

IREVOLUTION: A DATA-DRIVEN EXPLORATION OF APPLE'S IPHONE IMPACT IN INDIA

Project Work Submitted by

Roll No:	C21UG105STA002	Name:	Balamurugan K
	C21UG105STA007		Harish R
	C21UG105STA013		Nadhin M
	C21UG105STA022		Santhosh M

Under the Guidance of

Dr. M. GOVINDHAN, M.Sc., Ph.D.

Guest Lecturer

DEPARTMENT OF STATISTICS

GOVERNMENT ARTS COLLEGE

Dharmapuri – 636705

(Affiliated to Periyar University)

October – 2023

PROJECT REPORT

1. Introduction

1.1 Overview

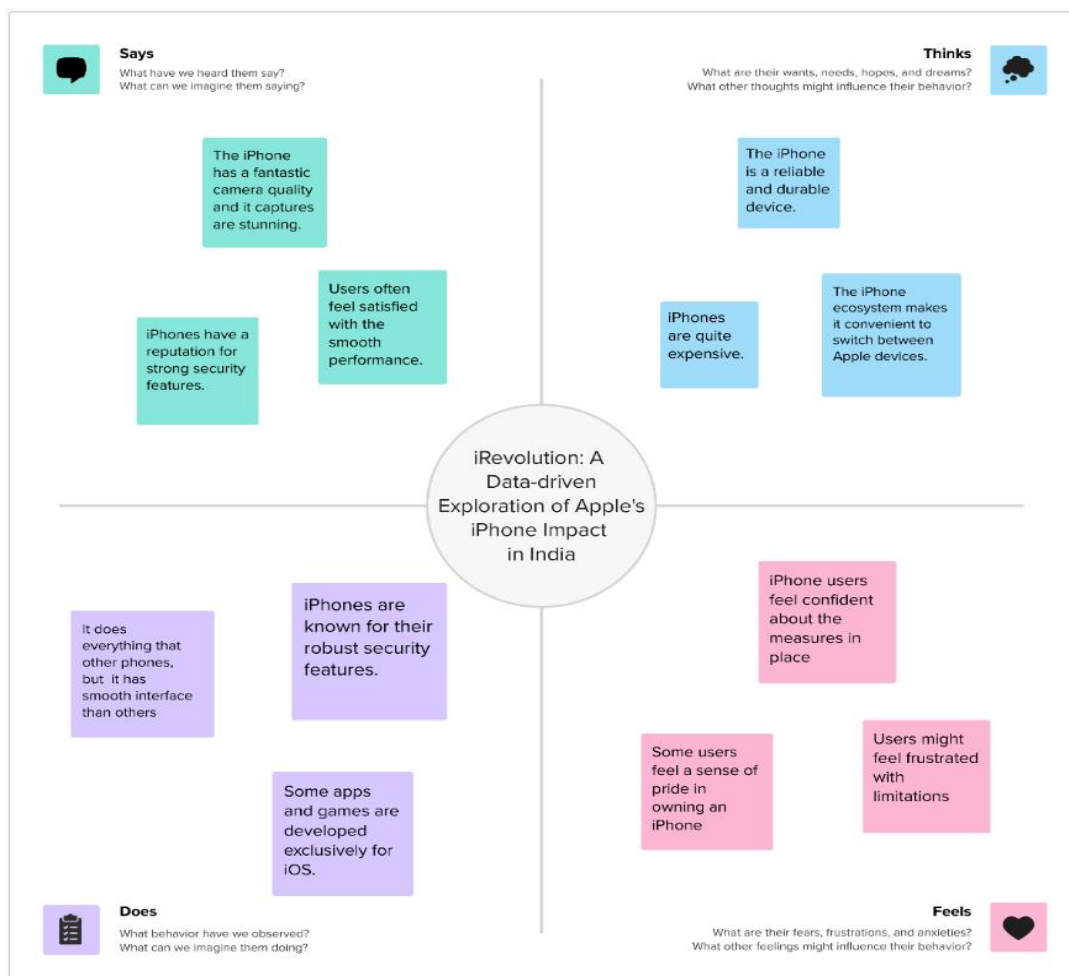
Our Project is about Revenue and Market Penetration of iPhone. We intend to investigate how the iPhone has penetrated the markets and how much revenue generated though data analytics and Tableau visualizations.

