

# **FUNDAMENTALS OF DATA ANALYTICS WITH TABLEAU**

## **1. INTRODUCTION:**

### **1.1 Overview:**

The world has changed as a consequence of the increasing use of smartphones, which have improved communication, connected people, and revolutionized many different businesses. With its main product, the iPhone, capturing markets around the world, Apple Inc. has emerged as a prominent player among the top smartphone makers. India, one of the economies with the greatest economic growth, has seen a tremendous increase in smartphone usage, making it an interesting market to study the effects of Apple's iPhone. In order to shed light on important factors like market penetration, customer preferences, economic ramifications, and societal changes, this research report will perform a data-driven investigation of the impact of the iPhone in India. This study will offer invaluable insights into the transformative impact of the iPhone on India's technological landscape and the lives of its consumers by using advanced data analytics techniques and analyzing large datasets. Apple has a special chance to increase its market share and develop a significant presence in India thanks to the country's large population and rising smartphone adoption. Each new iPhone model unveiling generates excitement and anticipation among Indian buyers. By utilizing the plethora of information already accessible, this research aims to go beyond conjecture and anecdotal evidence in order to develop a thorough knowledge of the effects of the iPhone.

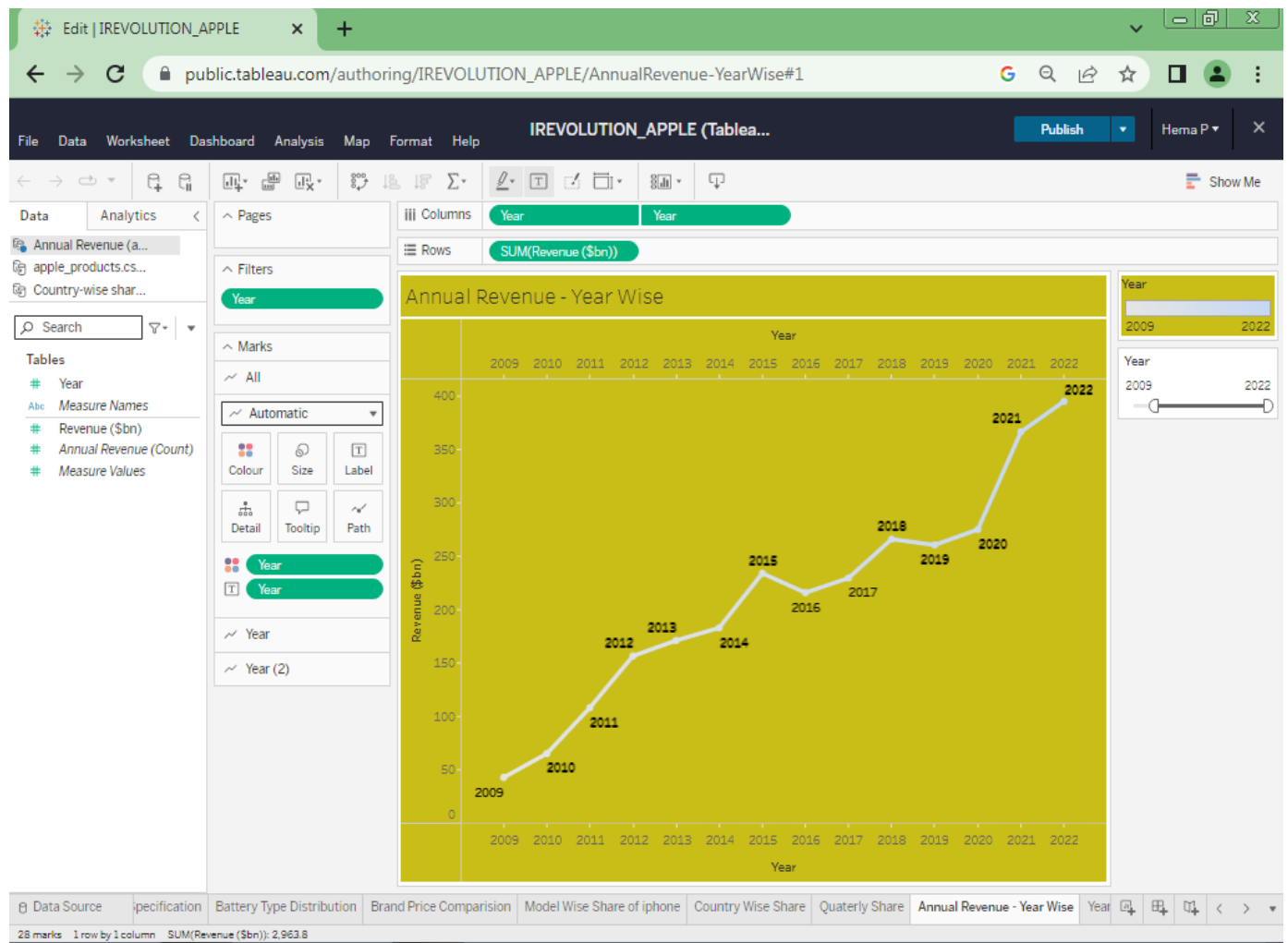
### **1.2 Purpose**

Tableau is a data visualization tool that can be used to create various types of graphs and visualization to help better understanding and analyze of Apple iPhone impact data. Here are a few types of graphs and visualization that can be used to visualize Apple iPhone impact data and their purposes:

## ANNUAL REVENUE – YEAR WISE- LINE MAP

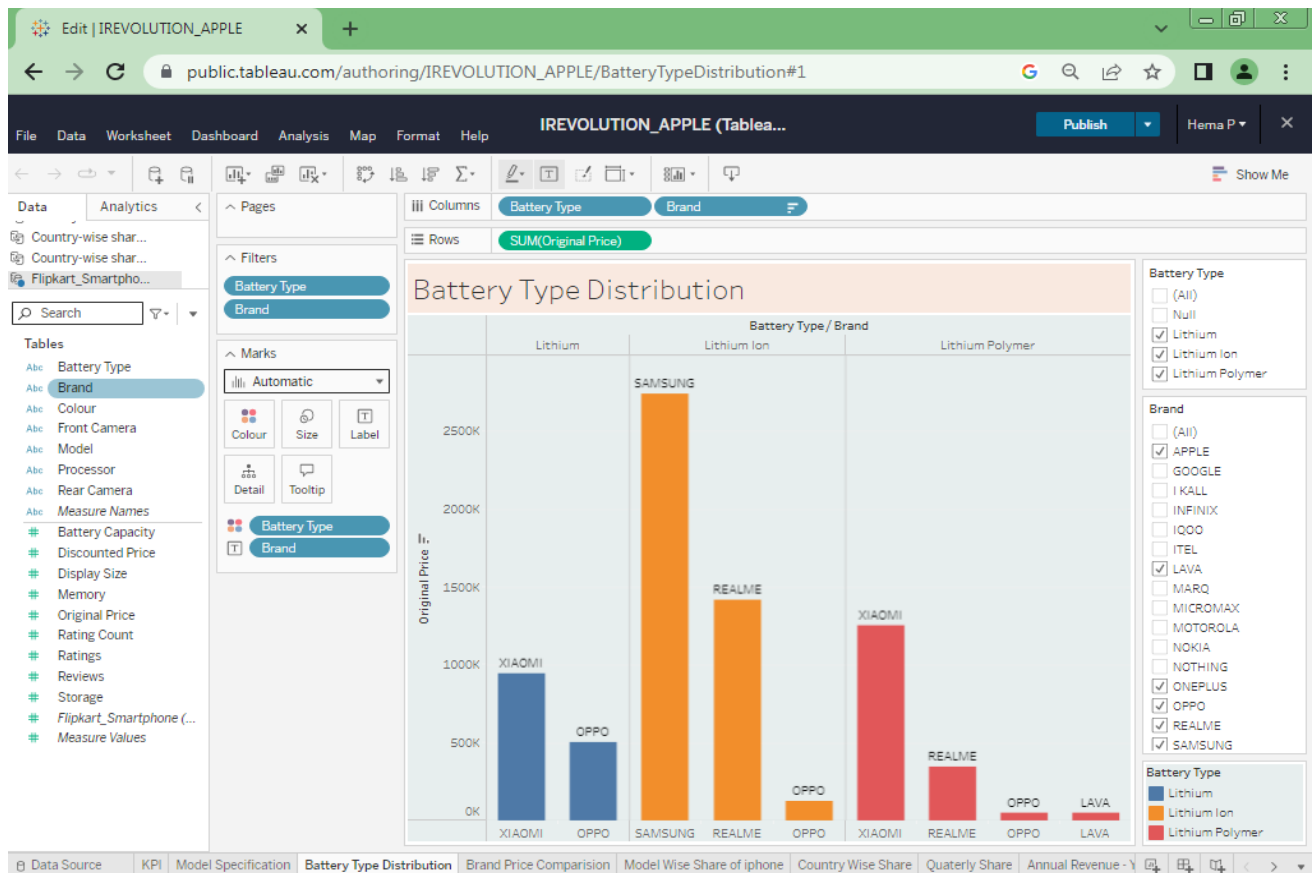
These graphs are useful for visualizing trends and impact of apple iphone over time.

They can show how impact are increased or decreased over a specific period and can help to identify patterns and fluctuations in the data.



