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

INTRODUCTION:

1.1 Overview:

"iRevolution: A Data-Driven Exploration of Apple iPhone Impact in India" would be a comprehensive study that delves into the various aspects of how Apple's iPhone has influenced and transformed the Indian market. Here's an overview of how such an exploration could be structured:

- **Introduction:**

  Provide an introduction to the study, explaining its objectives and the significance of analyzing the impact of the iPhone in India.

- **Data Collection and Sources:**

  Detail the sources of data used in the study, including market research reports, sales data, user surveys, and economic indicators.

- **Market Penetration and Growth:**

  Analyze the growth of iPhone sales in India over time, presenting data on unit sales, revenue, and market share.
  Explore factors contributing to the iPhone's market penetration, such as pricing strategies, product launches, and marketing campaigns.

- **Consumer Behavior and Preferences:**

  Examine consumer behavior related to iPhone adoption, including factors influencing purchasing decisions, brand loyalty, and user satisfaction.
  Investigate consumer preferences in terms of iPhone models, features, and accessories.

- **Economic and Industry Impact:**

  Evaluate the economic impact of the iPhone's presence in India, including contributions to GDP, employment, and tax revenues.
  Analyze the effect of iPhone manufacturing and assembly operations in India on the local industry.

- ### TECHNOLOGICAL AND CULTURAL IMPLICATIONS:

Explore how the iPhone has influenced technological trends in India, such as mobile app development, 4G/5G adoption, and mobile payments.Investigate the cultural impact of iPhones on communication, entertainment, and social interactions in Indian society.

- ### COMPETITIVE LANDSCAPE:

Assess the competitive landscape in the Indian smartphone market, including the rivalry between Apple and other major smartphone manufacturers.
Examine strategies employed by competitors to counter Apple's iPhone.

- ### REGIONAL VARIATIONS:

Identify regional variations in iPhone adoption and usage patterns within India. Highlight specific states or cities where iPhones are particularly popular.

- ### APP ECOSYSTEM AND DEVELOPER COMMUNITY:

Explore the growth of the Apple App Store in India, including the number of Indian-developed apps and popular app categories.
Analyze the contributions of the Indian developer community to the global app ecosystem.

- ### CHALLENGES AND REGULATORY FACTORS:

Discuss challenges faced by Apple in the Indian market, such as regulatory hurdles, import tariffs, and local content requirements.
Evaluate how Apple has navigated these challenges.

- ### FUTURE TRENDS AND OUTLOOK:

Predict and discuss future trends in the Indian smartphone market, considering factors like 5G adoption, changing consumer preferences, and Apple's product roadmap for India.

- ### ETHICAL AND SOCIAL IMPLICATIONS:

Address ethical considerations related to Apple's business practices, labor conditions, and environmental impact in the Indian context.

Explore the social implications of increased iPhone adoption, including impacts on education, healthcare, and urbanization.

1.2 PURPOSE:

The project titled "iRevolution: A Data-Driven Exploration of Apple's iPhone Impact in India" has several valuable uses and applications across different sectors. Here are some of the key uses of the project:

- **Business Strategy and Decision-Making:**

  Apple and other smartphone manufacturers can utilize the insights to refine their marketing strategies, product offerings, and pricing strategies in the Indian market.

- **Market Research and Analysis:**

  Market research firms and analysts can use the project's findings to provide valuable market insights to businesses, investors, and policymakers.

- **Investment Decisions:**

  Investors and financial analysts can make informed decisions about investing in Apple or related industries based on the project's assessment of Apple's performance and growth potential in India.

- **Policy Formulation:**

  Policymakers and government bodies can use the analysis to develop or adapt policies related to technology, manufacturing, taxation, and trade that encourage foreign investment and innovation.

- **Educational and Research Purposes:**

  Educational institutions can use the project as a valuable case study for business, economics, and data science courses, promoting research and discussion.

- **Consumer Insights:**

  Consumer behavior analysis can help businesses understand the preferences and needs of Indian consumers, leading to improved product design and marketing strategies.

- **Global Supply Chain Management:**

  Companies involved in the global supply chain, including component manufacturers and logistics firms, can assess the impact of Apple's operations in India on their businesses.

- **Technology Ecosystem Development:**

  The analysis can highlight the growth of the app ecosystem, app developers' contributions, and the potential for further technology ecosystem development in India.

- **Cultural and Societal Impact:**

  Researchers and cultural analysts can examine the cultural and societal changes brought about by the widespread adoption of iPhones in India.

- **Competitive Analysis:**

  Competitors in the smartphone market can use the project's insights to strategize and better position themselves in the Indian market.

- **Environmental Impact Assessment:**

The project can be used to evaluate the environmental implications of Apple's manufacturing and operations in India, promoting sustainability efforts.

- **Strategic Partnerships and Alliances:**

  Businesses in related industries, such as telecommunications providers and software developers, can explore potential collaborations and alliances with Apple based on the findings.