1.2 Purpose

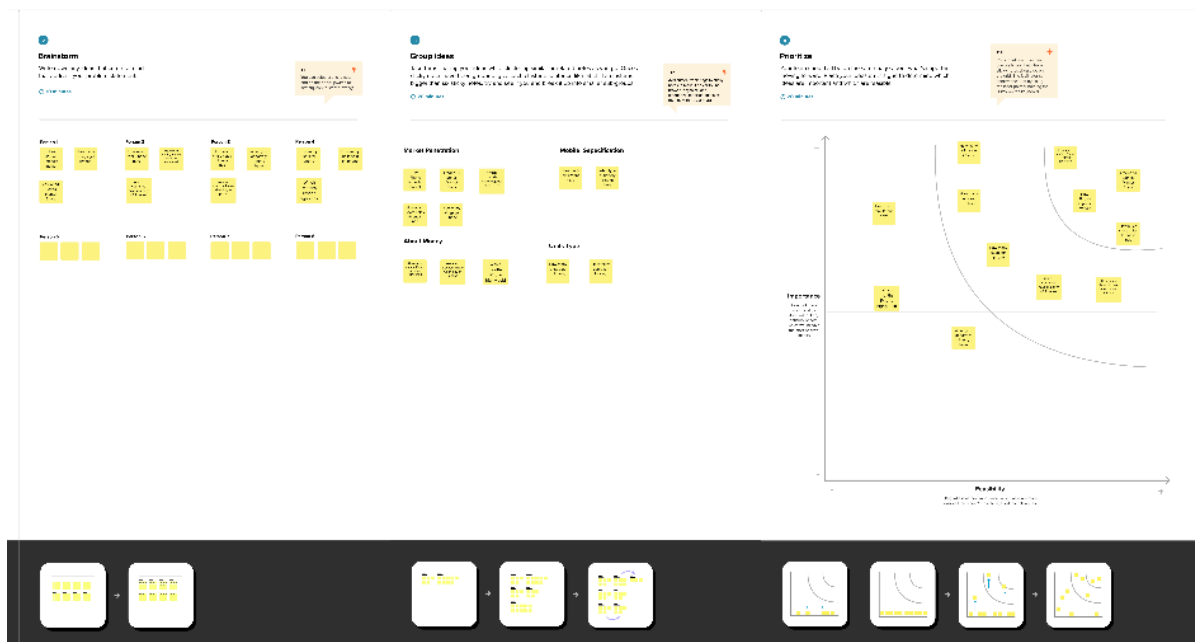
Through the insightful Visualizations and the analysis, we gain a comprehensive understanding of the iPhone's revenue streams and its extensive market reach. From these visual representations enabling us to capture the complexities of market penetration providing actionable insights to optimize strategies and capitalize on iPhone's market success.

