

VYASA ARTS AND SCIENCE WOMEN'S COLLEGE

SUBRAMANIAPURAM

A documentation project on the topic
**"iRevolution: A Data-driven
Exploration of Apple's iPhone
Impact in India"**

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III B.Sc.Mathematics
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iRevolution: A Data-driven Exploration of Apple's iPhone Impact in India

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 revolutionised 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.

1.2 Purpose

- 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 analysing large datasets.
- Apple has a special chance to increase its market share and develop a significant presence in India. Each new iPhone model unveiling generates excitement and anticipation among Indian buyers. By utilising 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.

2. PROBLEM DEFINITION AND DESIGN THINKING

2.1 EMPATHY MAP

The screenshot displays a Mural collaborative workspace titled "Untitled mural • iRevolution: A d...". The URL in the address bar is app.mural.co/t/irevolutionadatadrivenexplor1791/m/irevolutionadatadrivenexplor1791/1693636824957/2a7aff1e0066c14742a4e116d11ed4.... The board features a central "Persona's name" circle with a placeholder image and a "Short summary of the persona" text. Four quadrants are defined by a cross: "Says" (top-left, teal), "Thinks" (top-right, blue), "Does" (bottom-left, purple), and "Feels" (bottom-right, pink). Each quadrant contains several sticky notes with text related to the persona. For example, under "Says", notes include "I don't really..." and "I'm not really...". Under "Thinks", notes include "I'm not really..." and "I'm not really...". Under "Does", notes include "I don't really..." and "I'm not really...". Under "Feels", notes include "I'm not really..." and "I'm not really...". A vertical toolbar on the left contains icons for various Mural tools. The bottom of the screen shows a Windows taskbar with a search bar and several application icons, including File Explorer, Edge, and Chrome. The system clock in the bottom right corner shows 21:09 on 02/09/2023.

2.2 IDEATION AND BRAINSTORMING

dashboard link - sujibalsam4@... X Thank You For Downloading Scri X Brainstorm iRevolution A Data-driven Exploration of Apple's iPhone i...

File | C:/Users/ELCOT/Downloads/Brainstorm%20iRevolution%20A%20Data-driven%20Exploration%20of%20Apple's%20iPhone%20Impact%20in%20India%20... Q

Brainstorm iRevolution A Data-driven Exploration of Apple's iPhone i...

1 / 1 | - 7% +

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions to generate and start shaping concepts based on your own ideas in the same space.

- Brainstorm in pairs
- Have a timer
- Multiple rounds

Before you collaborate

Brainstorming is a group activity. It's important to have a clear goal and a time limit. Make sure everyone has a chance to contribute and that the session is productive.

- Brainstorming is a group activity.
- It's important to have a clear goal and a time limit.
- Make sure everyone has a chance to contribute.
- That the session is productive.

Define your problem statement

What problem are you trying to solve? Frame your problem as a clear, specific statement. This will be the focus of your brainstorm.

Example: "How can we improve the user experience of the iPhone app?"

Brainstorm

Brainstorming is a group activity. It's important to have a clear goal and a time limit. Make sure everyone has a chance to contribute and that the session is productive.

Example: "How can we improve the user experience of the iPhone app?"

Group ideas

Take time during your session to discuss and refine your ideas. Group ideas and refine them into a clear, specific statement. This will be the focus of your brainstorm.

Example: "How can we improve the user experience of the iPhone app?"

Prioritize

You have a list of ideas. Now it's time to prioritize them. Use the following criteria to rank your ideas based on their potential impact and feasibility.

Criteria: Impact, Feasibility, Cost, Time, Risk, etc.

After you collaborate

Brainstorming is a group activity. It's important to have a clear goal and a time limit. Make sure everyone has a chance to contribute and that the session is productive.

Example: "How can we improve the user experience of the iPhone app?"

11:01 15/10/2023

3. RESULTS

3.1 CHARTS

a) KPI

Tableau - Apple iPhone project

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Standard

Show Me

Data Analytics Pages

Columns Measure Names

Rows Brand

Filters

Measure Names

Upc: MOBEXRGVZFZGZEWW

Marks

Automatic

Color Size Text

Detail Tooltip

Measure Values

Measure Values

SUM(Discount Percentage)

SUM(Mrp)

SUM(Sale Price)

SUM(Sale difference)

SUM(Star Rating)

KPI

Brand	Discount Percent..	Mrp	Sale Price	Sale difference	Star Rating
Apple	0	77,000	77,000	0	5

Measure Names

(All)

Count of apple_products.csv

Discount Percentage

Mrp

Number Of Ratings

Number Of Reviews

Sale Price

Sale difference

Star Rating

sales difference

Upc

MOBEXRGVZFZGZEWW

Data Source KPI Model specification Battery type Brand price comparison Model share Country wise best selling smart... Quarterly-Share Annual Revenue GMS KPI 2 Dashboard 1 Dashb

5 marks 1 row by 5 columns SUM of Measure Values: 154,005

Type here to search

21:50 14/10/2023

b) MODEL SPECIFICATIONS

Tableau - Apple iPhone project

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Entire View

Pages

Columns

Rows

Model Processor Front Camera Rear Camera Colour

Filters

Brand: APPLE

Colour

Search

Tables

Battery Type

Brand

Colour

Front Camera

Model

Processor

Rear Camera

Measure Names

Battery Capacity

Discounted Price

Display Size

Memory

Original Price

Rating Count

Ratings

Reviews

Storage

Marks

Automatic

Color

Size

Text

Detail

Tooltip

Colour

SUM(Original ..

Model specification

Model	Processor	Front Ca..	Rear Camera	Col..	
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

Colour

(All)