- **Consumer Advocacy and Awareness:**

  Consumer advocacy groups and organizations can use the project's insights to educate consumers about the implications of their technology choices and encourage responsible consumption.
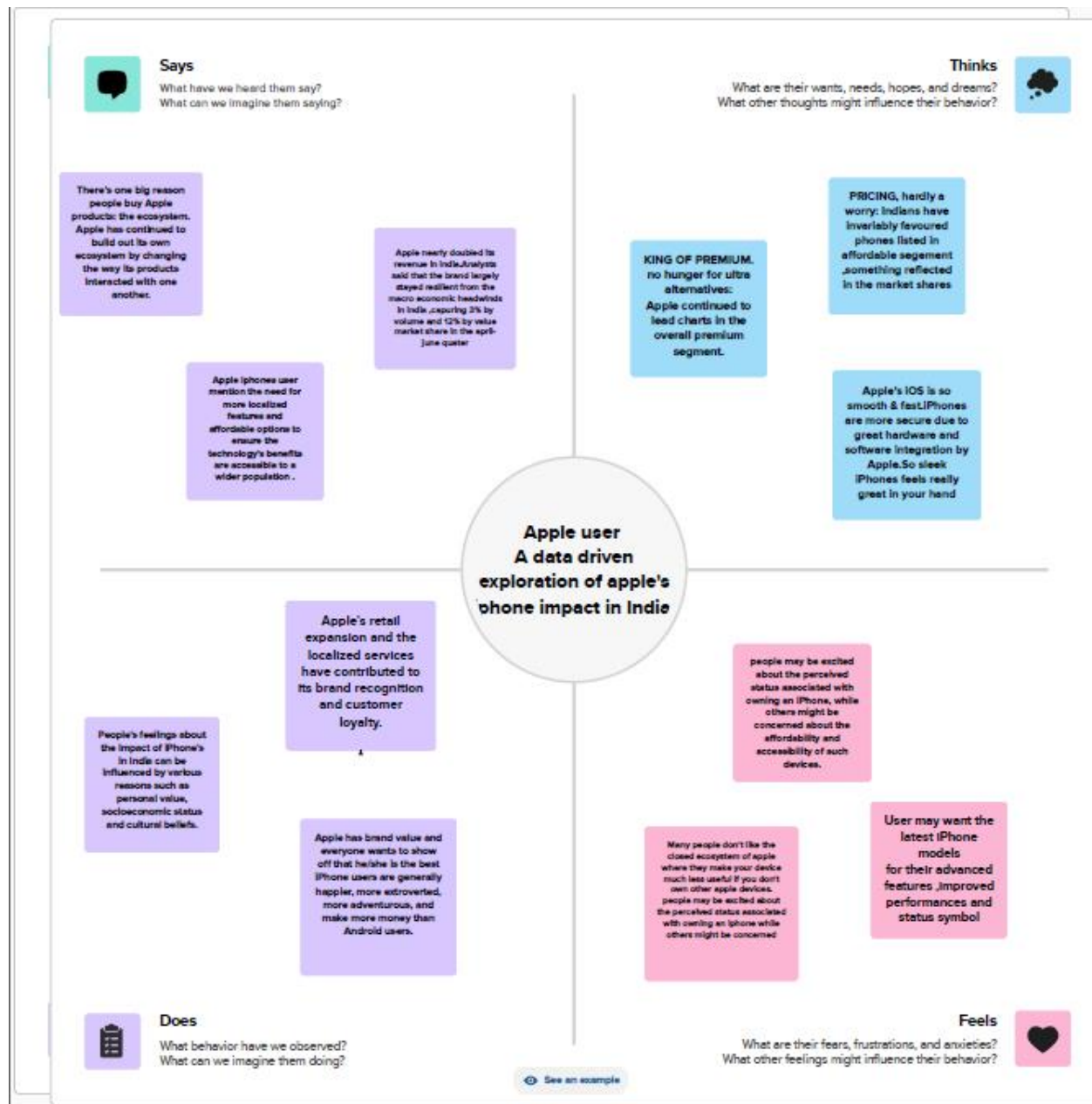
- **Media and Journalism:**

  Journalists and media organizations can use the project's data and insights to produce articles, reports, and documentaries about Apple's impact in India.

  This project serves as a valuable resource for a wide range of stakeholders, offering data-driven insights into the impact of Apple's iPhone in India's business, economic, cultural, and technological landscape. It provides a comprehensive understanding of how the iPhone has influenced India and the opportunities and challenges it presents.

PROBLEM DEFINTION AND DESIGN THINKING:

1.1 EMPATHY MAP:

Says
What have we heard them say?
What can we imagine them saying?

Thinks
What are their wants, needs, hopes, and dreams?
What other thoughts might influence their behavior?

There's one big reason people buy Apple products: the ecosystem. Apple has continued to build out its own ecosystem by changing the way its products interacted with one another.

Apple nearly doubled its revenue in India.Analysts said that the brand largely stayed resilient from the macro economic headwinds in India ,capuring 3% by volume and 12% by value market share in the april-june quater

PRICING, hardly a worry: Indians have invariably favoured phones listed in affordable segment ,something reflected in the market shares

KING OF PREMIUM. no hunger for ultra alternatives: Apple continued to lead charts in the overall premium segment.

Apple iphones user mention the need for more localized features and affordable options to ensure the technology's benefits are accessible to a wider population .

Apple's iOS is so smooth & fast.iPhones are more secure due to great hardware and software integration by Apple.So sleek iPhones feels really great in your hand

Apple user A data driven exploration of apple's phone impact in India

Apple's retail expansion and the localized services have contributed to its brand recognition and customer loyalty.

People's feelings about the impact of iPhone's in India can be influenced by various reasons such as personal value, socioeconomic status and cultural beliefs.

people may be excited about the perceived status associated with owning an iPhone, while others might be concerned about the affordability and accessibility of such devices.

Apple has brand value and everyone wants to show off that he/she is the best iPhone users are generally happier, more extroverted, more adventurous, and make more money than Android users.

Many people don't like the closed ecosystem of apple where they make your device much less useful if you don't own other apple devices. people may be excited about the perceived status associated with owning an iphone while others might be concerned

User may want the latest iPhone models for their advanced features ,improved performances and status symbol

Does
What behavior have we observed?
What can we imagine them doing?