2. Problem Definition & Design Thinking

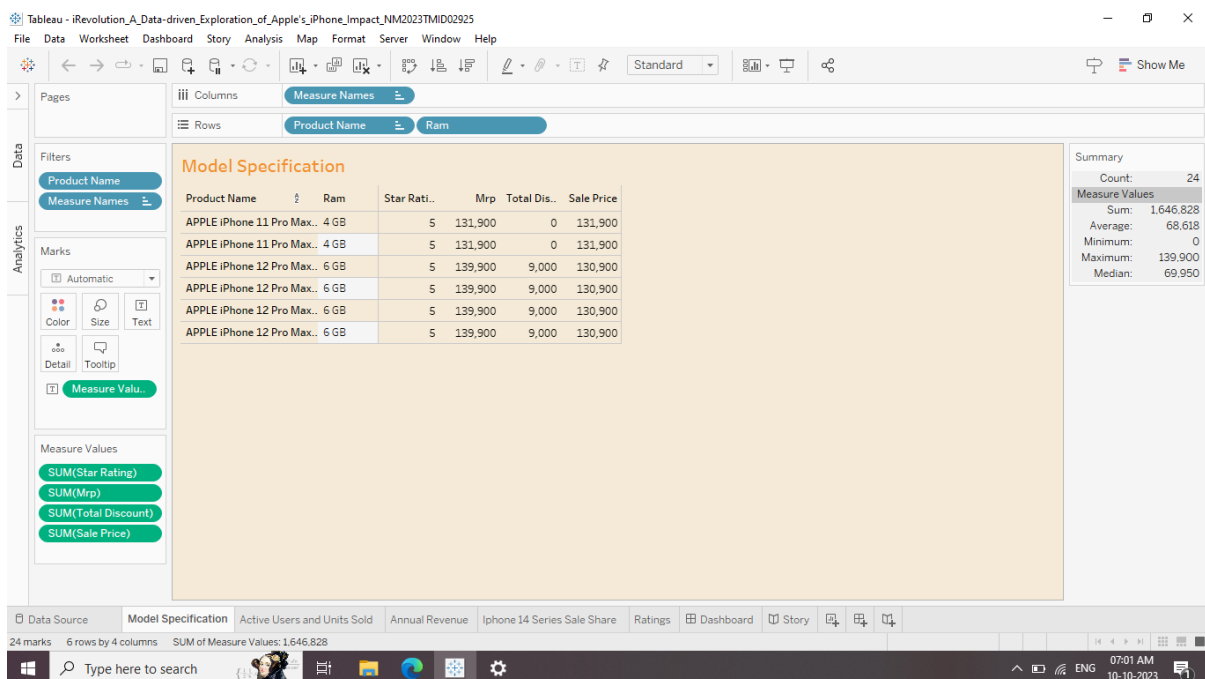
2.1 Empathy map



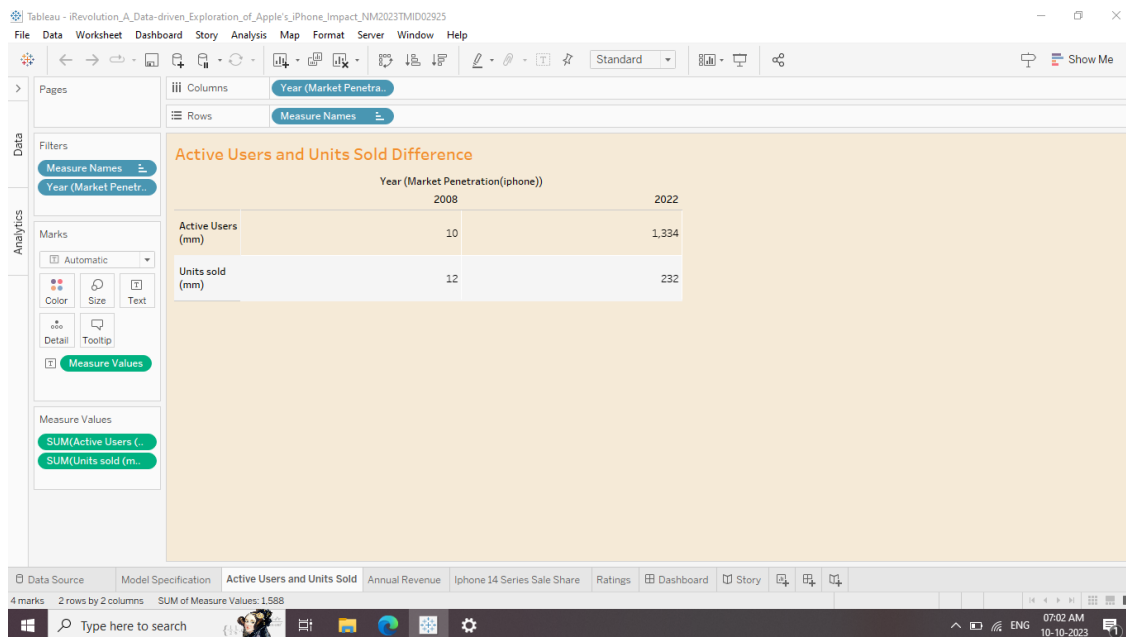
2.2 Ideation & Brainstorming map



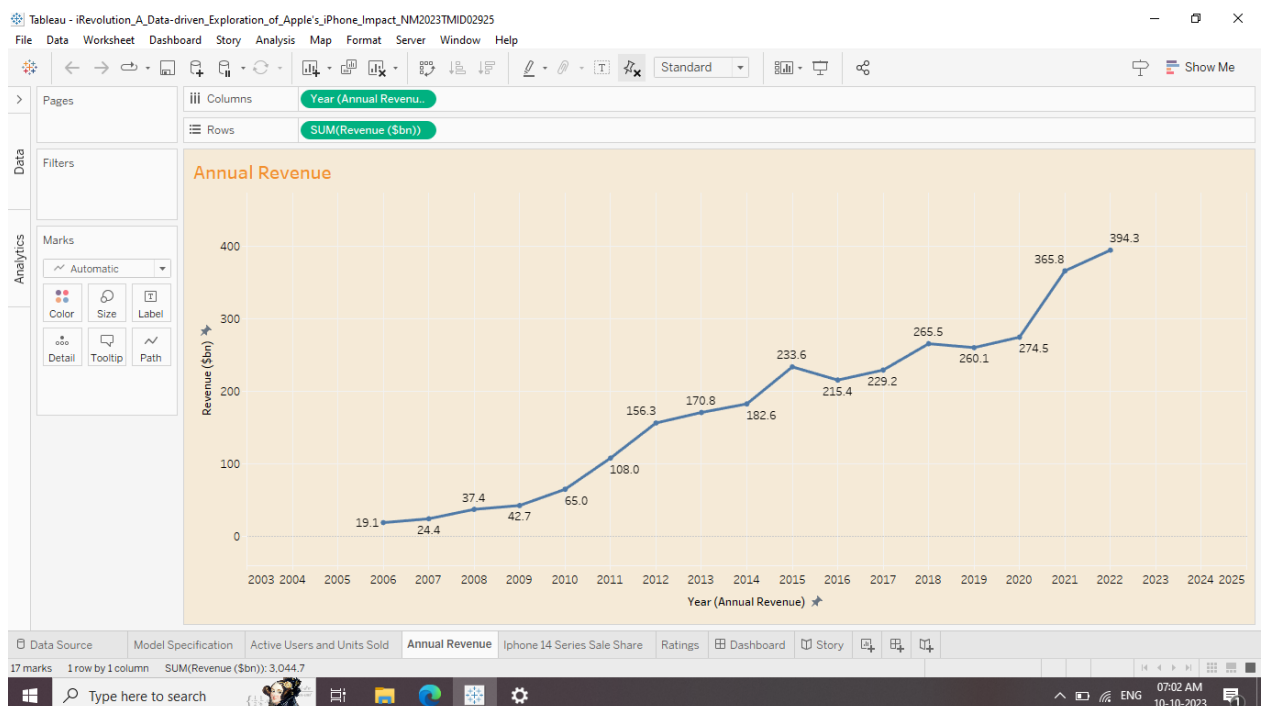
3. RESULT