Null

7° Purple

Agate Black

Alpine White

Aqua Blue

Aqua Green

Aqua Sky

Aquamarine Blue

Arctic Blue

Arctic White

Asphalt Black

Astral Black

Astral White

Atlantic Blue

Atlantic Green

Aurora Green

Awesome Black

Brand

APPLE

Colour

Black

Blue

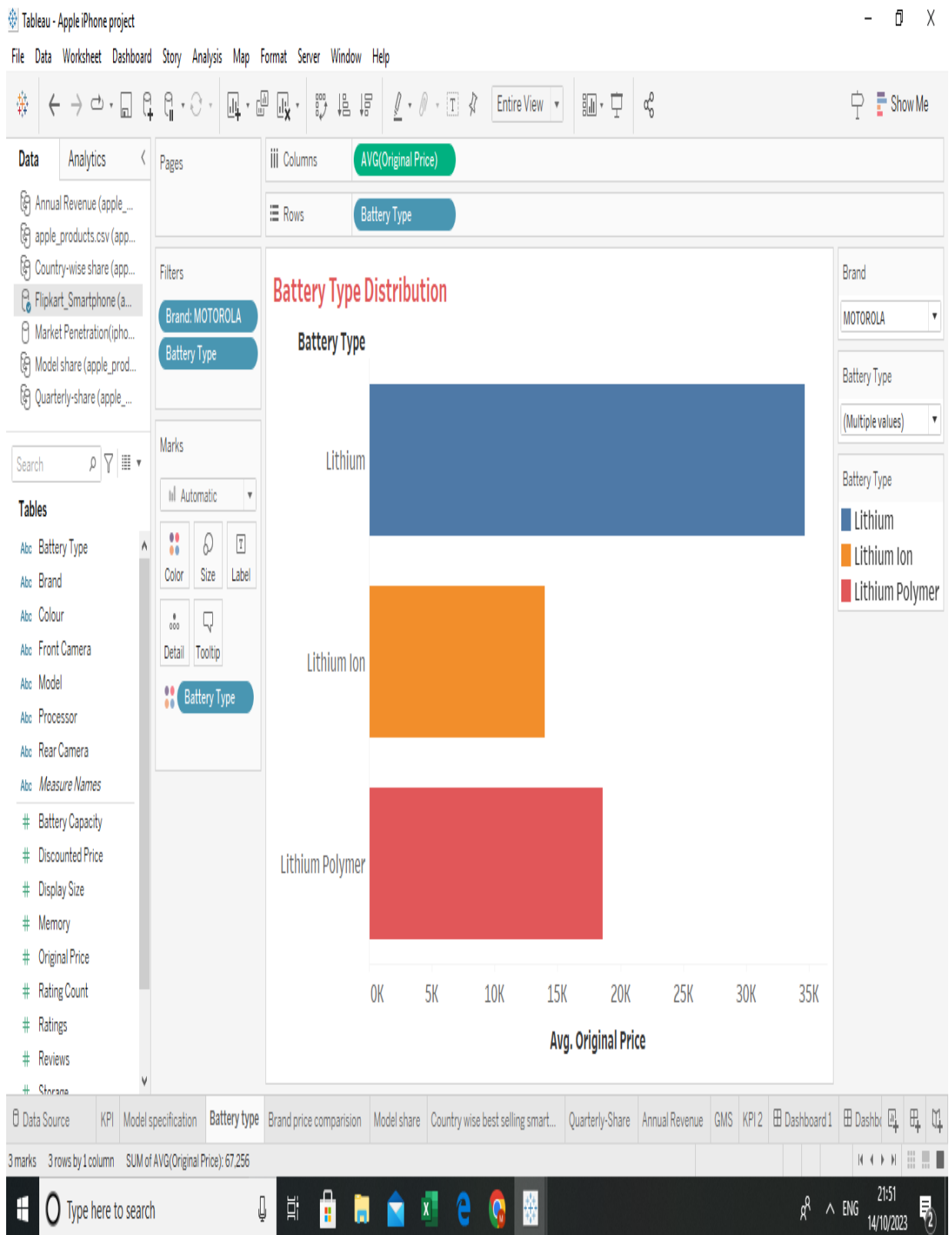
Data Source KPI Model specification Battery type Brand price comparison Model share Country wise best selling smart... Quarterly-Share Annual Revenue GMS KPI 2 Dashboard 1 Dashb...