Feels
What are their fears, frustrations, and anxieties?
What other feelings might influence their behavior?

See an example

1.2   IDEATION AND BRAIN STORMING MAP:

1. Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

PROBLEM
The data-driven exploration of the impact of Apple iPhone in India aims to comprehensively analyze and understand the multifaceted effects of Apple's flagship product, the iPhone, on the Indian market, economy, society, and consumer behavior.

Key rules of brainstorming
To run an smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.

2. Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

TIP
You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

v.s.sara

- Apple can introduce more budget-friendly iPhone models specifically designed for the Indian market. These models should offer essential features and performance at a lower price point.
- Increase local manufacturing to reduce production costs and pass on the savings to consumers. This can also help in avoiding import duties.
- Implement financing options that allow consumers to purchase iPhone through monthly installments, making them more affordable. Offer trade-in programs where consumers can exchange their old smartphones for a discount on a new iPhone.

S.Rajeshwari

- Collaborate with Indian telecom operators to offer bundled packages, including iPhones with data plans, at more attractive prices.
- Increase the availability of iPhones in smaller towns and rural areas, not just in metropolitan cities, to reach a wider audience.
- Develop and promote localized content and services that cater to Indian users, making iPhones more appealing.

J.Vasantha Mary

- Increasing local manufacturing of iPhone can help reduce costs due to import taxes and boost job creation,making the product more affordable
- Emphasizing Apple's ecosystem of services like Apple Music, iCloud, and the App store can enhance the overall value
- Working closely Indian app developers to create apps that cater to local needs can enhance the overall user experience.

K.Riswanul Janna

- Partner with Indian corporations and government agencies to provide iPhones to employees or students at discounted rates, promoting broader adoption.
- Engage in community outreach programs to educate potential customers about the benefits of iPhones and how they can be integrated into their daily lives.
- Launch educational initiatives to promote digital literacy and smartphone usage among underserved communities. This can create a larger market for iPhones over time.

R.Shifana fathima

- Implement Corporate Social Responsibility (CSR) programs focused on technology access and digital education in underserved areas.
- Recognize that increasing market share and accessibility may take time. Apple should be committed to long-term investment in the Indian market.
- Advocate for favorable policies that promote the growth of the smartphone market, reduce import tariffs, and encourage local manufacturing.

3. Group Ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

20 minutes

TIP
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

4. Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

TIP
Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the H key on the keyboard.

Importance — If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

Share the mural
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.

Export the mural
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

Keep moving forward

Strategy blueprint
Define the components of a new idea or strategy.
Open the template →

Customer experience journey map
Understand customer needs, motivations, and obstacles for an experience.
Open the template →

Strengths, weaknesses, opportunities & threats
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.
Open the template →

Share template feedback

RESULT:

Finial findings (output) of the project along with screenshots

DASHBOARD 1:
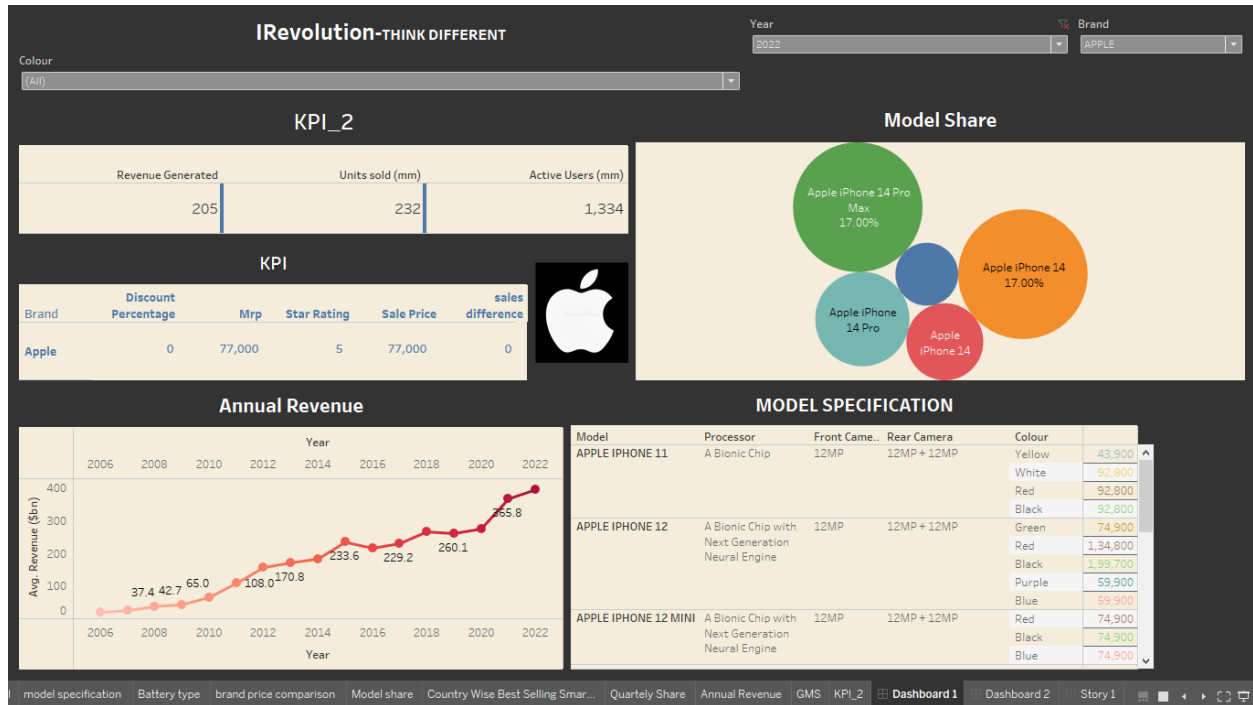
LINK FOR DASHBOARD 1:

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DASHBOARD 2:

LINK FOR DASHBOARD 2:

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STORY:

ne smartphone market. The brand has ... e top 10 most sold smartphone ...