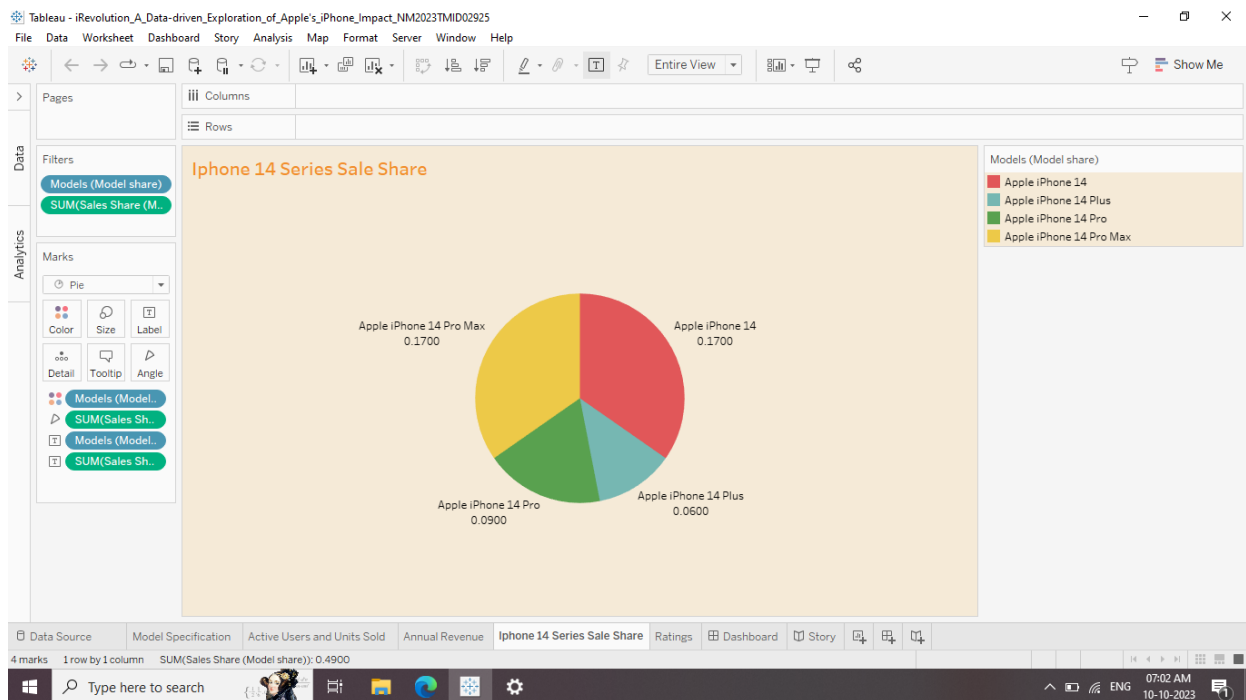
Explanation: This sheet represents the RAM, Ratings, and Prices from the Pro Max series from the iPhone 11 and 12 series.



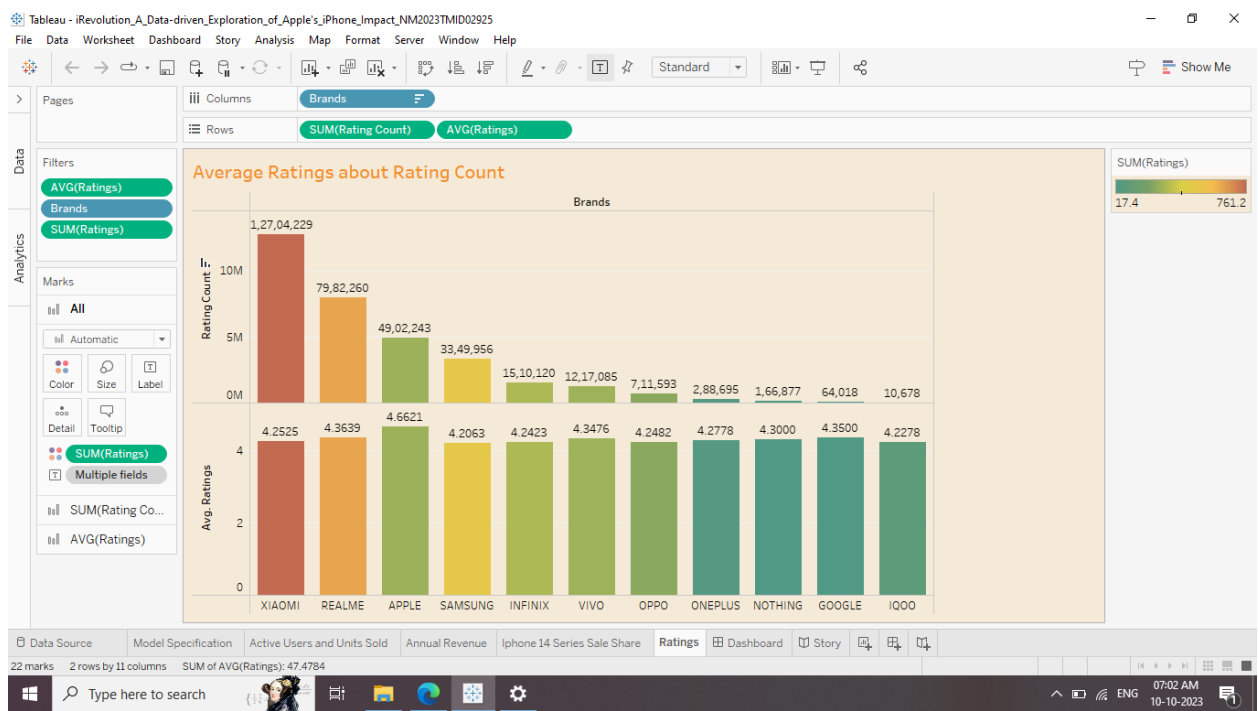
Explanation: This table shows the Active Users and Units Sold from 2008 to 2022. They are Active users from 10 million to 1,334 million which is increased by approximately 13,240%, and They are Sold Units from 12 million to 232 million which is increased by approximately 1833.33%.



