IRevolution: A Data Driven Exploration Of Apple's IPhone Impact in India

1. INTRODUCTION

1.1 Project Overview

Development of an Apple smartphone began in 2004, when Apple started to gather a team of 1,000 employees led by hardware engineer Tony Fadell, software engineer Scott Forsta l, and design officer Jony Ive to work on the highly confidential "Project Purple"

1.2 Purpose

Apple has started assembling the iPhone 14 in India, according to reports from TechCrunch and Bloomberg. This marks the first time Apple has shifted production from China to India this quickly after the launch of a new iPhone.
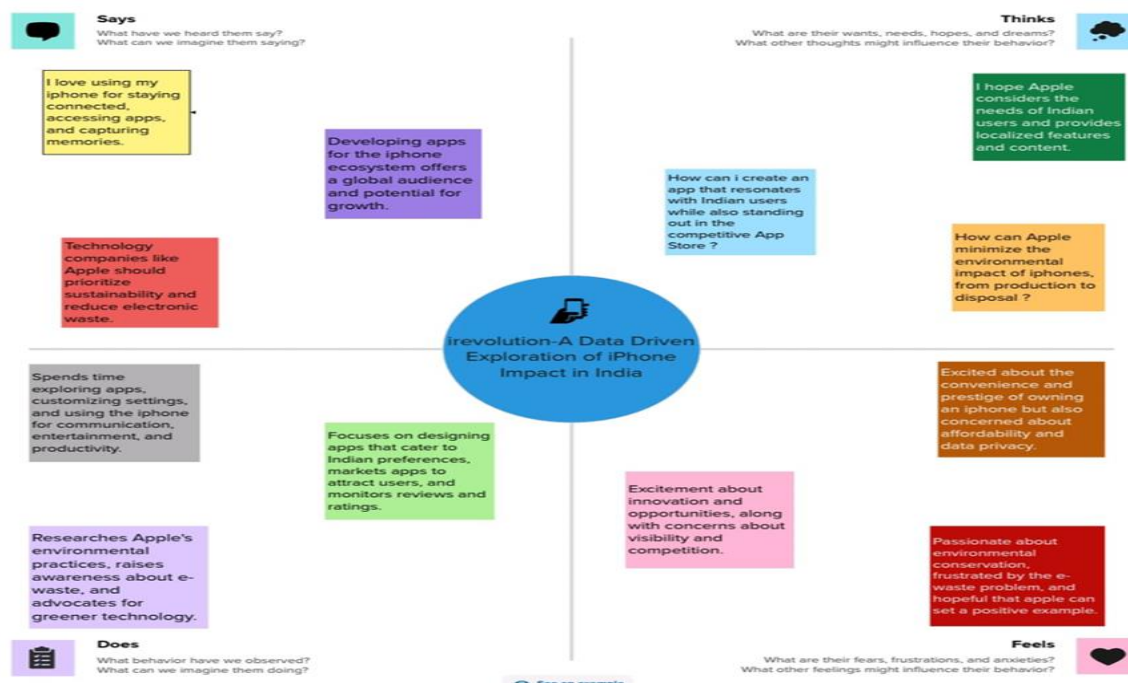
2. IDEATION PHASE

2.1 Problem Statement

Increase iPhone sales in India among young adults (18-30) who are price-sensitive and influenced by social media. This project seeks to solve that by analyzing existing data and providing clear visual insights.

2.2 Empathy Map Canvas

Focuses on store managers and marketing teams:

2.3 Brainstorming

1. Financing options

2. Social media campaigns

3. Influencer partnerships

4. Student discounts

5. Trade-in programs

6. Experience centers

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

Users (store managers or analysts) navigate from raw sales data to visualization dashboards for actionable insights.

3.2 Solution Requirements

- Tableau for data visualization

- Flask for web integration

- Cleaned CSV dataset

- Filterable interactive dashboard

3.3 Data Flow Diagram

Input (CSV) → Data Prep → Tableau Charts → Dashboard → Flask Web UI → User Interaction

3.4 Technology Stack

Data: CSV, Excel

Viz: Tableau

Web: HTML, CSS, Flask

Backend: Python (Flask)

4. PROJECT DESIGN

4.1 Problem-Solution Fit

Helps businesses place products effectively based on real-world sales, customer flow, and seasonal trends.

4.2 Proposed Solution

An interactive Tableau story embedded in a Flask-based web interface for fast and easy insights.