More than 1 billion consumers currently use iphones.Since its initial launch,more than 1.9 billion have been sold. iphone sales in 2021 surpassed the 2015 peek but declined in 2022 to 232.2 million units
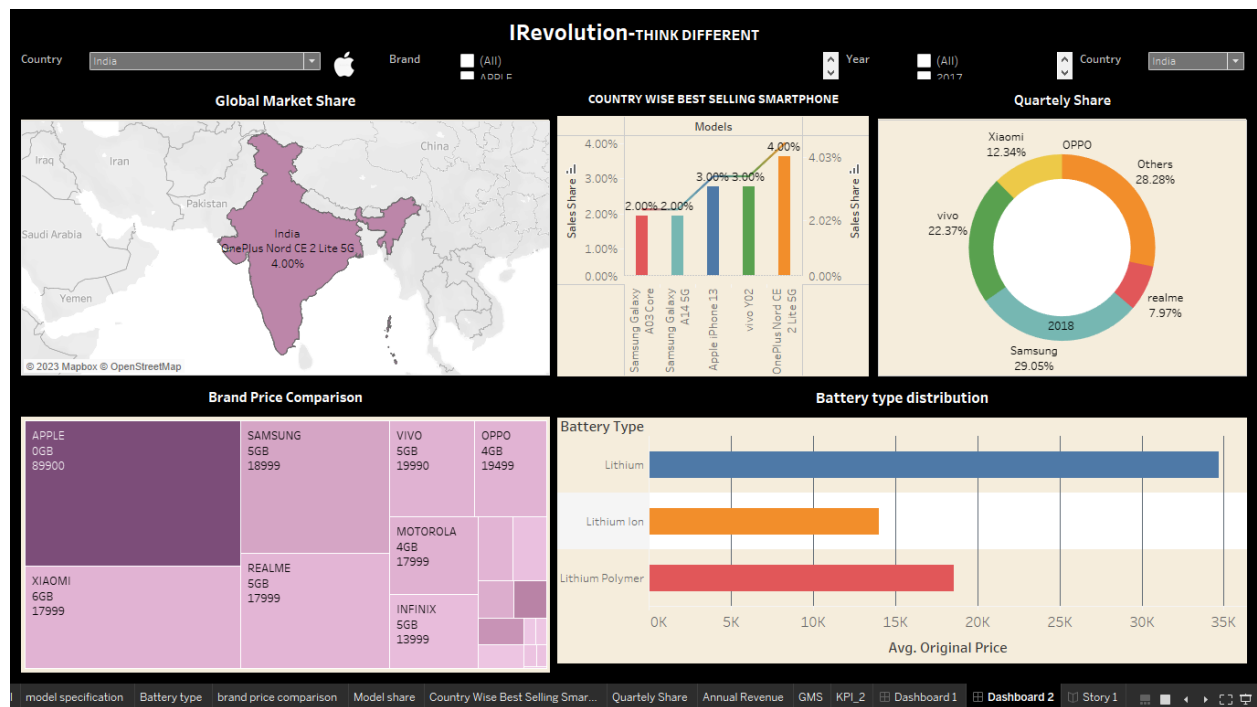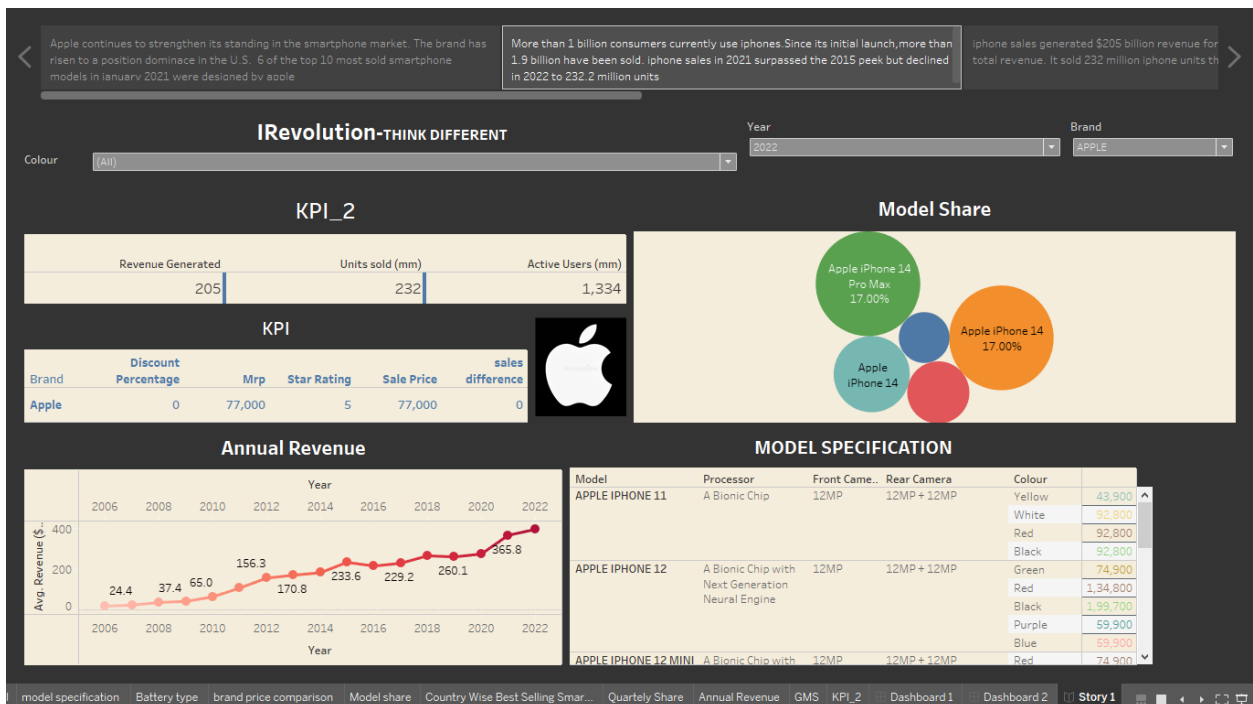