

Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization



Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization

Project Report Format

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INTRODUCTION

1.1 Project Overview

In today's competitive market environment, strategic product placement plays a crucial role in influencing customer purchasing decisions and driving sales performance. Businesses invest significantly in positioning products effectively within retail stores, online platforms, films, television shows, and digital media to maximize visibility and revenue.

The project **"Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization"** focuses on analyzing the relationship between product positioning, sales performance, and consumer behavior. By leveraging Tableau as a data visualization tool, the project aims to transform raw sales and placement data into meaningful insights. The analysis helps identify which placement strategies are most effective in increasing sales and customer engagement.

Through interactive dashboards and visual analytics, this project demonstrates how data-driven decision-making can optimize product placement strategies and enhance overall business performance.

1.2 Purpose

The primary purpose of this project is to examine how product positioning impacts sales outcomes and consumer behavior using visual analytics.

Specifically, this project aims to:

- Analyze sales data based on different product placement strategies.
- Identify high-performing placement locations (e.g., shelves, end caps, online banners).
- Understand customer demographics and purchasing patterns.
- Provide actionable insights to improve marketing and merchandising strategies.
- Support data-driven decision-making using Tableau dashboards.

Ultimately, the project seeks to help organizations optimize product visibility, improve customer engagement, and drive sustainable revenue growth through strategic placement decisions.

IDEATION PHASE

Define the Problem Statements

Date	17 February 2026
Team ID	LTVIP2026TMIDS90604
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	2 Marks

Customer Problem Statement Template:

I am a Retail Marketing Manager in a consumer goods company.

I'm trying to understand how different product placements inside stores and on online platforms influence sales performance and customer purchasing behavior.

But I do not have clear visual insights that connect product positioning, sales data, and customer demographics in one place.

Because the data is scattered across multiple systems and not analyzed together using a proper visualization tool like Tableau.

Which makes me feel uncertain about making data-driven decisions to optimize product visibility and maximize revenue growth.

I am	a Retail Marketing Manager in a consumer goods company.
I'm trying to	understand how different product placements inside stores and on online platforms influence sales performance and customer purchasing behavior.
But	I do not have clear visual insights that connect product positioning , sales data, and customer demographics in one place.
Because	the data is scattered across multiple systems and not analyzed together using a proper visualization tool like Tableau.
Which makes me feel	the data is scattered across multiple systems and not analyzed together using a proper visualization tool like Tableau.
	uncertain about making data-driven decisions to optimize product visibility and maximize revenue growth.

Reference: <https://miro.com/templates/customer-problem-statement/>

Example:



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	A Retail Marketing Manager in a consumer goods company	Understand how product placement in stores and online platforms impacts sales performance and customer purchasing behavior	I do not have clear visual insights connecting placement strategy with sales and demographic data	The data is scattered across multiple systems and not integrated into a centralized Tableau dashboard	Uncertain about making data-driven decisions to optimize product positioning and maximize revenue
PS-2	A Brand Partnership Manager in a film and television production company	Evaluate the effectiveness of product placements in scenes and episodes	I cannot clearly measure audience engagement or sales impact from those placements	There is no structured visualization system linking placement exposure with ROI metrics	Less confident in negotiating sponsorship deals and planning future placement strategies

Empathize & Discover

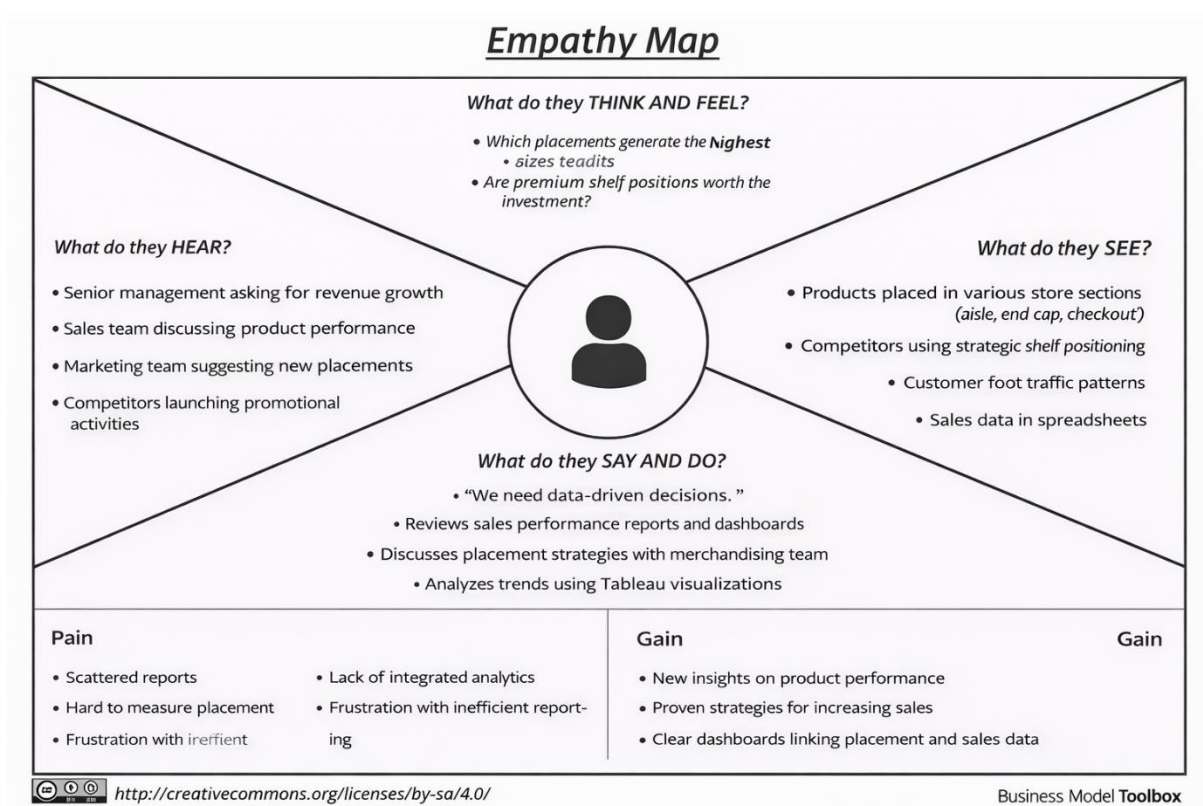
Date	17 Feb 2026
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Maximum Marks	4 Marks

Empathy Map Canvas:

An empathy map is a simple and visual tool used to understand users' behaviors, thoughts, emotions, and challenges. It helps teams gain deeper insight into the user's perspective before designing a solution.