4.3 Solution Architecture

Data → Tableau → Tableau Public → Embedded in HTML → Served via Flask → Accessed via Browser

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

Phase | Duration

Data Collection | 1day

Data Cleaning & Prep | 1 days

Visualization Design | 1 day

Dashboard & Story Dev | 2 days

Web Integration (Flask) | 1 day

Testing & Doc Prep | 1 day

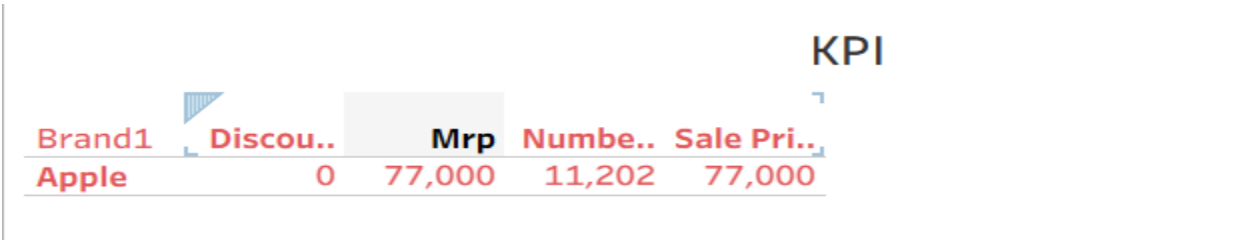# 6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

- Visualizations optimized with filters and extracts

- Used ≤ 6 charts per dashboard

- Minimum calculated fields

- Tableau Public used to host visuals for fast load time

7. RESULTS

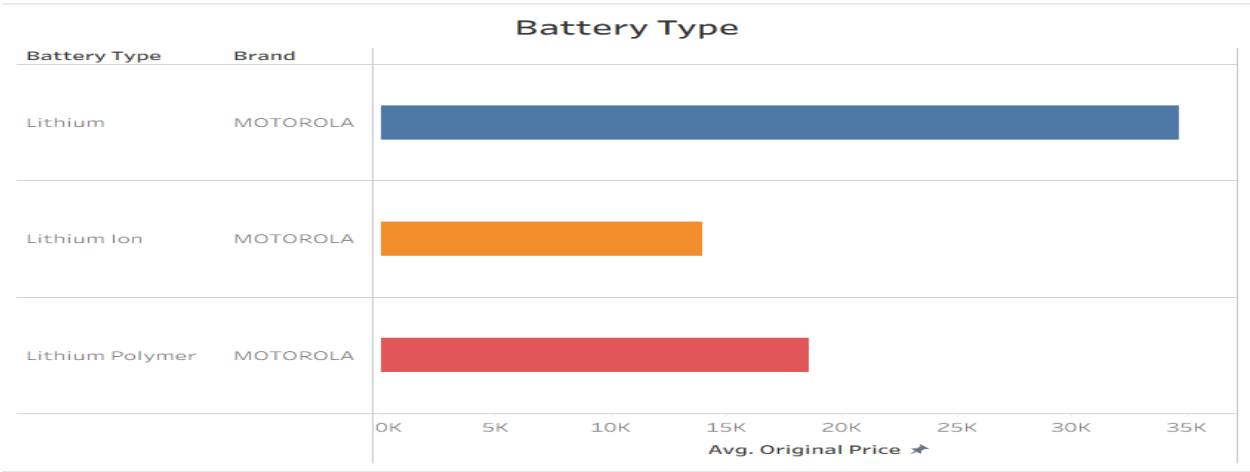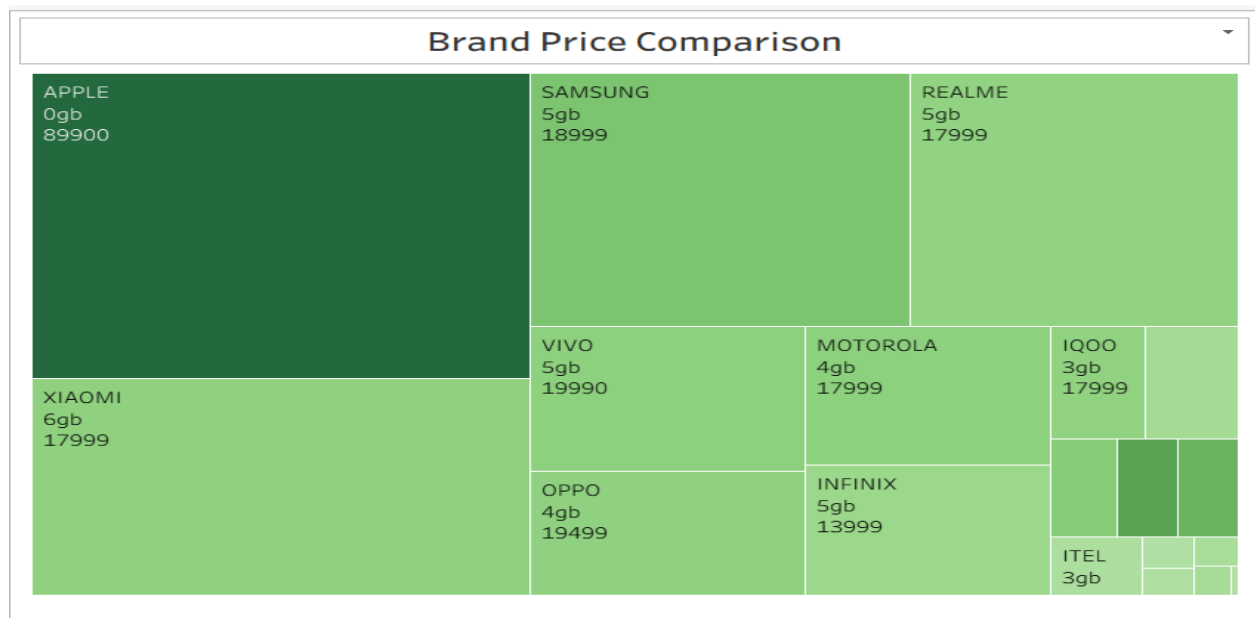## 7.1 Output Screenshots