8 marks 8 rows by 1 column SUM(Original Price): 941,700

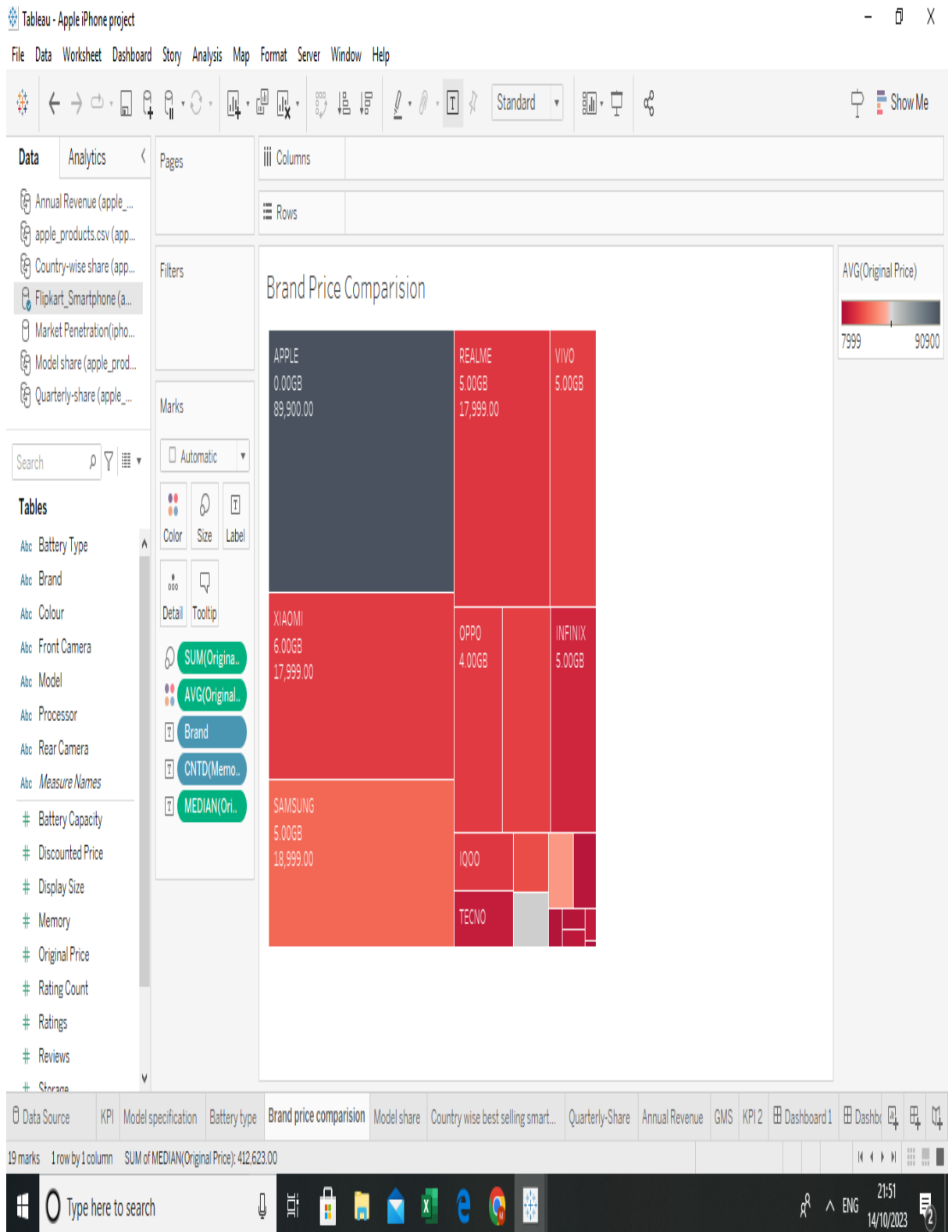
Type here to search

21:51 14/10/2023

