

Project Design Phase-II

I-Revolution: A Data-Driven Exploration of Apple's iPhone Impact in India

Solution Requirements (Functional & Non-Functional)

Date: 31 January 2025

Team ID: **LTVIP2026TMIDS47508**

Maximum Marks: 4 Marks

1. Functional Requirements

The following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirements (Stories / Sub-Tasks)
FR-1	User Registration	<ul style="list-style-type: none">• Registration through Form (Name, Email, Password)• Registration through Gmail• Registration through LinkedIn
FR-2	User Confirmation	<ul style="list-style-type: none">• Confirmation via Email• Confirmation via OTP• Account activation after verification
FR-3	Data Collection & Management	<ul style="list-style-type: none">• Upload iPhone sales datasets• Import market research data• Update and delete datasets• Store raw and cleaned data in database
FR-4	Data Cleaning & Processing	<ul style="list-style-type: none">• Remove duplicate records• Handle missing values• Standardize formats• Prepare datasets for analysis
FR-5	Data Analysis	<ul style="list-style-type: none">• Analyze sales trends across years• Compare iPhone market share with competitors• Analyze pricing trends in

		<p>India</p> <ul style="list-style-type: none"> • Study urban vs rural adoption
FR-6	Dashboard & Visualization	<ul style="list-style-type: none"> • Interactive Tableau dashboards • Filters by year, region, price range • Graphs showing revenue growth • Download reports in PDF format
FR-7	User Login & Access Control	<ul style="list-style-type: none"> • Secure login with email & password • Role-based access (User, Analyst, Admin) • Password reset option
FR-8	Report Generation	<ul style="list-style-type: none"> • Generate summary reports • Export reports in PDF/Excel • View historical analysis reports

2. Non-Functional Requirements

The following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system should have a simple, user-friendly interface with easy navigation and clear dashboards.
NFR-2	Security	The system must use secure authentication, encrypted passwords, and protected data storage.
NFR-3	Reliability	The system should provide accurate analysis results with minimal downtime.
NFR-4	Performance	Dashboards and reports should load within 3–5 seconds under normal usage

		conditions.
NFR-5	Availability	The system should be available 24/7 with regular backups and minimal maintenance interruptions.
NFR-6	Scalability	The system should support increasing datasets and growing user base without performance degradation.
NFR-7	Maintainability	The system should allow easy updates, bug fixes, and dataset modifications.
NFR-8	Compatibility	The system should be accessible via web browsers and mobile devices.