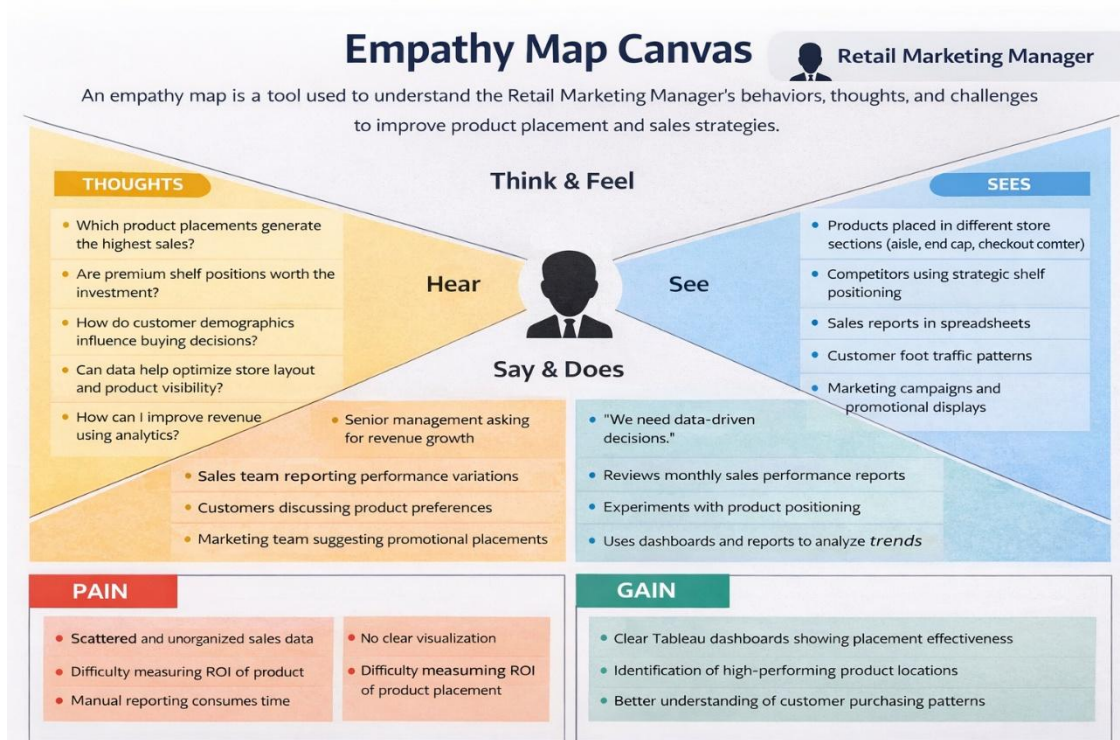
For this project, the primary user considered is a **Retail Marketing Manager** responsible for product placement and sales optimization.

Example:



Reference: <https://www.mural.co/templates/empathy-map-canvas>

Example: Food Ordering & Delivery Application



Brainstorm & Idea Prioritization Template

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Maximum Marks	4 Marks


Brainstorm & Idea Prioritization Template:

Brainstorming provides a collaborative and open environment where every team member is encouraged to actively participate in the creative thinking process. It focuses on generating a large volume of ideas without immediate judgment, allowing innovative and out-of-the-box concepts to emerge. By prioritizing quantity over initial evaluation, teams can explore diverse perspectives and build upon each other's ideas to develop effective problem-solving solutions.

This template is designed to support structured brainstorming sessions, enabling teams to collaborate efficiently, even in remote settings. It helps organize thoughts, refine concepts, and systematically prioritize ideas to transform creativity into actionable outcomes.

Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

Step-1: Team Gathering, Collaboration and Select the Problem Statement



Brainstorm & Idea Prioritization Template

Use this template in your brainstorming session so your team can **collaborate effectively**, generate innovative ideas, and shape practical solutions for the **Smart Hospital Navigation & Patient Assistance System**.

Brainstorm & idea prioritization

Use this template in your brainstorming session, so your team can **collaborate effectively**, generate innovative ideas, and shape practical solutions for the Smart Hospital Navigation & Patient Assistance System.

- 10 minutes to prepare
- 1 hour to collaborate
- 3-4 team members recommended

1 Define Your Problem Statement

A little preparation ensures a productive brainstorming session. Here's how we started:

10 minutes

4 Team Gathering

- Identify team members (Development, UI/UX, Research, Documentation)
- Share problem context and hospital challenges in advance
- Define roles: Facilitator, Idea Recorder, Timekeeper

5 Set the Goal

- Focus on solving navigation confusion in hospitals
- Aim to design a patient-friendly smart assistance
- Generate at least 15+ innovative ideas

6 Learn & Use Facilitation Tools

- Use sticky notes or digital whiteboards
- Encourage equal participation
- Avoid early criticism of ideas

3 Key rules of brainstorming

- Stay focused on the problem
- Encourage wild and creative ideas
- Defer judgment
- Build on others' ideas
- Aim for volume
- Be clear and visual

Key rules of brainstorming

- Stay focused on the problem
- Encourage wild and creative ideas
- Defer judgment
- Build on others ideas
- Aim for volume

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

TIP
You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

Amar

Yuktesh

Person 3

Person 4

Person 5

Person 6

Person 7

Person 8

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

20 minutes

TIP
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mind.