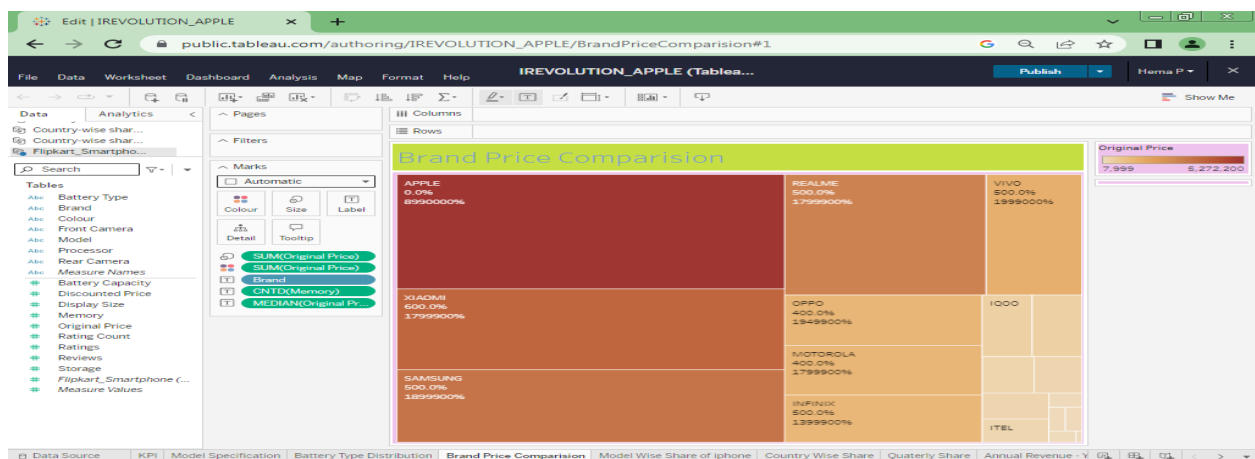
## Battery Wise Distribution- Bar chart

This chart says about the battery types between the other brands. In the manufacturing of battery, lithium battery is used highly with compared than other batteries like lithium polymer and lithium iron.



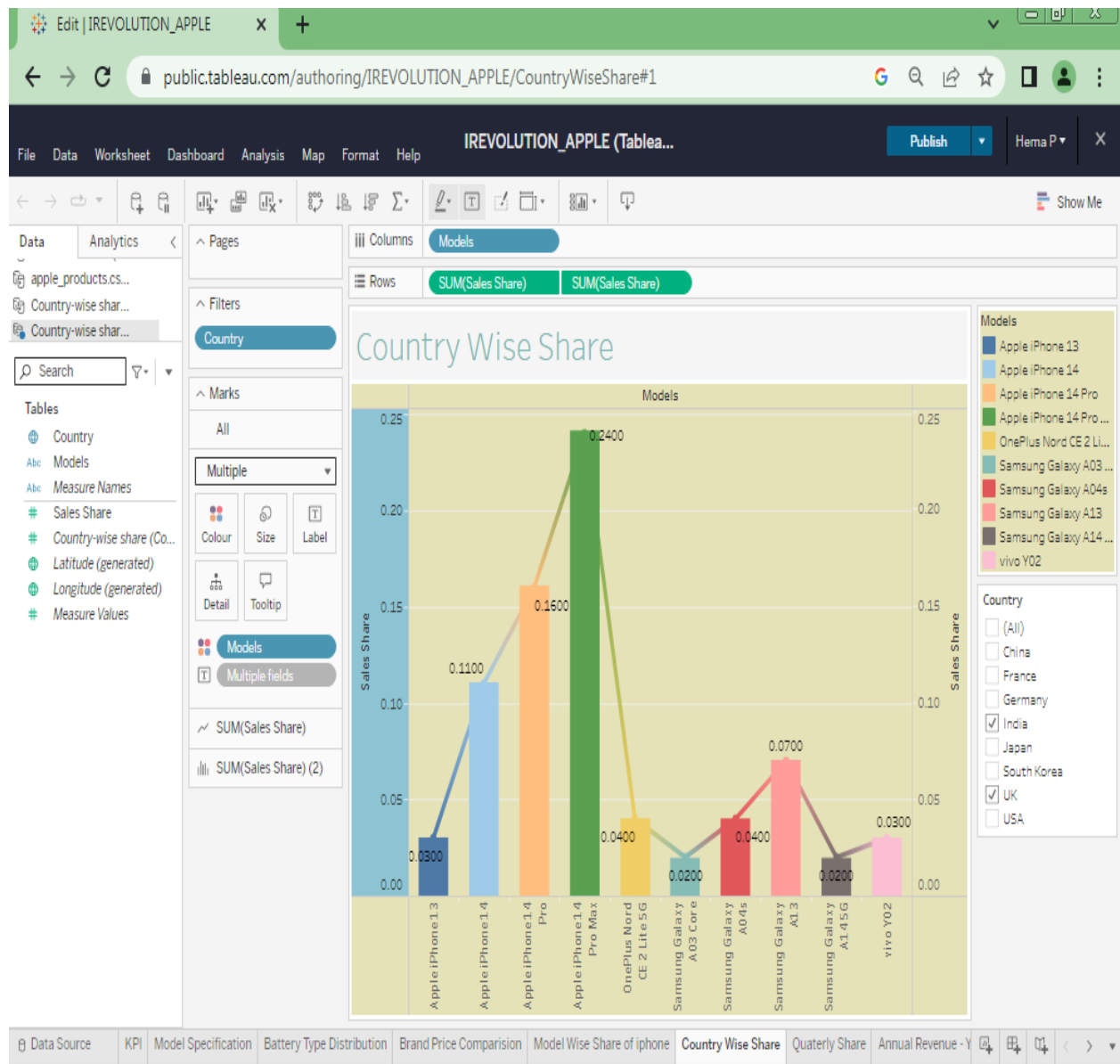
## BRAND – PRICE COMPARISON – TREE MAP

Tree Maps – In tree map we known about that, the different types of brands compared to their price rate. Then it is compared to the memory capacity and original size of the different mobile brands.



## COUNTRY WISE BEST SELLING SMARTPHONE – LINE-BAR CHART

This country wise is explained by the line- bar chart. The above countries and brands are compared wise share in decreasing order. At the top most brand is Apple iphone 14 in Apple brand and then comparison make up with oneplus and Samsung brands.

