Solution Architecture

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Team ID: LTVIP2026TMIDS78157

Project Name: Strategic Product Placement Analysis

Maximum Marks: 4

Solution Architecture

The Solution Architecture represents the complete workflow of the Product Placement Analysis Project. This project is designed to analyze how different product positioning strategies affect sales volume and customer behavior. The architecture follows a layered approach starting from data collection, data visualization, publishing, and finally web integration.

The dataset is collected from Kaggle in CSV format and is imported into Tableau Desktop for data preparation and visualization. Multiple charts are created to analyze key business factors such as product category, product position, promotions, foot traffic, seasonal demand, and consumer demographics.

After generating the visualizations, an interactive Dashboard and Story are developed in Tableau. These outputs are then published to Tableau Public, which provides shareable links and embed codes.

To make the dashboard and story accessible through a user interface, the embed codes are integrated into a Flask web application using HTML templates. Finally, the end user (Retail Manager or Business Analyst) can access the dashboard and story through a web browser to gain insights and make data-driven decisions for improving sales and revenue.

SOLUTIONS ARCHITECTURE – PRODUCT PLACEMENT ANALYSIS PROJECT

Using Tableau Dashboard & Story with Flask Integration

DATA SOURCE LAYER

Kaggle Dataset (CSV File)

PROCESSING & VISUALIZATION LAYER

TABLEAU DESKTOP

- Data Preparation
- Visualizations (3 (Charts)
- Dashboard & Story Creation

TABLEAU PUBLIC

- Publishing
- Publishing Online
- Embed Code

TABLEAU PUBLIC

Dashboard

Story

Publishing

WEB INTEGRATION LAYER

FLASK WEB APPLICATION

Frontend HTML, CSS

Flask

Python, Flask)

<+HTML>

Embed Code

- Embed Dashboard & Story

END USER LAYER

- Web Browser
- Interactive Dashboards
- Filters & Reports
- Decision Making

DATA SOURCE → TABLEAU DESKTOP → TABLEAU PUBLIC → FLASK APP & WEB BROWSER