Business Use Case

Title: Interactive Sales and Profit Monitoring Dashboard for Small Retail Businesses

Objective:

To provide business owners and analysts with a lightweight, webbased visualization tool to monitor and interpret monthly sales and profit trends, identify performance patterns, and support better decision-making without requiring advanced BI platforms.

Stakeholders:

- Small retail business owners
- Sales managers
- Financial analysts
- Marketing teams

Key Features:

- Interactive charts (line, bar, pie, scatter, histogram, box plot) to analyse sales and profit trends
- Easy toggle between different views using a simple web interface
- No complex installation runs as a lightweight Gradio app
- Rapid insights without needing Excel or Power BI

? Problem Statement

Current Challenge:

Small business owners often rely on manual tools like spreadsheets to track performance, which makes it difficult to analyze trends visually or make quick, data-driven decisions.

Specific Problems:

- Lack of automated or interactive visualizations
- · Difficulty in spotting monthly performance trends and outliers
- No easy way to compare metrics like sales and profit simultaneously
- Overdependence on technical experts or paid BI tools

Proposed Solution:

An easy-to-use, interactive dashboard using Python and Gradio that allows users to:

- Select from various chart types for visualizing their monthly performance
- Quickly identify which months had the best or worst sales/profit
- Detect correlations between sales and profit
- Understand profit distribution and variability using statistical plots