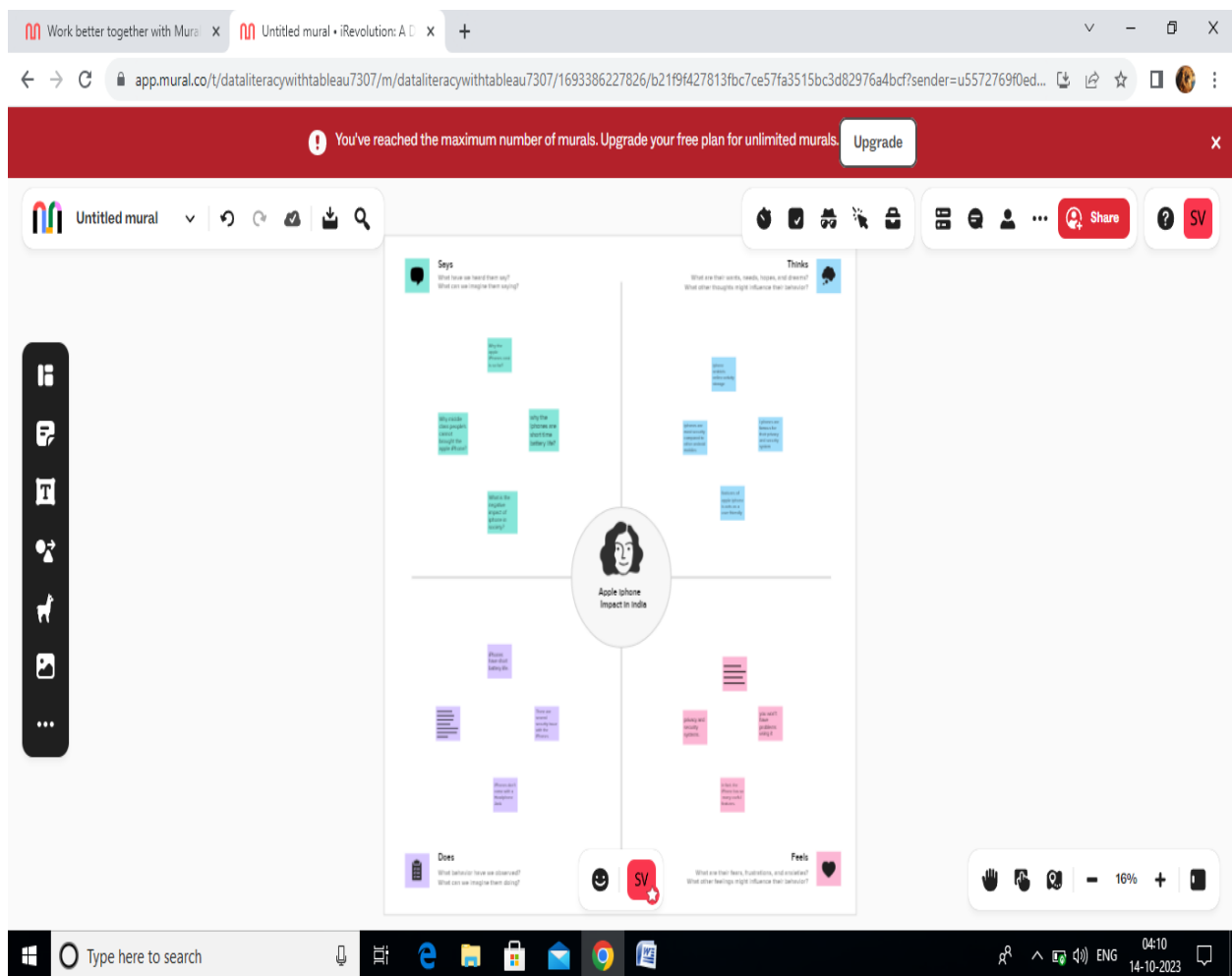


## 2. Problem Definition & Design Thinking:

### 2.1 Empathy Map

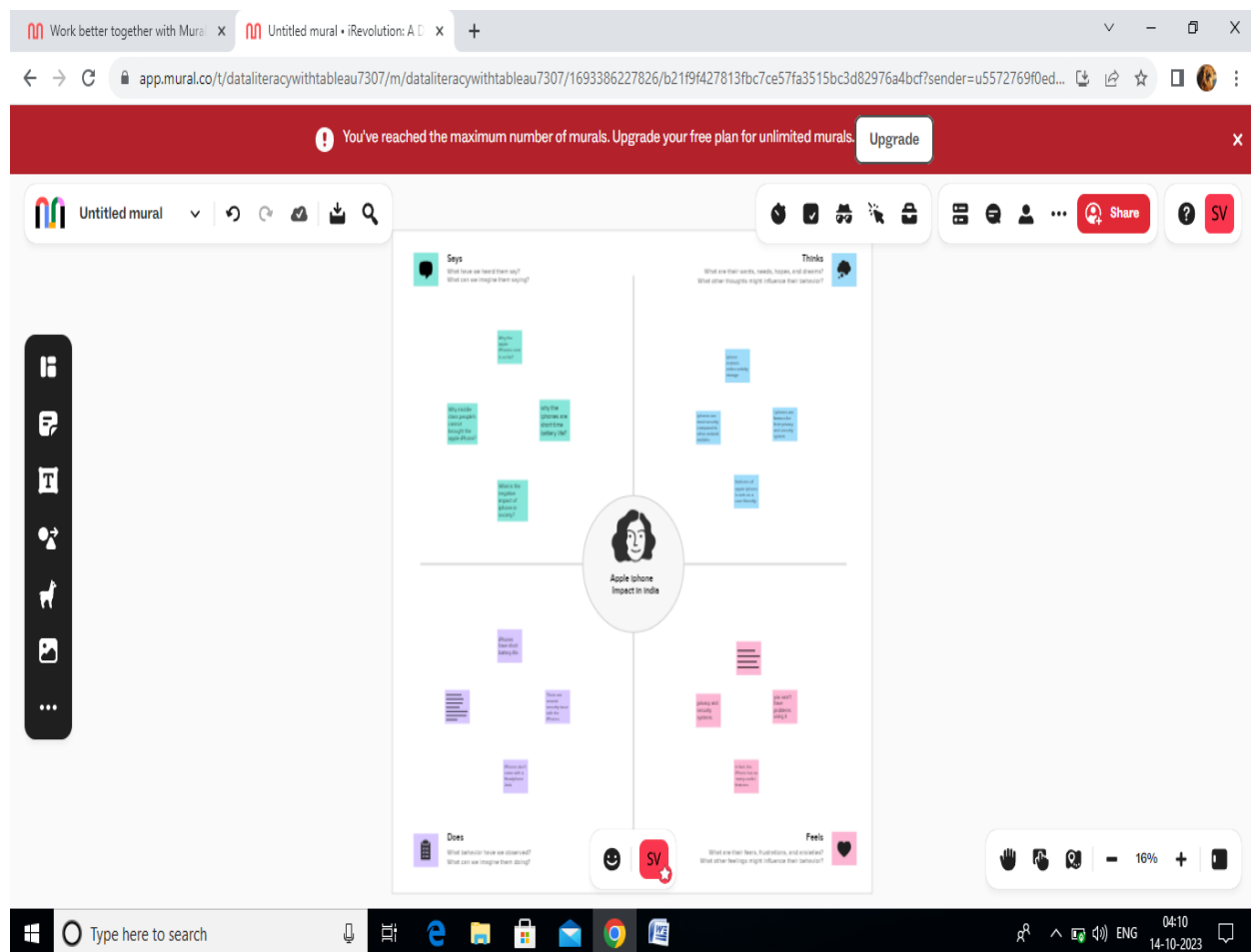
An empathy map is a template that organizes a user's behaviors and feelings to create a sense of empathy between the user and team. The empathy map represents a principal user and helps teams understand their motivations, concerns, and experience.

Empathy mapping is an important tool used in marketing, product development, and user experience design to identify and solve individuals' or target audiences' requirements, motivations, and experiences. Empathy mapping can be applied to various design thinking activities, including user research, brainstorming, and prototyping.



## 2.2 Ideation & Brainstorming Map:

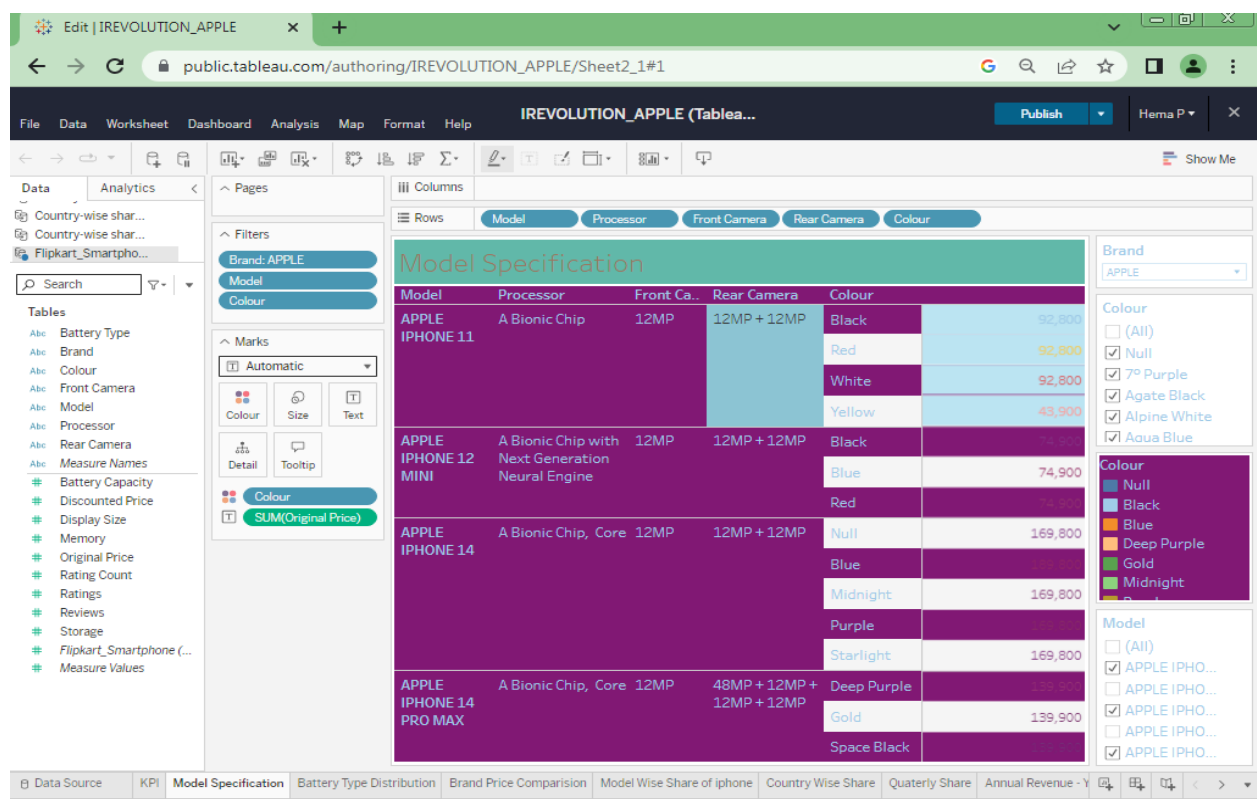
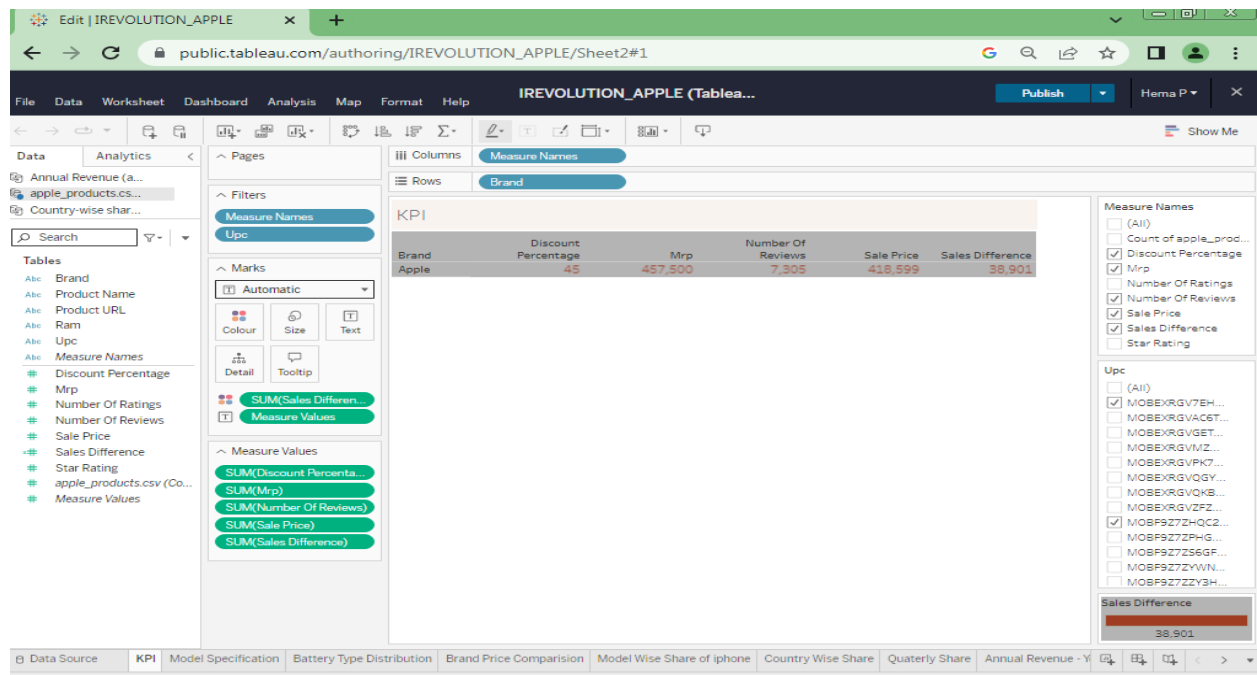
Ideation is often closely related to the practice of brainstorming, a specific technique that is utilized to generate new ideas. A principal difference between ideation and brainstorming is that ideation is commonly more thought of as being an individual pursuit, while brainstorming is almost always a group activity.

