

# Sales Performance Analysis Business Problem Document

## Business Problem Statement

The company seeks to understand sales performance to improve profitability, reduce revenue risk, and support sustainable growth. Variations in revenue and profit across products, channels, and regions require structured analysis.

**Key Question:** How can sales data identify revenue and profit drivers, uncover trends and anomalies, and optimize pricing, promotion, and market expansion for sustainable growth?

## Business Objectives

- Identify top performing products, channels, and regions
- Analyze seasonal trends for better forecasting
- Detect anomalies and outliers affecting pricing and margins
- Compare actual performance against budgets
- Inform pricing, promotion, and market expansion
- Support a Power BI dashboard for decision making

## Scope of Analysis

- Product profitability and performance
- Channel and regional performance
- Seasonal trends and time based patterns
- Budget vs actual evaluation
- Detection of pricing and margin inconsistencies

## Deliverables

### 1. Data Preparation and Modeling (Python)

Clean, transform, and structure data; handle missing values; create revenue growth, profit margin, and budget variance metrics.

### 2. Data Analysis (Python)

Identify revenue and profit drivers; analyze products, channels, regions; detect trends, anomalies, and margin risks.

### 3. Visualization and Insights (Power BI)

Build interactive dashboard; present trends and comparisons; highlight seasonal patterns and outliers.

### 4. Report and Presentation

Summarize insights; provide actionable recommendations; present visually to stakeholders.

### 5. GitHub Repository

Include Python scripts, notebooks, dashboard files; provide documentation.

## Expected Impact

Enable informed pricing and promotion decisions; reduce dependency on limited products or regions; enhance forecasting accuracy; mitigate margin risks; support data driven market expansion for sustainable growth.