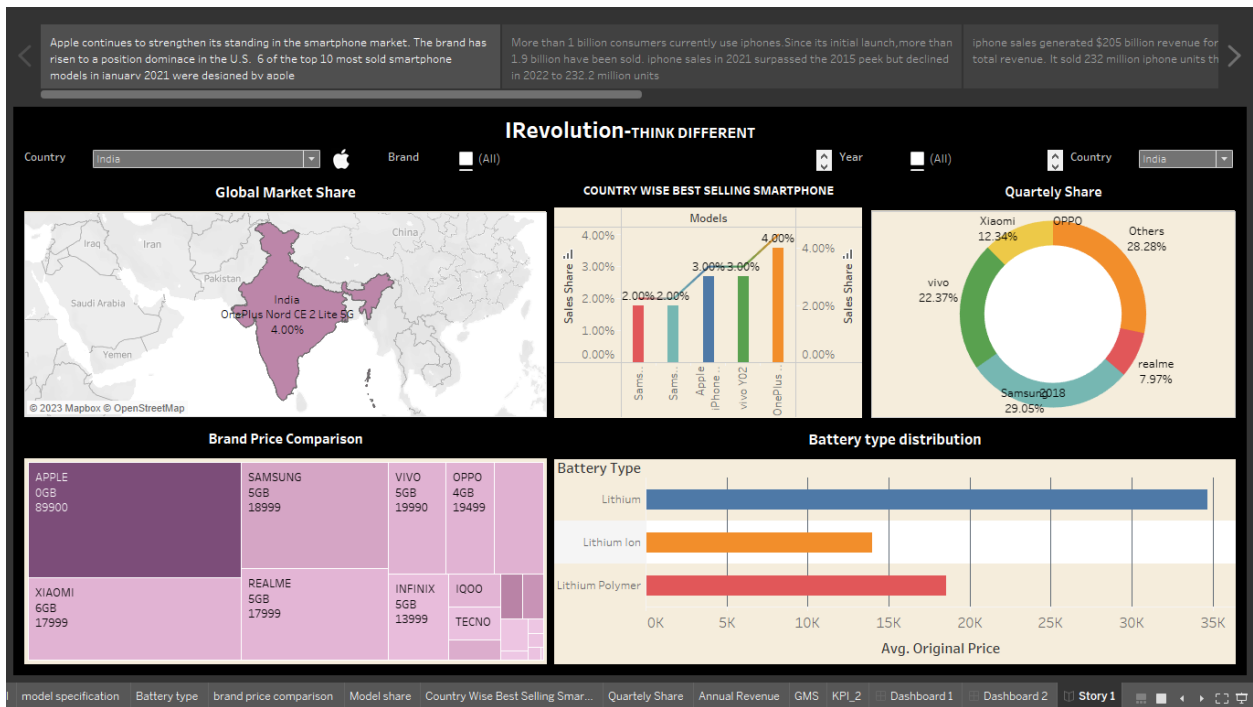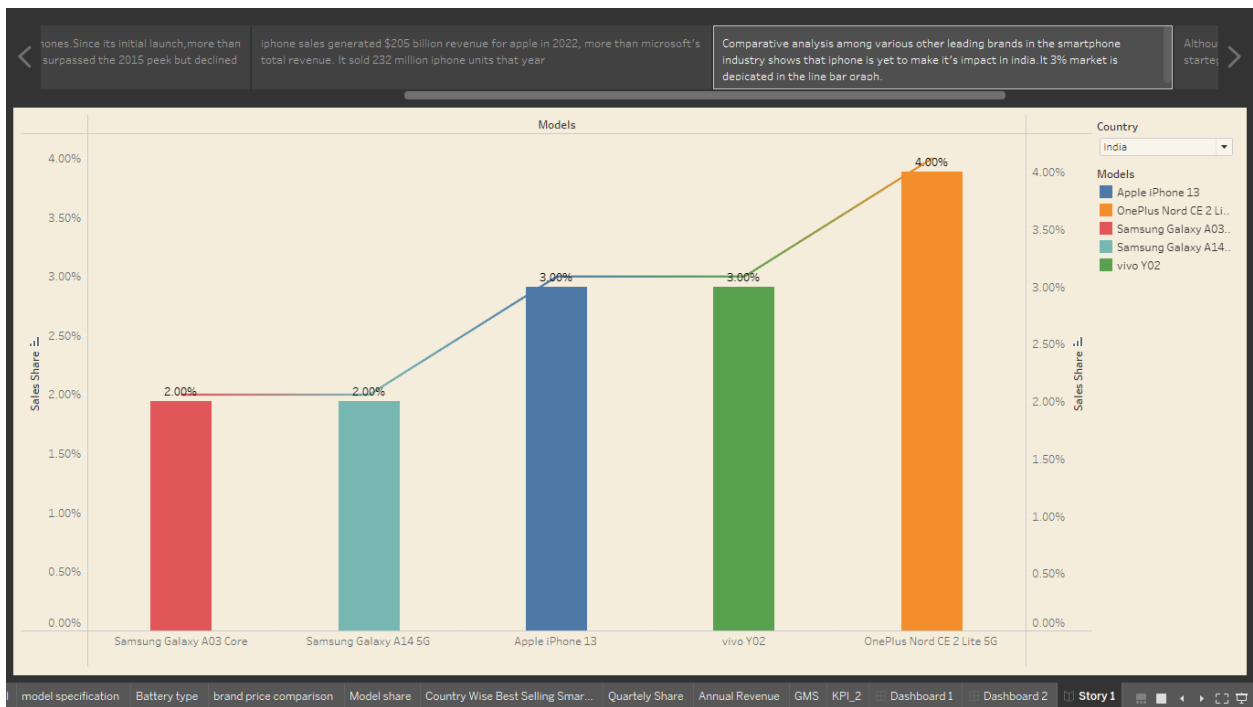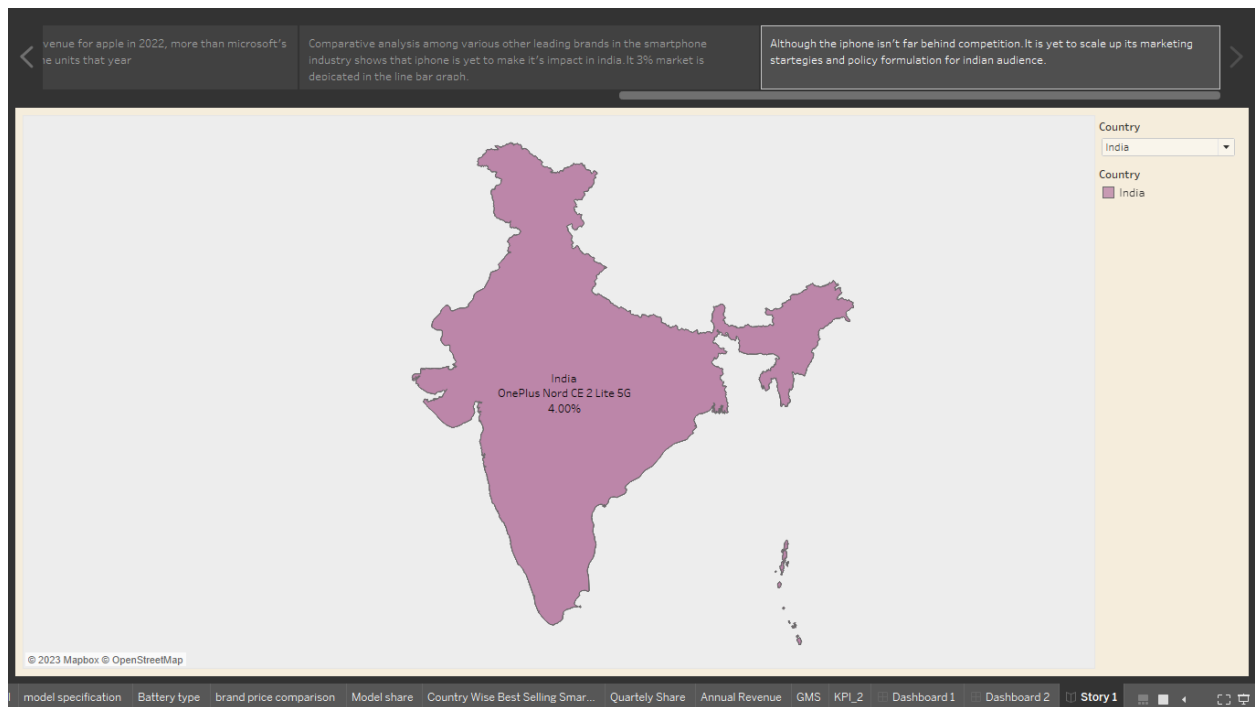
iphone sales generated $205 billion revenue for apple in 2022, more than microsoft's total revenue. It sold 232 million iphone units that year