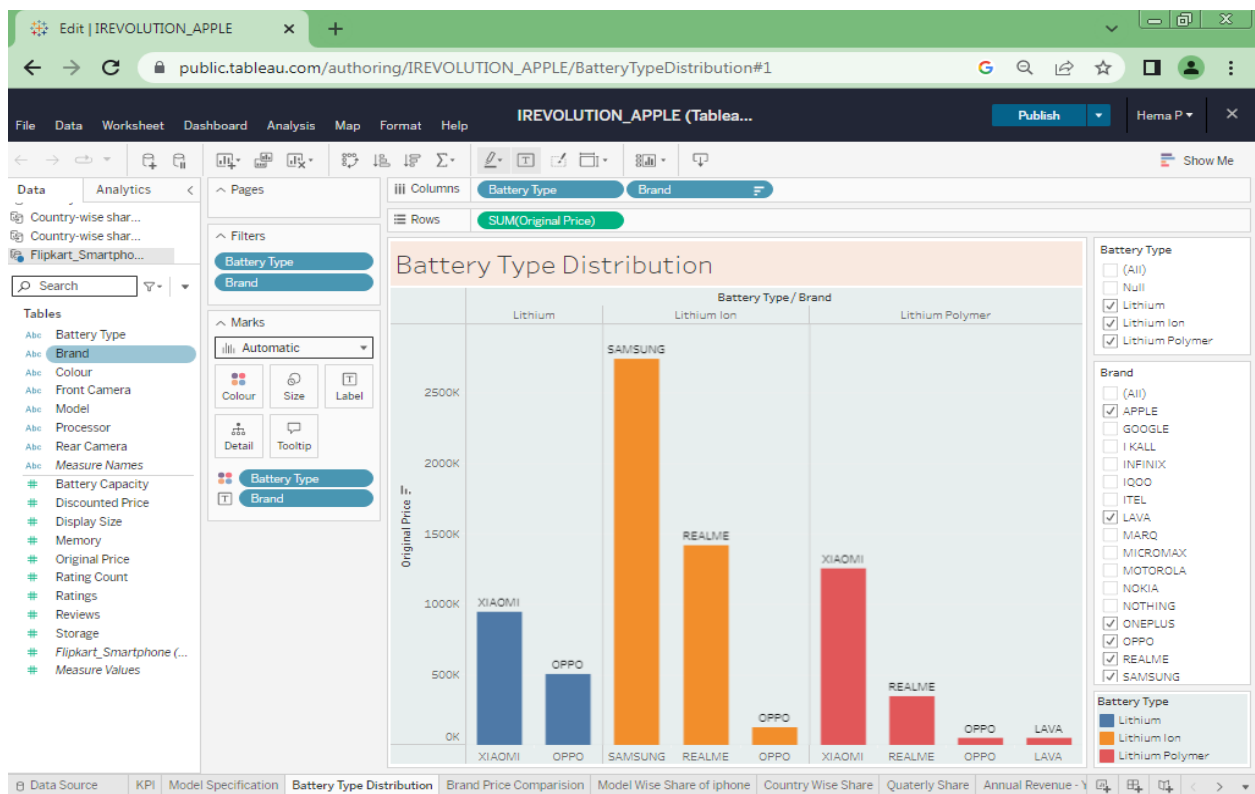
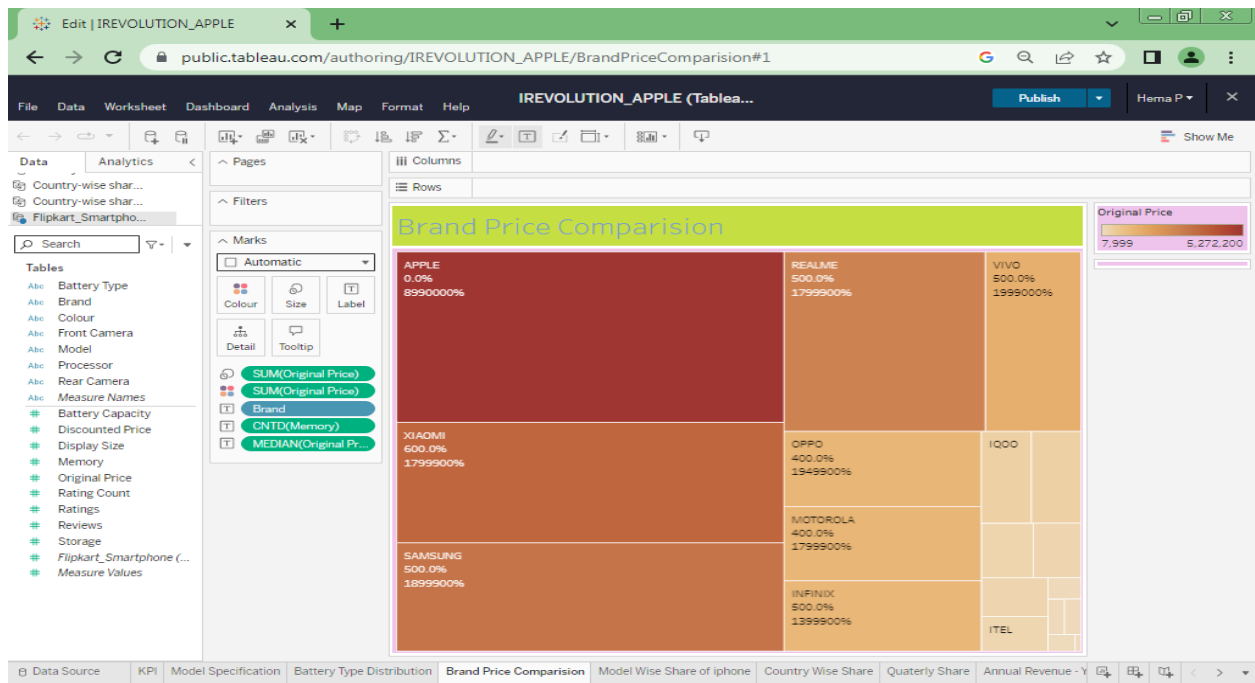


