, actionable insights

Thank You