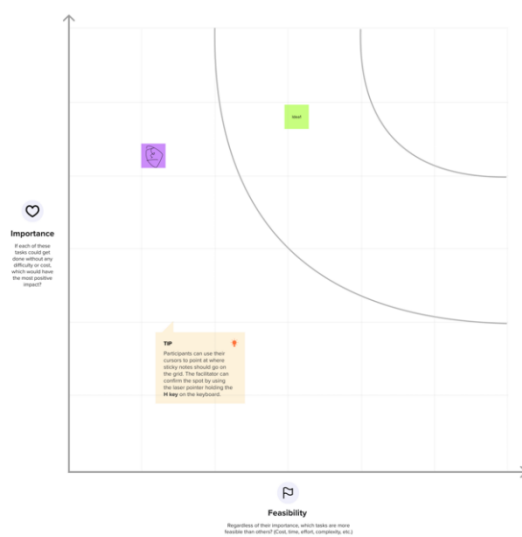
Step-3: Idea Prioritization

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes



REQUIREMENT ANALYSIS

3.1 Customer Journey map



3.2 Solution Requirement

olution Requirements (Functional & Non-functional)

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Team ID	LTVIP2026TMIDS90604
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Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Collection & Integration	Import sales dataset (CSV/Excel/Database) Integrate product, category, and placement data Clean and preprocess raw data
FR-2	Data Transformation & Modeling	Create calculated fields (Profit, Growth %, Conversion Rate) Create relationships between sales, region, and product placement Build KPIs for revenue and performance
FR-3	Tableau Dashboard Development	Create interactive sales dashboard Visualize sales by product category Visualize sales by region/store layout Add filters (Region, Category, Time Period)
FR-4	Product Placement Impact Analysis	Compare high-visibility vs low-visibility placements Analyze seasonal sales trends Identify best-performing product positions

FR-5	Insight Generation & Reporting	Generate summary insights Export dashboard reports Present strategic recommendations
FR-6	Storytelling with Tableau Stories	Combine dashboards into story format Create interactive story points for stakeholders

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

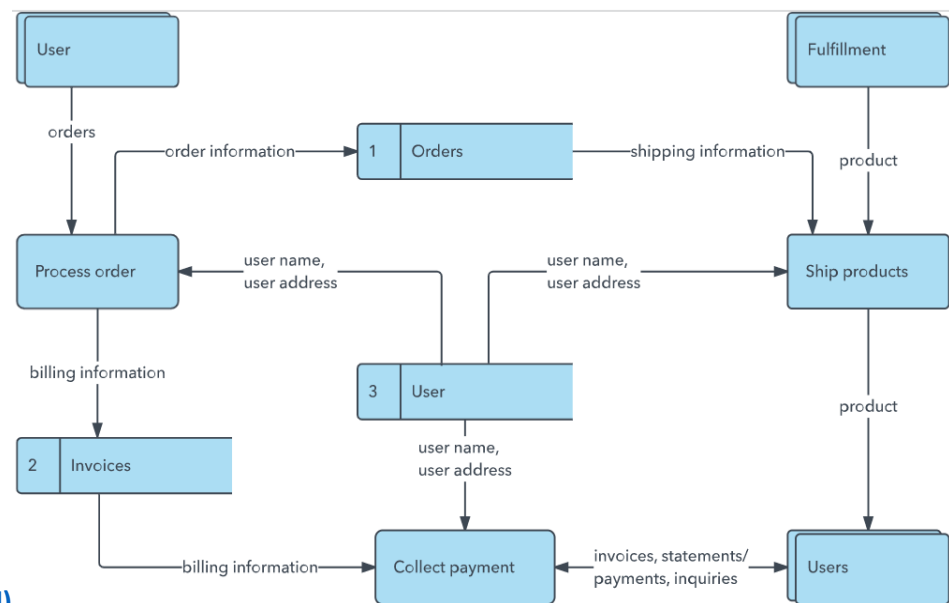
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Dashboard must be easy to navigate with clear filters, tooltips, and interactive visuals.
NFR-2	Security	Data calculations and KPIs must be accurate and validated.
NFR-3	Reliability	Dashboard should load quickly and respond to filters within 2–3 seconds.
NFR-4	Performance	System must consistently display correct insights without data loss.
NFR-5	Availability	Dashboard should support increasing data size and multiple time periods.
NFR-6	Scalability	Data model and dashboard design should allow easy updates with new data.

Data Flow Diagram & User Stories

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Maximum Marks	4 Marks

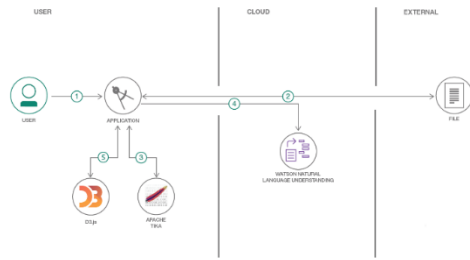
Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



Example: [Simplified](#)

Flow



1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Web User	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
Web User	Email Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Web User	Login	USN-3	As a user, I can log in using my email and password.	I can access dashboards securely.	High	Sprint-2
Web User	Dashboard Access	USN-4	As a user, I can register for the application through Gmail	I can filter data by region, category, and time period.	High	Sprint-1
Web User	Placement Analysis	USN-5	As a user, I can compare sales performance by different product placements.	I can see charts showing high vs low visibility impact.	High	Sprint-2
Web User	KPI Monitoring	USN-6	As a user, I can view key metrics like Revenue, Growth %, and Conversion Rate.	KPIs update dynamically based on filters.	High	Sprint-2
Data Analyst	Data Upload	USN-7	As a data analyst, I can upload sales and placement data.	Data is stored and reflected in dashboards.	High	Sprint-1
Data Analyst	Data Cleaning	USN-8	As a data analyst, I can preprocess	Cleaned data is validated before visualization.	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
			and clean raw data.			
Data Analyst	Calculated Fields	USN-9	As a data analyst, I can create calculated KPIs in Tableau.	KPIs display correctly in dashboards.	Medium	Sprint-2
Administrator	User Management	USN-10	As an admin, I can manage user accounts.	I can activate/deactivate users.	High	Sprint-1
Administrator	Access Control	USN-11	As an admin, I can assign role-based permissions.	Only authorized users can access sensitive data.	High	Sprint-2
Administrator	Data Security	USN-12	As an admin, I ensure secure data handling.	Data access is restricted and encrypted.	High	Sprint-2

