iRevolution: A Data-Driven Exploration of Apple's iPhone Impact in India Using Tableau

Project Documentation

1. Project Title

iRevolution: A Data-Driven Exploration of Apple's iPhone Impact in India Using Tableau

2. Team Members

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• Team Members:
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3. Faculty Mentor

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4. Project Overview

• Purpose:
To analyze the influence of Apple iPhones in the Indian smartphone market by transforming raw datasets into visual stories using Tableau.

• Features:
- KPI-based visual insights
- Interactive dashboards and filters
- Global vs Indian market comparison
- Battery-type and model analysis
- Quarterly and annual revenue charts
- Web integration using Flask
- Visual storytelling using Tableau storyboards

5. Architecture

• Frontend:
Tableau dashboards act as the frontend visual interface.

• Backend:
Flask is used to host and serve the frontend page that embeds Tableau dashboards.

• Database:
Preprocessed data in Excel/CSV format is uploaded into Tableau.

6. Setup Instructions

• Prerequisites:
- Python 3.x
- Flask
- Internet connection

• Installation Steps:
1. Clone the project files
2. Install Flask using pip
3. Place Tableau links in index.html
4. Run Flask server
5. Open http://localhost:5000

7. Folder Structure

```
/iRevolution
├── /templates
│   └── index.html
├── /static
├── app.py
└── README.md
```

8. Running the Application

• Frontend:
Use a browser to view embedded dashboards.
• Backend:
Run Flask server using python app.py

9. API Documentation

No custom APIs were developed.

10. Authentication

No authentication was implemented. Future versions can include user login.

11. User Interface

• Interactive dashboards
• Filters for year, model, country
• Responsive layout

12. Testing

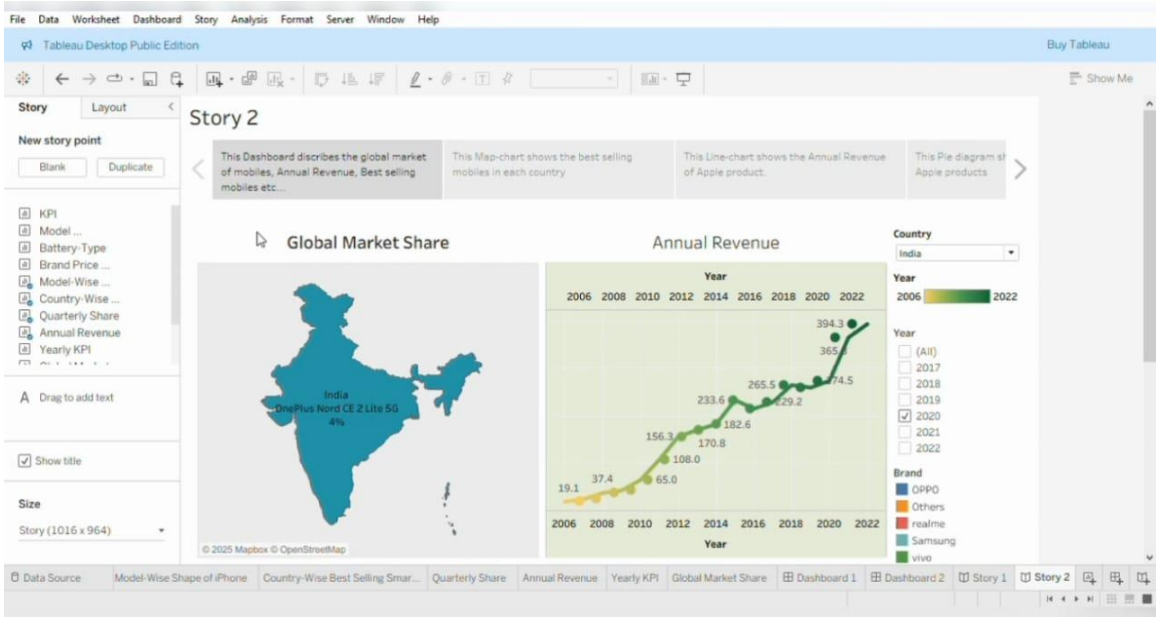
Tested performance in Tableau and Flask server routing.

