Project Initialization and Planning Phase

Date	22 June 2025
Team ID	LTVIP2025TMID47588
Project Title	Cosmetics Insights : Navigating cosmetic trends and consumer insights with tableau
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	To analyze and visualize cosmetic industry trends using Tableau, providing insights into consumer behavior, product performance, and emerging beauty trends.
Scope	- Collect and analyze data from beauty product sales, social media trends, and customer reviews. - Develop interactive dashboards in Tableau to visualize key cosmetic industry insights. - Enable brands and retailers to make data-driven decisions.
Problem Statement	

Description	The cosmetic industry is constantly evolving, with shifting consumer preferences, influencer impact, and changing beauty standards. Businesses lack clear, data-driven
	insights into market trends.
Impact	Without accurate insights, brands struggle to meet consumer expectations, leading to missed market opportunities and ineffective marketing strategies.

Proposed Solution

Approach	- Gather historical and real-time cosmetic industry data from sources like sales reports, social media, and surveys. - Clean and preprocess data using Python and Tableau Prep. - Design interactive Tableau dashboards for analyzing product performance, customer preferences, and emerging beauty trends.
Key Features	- **Trend Analysis:** Identify popular cosmetic products and emerging beauty trends. - **Consumer Insights:** Understand customer demographics and buying patterns. - **Market Segmentation:** Analyze brand performance across different regions and customer groups. - **Interactive Dashboards:** Provide real-time visualizations for better decision-making.

Resource Type	Description	Specification/Allocation
Hardware		

Computing Resources	CPU/GPU specifications, number of cores	e.g., 2 x NVIDIA V100 GPUs

Resource Requirements

Memory	RAM specifications	e.g., 16 GB
Storage	Disk space for data, models, and logs	e.g., 2 TB SSD

Software

Frameworks	Python frameworks	e.g., Flask, Tableau, Python (Pandas, NumPy)
Libraries	Additional libraries	e.g., Tableau Prep, scikit-learn,Tableau Desktop,spyder
Development Environment	IDE, version control	e.g., Jupyter Notebook, Git,spyder

Data

Data	Source, size, format	e.g., Kaggle dataset, 1M+ consumer reviews, CSV
Data Cleaning Tools	Tools for peeprocessing	e.g., Tableau Prep, Python (Pandas)
Data Types	Structured/unstructured data	e.g., sales figures, social media trends