Technology Stack (Architecture & Stack)

Date	31 January 3035
Team ID	LTVIP2026TMIDS90604
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	4 Marks

Technical Architecture:

Architecture Type:

3-Tier Data Analytics Architecture

Presentation Layer (UI Layer)

- Web-based Tableau Dashboard
- Interactive Filters & Visualizations

Application / Analytics Layer

- Data Processing & Transformation
- KPI Calculations
- Business Logic Implementation

Data Layer

- Sales Database
- Product Placement Data
- Customer Demographic Data

Data Flow:

Data Source (CSV/Database)

- Data Cleaning & Preprocessing (Python/Excel)
- Data Modeling (Tableau Data Model)
- Dashboard Visualization
- Strategic Insights & Reports

Reference: <https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/>

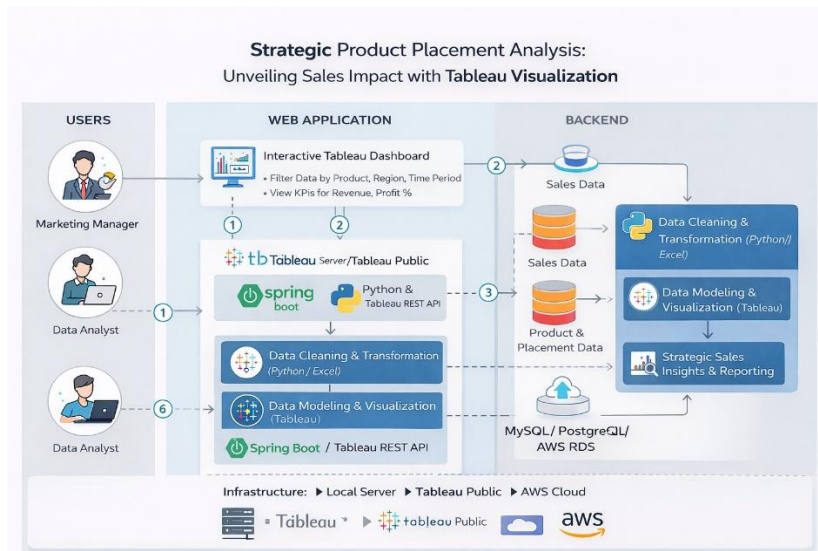


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Interactive dashboards for business users	Tableau Desktop / Tableau Public
2.	Application Logic-1	Data cleaning and preprocessing	Python (Pandas, NumPy) / Excel
3.	Application Logic-2	Data transformation & KPI calculation	Tableau Calculated Field
4.	Application Logic-3	Storytelling & insight generation	Tableau Story Feature
5.	Database	Storage of structured sales & placement data	MySQL / CSV / Excel
6.	Cloud Database	Cloud-based data storage (if deployed online)	Google Drive / AWS RDS / Tableau Server
7.	File Storage	Dataset storage (sales, region, placement files)	Local File System / Cloud Storage
8.	External API-1	Optional market data integration	Public Sales API (if applicable)
9.	External API-2	Regional demographic data	Government Open Data API (optional)
10.	Machine Learning Model	(Optional Future Scope) Predict sales trends	Scikit-learn (Regression Model)

11.	Infrastructure (Server / Cloud)	Dashboard deployment	Local System / Tableau Public / Tableau Server
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Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Libraries used for preprocessing and analysis	Python (Pandas, Matplotlib, NumPy)
2.	Security Implementations	Secure data handling & access restrictions	Role-based access (Tableau Server), Password Protection
3.	Scalable Architecture	Supports increasing dataset size & new KPIs	3-Tier Architecture
4.	Availability	Dashboard accessible online anytime	Tableau Public / Tableau Server
5.	Performance	Optimized dashboard with filters & indexed datasets	Extract Data Source in Tableau

References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>

Project Design Phase

Problem – Solution Fit Template

Date	15 February 2025
Team ID	LTVIP2026TMIDS90604
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The project “**Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization**” addresses the problem of limited visibility into how product placement affects sales performance. Marketing and sales teams often rely on manual reports or static dashboards, which do not clearly show the relationship between shelf positioning, product categories, and revenue. This leads to slow, assumption-based decision-making and missed revenue opportunities.

The proposed solution is an interactive Tableau dashboard that visualizes placement impact, sales trends, and key performance indicators. It enables quick analysis, comparison across regions and categories, and identification of high- and low-performing products. By transforming complex sales data into clear visual insights, the solution supports faster, data-driven strategic decisions and improves overall business performance.

Purpose:

- Simplifies complex sales data into easy-to-understand visual insights.
- Fits into existing reporting systems using available sales data.
- Improves marketing and placement strategy with data-backed decisions.
- Reduces manual effort and costly errors in planning.
- Helps businesses understand current performance and optimize future strategies.

Template:

1. CUSTOMER SEGMENT(S) CS Who is your customer? <ul style="list-style-type: none"> Marketing Managers Sales Managers Retail Business Analysts Strategic Decision Makers 	2. CUSTOMER CONSTRAINTS CC Which constraints prevent your customers from taking action or limit their choice of solutions? I.e. spending power, budget, too cash. <ul style="list-style-type: none"> Spending power (ROI) Time constraints Dependence on manual reports 	5. AVAILABLE SOLUTIONS AS Which solutions are available to customers when they face the problem or need to get the job done? What jobs & come three solutions have? I.e. just real paper is an alternative. <ul style="list-style-type: none"> Manual Excel analysis Basic static dashboards Traditional BI reports (BI limited interactivity)
3. JOBS-TO-BE-DONE / PROBLEMS J&P Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one, explore different sides (like hajot). <ul style="list-style-type: none"> 1. Need clear insights into placement effects on sales 2. Struggle with manual and fragmented data analysis 	9. PROBLEM ROOT CAUSE RC What is the real reason that the problem exists? What is the reason there is no alternative to doing the job? It's often based on laws & policies or the change in regulation, or in our roles. <ul style="list-style-type: none"> Lack of interactive tools to analyze sales vs placement Reliance on outdated analysis methods 	7. BEHAVIOUR BE How does your customer do or address the problem and get the job done? I.e. decisions they take for the messes? just its natural, simple and benefit. ineffective for them? (e.g., marketers stick to habits to their message budget as's. <ul style="list-style-type: none"> Depend on Excel sheets Use intuition for placement strategy
3. JOBS-TO-BE-DONE / PROBLEMS J&P Which jobs-to-be-done (or problems) do you address for your customer? There could be more than one, explore different sides. <ul style="list-style-type: none"> 1. Need clear insights into placement effects on sales 2. Struggle with manual and fragmented data analysis 	9. PROBLEM ROOT CAUSE RC What is the real reason that the problem exists? What is the reason there is no alternative to doing the job? It's often based on laws & policies or the change in regulation, or in our roles. <ul style="list-style-type: none"> Lack of interactive tools to analyze sales vs placement Reliance on outdated analysis methods 	7. BEHAVIOUR BE How does your customer do or address the problem and get the job done? I.e. decisions they take for the messes? just its natural, simple and benefit. ineffective for them? (e.g., marketers stick to habits to their message budget as's. <ul style="list-style-type: none"> Depend on Excel sheets Use intuition for placement strategy
4. TRIGGERS TR What triggers customers to act? (i.e. seeing a competitor's store perform better, hearing about a new successful customer in the store). <ul style="list-style-type: none"> Competitors with better-placed products KPI reports showing sales declines 	10. YOUR SOLUTION SL If you are working on an existing business, write down your current solution. Form it in the same essential, prevent further better solutions. this way a little base with best activist your, ability to costs in Benetresary least, perfect late different methods and actions a problem and manuf the retailers. <ul style="list-style-type: none"> Renut agethent, follow discussions 	8. CHANNELS of BEHAVIOUR CH 8.1 ONLINE What kinds of actions do customers take online? Extract online channels from #7. <ul style="list-style-type: none"> Web-based dashboards Email reports
6. EMOTIONS: BEFORE / AFTER EM How do customers feel when they face problem a job lot afterwards? I.e. lost, insecure - confident, in control - use it in your communication strategy & sign.		8. CHANNELS of BEHAVIOUR CH 8.1 Web-based dashboards <ul style="list-style-type: none"> Email reports

Define CS fit into CC | Focus on J&P fit into BE, understand RC | Identify strong TR & EM | Extract online & offline CH

References:

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>

Proposed Solution Template

Date	17 February 2026
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Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Retail businesses struggle to understand how product placement affects sales due to scattered data, manual analysis, and lack of visual insights.
2.	Idea / Solution description	Develop an interactive Tableau dashboard that analyzes sales data to evaluate the impact of product placement on revenue, customer behavior, and performance metrics.
3.	Novelty / Uniqueness	Uses interactive visual analytics to directly correlate product placement with sales impact, enabling data-driven decisions instead of intuition-based strategies.
4.	Social Impact / Customer Satisfaction	Helps businesses improve product availability and visibility, leading to better customer experience and informed purchasing decisions.
5.	Business Model (Revenue Model)	Subscription-based access to dashboards, analytics consulting services, and customized reporting solutions for retail businesses.
6.	Scalability of the Solution	Easily scalable across multiple stores, regions, and product categories by integrating additional datasets and expanding dashboard capabilities.

Solution Architecture

Date	15 February 2025
Team ID	LTVIP2026TMIDS90604
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	4 Marks

Solution Architecture:

The solution architecture bridges the gap between the business problem of unclear product placement impact and a technology-driven analytics solution. The architecture is designed to collect, process, analyze, and visualize sales data efficiently using Tableau as the core business intelligence tool.

The primary goal of this architecture is to transform raw sales data into meaningful insights that help stakeholders optimize product placement strategies and improve revenue performance.

Example - Solution Architecture Diagram:

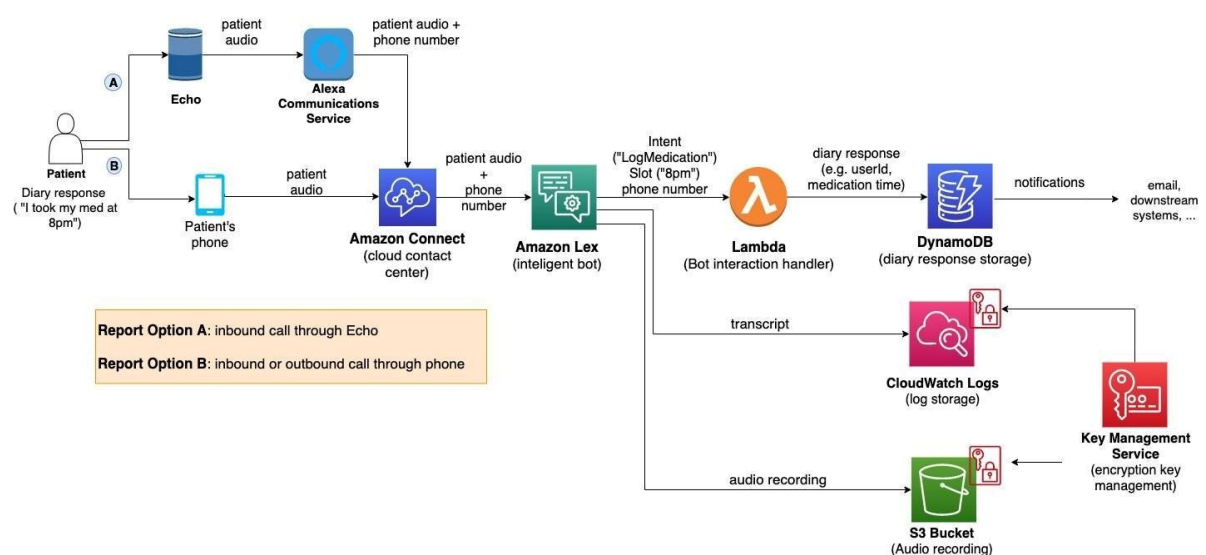


Figure 1: Architecture and data flow of the voice patient diary sample application