13. Screenshots or Demo

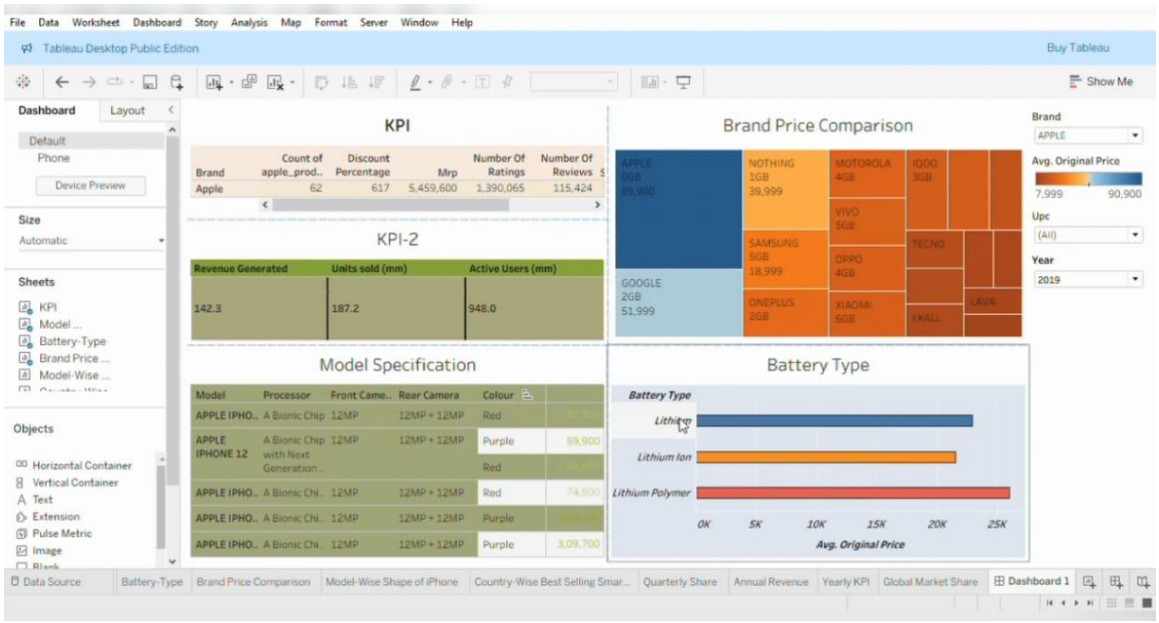
Below are visual proofs from the Tableau dashboards used in the project:

Screenshot 1:

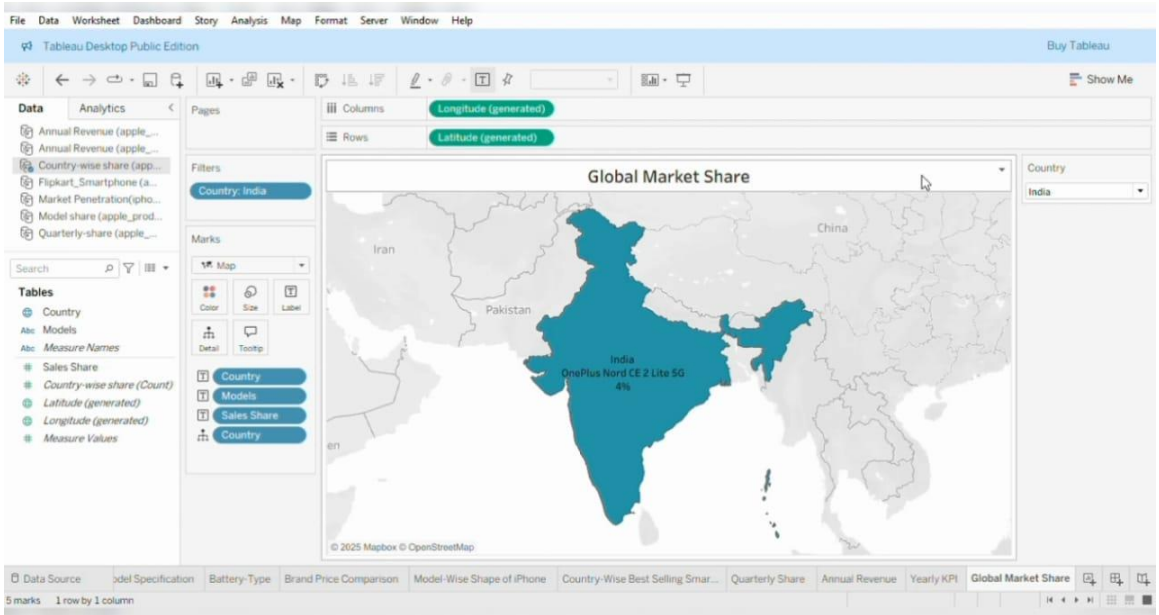
Screenshot 2:



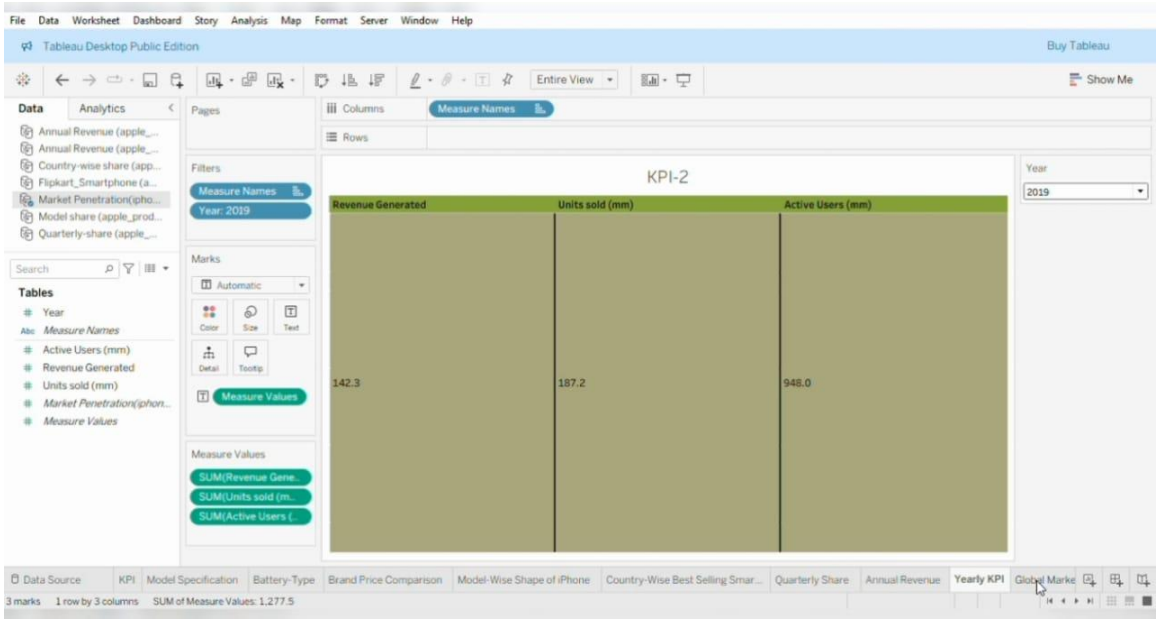
Screenshot 3:



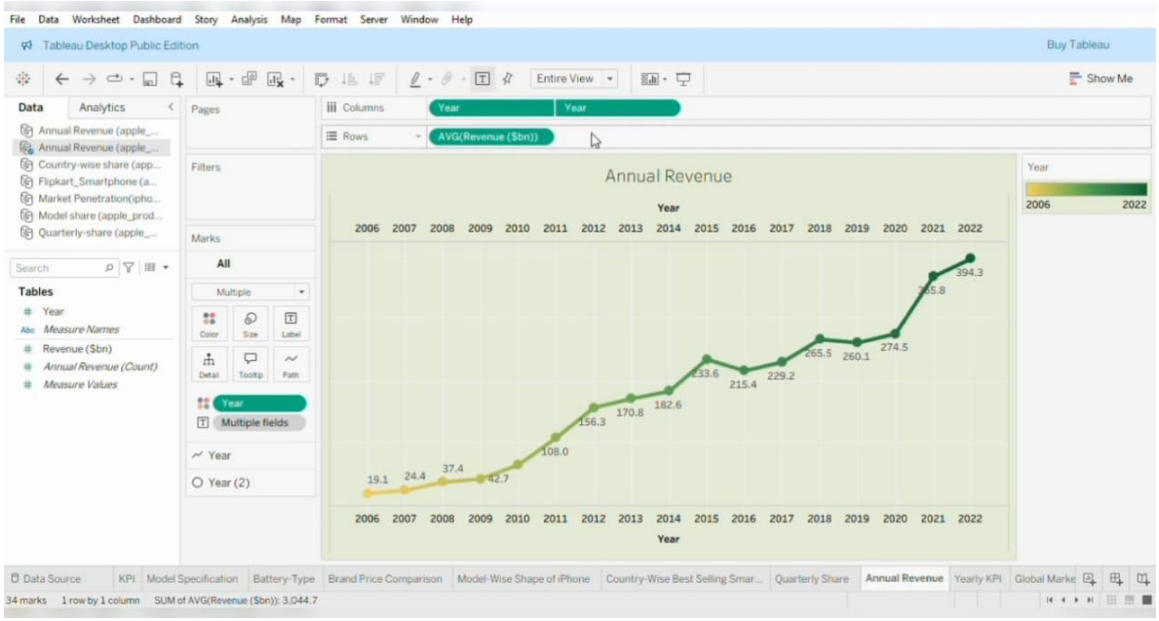
Screenshot 4:



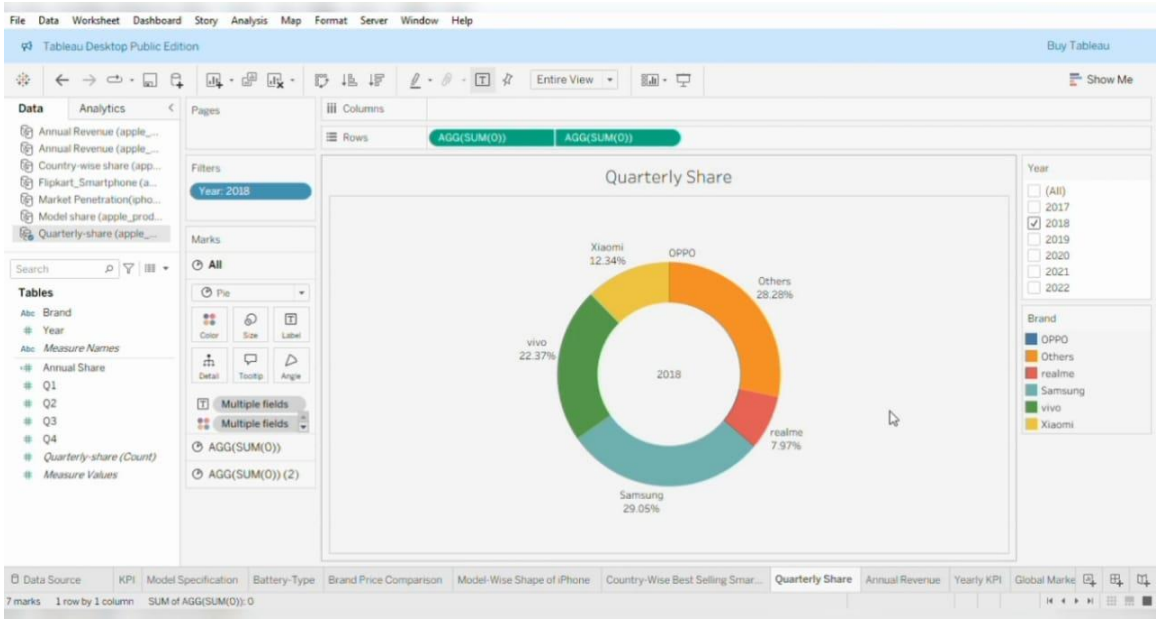
Screenshot 5:



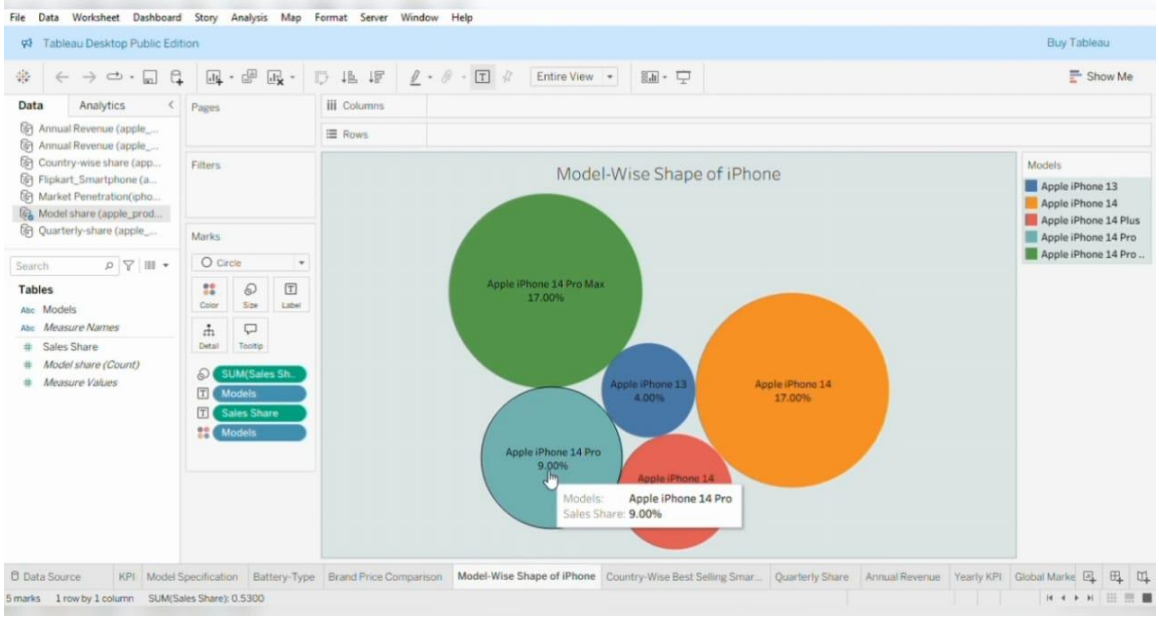
Screenshot 6:



Screenshot 7:



Screenshot 8:



14. Known Issues

- Dashboards rely on internet connection
- May load slower on low-end devices
- No authentication

15. Future Enhancements

- Add real-time data APIs
- Host on cloud platform
- Compare more brands
- Add chatbot and user login system