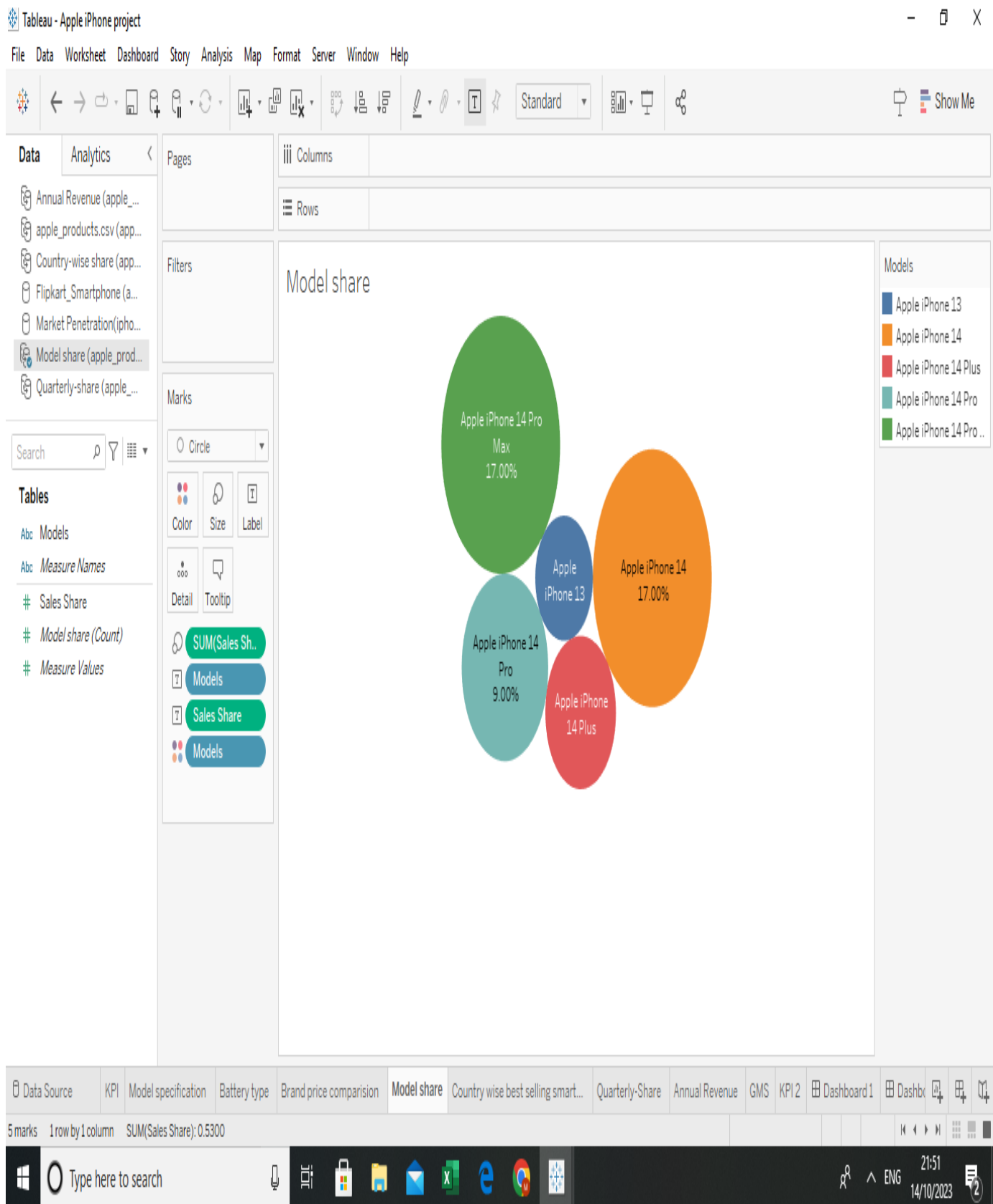
c) BATTERY TYPE



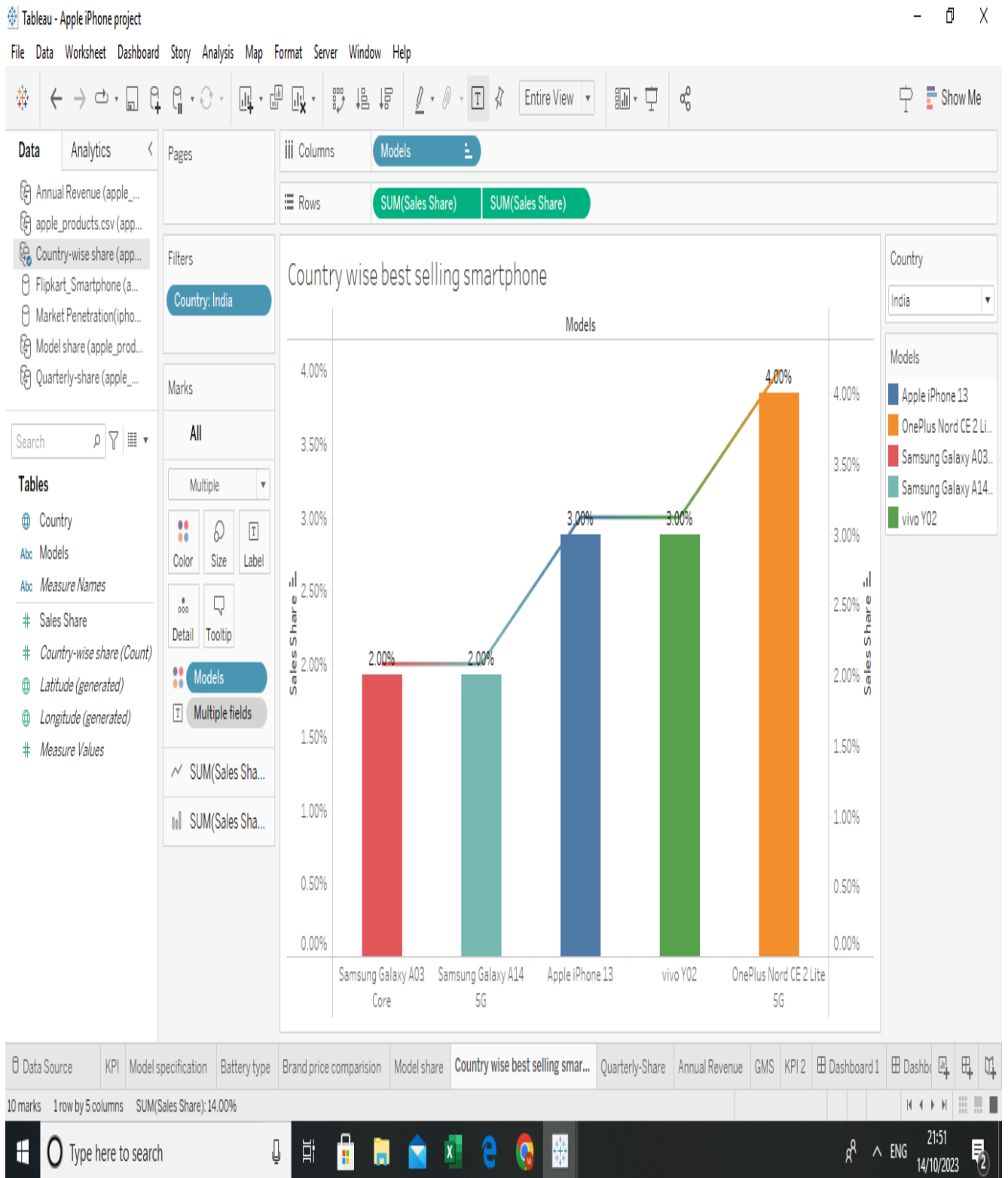
d. BRAND PRICE COMPARISON



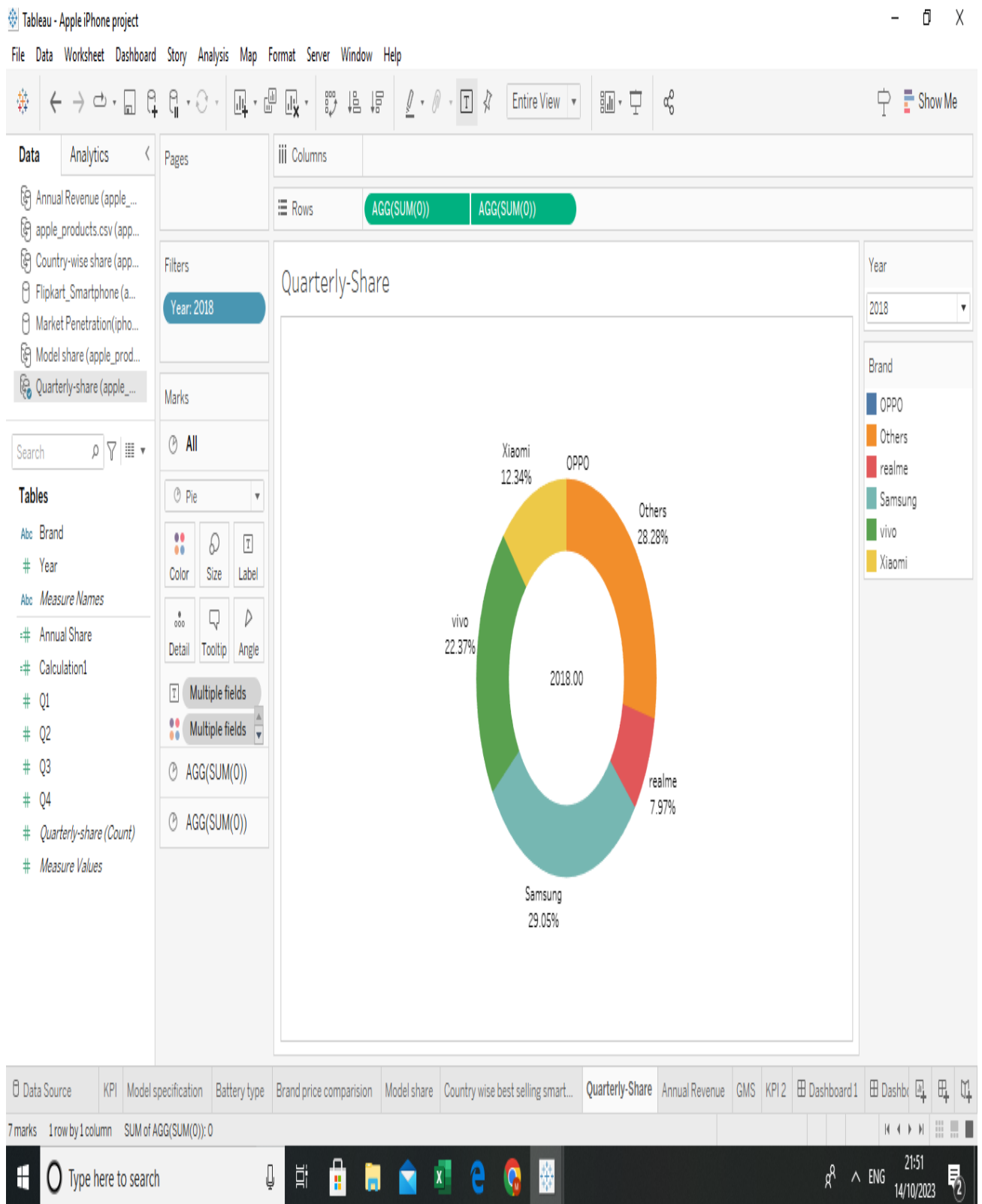