Reference: <https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>

PROJECT PLANNING & SCHEDULING

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	17 February 2026
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Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection & Preparation	USN-1	As an analyst, I want to collect sales and product placement data to begin analysis.	3	High	Team
Sprint-1	Data Cleaning	USN-2	As an analyst, I want to clean and preprocess raw sales data for accurate insights.	3	High	Team
Sprint-2	KPI Identification	USN-3	As a business analyst, I want to define key performance indicators (Revenue, Units Sold, Profit Margin).	2	Low	Team
Sprint-1	Dashboard Development	USN-4	As a marketing manager, I want to view placement vs sales comparison in an interactive dashboard.	5	Medium	Team
Sprint-1	Trend Analysis	USN-5	As a sales manager, I want to analyze monthly and yearly sales trends.	1	High	Team

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Regional Analysis	USN-6	As a decision maker, I want to compare sales performance across regions.	3	High	Team
Sprint-3	Product Performance Ranking	USN-7	As a user, I want to identify high-performing and low-performing products.	2	High	Team
Sprint-3	Filter & Drill-down Features	USN-8	As a user, I want to apply filters by category, region, and product type.	3	High	Team

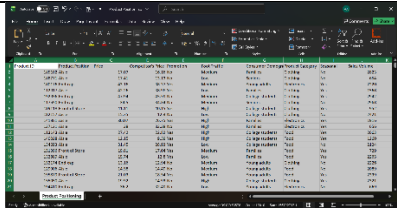
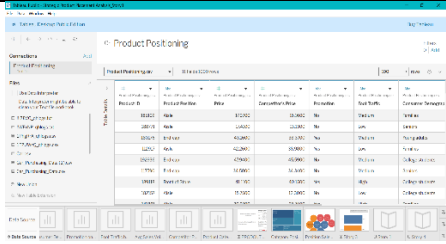
FUNCTIONAL AND PERFORMANCE TESTING

Performance Test

Date	17 February 2026
Team ID	LTVIP2026TMIDS90604
Project Name	Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization
Maximum Marks	

Model Performance Testing:

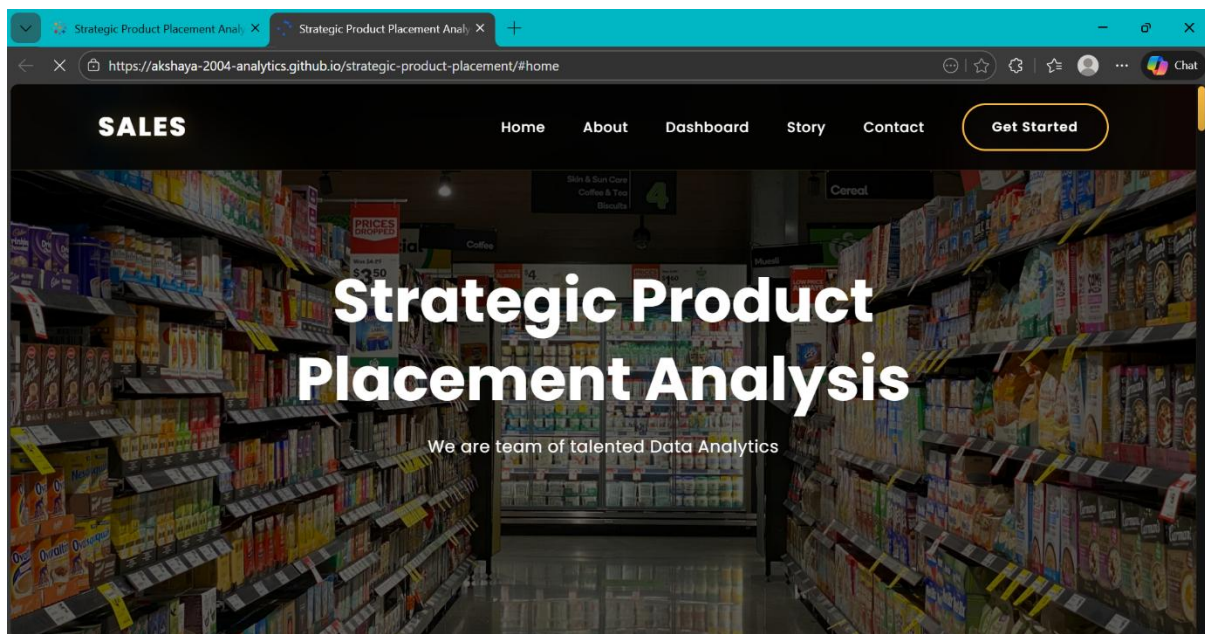
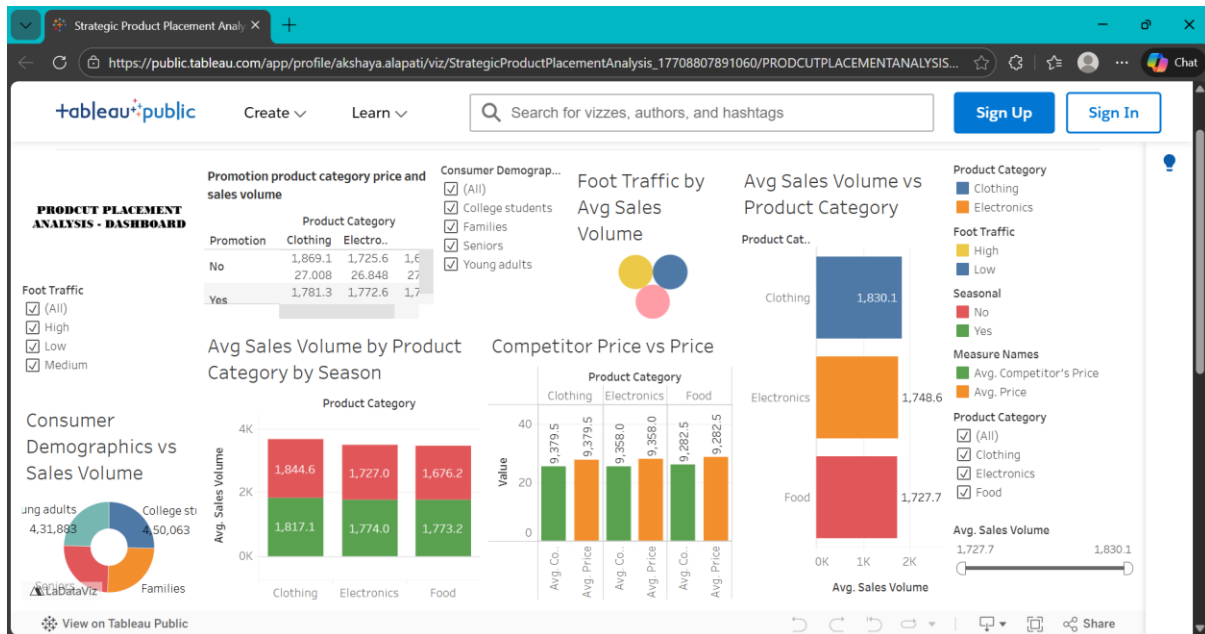
Project team shall fill the following information in model performance testing template.