Explanation: This chart represents about Annual Revenue of iPhone from 2006 to 2022. The Revenue generated by iPhone is from 19.1 billion to 394.3 which is approximately 1963.76%.



Explanation: This pie chart represents the sales share of the iPhone 14 series in the market.



Explanation: From this chart we know about the average ratings of mobile companies under the count of ratings, and also find that the iPhone is in 3rd place in the count of ratings and 1st place in the average ratings

Year (Market Penetration(Iphone))			
	2008		2022
Active Users (mm)	10		1,334
Units sold (mm)	12		232

A pie chart illustrating the distribution of four Apple iPhone 14 models. The chart is divided into four colored segments: yellow for Apple iPhone 14 Pro Max (0.1700), red for Apple iPhone 14 (0.1700), green for Apple iPhone 14 Pro (0.0900), and light blue for Apple iPhone 14 Plus (0.0600). The segments are arranged in a circle, with the yellow and red segments being the largest and the light blue segment being the smallest.

Model	Value
Apple iPhone 14 Pro Max	0.1700
Apple iPhone 14	0.1700
Apple iPhone 14 Pro	0.0900
Apple iPhone 14 Plus	0.0600

The chart illustrates the annual revenue from 2006 to 2022. The revenue shows a strong upward trend, starting at \$19.1 billion in 2006 and reaching \$394.3 billion in 2022. There is a notable dip in 2021, where revenue was \$274.5 billion, followed by a sharp recovery in 2022.

Year	Annual Revenue (\$bn)
2006	19.1
2007	24.4
2008	37.4
2009	42.7
2010	65.0
2011	108.0
2012	156.3
2013	170.8
2014	182.6
2015	233.6
2016	215.4
2017	229.2
2018	265.5
2019	260.1
2020	274.5
2021	365.8
2022	394.3

- Brands**

 - ☒ APPLE
 - ☒ GOOGLE
 - ☒ I KALL
 - ☒ INFINIX
 - ☒ IQOO
 - ☒ ITEL
 - ☒ LAVA
 - ☒ MARQ
 - ☒ MICROM...
 - ☒ MOTORO...
 - ☒ NOKIA
 - ☒ NOTHING
 - ☒ ONEPLUS
 - ☒ OPPO
 - ☒ REALME
 - ☒ SAMSUNG
 - ☒ TECNO
 - ☒ VIVO
 - ☒ XIAOMI

Models (Mod..)

 - ☐ Apple iP...
 - ☒ Apple iP...
 - ☒ Apple iP...
 - ☒ Apple iP...
 - ☒ Apple iP...