e. MODEL SHARE



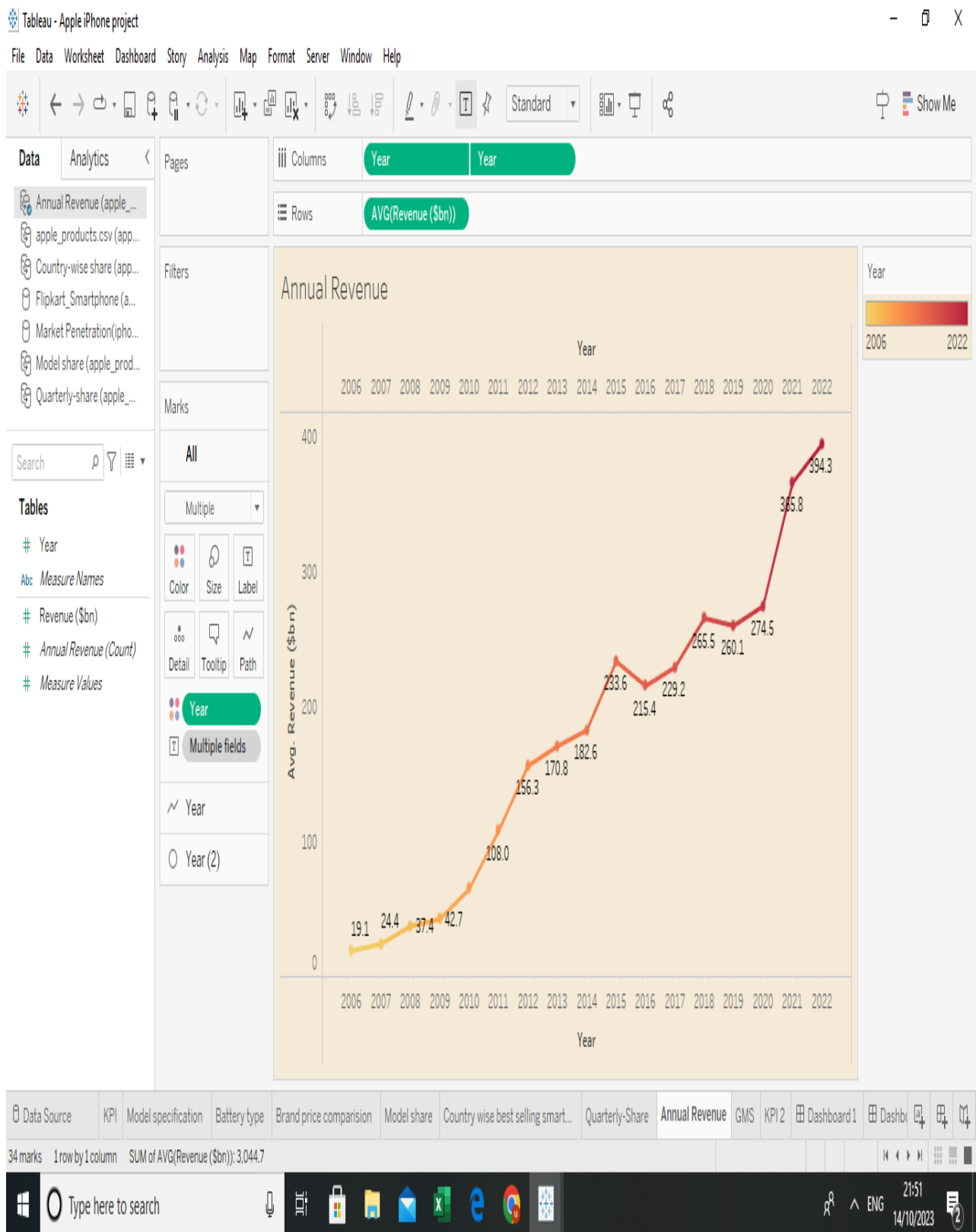
f. COUNTRY WISE BEST SELLING SMARTPHONE



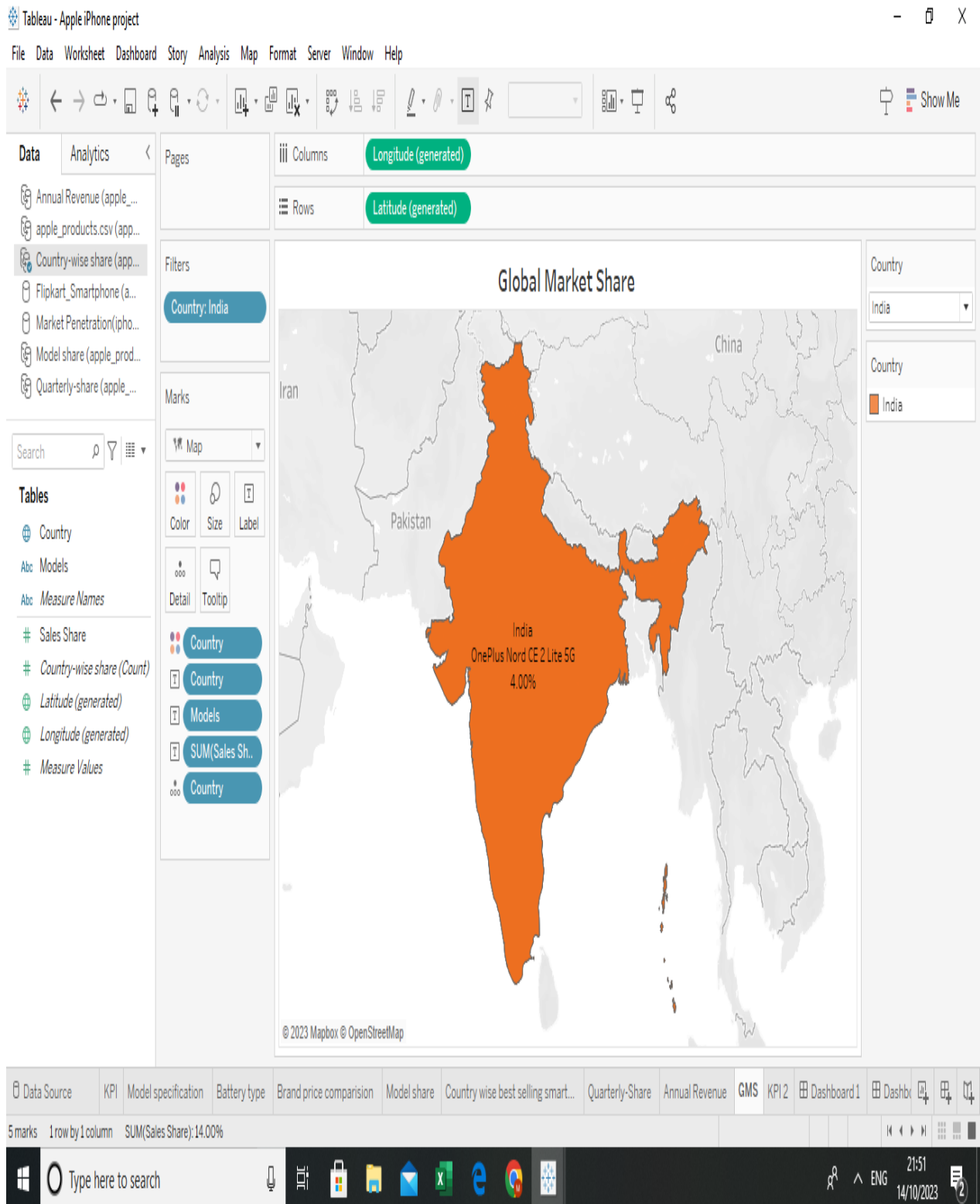