## Visualization:

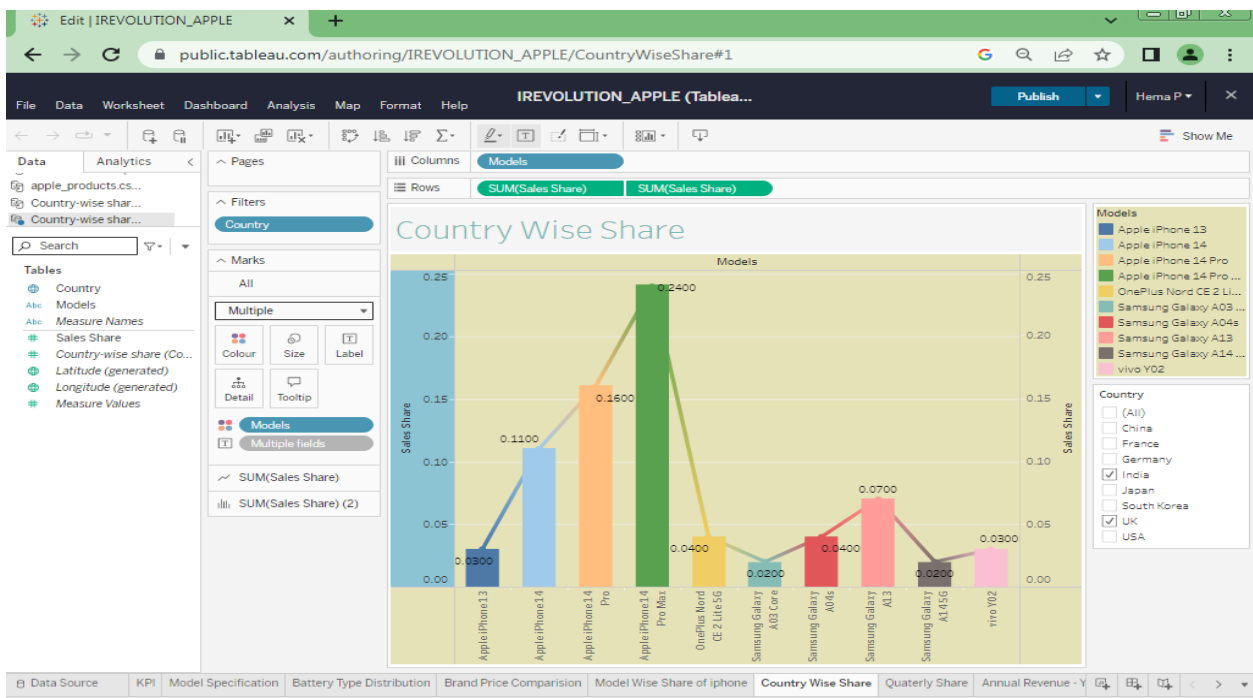
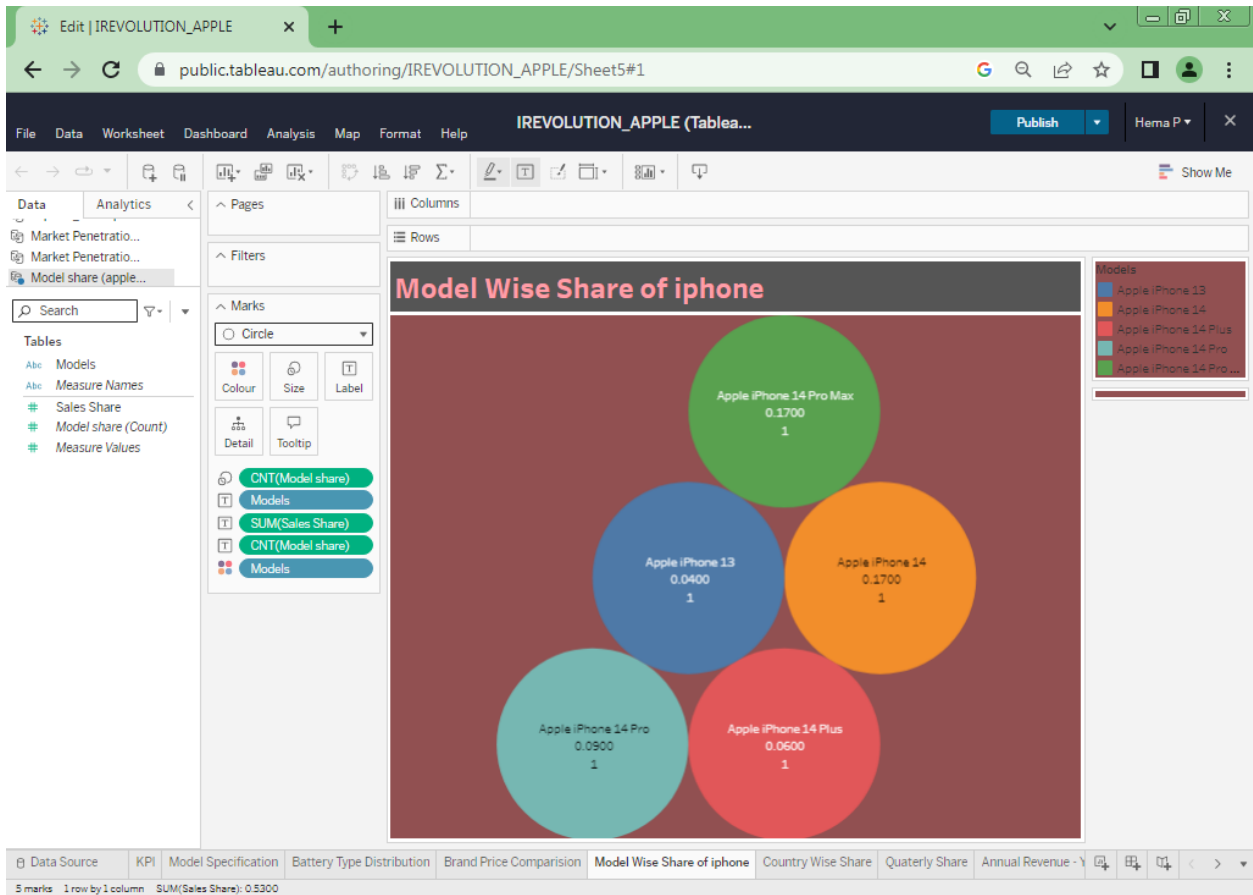
Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements

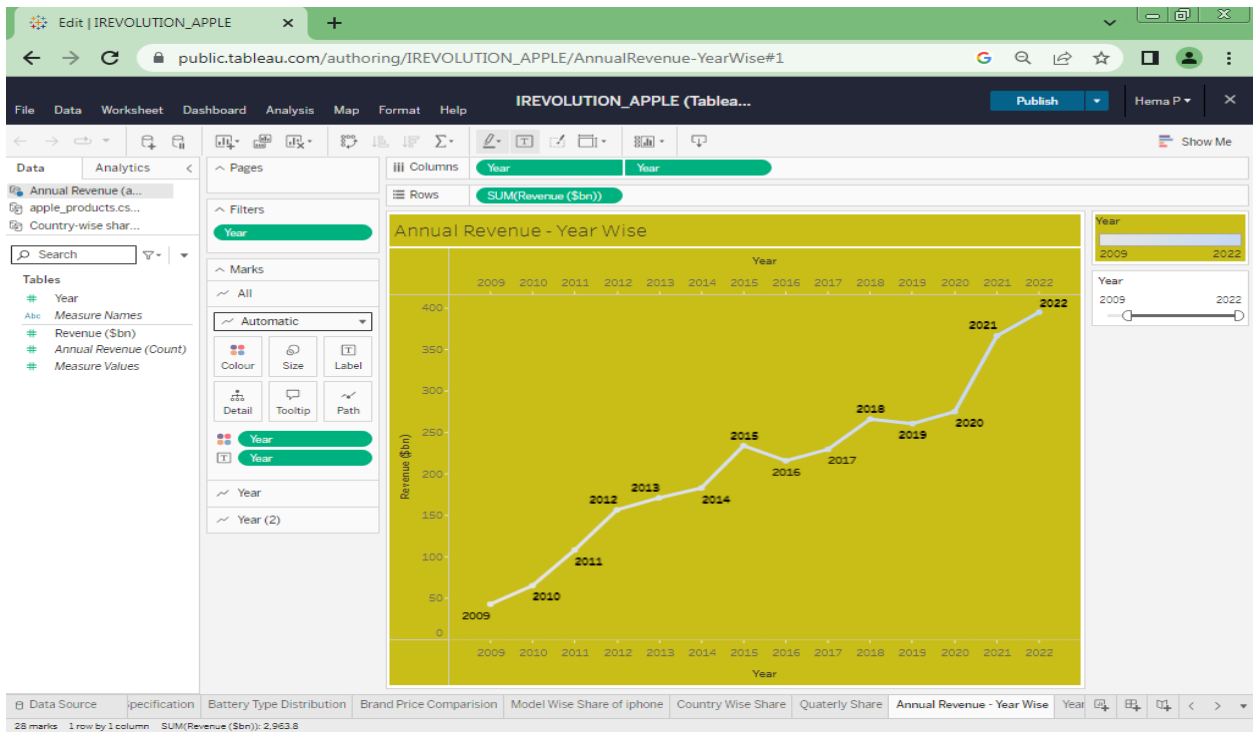
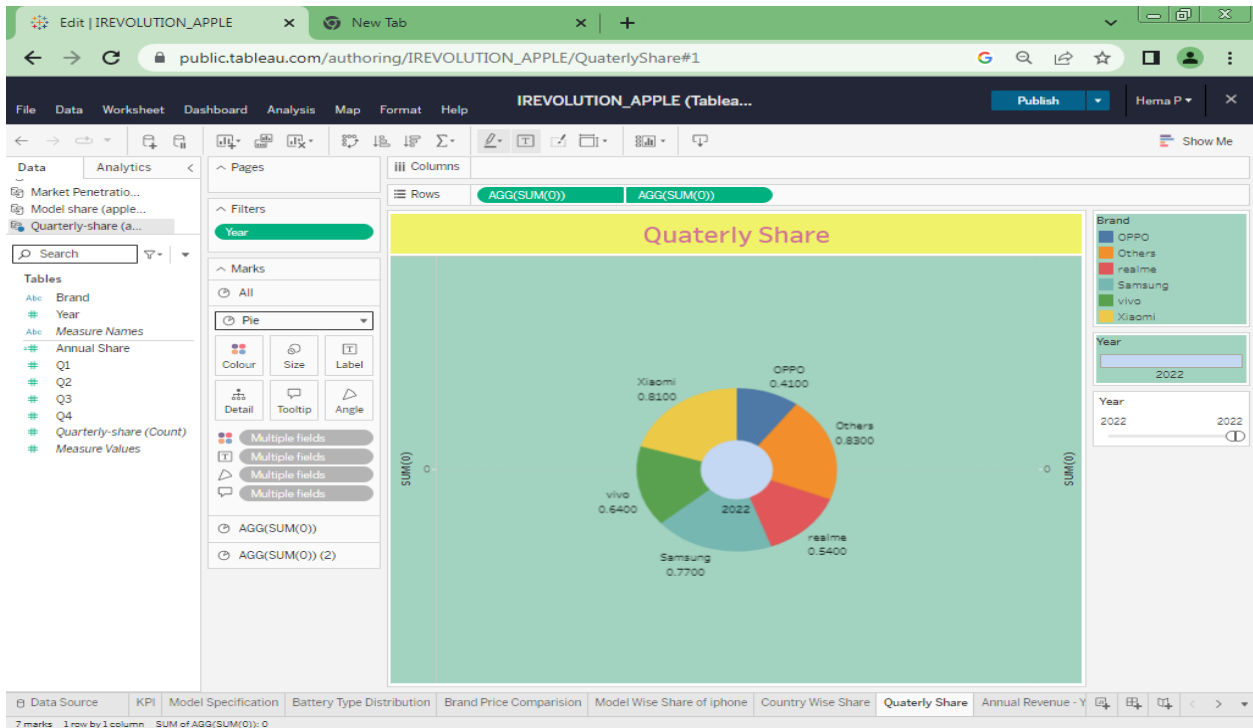
such as charts, graphs, and maps, data visualizations can help people quickly identify patterns, trends, and outliers in the data.

