Final Report – iRevolution

1. INTRODUCTION

1.1 Project Overview

iRevolution is a data-driven analysis platform that allows users to explore, compare, and evaluate Apple iPhone products listed on Flipkart. Using visual analytics, the project aims to identify best-value phones based on pricing, features, and customer sentiment.

1.2 Purpose

The purpose of this project is to enable users to make informed purchase decisions by analyzing iPhone product listings with interactive dashboards and derived insights from the data.

2. IDEATION PHASE

2.1 Problem statement

Consumers face difficulty in selecting the right iPhone model on e-commerce platforms due to overwhelming choices, inconsistent data, and scattered reviews. There is a need for a centralized, data-driven solution that enables meaningful comparison and informed decision-making.

2.2 Empathy Map Canvas

An Empathy Map is a collaborative visualization tool used to deeply understand your users' behavior, thoughts, and feelings. It helps you put yourself in the user's shoes and see the product or problem from their perspective.

2.3 Brainstorming

Brainstorming session was conducted focusing on simplifying the decision-making process. The team identified key pain points such as information overload, lack of side-by-side comparisons, unstructured user reviews, and inconsistent data presentation on e-commerce platforms.

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

A Customer Journey Map is a visual or written representation of the entire experience a customer goes through when interacting with a product, service, or brand. It captures each stage of the customer's experience, from initial awareness to post-purchase, and helps identify what the customer is thinking, feeling, and doing at each step.

3.2 Solution Requirement

The proposed solution aims to address the challenges users face while selecting the right iPhone model on platforms like Flipkart by offering a data-driven, interactive dashboard that simplifies comparison and decision-making.

3.3 Data Flow Diagram

Data flow diagram is designed to help users analyze and compare Apple iPhone products listed on Flipkart through a structured and interactive data flow process.

3.4 Technology Stack

- Tableau Public / Tableau Desktop (Dashboard)
- Python(preprocessing)
- Excel/csv (Data source)
- Github

4. PROJECT DESIGN

4.1 Problem Solution Fit

The solution fits well with user needs by offering tailored product suggestions, a simple UI, and insights that reduce choice overload.

4.2 Proposed Solution

A personalized recommendation system supported by AI-analyzed reviews and interactive dashboards for filtering and insights.

4.3 Solution Architecture

Architecture includes modules for data processing, AI review engine, dashboard service, and user personalization.

5. PROJECT PLANNING & SCHEDULING

5.1 Project planning

The project followed

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

Performance was tested based on data rendering speed, dashboard responsiveness, and accuracy of personalized results.

7. RESULT

7.1 Output Screenshots

Output includes dashboards showing

8. ADVANTAGES & DISADVANTAGES

Advantages:

- User-Friendly Interface
- Data-Driven Decision Making
- Time-Saving
- Customizable &

Scalable Disadvantanges:

- Static dataset
- Limited Sentiment Analysis
- Platform Dependency

9. CONCLUSION

The iRevolution Dashboard successfully addresses the challenges faced by online shoppers in identifying the most suitable iPhone model on platforms like Flipkart. By transforming raw product data into a structured, interactive, and visual format, the project empowers users to make informed purchasing decisions with ease and confidence.

10. FUTURE SCOPE

The iRevolution has strong potential for further development and real-world application.

- **Live Data Integration**

  Integrating APIs from e-commerce platforms (like Flipkart or Amazon) to fetch real-time data on pricing, availability, and reviews.

- **Advanced Sentiment Analysis**

  Using Natural Language Processing (NLP) models to analyze user reviews more deeply and classify them into detailed sentiment categories.

- **Multi-Brand Comparison**

  Extending the dashboard to include other smartphone brands such as Samsung, OnePlus, and Xiaomi for a more comprehensive market view.

11. APPENDIX

Source Code: Available on GitHub
Dataset Link:
https://docs.google.com/spreadsheets/d/1bh_4a9uYabdbGXw7tw0nVyanuVpn3xnk/edit?usp=drive_link&ouid=108219534146229863783&rtpof=true&sd=tr ue

Github & Project Demo Link:

https://github.com/AbhiRam-Podugu/iRevolution-A-Data-driven-Exploration-of-Apple-s-iPhone-Impact-in-India-using-Tableau-Project