g.QUARTERLY SHARE



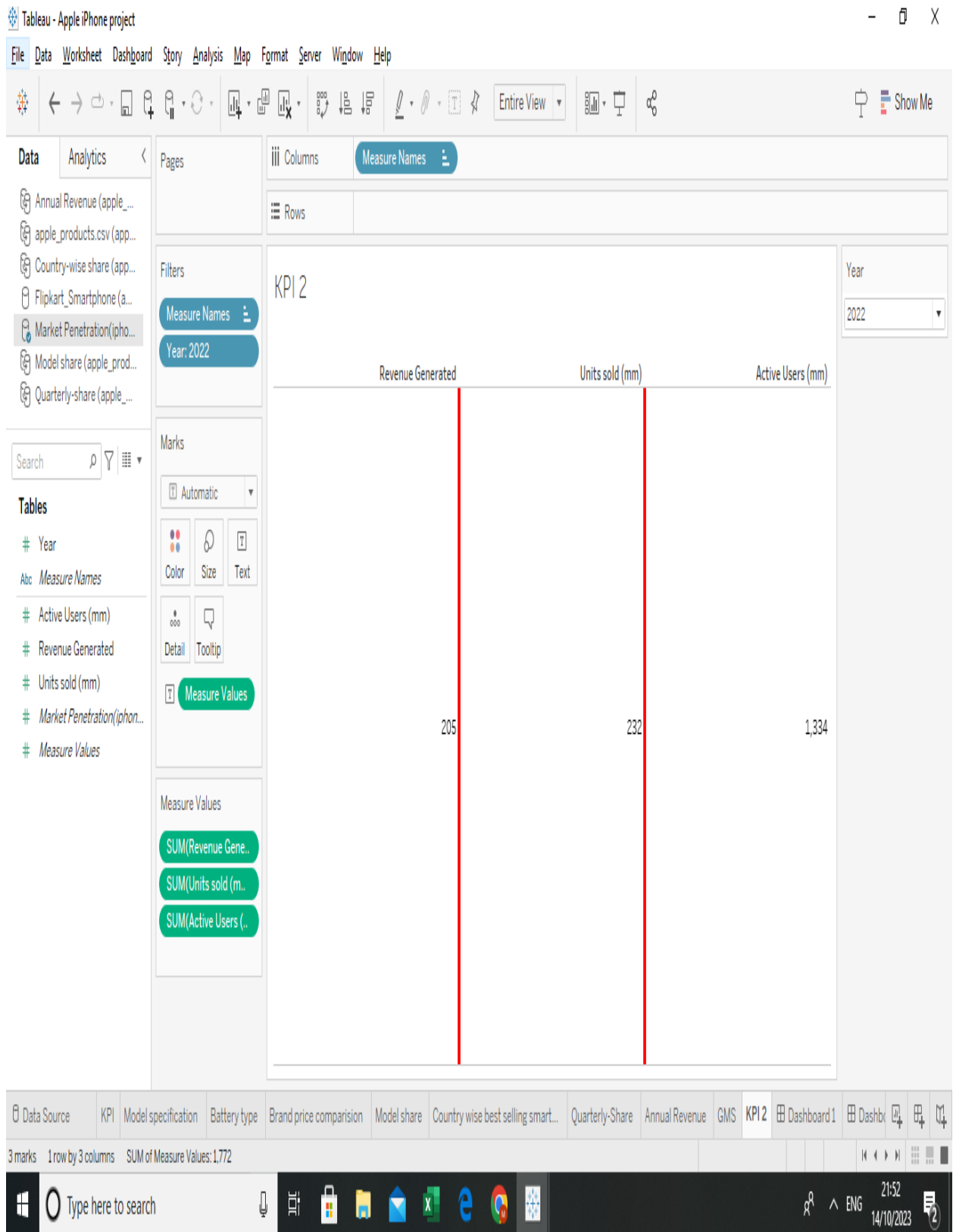
h. ANNUAL REVENUE



i. GLOBAL MARKET SHARE

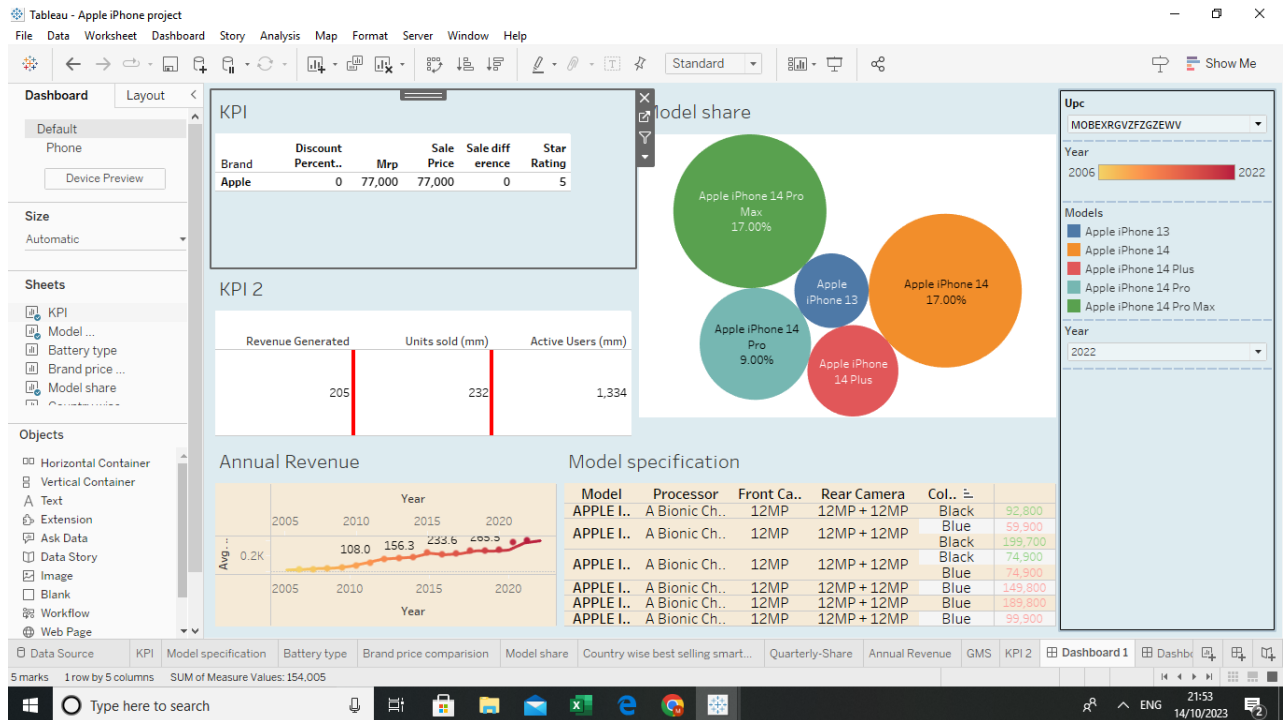


j. KPI 2