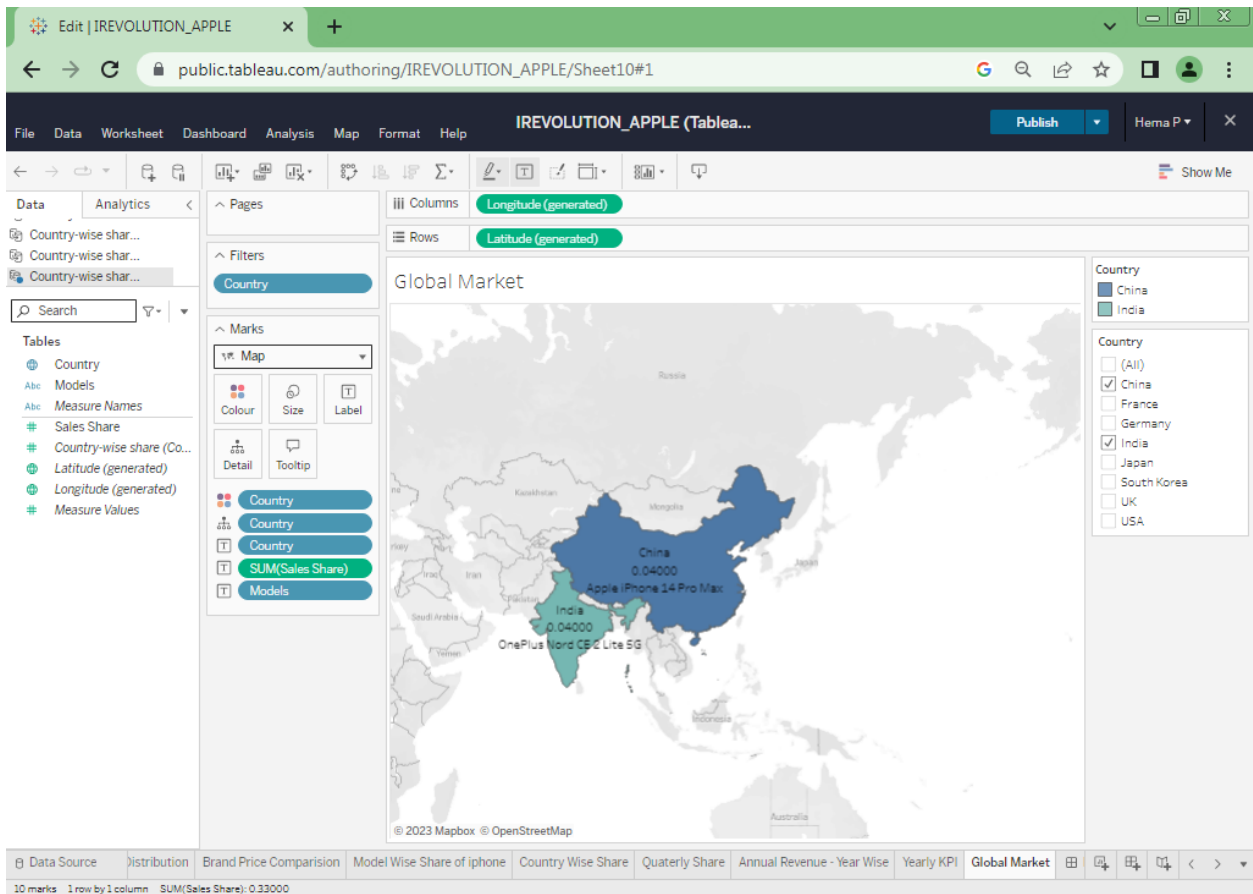
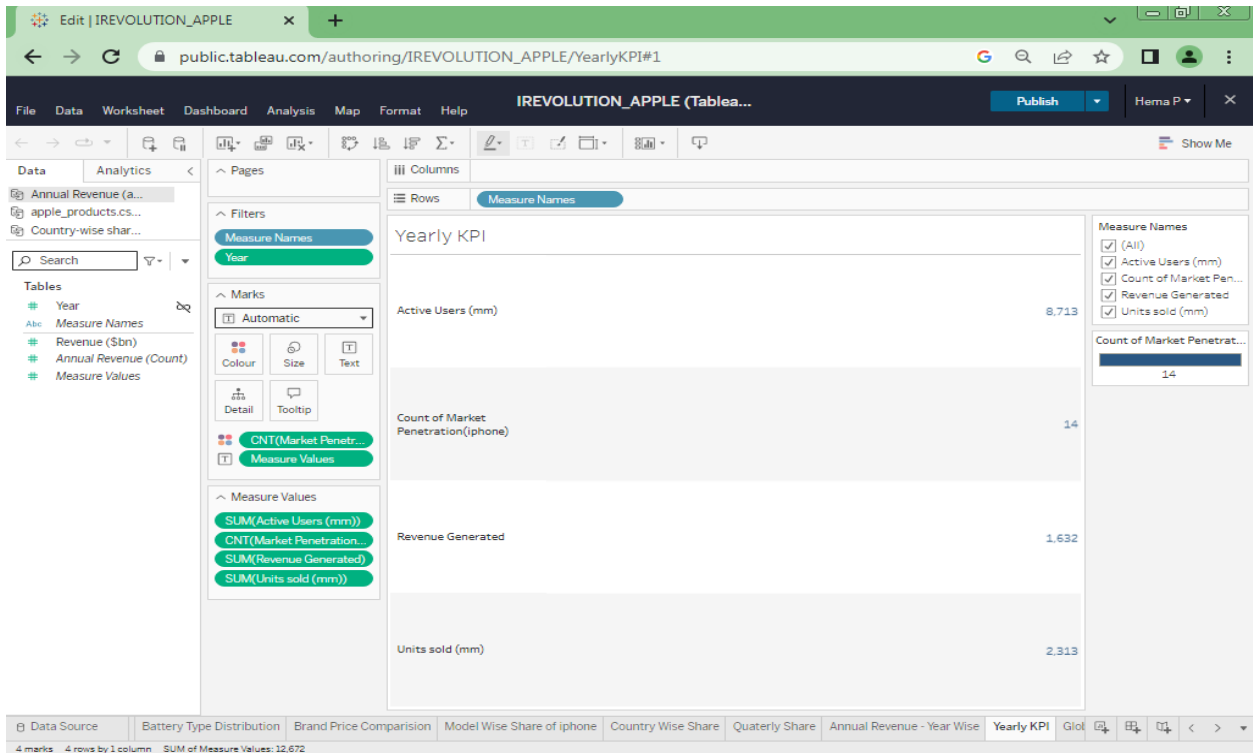