Include dashboard images such as:

- KPI

KPI

Brand1	Discou..	Mrp	Numbe..	Sale Pri..
Apple	0	77,000	11,202	77,000

- Model Specification

Model Specification

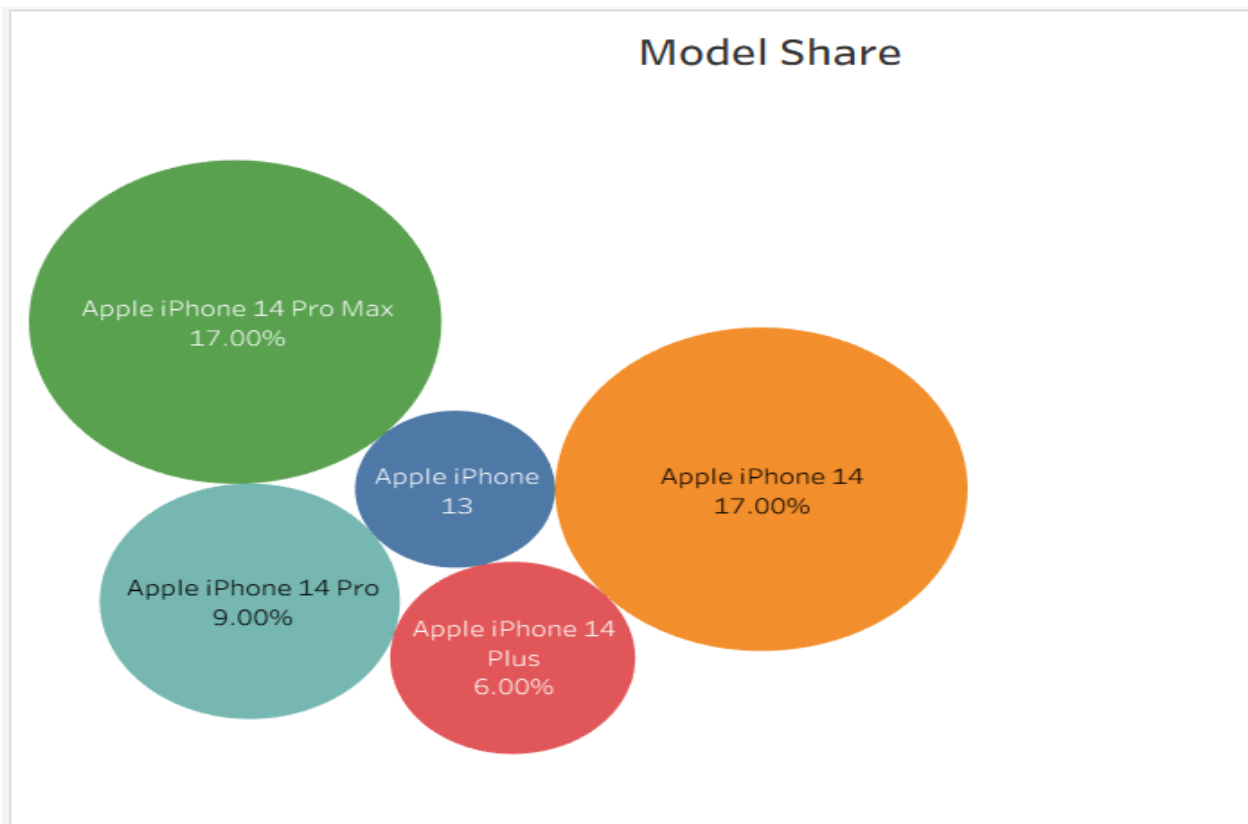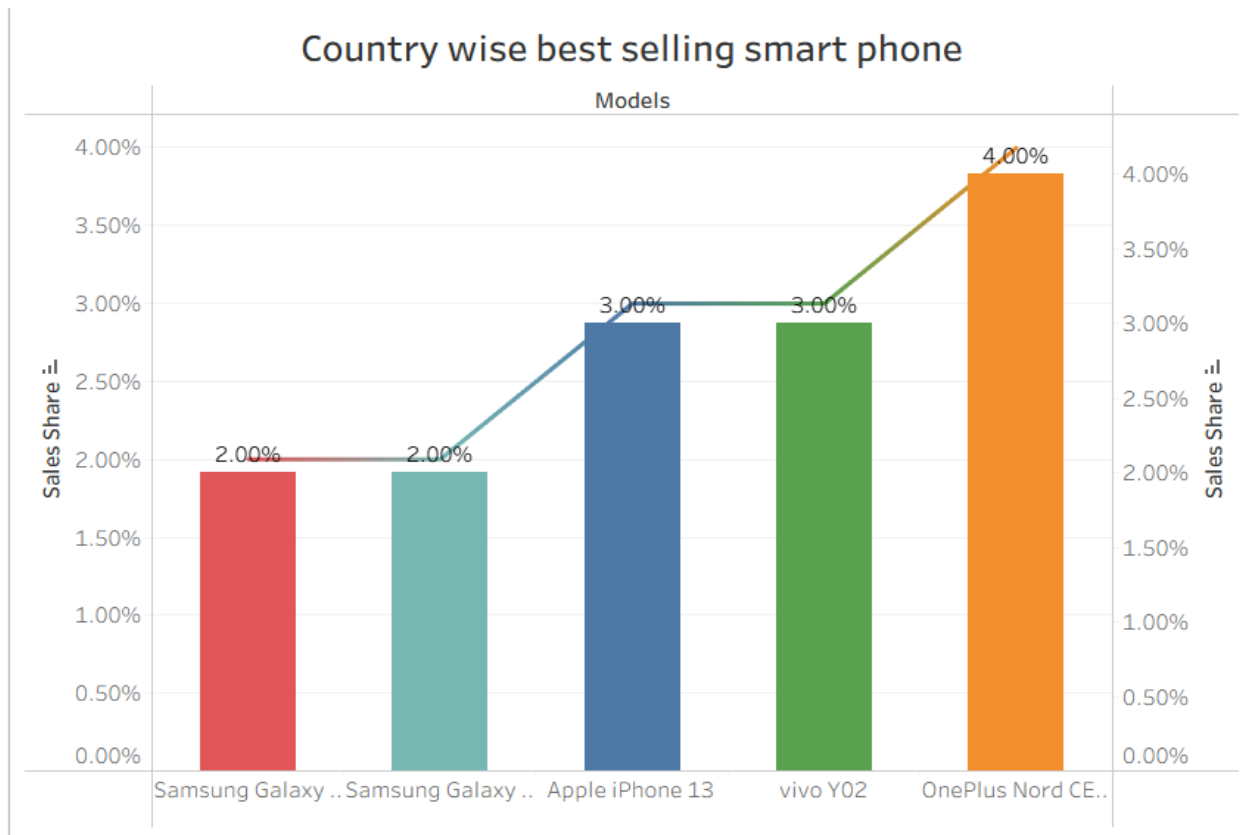| Model	Processor	Front Ca..	Rear Camera	Colo.. ≟	
APPLE IPHONE 11	A Bionic Chip	12MP	12MP + 12MP	Black	92,800
APPLE IPHONE 12	A Bionic Chip with Next Generation Neural Engine	12MP	12MP + 12MP	Blue	59,900
				Black	199,700
APPLE IPHONE 12 MINI	A Bionic Chip with Next Generation Neural Engine	12MP	12MP + 12MP	Black	74,900
				Blue	74,900
APPLE IPHONE 13	A Bionic Chip	12MP	12MP + 12MP	Blue	149,800
APPLE IPHONE 14	A Bionic Chip, Core	12MP	12MP + 12MP	Blue	189,800
APPLE IPHONE 14 PLUS	A Bionic Chip, Core	12MP	12MP + 12MP	Blue	99,900