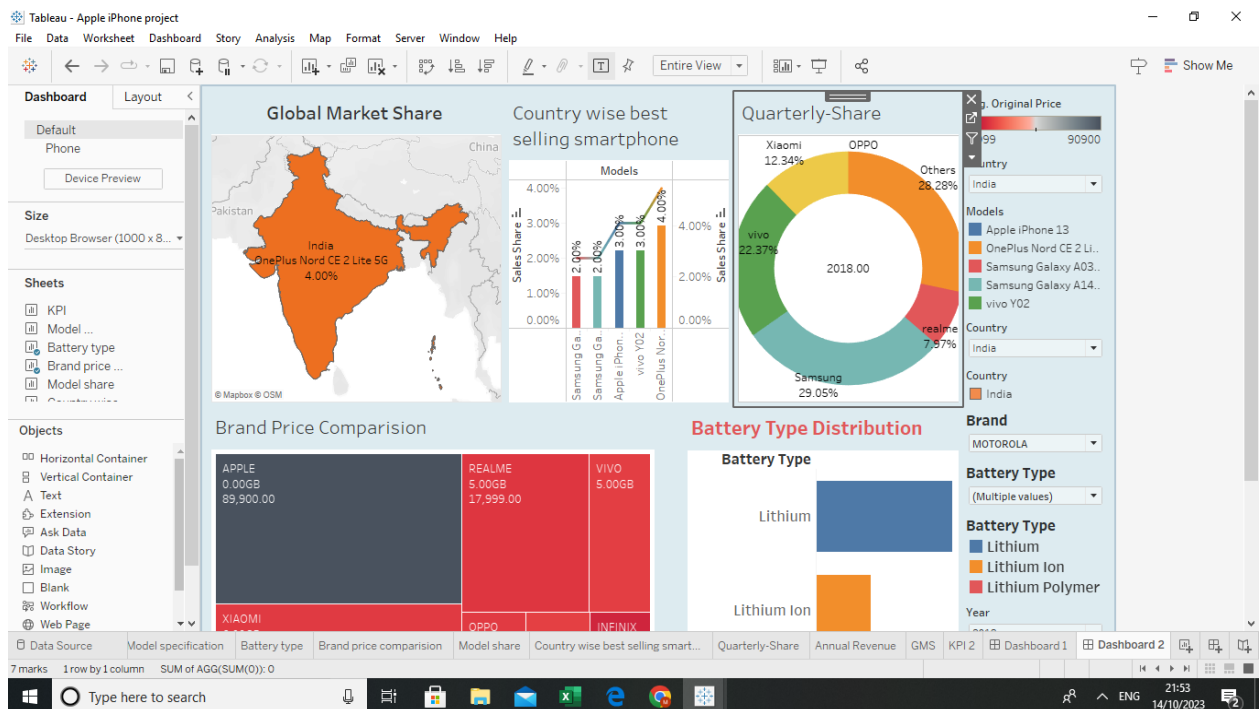


3.2 DASHBOARDS

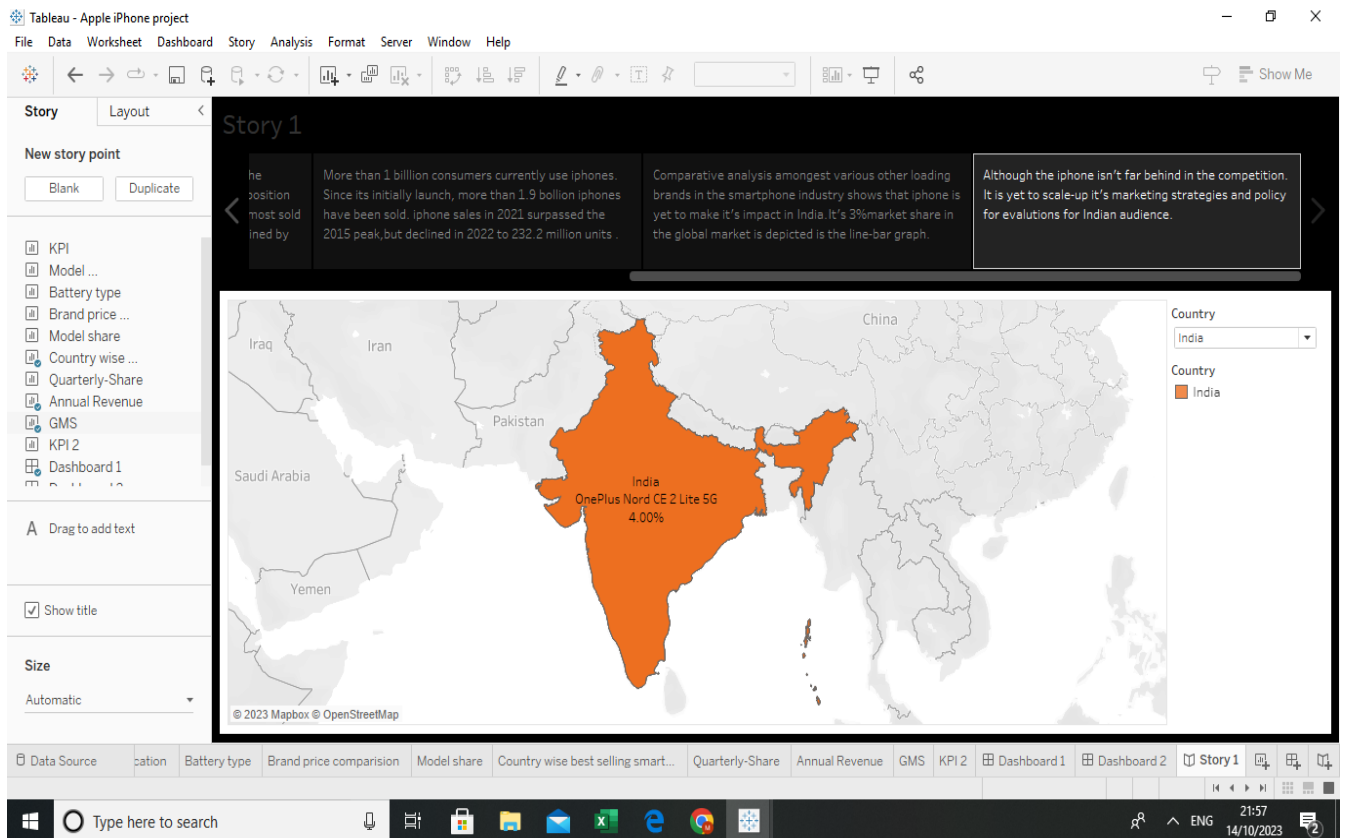
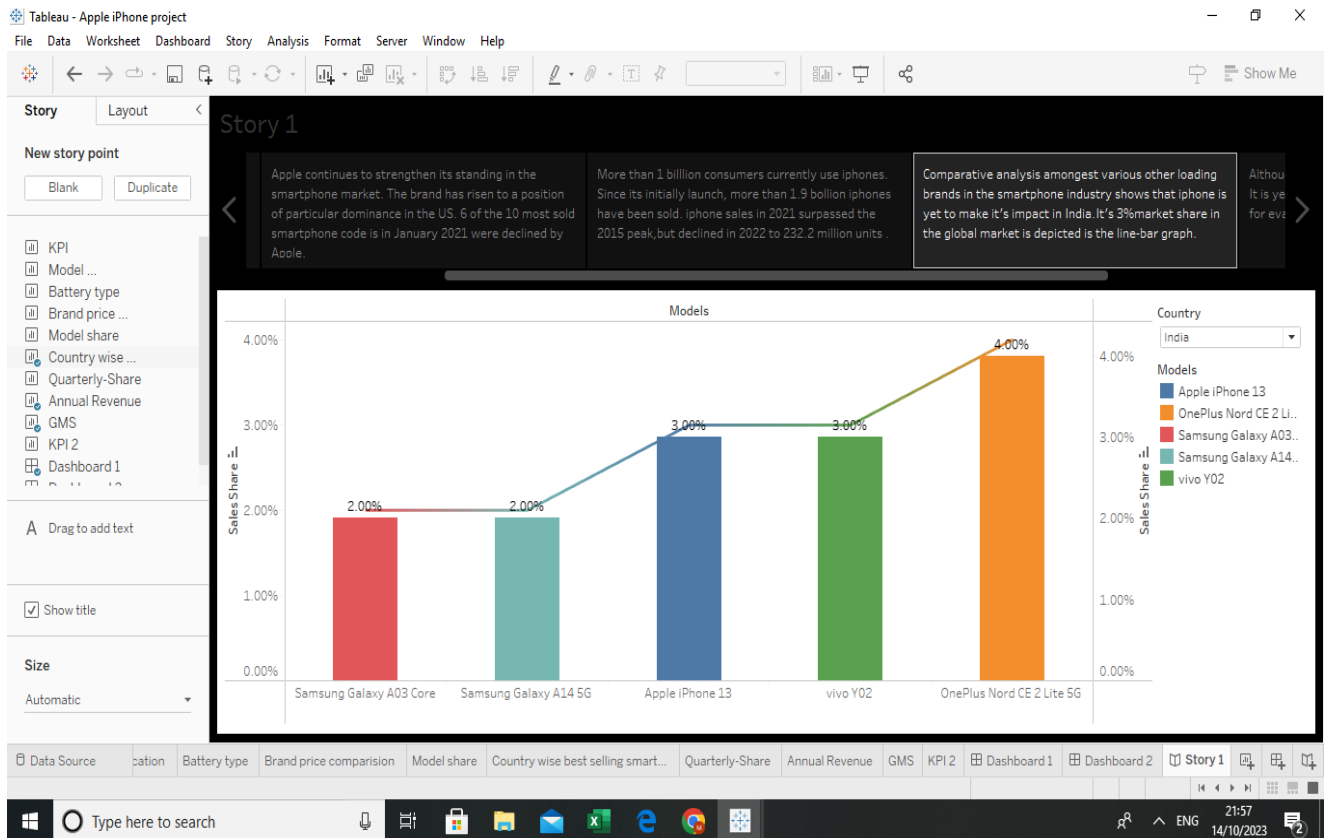
Dashboard 1

