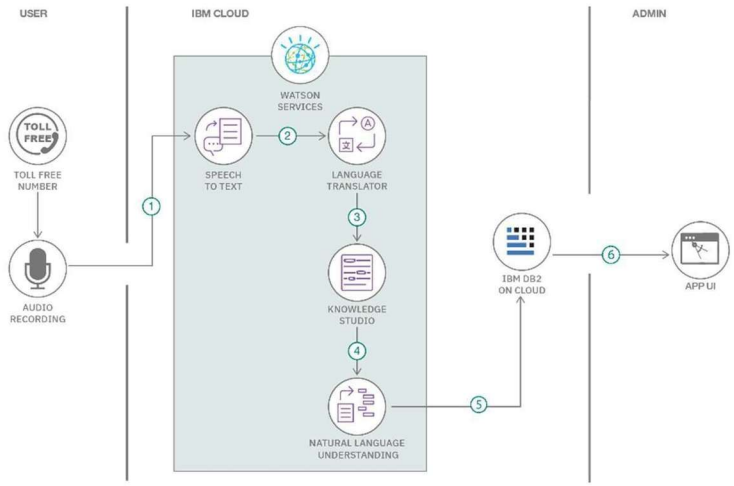
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	31 January 2026
Team ID	LTVIP2026TMIDS61666
Project Name	I Revolution_ A Data-driven Exploration of Apple's iPhone Impact in India using tableau
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



Guidelines:

- Include all the processes (As an application logic / Technology Block)
- Provide infrastructural demarcation (Local / Cloud)
- Indicate external interfaces (third party API's etc.)
- Indicate Data Storage components / services
- Indicate interface to machine learning models (if applicable)

Table 1:

Component	Tool / Technology	Purpose
Data Source	CSV, JSON files	Raw smartphone sales and specifications data
Visualization	Tableau Desktop	Creating interactive dashboards and stories
Storage	Google Drive / Local System	Storing raw and processed datasets
Collaboration	Google Docs, Slack	Team communication and report writing
Deployment	Tableau Public / Tableau Server	Dashboard sharing and stakeholder access

Table 2: Application Characteristics

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	The application uses open datasets and visualization tools to analyze iPhone sales and market trends in India. Tableau supports integration with open data formats for analytics.	Tableau Desktop, CSV/JSON data formats
2	Security Implementations	The system ensures secure access to dashboards through Tableau Public/Server permissions. Data files are stored securely and access is controlled at the platform level.	Tableau authentication, Access control, HTTPS
3	Scalable Architecture	The architecture supports scalability by handling large datasets and multiple visualizations efficiently through Tableau's in-memory engine.	Tableau Hyper Engine
4	Availability	The dashboards are available online through Tableau Public/Server, enabling access anytime through a web browser without local installation.	Tableau Public / Tableau Server

S.No	Characteristics	Description	Technology
5	Performance	Performance is optimized using data extracts, filters, and efficient visual rendering to ensure fast dashboard loading and smooth interaction.	Tableau Extracts (.hyper), Caching