Compa... indust... deoica...

Year

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Year
2006 ▮▮▮ 2022

400

350

300

250

200

150

100

50

0

Avg. Revenue ($bn)

19.1   24.4 37.4   42.7   65.0   108.0   156.3   170.8   182.6   233.6   215.4   229.2   265.5   260.1   274.5   365.8   394.3

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Year

ones.Since its initial launch,more than ... surpassed the 2015 peek but declined

iphone sales generated $205 billion revenue for apple in 2022, more than microsoft's total revenue. It sold 232 million iphone units that year

Comparative analysis among various other leading brands in the smartphone industry shows that iphone is yet to make it's impact in india.It 3% market is deoicated in the line bar graph.

Althou... startep...

Models

Country
India ▾

Models
▮ Apple iPhone 13
▮ OnePlus Nord CE 2 Li..
▮ Samsung Galaxy A03..
▮ Samsung Galaxy A14..
▮ vivo Y02

4.00%

3.50%

3.00%

2.50%

2.00%

1.50%

1.00%

0.50%

0.00%

Sales Share

2.00%   2.00%   3.00%   3.00%   4.00%

Samsung Galaxy A03 Core   Samsung Galaxy A14 5G   Apple iPhone 13   vivo Y02   OnePlus Nord CE 2 Lite 5G

4.00%

3.50%

3.00%

2.50%

2.00%

1.50%

1.00%

0.50%

0.00%

Sales Share

LINK FOR STORY:

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ADVANTAGES AND DISADVANTAGES :

Analyzing the impact of Apple's iPhone in India through a data-driven exploration, such as "iRevolution," comes with its own set of advantages and disadvantages:

Advantages:

- **Informed Decision-Making:**

  Provides valuable insights for Apple, businesses, investors, and policymakers to make informed decisions regarding market strategies, investments, and policies.