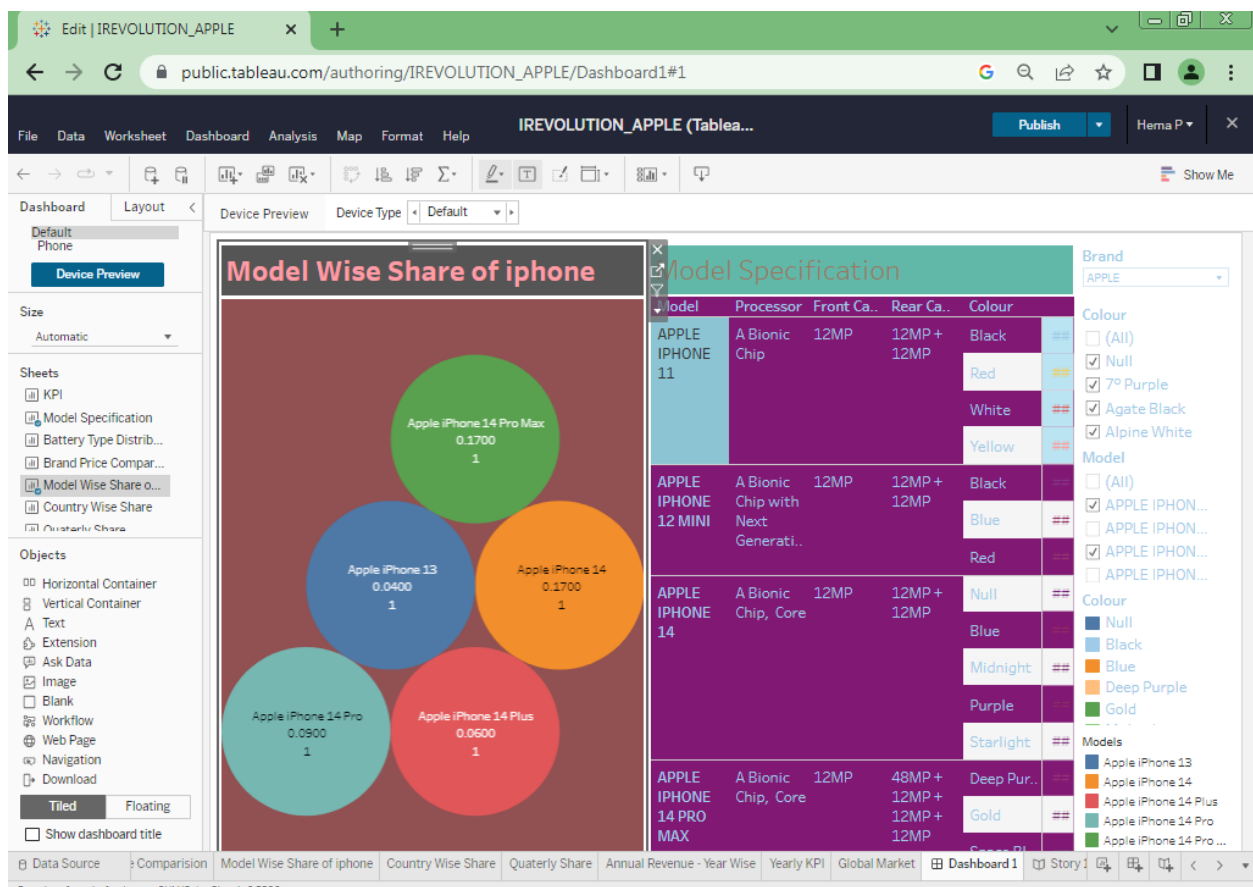




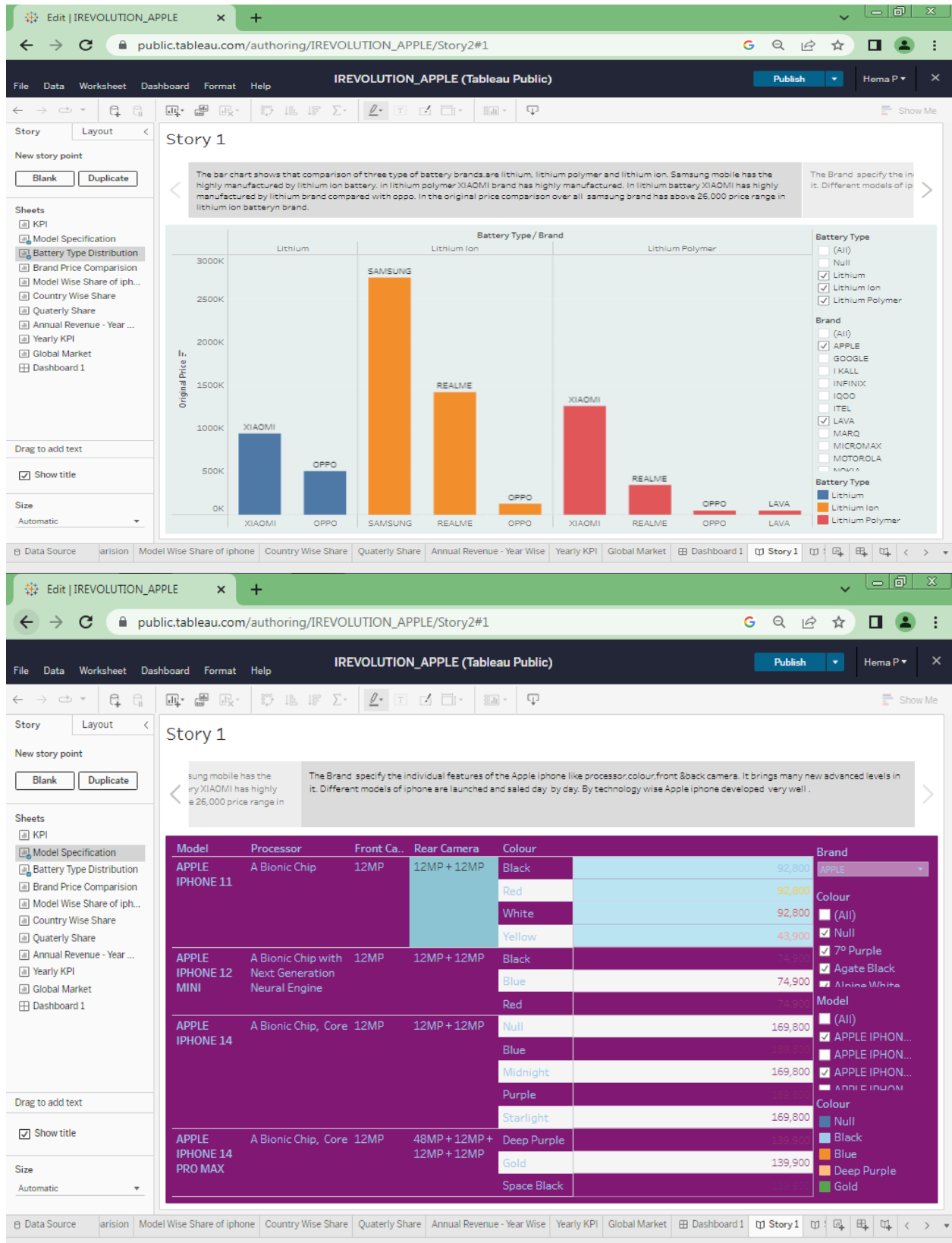
### 3.Result

#### 3.1 Dashboard 1

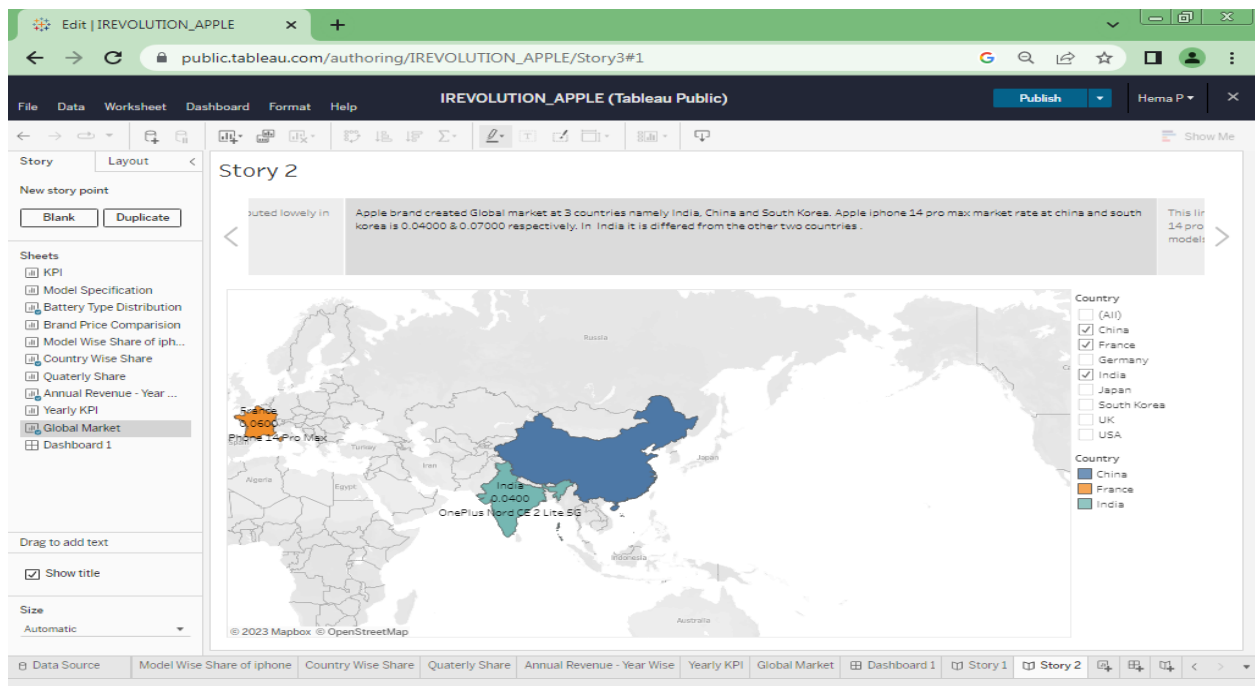
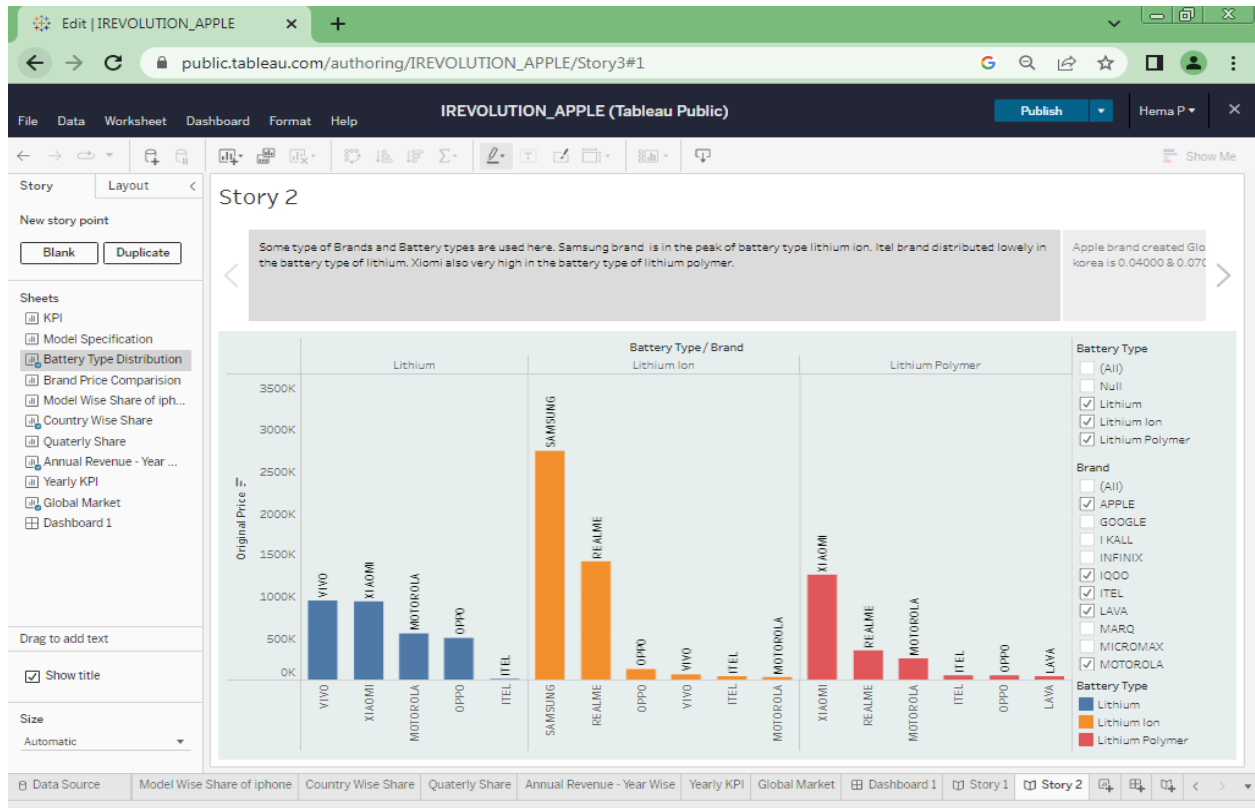
A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data, and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs, and tables