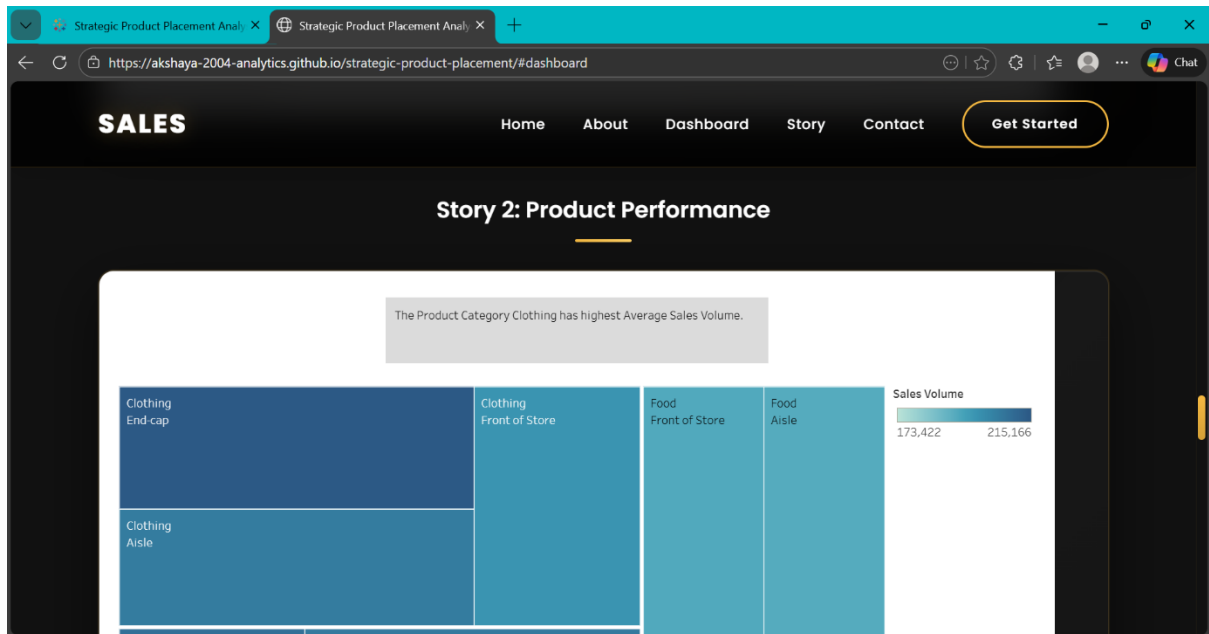
S.No.	Parameter	Screenshot / Values
1.	Data Rendered	
2.	Data Preprocessing	

3.	Utilization of Filters	
4.	Calculation fields Used	
5.	Dashboard design	No of Visualizations / Graphs - 6
6	Story Design	No of Visualizations / Graphs - 3

RESULTS

Output Screenshots –





Strategic Product Placement Anal Strategic Product Placement Anal

https://akshaya-2004-analytics.github.io/strategic-product-placement/#contact

SALES

Home About Dashboard Story Contact **Get Started**

Get In Touch

Contact Information

Have questions about the analysis or interested in collaboration? Reach out through any of the channels below.

Location
vishnu institute of technology
bhimavaram

Email
akshaya44@gmail.com
22pala4504@vishnu.edu.in

Send a Message

Your Name

Your Email

Subject

Your Message

ADVANTAGES & DISADVANTAGES

Advantages :

1. **Data-Driven Decision Making**
Enables businesses to make strategic placement decisions based on actual sales data instead of assumptions.
2. **Improved Revenue Optimization**
Identifies high-performing shelf positions and products to maximize sales.
3. **Interactive Visualization**
Tableau dashboards provide dynamic filters and drill-down analysis for deeper insights.
4. **Time Efficiency**
Reduces manual data analysis and reporting time significantly.
5. **Better Strategic Planning**
Supports marketing and product teams in planning promotions and shelf allocation.
6. **Scalable Solution**
Can be expanded to multiple stores, regions, and larger datasets.
7. **Easy Integration**
Connects with Excel, CSV, and SQL databases without complex setup.

Disadvantages -

1. **Dependency on Data Quality**
Inaccurate or incomplete data may lead to misleading insights.
2. **Limited Predictive Capability (Current Version)**
Primarily focuses on descriptive analytics unless ML is integrated.
3. **Requires BI Tool Knowledge**
Users need basic Tableau understanding to modify dashboards.
4. **Performance Issues with Large Datasets**
Very large datasets may affect dashboard loading time if not optimized.
5. **Initial Setup Effort**
Data cleaning and preprocessing require time and effort.

CONCLUSION

The project “**Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization**” successfully demonstrates how data analytics can transform business decision-making. By analyzing sales data and product placement strategies through interactive Tableau dashboards, the system provides clear insights into how placement directly influences revenue and performance.

The solution bridges the gap between raw sales data and strategic planning by converting complex datasets into meaningful visual insights. It enables marketing managers, sales teams, and decision-makers to identify high-performing products, optimize shelf positioning, analyze regional trends, and improve overall business performance.

