Project Design Phase - II
Technology Stack (Architecture & Stack)

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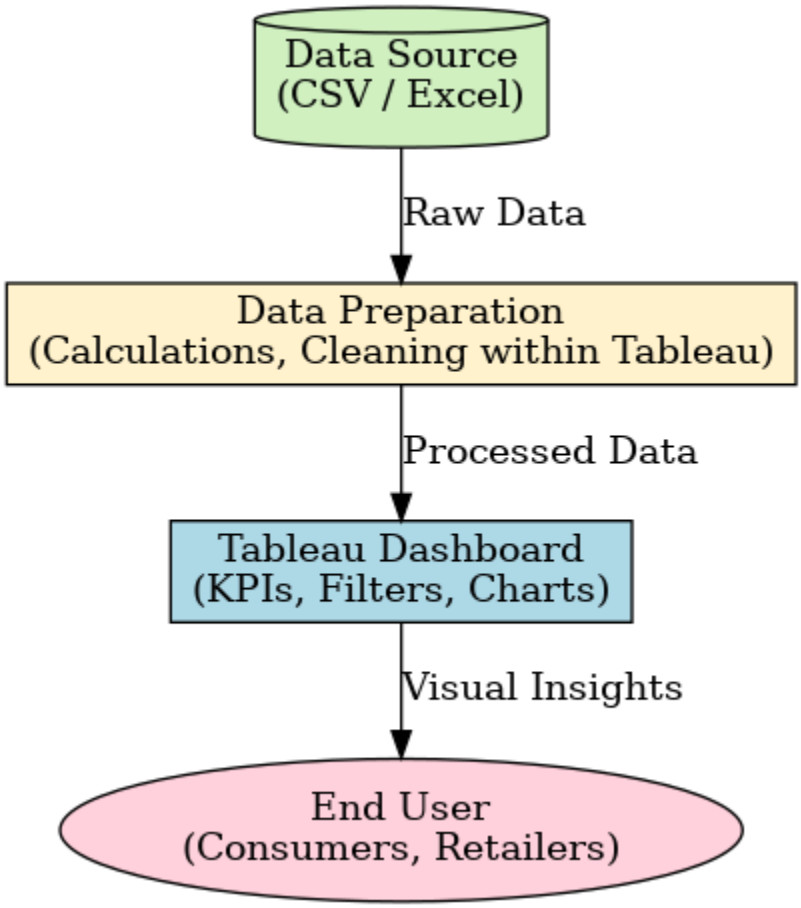
Team ID - PNT2025TMID09841

Project name - iRevolution: A Data-driven Exploration of Apple's iPhone Impact in India

This document describes the technology stack and architecture used to build the iPhone Value-for-Money Dashboard. It includes the key components, technologies, and characteristics of the application. (Maximum marks – 4 marks)

1. Technical Architecture

The architecture consists of data input, processing, visualization, and user interaction layers. A diagram can be inserted here to show how the CSV dataset flows through data cleaning and visualization in Tableau for end-users.



2. Components and Technologies

S.No	Component	Description	Technology
1	User Interface	How the user interacts with the dashboard	Tableau Dashboard (Web UI)
2	Application Logic - 1	Value Score calculation and data cleaning	Excel / Python (pandas)/ Tableau
3	Application Logic - 2	KPI and chart generation	Tableau
4	Database	Primary data source for analysis	CSV / Excel
5	File Storage	Storage for datasets and processed files	Local storage
6	Infrastructure	Environment where the dashboard is deployed	Tableau Public (Cloud)

3. Application Characteristics

S.No	Characteristic	Description	Technology
1	Open-Source Frameworks	Optional Python scripts for data cleaning	pandas, numpy (optional)
2	Security Implementations	Secure data handling and Tableau Public access	Tableau Public security
3	Scalable Architecture	Can expand with additional iPhone datasets	Tableau + Excel
4	Availability	Accessible through Tableau Public 24/7	Tableau Public
5	Performance	Fast KPI calculation and filter response	Tableau optimizations