- Battery Type

Battery Type

Battery Type	Brand	
Lithium	MOTOROLA	
Lithium Ion	MOTOROLA	
Lithium Polymer	MOTOROLA	

Avg. Original Price ✈

-Brand Price Comparison

Brand Price Comparison

APPLE 0gb 89900	SAMSUNG 5gb 18999	REALME 5gb 17999
XIAOMI 6gb 17999	VIVO 5gb 19990 — MOTOROLA 4gb 17999 — IQOO 3gb 17999	
	OPPO 4gb 19499 — INFINIX 5gb 13999 — ITEL 3gb	

- Model Share

Model Share

- Apple iPhone 14 Pro Max 17.00%
- Apple iPhone 13
- Apple iPhone 14 17.00%
- Apple iPhone 14 Pro 9.00%
- Apple iPhone 14 Plus 6.00%

-Country wise best selling smart phones

Country wise best selling smart phone

Models

| | 2.00% | 2.00% | 3.00% | 3.00% | 4.00% |
| Samsung Galaxy .. | Samsung Galaxy .. | Apple iPhone 13 | vivo Y02 | OnePlus Nord CE.. |

-Quaterly Share

Quaterly Share

Xiaomi 12.34%
OPPO
Others 28.28%
vivo 22.37%
realme 7.97%
2018
Samsung 29.05%

-Annual Revenue

-GMS (Global Market Share)
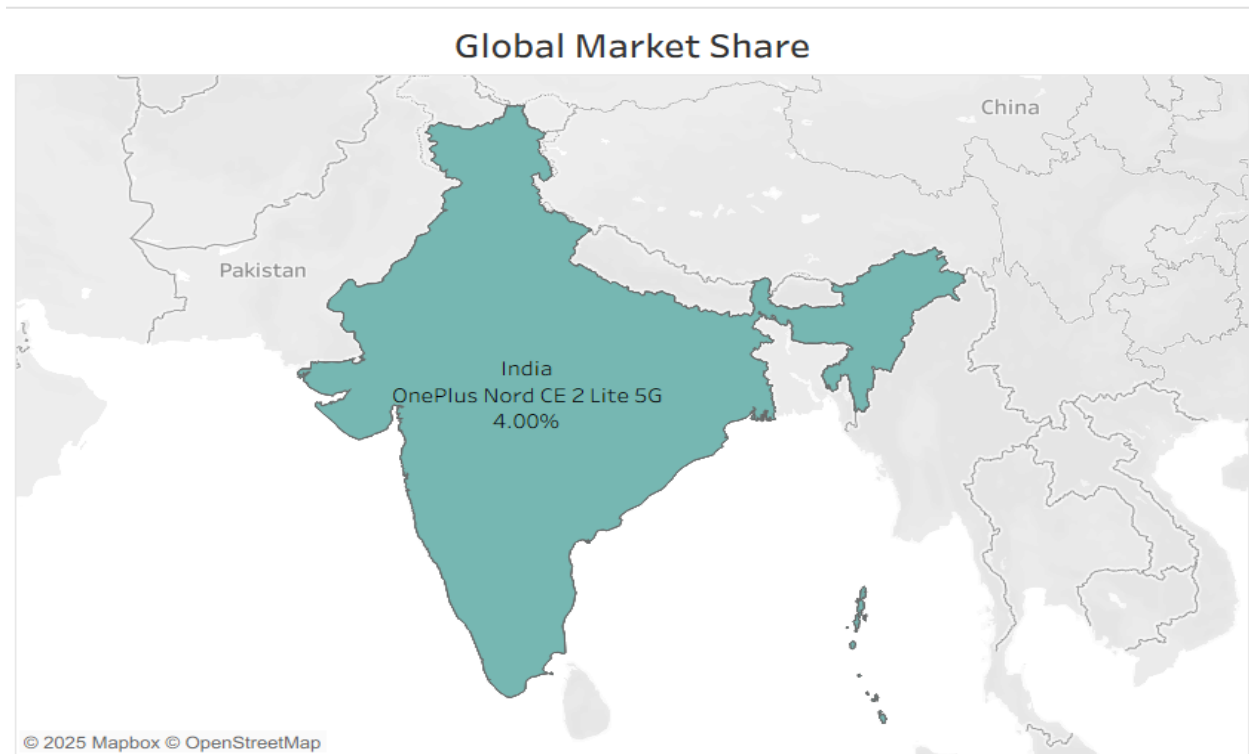
-KPI 2

Dash board:
-Dasboard 1
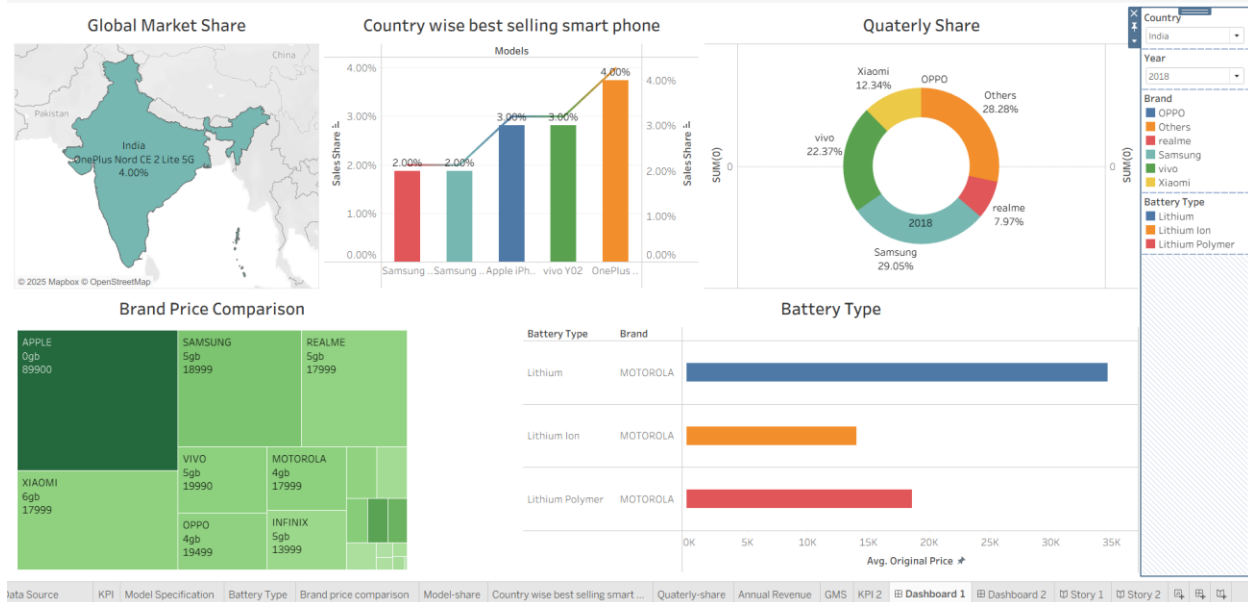
-Dashboard 2
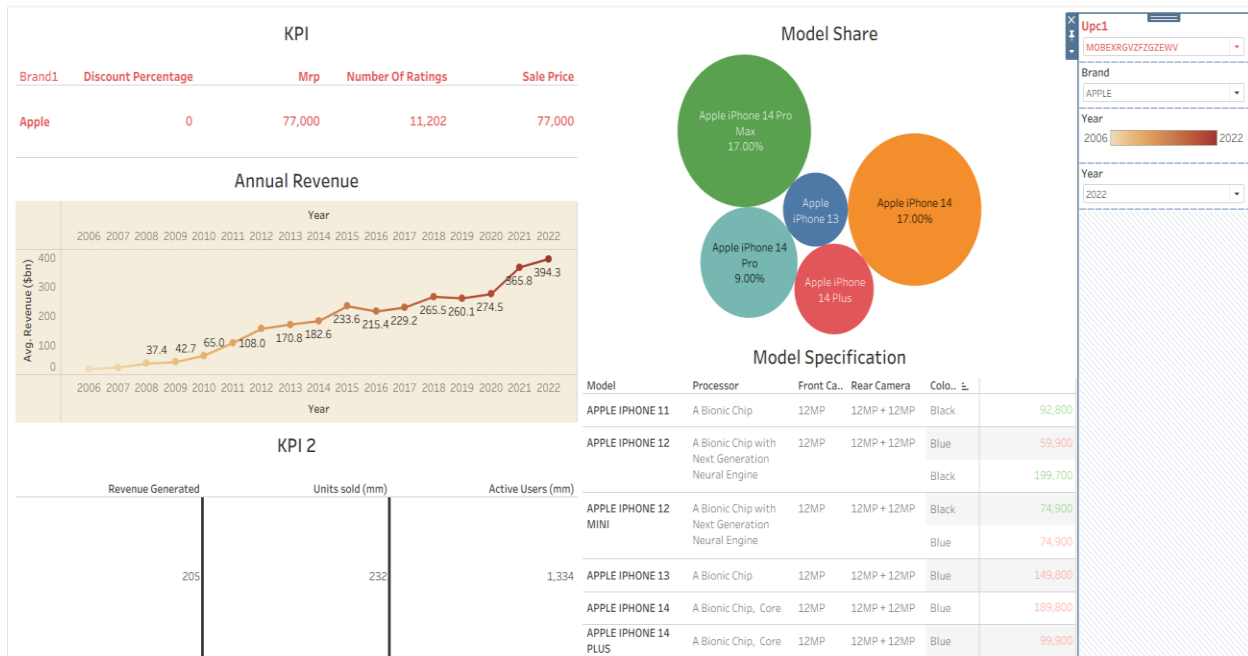
Story:

Story 1

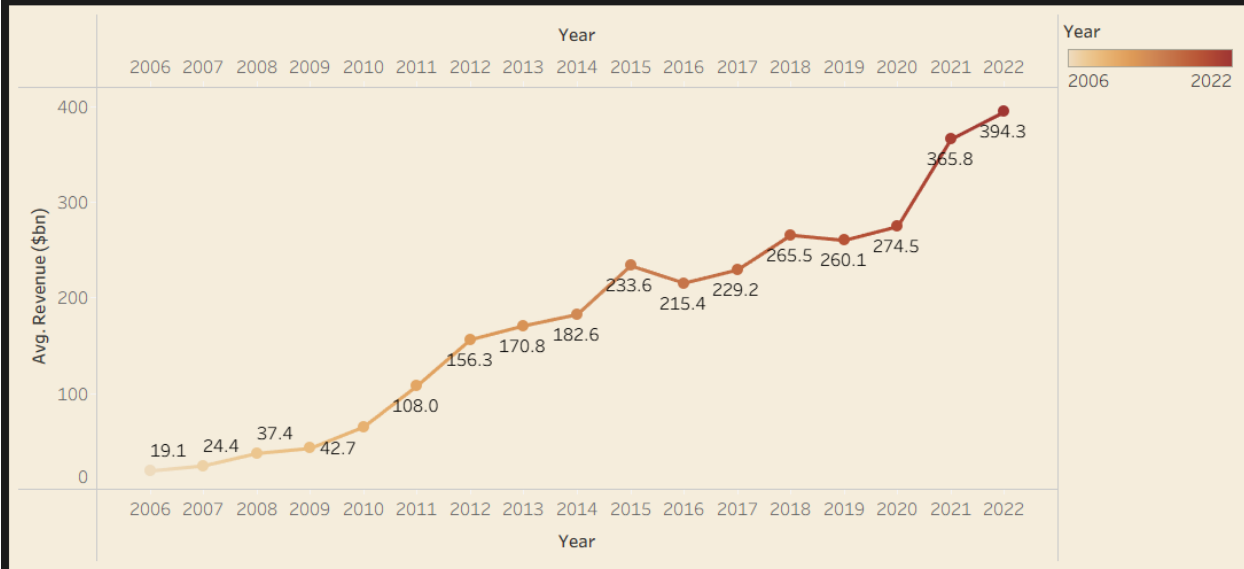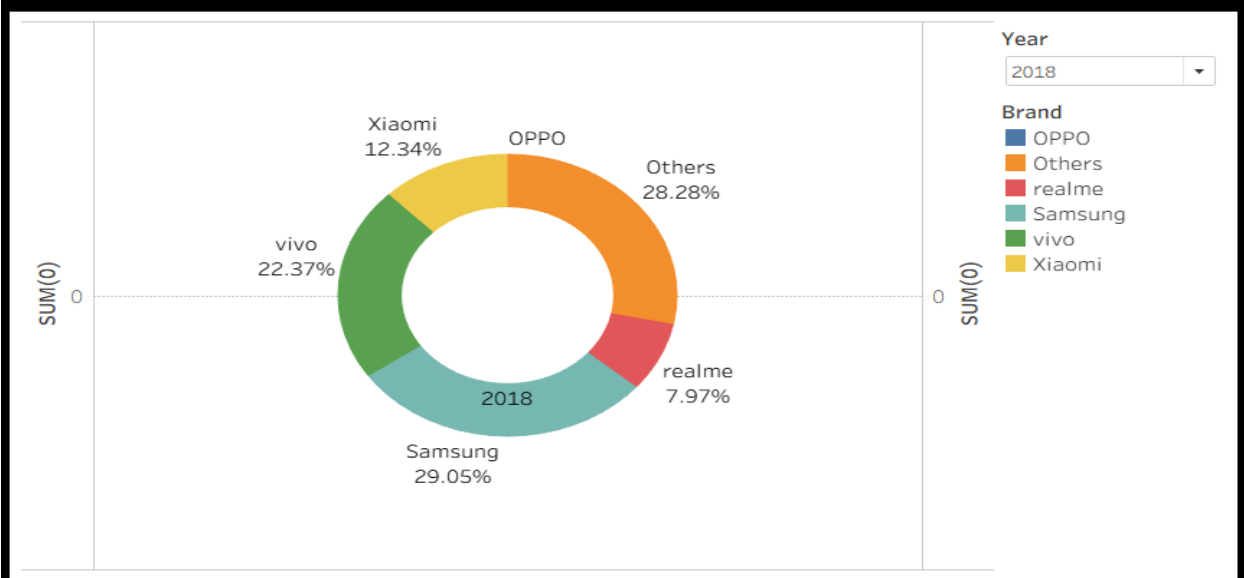't far behind in market share epicted in the | comparative analysis amongst various other leading brands in the smartphone industry shows that iphone is yet to | Since it's initiation in 2006 it has seen tremendous increase in sale and revenue generation over the | More than 1 billion consumers currently use iphones. Since its initial launch, more than 1.9 billion iphones have been