Through structured data preprocessing, KPI calculations, and interactive visualizations, the project ensures faster, more accurate, and data-driven decisions. Although the current system focuses on descriptive analytics, it lays a strong foundation for future enhancements such as predictive modeling and AI-based recommendations.

Overall, this project highlights the importance of business intelligence tools in modern retail strategy and proves that effective data visualization can significantly enhance revenue optimization and strategic growth.

FUTURE SCOPE

The project “**Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization**” provides a strong foundation for data-driven retail strategy. In the future, the system can be enhanced in several ways to increase its analytical power and business value.

One major enhancement would be the integration of **predictive analytics and machine learning models** to forecast future sales trends based on historical placement data. This would help businesses proactively plan product positioning and inventory management.

The solution can also be extended by incorporating **real-time data integration**, allowing businesses to monitor live sales performance and make instant strategic decisions. Integration with ERP systems or POS systems would further automate data collection.

Another future improvement is the addition of **AI-based recommendation systems** that automatically suggest optimal shelf placement strategies based on customer buying patterns.

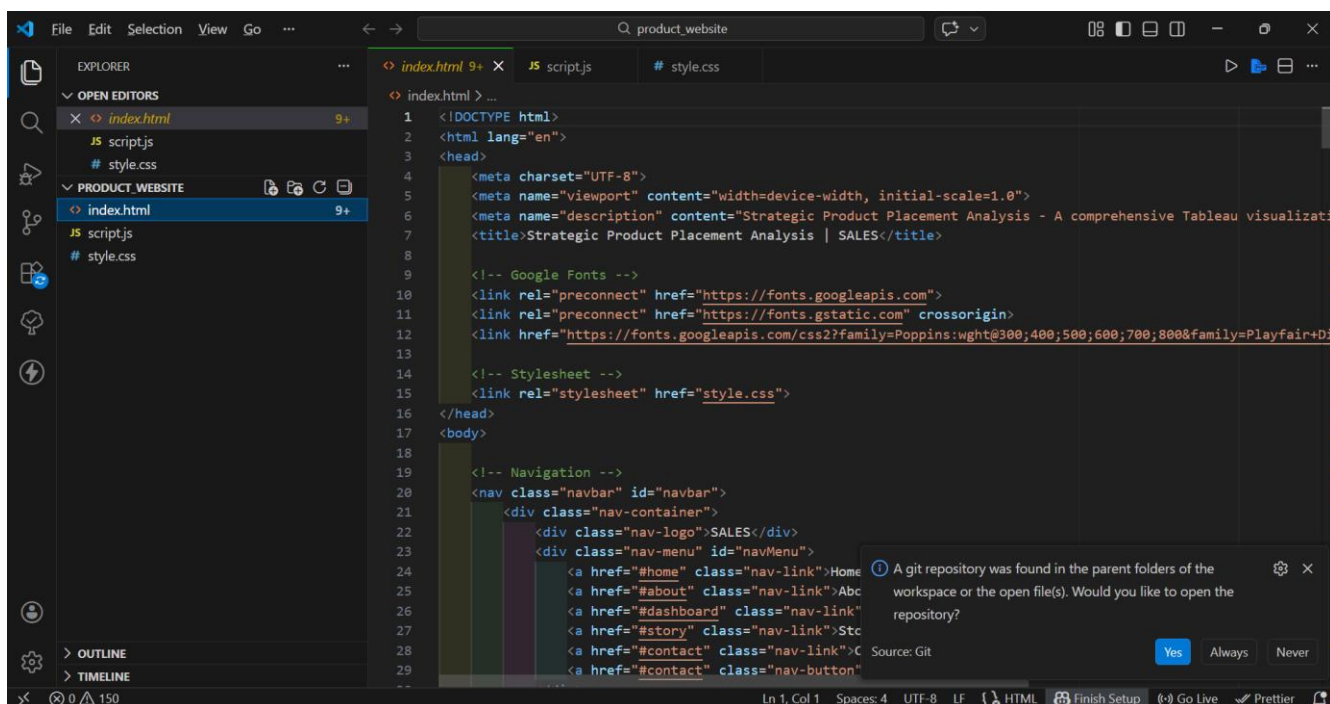
The dashboard can also be deployed on **cloud platforms** such as Tableau Server or AWS to support multi-store and multi-region scalability, ensuring enterprise-level implementation.

Furthermore, advanced analytics such as **customer segmentation**, **demand forecasting**, and **promotional impact analysis** can be added to enhance marketing effectiveness and customer satisfaction.

Overall, the project has strong potential to evolve into a comprehensive retail analytics platform that supports intelligent, predictive, and automated decision-making.

APPENDIX

Source Code :



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <meta name="description" content="Strategic Product Placement Analysis - A comprehensive Tableau visualizati
7   <title>Strategic Product Placement Analysis | SALES</title>
8
9   <!-- Google Fonts -->
10  <link rel="preconnect" href="https://fonts.googleapis.com">
11  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
12  <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;500;600;700;800&family=Playfair+Di
13
14  <!-- Stylesheet -->
15  <link rel="stylesheet" href="style.css">
16 </head>
17 <body>
18
19  <!-- Navigation -->
20  <nav class="navbar" id="navbar">
21    <div class="nav-container">
22      <div class="nav-logo">SALES</div>
23      <div class="nav-menu" id="navMenu">
24        <a href="#home" class="nav-link">Home
25        <a href="#about" class="nav-link">Abc
26        <a href="#dashboard" class="nav-link">
27        <a href="#story" class="nav-link">Stc
28        <a href="#contact" class="nav-link">C
29        <a href="#contact" class="nav-button">
```

Dataset Link –

<https://www.kaggle.com/datasets/amitvkulkarni/impact-of-product-positioning-on-sales>

GitHub Link –

<https://github.com/Akshaya-2004-Analytics/strategic-product-placement>

Project Link –

[Strategic Product Placement Analysis | SALES](#)

Vedio link –

<https://drive.google.com/file/d/1P11BBpjr8Dlddk36bu8mlqUbaEvvhtJM/view?usp=sharing>