Product Name	Ram	Star Rati..	Mrp	Total Dis..	Sale Price
APPLE iPhone 11 Pro Max..	4 GB	5	131,900	0	131,900
APPLE iPhone 11 Pro Max..	4 GB	5	131,900	0	131,900
APPLE iPhone 12 Pro Max..	6 GB	5	139,900	9,000	130,900
APPLE iPhone 12 Pro Max..	6 GB	5	139,900	9,000	130,900
APPLE iPhone 12 Pro Max..	6 GB	5	139,900	9,000	130,900
APPLE iPhone 12 Pro Max..	6 GB	5	139,900	9,000	130,900

Brands											
Rating %	12,704,229		4,902,243	3,349,956	1,510,120	1,217,085	711,593	288,695	166,877	64,018	10,678
Avg. Ratings	4.2525	4.3639	4.6621	4.2063	4.2423	4.3476	4.2482	4.2778	4.3000	4.3500	4.2278
	honor	realme	apple	hms	infinix	vivo	oppo	honor	honor	honor	honor

Explanation:

4. ADVANTAGES & DISADVANTAGES

4.1 Advantages

- i. By spanning data from 2006 to 2022, it enables a historical analysis, which is crucial for understanding the iPhone's evolution over time.
- ii. Expressing the increase in active users, sold units, and revenue in percentage terms provides a clear understanding of the growth rates.
- iii. The sheets provide a wide array of information, including RAM, ratings, prices, active users, units sold, and annual revenue.
- iv. The combination of tables and charts enhances data visualization, making it easier for readers to comprehend complex information.

4.2 Disadvantages

- i. While the data is detailed, it lacks specific context for certain figures.
- ii. The representation lacks qualitative data such as customer reviews or feedback, which could provide a more nuanced understanding of customer preferences and satisfaction.
- iii. The data is historical, providing a retrospective view. Including future projections or market forecasts would make the information more actionable for businesses and analysts.
- iv. While the iPhone's data is detailed, a comparison with similar data from competitors would provide a broader perspective, allowing for a more comprehensive analysis of its market position.

5. APPLICATIONS

- i. By studying the trends in active users, units sold, and revenue, analysts can identify patterns and make predictions about future market behaviour.
- ii. Businesses, especially those in the technology sector, can use this data to formulate strategic plans. Understanding the increase in active users and units sold helps in anticipating market demand.
- iii. Companies involved in smartphone manufacturing can analyse the RAM, ratings, and prices data to understand consumer preferences.
- iv. Investors and financial analysts can utilize this data to assess the financial health and growth potential of Apple Inc.
- v. Marketers can use the data on active users and units sold to target specific demographics effectively.
- vi. By analysing the average ratings data, companies can gain insights into customer satisfaction levels.

6. CONCLUSION

This data sheet presents a comprehensive overview of the iPhone Pro Max series, focusing on the 11 and 12 models. Active users surged from 10 million to 1,334 million (a 13,240% increase), with units sold rising from 12 million to 232 million (an 1833.33% increase) by 2022. Annual revenue witnessed an exponential growth from 19.1 billion to 394.3 billion (a 1963.76% increase) from 2006 to 2022. Despite being ranked 3rd in the count of ratings, the Pro Max series claimed the top spot in average ratings, showcasing exceptional consumer satisfaction and market dominance. This data underscores Apple's unparalleled success, emphasizing both its massive market reach and remarkable customer loyalty.

7. FUTURE SCOPE

The data presented in this sheet not only offers a historical perspective on the iPhone Pro Max series but also provides invaluable insights for future analysis. Researchers and market analysts can utilize this data to forecast market trends and consumer preferences, aiding in the development of future iPhone models and pricing strategies. Businesses can leverage this information to anticipate demand, optimize supply chains, and enhance customer satisfaction. Investors can use these trends to make informed decisions, while policymakers can gauge the tech industry's economic impact. Furthermore, this data could be instrumental in guiding innovations and ensuring Apple's continued market leadership.