- **MARKET UNDERSTANDING:**

    Enhances the understanding of consumer behavior and preferences in the Indian smartphone market, helping businesses tailor their products and services.

- **ECONOMIC IMPACT:**

    Offers a comprehensive view of the economic impact of iPhone operations in India, including contributions to GDP, job creation, and tax revenues.

- **TECHNOLOGICAL ECOSYSTEM:**

    Highlights the growth of the app ecosystem, which can benefit both app developers and users, and provides insights into the trends shaping it.

- **CULTURAL INSIGHTS:**

    Provides insights into how the iPhone has influenced Indian culture, social norms, and digital behavior.

- **COMPETITIVE ANALYSIS:**

    Assists competitors in understanding and strategizing against Apple's market presence, fostering healthy competition.

- **CONSUMER AWARENESS:**

    Educates consumers about the implications of their technology choices, fostering more informed and responsible consumption.

- **ACADEMIC AND RESEARCH VALUE:**

    Offers valuable data and insights for academic research in fields such as economics, technology, and cultural studies.

- **ETHICAL CONSIDERATIONS:**

  Raises awareness of ethical issues, such as data privacy, labor conditions, and environmental impact associated with Apple's operations in India.

DISADVANTAGES:

- **DATA PRIVACY AND ETHICS:**

  Handling and analyzing personal data, including user behavior and preferences, must be done with strict adherence to privacy and ethical standards.

- **COMPLEXITY AND RESOURCES:**

  Conducting a comprehensive data-driven analysis of this magnitude requires substantial resources, expertise, and time.

- **DATA AVAILABILITY AND ACCURACY:**

  Availability of accurate and up-to-date data may be limited, potentially leading to gaps in the analysis.

- **MARKET VOLATILITY:**

  The rapidly changing technology and consumer markets can make it challenging to predict future trends accurately.

- **BIAS AND SUBJECTIVITY:**

  The analysis may unintentionally introduce biases or subjectivity, particularly in interpreting consumer behavior or cultural impacts.

- **REGULATORY CHALLENGES:**

  Apple's operations in India may be subject to complex regulatory challenges, which can affect the accuracy of the analysis.

- ## Changing Landscape:

  The tech industry and consumer behavior are highly dynamic, making it challenging to keep the analysis up-to-date.

- ## Complexity of Causal Relationships:

  Establishing clear cause-and-effect relationships between iPhone adoption and various outcomes can be challenging due to multiple influencing factors.

- ## Data Security:

  Safeguarding sensitive data used in the analysis is critical to prevent breaches and privacy violations.

- ## Interpreting Cultural Impact:

  The interpretation of cultural impacts may vary, and it can be challenging to attribute changes directly to the iPhone's influence.

  In summary, while a data-driven exploration of Apple's iPhone impact in India can yield valuable insights, it also requires careful consideration of data ethics, resource allocation, and the complex, ever-evolving nature of technology markets. Ethical and responsible analysis is paramount in such studies.

APPLICATION :

The area where the solution can be applied for A DATA DRIVEN EXPLORATION OF APPLE'S IPHONE IMPACT IN INDIA

A data-driven exploration of Apple's iPhone impact in India, such as "iRevolution," has numerous applications and can be beneficial to various stakeholders:

- ## Apple's Business Strategy:

Apple can use the insights to refine its business strategies, including product offerings, pricing, and marketing, to better cater to the Indian market.

- **Investment Decisions:**

    Investors and financial analysts can make informed decisions about investing in Apple or related industries based on the analysis of Apple's performance and growth potential in India.

- **Market Research and Analysis:**

    Market research firms can leverage the findings to provide valuable market insights to businesses, investors, and policymakers.

- **Policymaking and Government Initiatives:**

    Policymakers can use the analysis to develop or adapt technology and trade policies to encourage foreign investment and innovation in India.

- **Consumer Behavior Analysis:**

    Businesses can gain a deeper understanding of consumer behavior regarding iPhone adoption in India, allowing for more effective marketing and product design.

- **Economic Impact Assessment:**

    Evaluate the economic impact of Apple's presence in India, including contributions to GDP, employment, and tax revenues.

- **Technological Ecosystem Development:**

    Explore the growth of the app ecosystem, identifying opportunities for app developers and technology startups in India.

- **Cultural and Societal Influence:**

  Researchers and cultural analysts can investigate how iPhones have influenced Indian culture, social interactions, and digital behavior.

- **Competitive Analysis:**

  Competing smartphone manufacturers can use the analysis to better understand Apple's position in the Indian market and strategize accordingly.

- **Ethical Considerations:**

  Address ethical concerns related to data privacy, labor conditions, and environmental impact associated with Apple's operations in India.

- **Media and Journalism:**

  Journalists and media organizations can utilize the project's data and insights to produce articles, reports, and documentaries about Apple's impact in India.

- **Academic and Educational Use:**

  Educational institutions can use the project as a case study for business, economics, and data science courses, fostering research and discussion.

- **Strategic Partnerships and Alliances:**

  Businesses in related industries, such as telecommunications providers and software developers, can explore potential collaborations with Apple based on the findings.

- **CONSUMER ADVOCACY AND AWARENESS:**

Consumer advocacy groups and organizations can use the project's insights to educate consumers about the implications of their technology choices.