Year
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Year
2006 — 2022

Avg. Revenue ($bn)

- 400
- 394.3
- 365.8
- 265.5 260.1 274.5
- 233.6
- 215.4 229.2
- 182.6
- 156.3 170.8
- 108.0
- 19.1 24.4 37.4 42.7

Year
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Story 2

Apple continues to strength its standing in the smartphone market. The brand has risen to a position of particular dominance in the US. 6 of the top 10 most sold phones in january 2021 | iphone sales generated $205 billion revenue for Apple in 2022, more than Microsoft's total ravenue. It sold 232 million iphones units per year | comparati leading bra shows tha India.

Year
2018

Brand
- OPPO
- Others
- realme
- Samsung
- vivo
- Xiaomi

SUM(0)

- Xiaomi 12.34%
- OPPO
- Others 28.28%
- vivo 22.37%
- realme 7.97%
- 2018
- Samsung 29.05%

SUM(0)

8. ADVANTAGES & DISADVANTAGES

Advantages

Apple's decision to manufacture iPhones in India is a robust alignment with the Indian government's 'Make in India' initiative. By engaging local suppliers like Foxconn and Wistron, Apple is contributing to the nation's industrial growth, inculcating technological innovation, and creating thousands of jobs.

Disadvantages

The cost of owning an iphone is higher in India when compared to other countries. Connectivity: iPhone a lows better connectivity to apple devices and it's very poor to Android and windows users which is the majority. Many features that iphone and apple provides cannot be used in India like apple pay

9. CONCLUSION

The iPhone's impact in India has been nothing short of transformative, reshaping the smartphone market and capturing the aspirations of millions of consumers. As a symbol of status and prestige, the iPhone has influenced consumer behavior and played a significant role in Apple's revenue growth in India

10. FUTURE SCOPE

iOS development has a bright future, as iOS is the most preferred platform where most of the Internet of Things (IoT) get complete compatibility and support. Moreover, ultra modern home automation apps are getting developed using iOS only.12-Jun-2017. As a result, iOS App Development must keep track of these technological changes to provide a seamless experience for users. IoT, Machine Learning, Artificial Intelligence, and Augmented Reality are just a few of the latest technologies on which they can improve their knowledge.

11. APPENDIX
- Source Code: Available on request / GitHub

```
HTML                                  ⚙ ∨

1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <meta name="viewport" content="width=device-
      width, initial-scale=1.0"/>
6     <title>iRevolution: iPhone Impact in
      India</title>
7     <script type="module" src="https://prod-
      apsoutheast-
      b.online.tableau.com/javascripts/api/tableau.embed
      ding.3.latest.min.js"></script>
8     <link rel="stylesheet" href="style.css">
9   </head>
10  <body>
11
12    <header>
13      <h1>iRevolution: A Data-driven Exploration of
      Apple's iPhone Impact in India</h1>
14    </header>
15
```

```
CSS                                   ⚙ ∨

1   body {
2     font-family: 'Segoe UI', sans-serif;
3     margin: 0;
4     background: #f4f4f4;
5     color: #222;
6   }
7
8   header {
9     background-color: #0d1b2a;
10    color: #ffffff;
11    padding: 20px;
12    text-align: center;
13  }
14
15  h1, h2 {
16    margin: 0;
17    font-size: 2rem;
18  }
19
20  h2 {
21    margin-top: 40px;
```

```
JS                                    ⚙ ∨

1   // Placeholder for custom JavaScript
2   console.log('iRevolution site loaded
      successfully.');
```

- Project Demo:

Tableau - Iphone_india_analysis.mp4