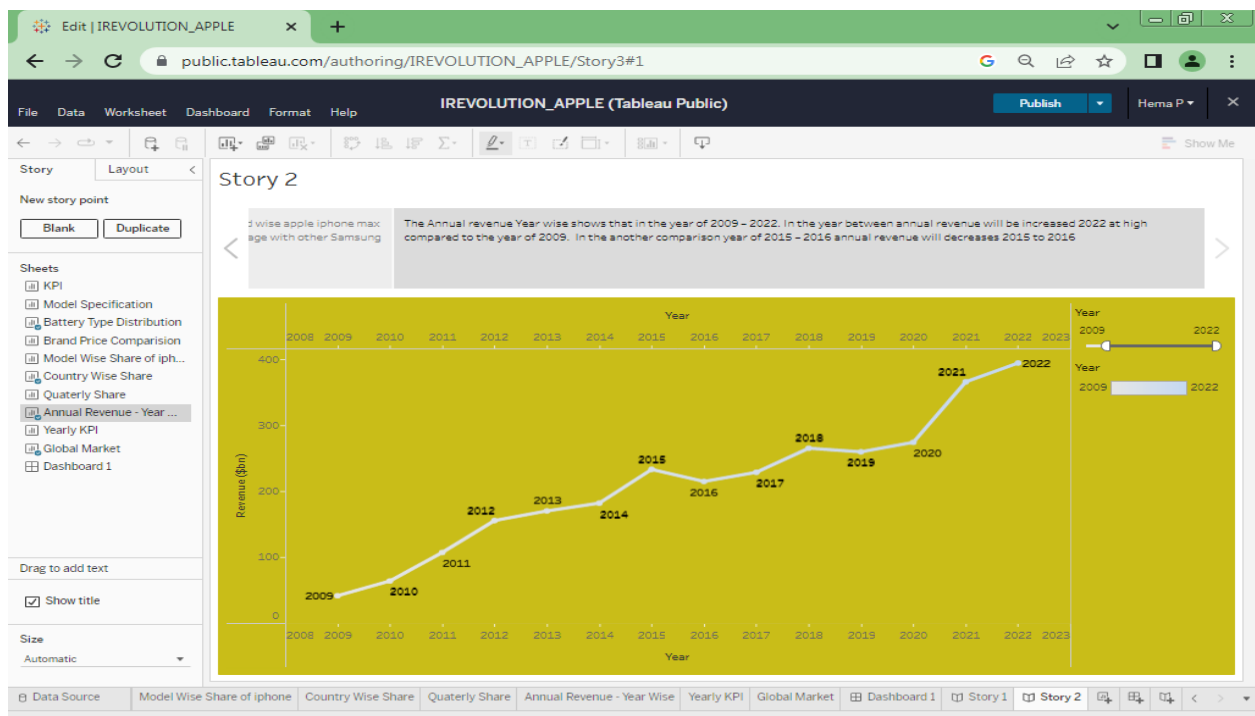
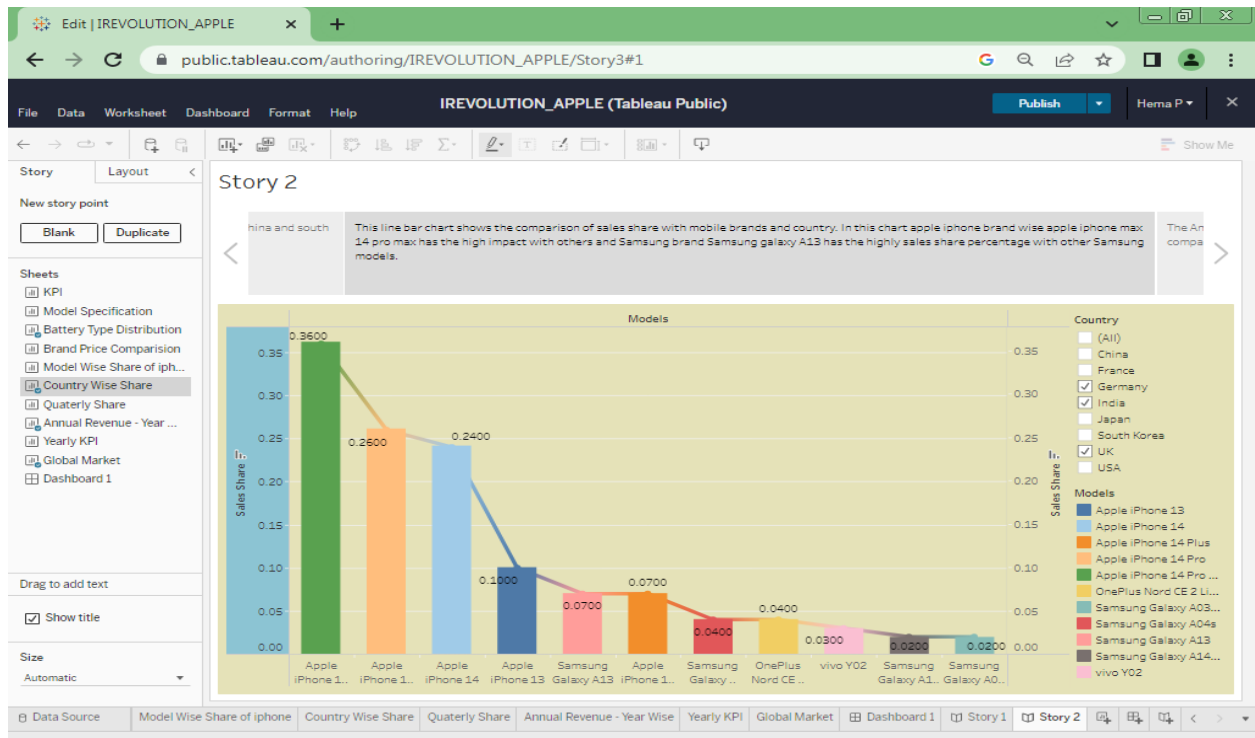


## 3.2 Story 1



## Story 2





#### **4 ADVANTAGES & DISADVANTAGES:**

Advantages of apple iphone impact:

- Assess how the iPhone market contributes to the Indian economy through sales, job creation, and taxes.
- Explore how Apple's user-friendly interface and ecosystem benefit Indian consumers.
- Analyze how iPhone technology has influenced innovation in India, particularly in app development and related industries. Examine how owning an iPhone influences social status and personal branding in the Indian context.
- Evaluate the security features of iPhones and their impact on user data protection.

#### **Disadvantages of apple iphone impact:**

- Discuss the high price point of iPhones and how it may limit their accessibility in India
- Investigate the environmental impact of iPhone production and disposal in India.
- Analyze how Apple's dominance affects the competition and availability of other smartphone brand.
- Examine how being locked into the Apple ecosystem can be limiting for users
- Assess the challenges of repairing and maintaining iPhones in India.

#### **5. APPLICATIONS:**

1. Explore how iPhones are used in the education sector for e-learning and skill development.
2. Investigate iPhone applications in healthcare, including telemedicine and health tracking.
3. Analyze how iPhones are used to promote digital banking and financial inclusion.



4. Examine the role of iPhones in the Indian entertainment industry, including streaming and gaming.

5. Discuss how iPhones are being utilized for social causes and activism in India.

This research would require data collection, surveys, interviews, and a thorough analysis of both quantitative and qualitative data to draw meaningful conclusions about the impact of iPhones in India.

## **6. CONCLUSION:**

In conclusion, analyzing apple iphone impact using Excel data sheet can provide valuable insights into the source and trends of apple iphone impact. By importing the dataset and connecting it to Tableau Public, we can create range of graphs and visualizations that help us better understand the data and identify opportunities for reducing impact.

Some of the types of graphs and visualizations we can create include line graphs, bar, charts, heat maps, scatter plots and tree maps. Each of these visualization types has its advantages and can provide valuable insights into the data.

## **7. FUTURE SCOPE:**

The future scope of Apple iPhones is expected to continue impacting various aspects of technology and society. Some potential areas of impact include:

1. Apple is likely to continue pushing the boundaries of smartphone technology, introducing new features, hardware advancements, and software enhancements. This innovation often sets industry standards and influences other Smartphone manufacture.

2. The Apple ecosystem, including the App Store, iCloud, and other services, is expected to expand and deepen its integration with iPhones, offering users a seamless and comprehensive experience.

3. Apple has shown a strong interest in AR technology, and future iphone may play a significant role in the development and adoption of AR applications and devices.

4. Apple's emphasis on user privacy and security is likely to remain a key selling point. The company's stance on data protection is influencing industry conversations and government regulations.

5. Apple is increasingly focusing on environmental sustainability, which may lead to more eco-friendly production processes and materials in future iPhones.

6. The iPhone is likely to continue evolving as a personal health and wellness tool with features like the Health app and integration with health monitoring devices.

7. As 5G networks become more prevalent, Apple will likely adopt and optimize 5G technology, enabling faster data speeds and new possibilities for mobile communication.

8. Social and Cultural Impact: iPhones will continue to shape the way we communicate, consume media, and connect with the world, influencing cultural and social norms.

9. Apple's strong brand and large customer base give it the power to influence consumer preferences and shape the direction of the smartphone market.

10. Apple's interactions with other tech giants and its competitive stance with companies like Google and Samsung will continue to impact the broader tech landscape.

11. It's important to note that the specific impact will depend on Apple's product development, market dynamics, and societal trends as we move into the future.