- **BUSINESS EXPANSION AND LOCATION DECISIONS:**

Apple and other businesses can consider the analysis when making decisions about expanding operations or opening new stores in India.

- **TECHNOLOGY TREND ANALYSIS:**

Technology companies can analyze the impact of iPhones on broader technology trends in India, such as mobile app development and digital payments.

- **ENVIRONMENTAL ASSESSMENT:**

Evaluate the environmental implications of Apple's manufacturing and operations in India, promoting sustainability efforts.

- **SOCIAL AND CULTURAL RESEARCH:**

Researchers in social sciences can use the analysis to investigate the social and cultural changes brought about by widespread iPhone adoption.

The applications of a data-driven exploration of Apple's iPhone impact in India are diverse and span various sectors, offering valuable insights into technology adoption, economic development, consumer behavior, and more.

CONCLUSION:

The impact of the iPhone in India has been significant since its introduction. It has revolutionized the smartphone market, influencing consumer preferences, technological advancements, and economic growth. The adoption of iPhones in India has led to increased access to advanced technology, improved connectivity, and enhanced productivity for many individuals and businesses. Additionally, it has spurred the growth of the app ecosystem and contributed to the country's digital transformation. However, challenges such as affordability and competition from Android devices continue to shape the iPhone's impact in India. In conclusion, the iPhone has had a transformative influence on India's technology landscape, and its effects are likely to continue evolving in the future.

FUTURE SCOPE:

The future scope for enhancing a data-driven exploration of Apple's iPhone impact in India, such as "iRevolution," is vast, given the ever-evolving technology landscape and India's importance as a growing market. Here are areas where advancements and improvements can be made:

- **Advanced Data Sources:**
    Incorporate emerging data sources, such as IoT devices, social media sentiment analysis, and user-generated content, to gain deeper insights into consumer behavior and preferences.

- **Machine Learning and AI:**
    Utilize advanced machine learning algorithms and artificial intelligence to analyze large datasets, predict market trends, and personalize recommendations for users.

- **Natural Language Processing (NLP):**
    Apply NLP techniques to extract insights from user reviews, comments, and feedback, providing a more nuanced understanding of consumer sentiment.

- **Geospatial Analysis:**
    Explore the spatial distribution of iPhone adoption and usage, identifying regional variations and opportunities for targeted marketing and infrastructure development.

- **Supply Chain Analysis:**
    Investigate the supply chain impact of iPhone manufacturing in India, including its economic contributions and sustainability practices.

- **Consumer Behavior Models:**
    Develop sophisticated models to predict consumer behavior related to iPhone upgrades, app usage patterns, and loyalty trends.

- **Digital Inclusion Assessment:**
    Evaluate how iPhone adoption has contributed to digital inclusion and access to technology, especially in rural and underserved areas.

- **Impact on Local App Ecosystem:**
    Analyze the growth of the Indian app development ecosystem and its relationship with iPhone adoption, including app categories, user engagement, and monetization.

- **Sustainability and CSR Analysis:**
    Assess Apple's corporate social responsibility (CSR) efforts, environmental initiatives, and their influence on consumer choices and brand perception in India.

- **PRIVACY AND DATA SECURITY ANALYSIS:**
  Investigate consumer concerns and preferences related to data privacy and security, exploring the impact of regulatory changes and privacy features introduced by Apple.

- **ECONOMIC AND SOCIETAL IMPACT MODELING:**
  Develop models to quantify the broader economic and societal impact of iPhones in India, including job creation, tax revenues, and cultural influences.

- **GLOBAL MARKET INTEGRATION:**
  Analyze how the Indian market fits into Apple's global strategy and the interplay between local preferences and global product offerings.

- **E-COMMERCE AND M-COMMERCE TRENDS:**
  Study the role of iPhones in driving e-commerce and mobile commerce trends in India, including mobile payment adoption and online shopping behaviors.

- **CROSS-PLATFORM INTEGRATION:**
  Explore how Apple's ecosystem (iOS, macOS, watchOS, etc.) interacts with other technology platforms and services, both within and outside India.

- **PUBLIC POLICY INSIGHTS:**
  Collaborate with policymakers to provide insights into technology and trade policies that can promote innovation, investment, and digital infrastructure development in India.

- **MARKET EXPANSION STRATEGIES:**
  Analyze potential expansion strategies for Apple, including exploring new product categories, target segments, and geographic markets within India.

- ▪ **Interdisciplinary Collaboration:**

Foster collaboration between data scientists, economists, sociologists, and technology experts to gain a more comprehensive understanding of the iPhone's impact.

Long-Term Trends Analysis: Continue to monitor and analyze long-term trends in iPhone adoption, usage patterns, and market dynamics to provide ongoing insights.

The future of a data-driven exploration of Apple's iPhone impact in India holds significant potential for delivering deeper, more nuanced insights into consumer behavior, market trends, and the societal and economic implications of technology adoption. It can provide valuable guidance to Apple, policymakers, businesses, and researchers in navigating the evolving Indian tech landscape.

APPENDICES AND DATA SOURCES:

Include any supplementary data, charts, or additional information in the appendices. List all data sources and references used in the study.

LINK FOR DASHBOARD 1:

https://public.tableau.com/views/TABLEAUTABLE2/Dashboard1?:language=en-US&:display_count=n&:origin=viz_share_link

LINK FOR DASHBOARD 2:

https://public.tableau.com/views/dashboard2_16965777660910/Dashboard2?:language=en-US&:display_count=n&:origin=viz_share_link

LINK FOR STORY:
https://public.tableau.com/views/story_16965828503670/Story1?:language=en-US&:display_count=n&:origin=viz_share_link

THANK YOU