Action Plan for the Superstore Sales Data Analysis Project

Project Goal Definition

Uncover drivers of sales and profit across categories, customers, and regions; build visuals and (optionally) forecasting models; deliver clear business recommendations.

Data Acquisition

Use the provided Superstore Sales dataset (CSV/Excel). Ensure data dictionary for fields like Order Date, Ship Date, Segment, Category, Sub■Category, Sales, Quantity, Discount, Profit, Region.

Environment Setup

Python: Pandas, NumPy, Matplotlib, Seaborn, scikit■learn; optional BI dashboards in Tableau/Power BI.

Data Cleaning & Preparation

Fix dtypes (dates, categories), handle missing/duplicates, standardize categories, derive features (Year/Month, Week, Delivery Days, Discount Buckets, Profit Margin).

EDA & Visualization

Trend lines by time; sales/profit heatmaps by Region × Category; top/bottom products; discount vs. margin analysis; cohort or RFM (optional).

Modeling (Optional)

Baseline forecast (moving average), regression or Prophet/ARIMA (if allowed) for demand; classification for return or late■ship risk; clustering for segments.

Documentation & Deliverables

Cleaned dataset, EDA notebook, dashboard/screenshots, final report with insights & recommendations, and (optional) model notebook with evaluation.

Timeline

Week 1: Setup & data cleaning
Week 2: EDA & visuals
Week 3: Modeling (optional) & validation
Week 4: Reporting & presentation