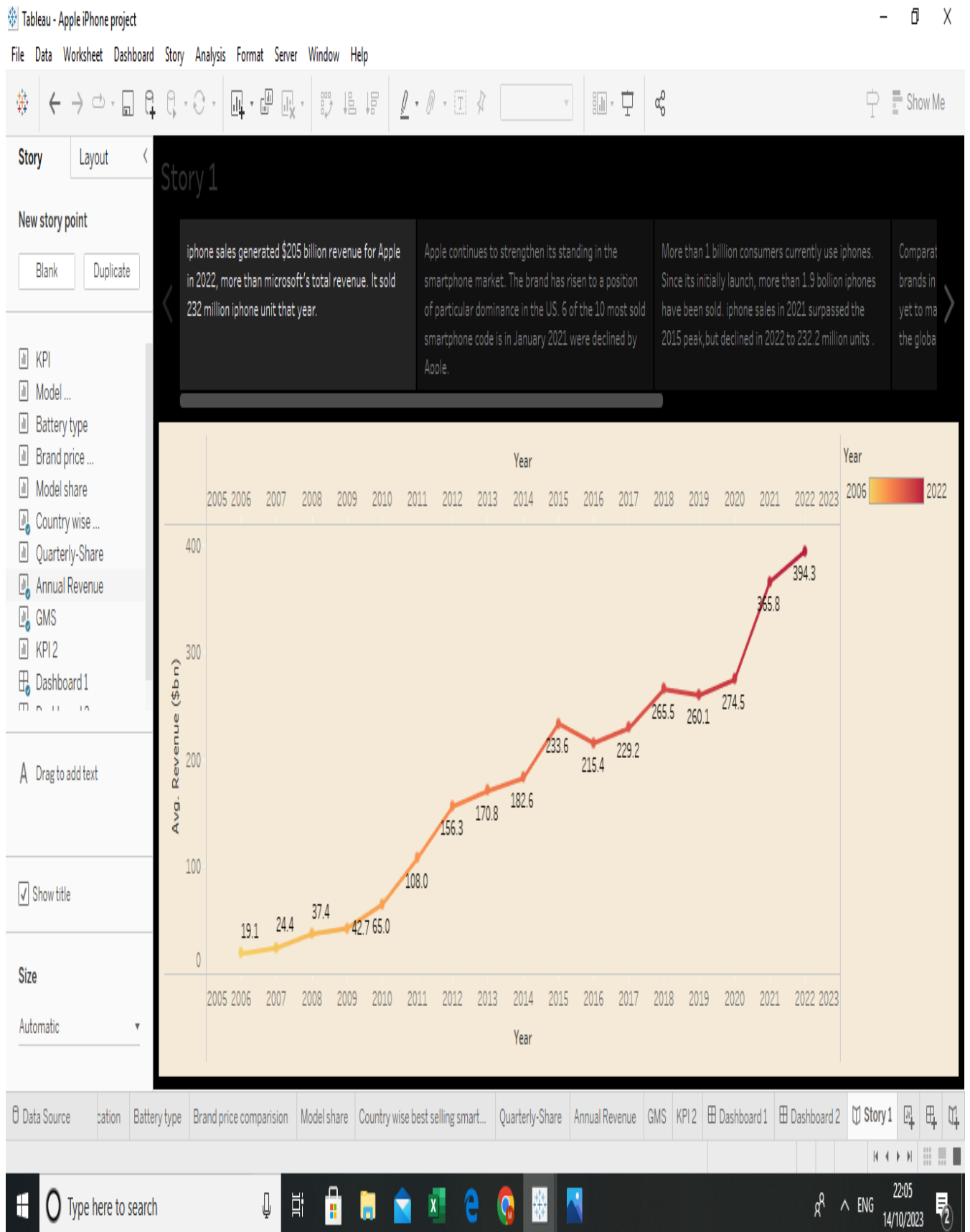


Dashboard 2



3.3 STORY





4.ADVANTAGES AND DISADVANTAGES

4.1 ADVANTAGES

- The iPhone dramatically changed the way people communicate, learn, play and work. With an iPhone in hand, an employee could work from home or be on site with a client and still have access to company data and be connected. The iPhone popularised the use of apps, web tools and mobility.
- The iPhone for a business is lightweight and portable, so we can take it wherever we go. It has a long battery life, so we don't have to worry about running out of power when we need it most. The iPhone's powerful applications give you access to all our office tools in a simple, intuitive interface.
- India has become Apple's fifth largest iPhone market in Q2, surpassing Germany and France. Apple's increased focus on distribution and marketing in India has resulted in a 50% YoY growth in sales and a rise in market share to 5.1%.
- The iPhone has an intuitive user interface that makes it easier to navigate.
- It allows users to access and transfer data across multiple devices.

4.2 DISADVANTAGES

- The cost of owning an iPhone is higher in India when compared to other countries. They frequently cost more than many Android phones with comparable or superior hardware specifications.
- iPhones are not entirely "made in India" but rather assembled in the country. The supply chain for iPhone production still relies on components imported from other regions. Consequently, Apple is subject to customs duties, which have a direct impact on the final prices.
- The iPhone's batteries are non-removable, which means that users cannot replace them.
- Apple's biometric security features, Face ID and Touch ID, can sometimes fail to recognize the user, leading to frustration and reduced security.
- No Expandable Storage.
- The iPhone is known to be fragile and prone to breaking if dropped.

5.APPLICATIONS

- The iPhone and its Apple-controlled App Store also became a massive business and gave app developers an easy way to sell to a global audience. In January, Apple said developers on its App Store platform had made \$120 billion since it launched in 2008, with over \$30 billion in 2018 alone.
- iPhone sales were adding one-quarter to one-third of a percentage point to the annualized growth rate of the gross domestic product (GDP).
- The iPhone dramatically changed the way people communicate, learn, play and work. With an iPhone in hand, an employee could work from home or be on site with a client and still have access to company data and be connected. The iPhone popularized the use of apps, web tools and mobility
- Apple has revolutionized communication, playing games, watching movies, listening to music, and more.
- Apple's increased focus on distribution and marketing in India surpassing Germany and France in iPhone sales. India now ranks behind the U.K., Japan, China, and the U.S. in terms of iPhone sales.

6.CONCLUSION

In this project we have analysed the iRevolution: A Data-driven Exploration of Apple's iPhone Impact in India with the help of tableau. In order to shed light on important factors like market penetration, customer preferences, economic ramifications, and societal changes, we have performed a data-driven investigation of the impact of the iPhone in India through this research.

This study offered 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 analysing large datasets.

For this the data are collected from various sources. At first, we defined the problem in the form of Empathy map and Brainstorming. Then we have connected the collected data set to the tableau and have created various chart's like line chart, bar chart, donut chart, map chart,etc.

Finally we have created the dashboard and story using these charts. Also from these charts we have analysed and acquired a thorough knowledge about the effects of the iPhone

7.FUTURE SCOPE

- The iPhone often served as a catalyst for the technologies introduced within, whether it's digital assistant Siri, mobile payments or wireless charging, and helped drive the evolution of how we live our mobile lives. But in the future, the most important part of the iPhone might be everything around it.
- we're likely to see incremental improvements like higher quality cameras and giant displays. But over the next decade, the iPhone could evolve into a hub for smart glasses and other devices. AirPods, Apple Watches and CarPlay-enabled vehicles may be just the start
- Apple's sales in India hit a new high of about \$6 billion in the fiscal year, up nearly 50% from a year earlier, showcasing the increasing importance of iPhones in a country that emerged to be the fastest growing major economy
- Apple's flagship smartphones, including the iPhone 15 Pro and Pro Max, have gone on sale in India, with the company expected to increase its market share from 5% to 7% by the end of 2023.