

# Flipkart Mobile Data Project Analysis

**NAME** : S.SINDHUJA

**BATCH NUMBER** : TN\_DA\_FNB07

**MOBILE NUMBER** : +91 967786045

**MAIL ID** : [sindhujadurai21@gmail.com](mailto:sindhujadurai21@gmail.com)

**PROJECT NAME** : Flipkart Mobile Data Analysis

**PROJECT DOMAIN** : E-Commerce

**SUBMISSION DATE** : December 10,2025

**MENTOR NAME** : KUMURAN M

## RAW DATASET LINK :

<https://github.com/Sindhuja-durai/Flikart-Mobile-Data-Project-Analysis/blob/main/RAW%20DATASET.xlsx>

## CLEANED DATASET LINK:

<https://github.com/Sindhuja-durai/Flikart-Mobile-Data-Project-Analysis/blob/main/CLEANED%20DATASET.xlsx>

# INDEX

| <b>TITLE</b>  | <b>PAGE NUMBER</b> |
|---|--------------------|
| <b>1.Project Overview</b>                                     | <b>03</b>          |
| <b>2.Purpose of the Project</b>                               | <b>03</b>          |
| <b>3.Mission Statement</b>                                    | <b>03</b>          |
| <b>4.Project Objectives</b>                                   | <b>03</b>          |
| <b>5.Dataset Description</b>                                  | <b>04</b>          |
| <b>6.Data Cleaning<br/>Process (Excel )</b>                   | <b>05-07</b>       |
| <b>7.Data Transformation<br/>Steps</b>                        | <b>08-09</b>       |
| <b>8.Calculated Columns &amp;<br/>Measures</b>                | <b>10-17</b>       |
| <b>9.Dashboard Planning &amp;<br/>Visualization Blueprint</b> | <b>18-20</b>       |
| <b>10.Insights &amp; Key<br/>Findings</b>                     | <b>20</b>          |
| <b>11.Conclusion</b>  | <b>21</b>          |
| <b>12.Future<br/>Enhancements</b>                             | <b>21</b>          |

# **1. PROJECT OVERVIEW**

This project analyzes Flipkart mobile phone listings to understand market trends in price, features, brand presence, 5G adoption, ratings, and discounts.

The goal is to convert raw data into a professional, interactive dashboard that supports data-driven decision-making.

## **2. PURPOSE OF THE PROJECT**

The purpose of this project is to:

- Organize raw Flipkart data into a clean, structured dataset
- Identify mobile market trends
- Build Excel and Power BI dashboards
- Provide insights for buyers, sellers, and market analysts
- Demonstrate end-to-end data analytics workflow

## **3. MISSION STATEMENT**

“To transform raw e-commerce mobile data into meaningful insights using Excel and Power BI for better understanding of pricing trends, brand performance, and feature adoption.”

## **4. PROJECT OBJECTIVES**

### **Business Objectives**

- Identify top-performing mobile brands
- Understand price range distribution
- Compare 5G vs Non-5G mobile availability
- Analyze discount and rating patterns
- Evaluate storage and battery trends

## **Technical Objectives**

- Clean and standardize dataset in Excel
- Build DAX measures for analysis
- Create professional interactive dashboards
- Deliver actionable insights

## **5. DATASET DESCRIPTION**

The dataset includes the following key columns:

- Mobile Name
- Brand
- Price
- Rating
- Reviews
- RAM
- Battery
- 5G Support
- Discount Price
- Display
- Camera

## 6. DATA CLEANING PROCESS (EXCEL)

### Excel Cleaning Steps

- ✓ Remove extra spaces
- ✓ Extract Brand from Mobile Name
- ✓ Standardize Storage (64/128/256 GB)
- ✓ Create Discount price categories
- ✓ Get 5G and Not 5G ranges using Mobile Brand
- ✓ Extract numeric values from rating/reviews

### Useful Excel Formulas

- Using `=LEFT(A2, FIND(" ",A2)-1)` separate Mobile name into individual Mobile Brand.

**BEFORE**

| Name  |
|---|
| SAMSUNG Galaxy F14 5G (B.A.E. Purple, 128 GB) |
| SAMSUNG Galaxy F14 5G (GOAT Green, 128 GB)    |
| OnePlus Nord CE 2 Lite 5G (Blue Tide, 128 GB) |
| SAMSUNG Galaxy F14 5G (OMG Black, 128 GB)     |
| vivo T2x 5G (Glimmer Black, 128 GB)           |
| APPLE iPhone 14 (Starlight, 128 GB)           |
| REDMI 12 (Jade Black, 128 GB)                 |
| POCO C55 (Cool Blue, 128 GB)                  |
| REDMI 12C (Lavender Purple, 64 GB)            |

**AFTER**

| A            |
|--------------|
| Mobile Brand |
| SAMSUNG      |
| SAMSUNG      |
| OnePlus      |
| SAMSUNG      |
| vivo         |
| APPLE        |
| REDMI        |
| POCO         |
| REDMI        |

- Using Delimiter Space **RAM,ROM,DISPLAY,CAMERA,BATTERY** are separated into individual columns and applied **Numeric Values**.

|   | Ram  | Display                                      | Camera                                   | Battery                       | Processor  |
|---|--|--|--|-------------------------------|--|
| 2 | 6 GB RAM   128 GB ROM   Expandable Upto 1 TB | 16.76 cm (6.6 inch) Full HD+ Display         | 50MP + 2MP   13MP Front Camera           | 6000 mAh Battery              | Exynos 1330, Octa Core Processor                           |
| 3 | 6 GB RAM   128 GB ROM   Expandable Upto 1 TB | 16.76 cm (6.6 inch) Full HD+ Display         | 50MP + 2MP   13MP Front Camera           | 6000 mAh Battery              | Exynos 1330, Octa Core Processor                           |
| 4 | 6 GB RAM   128 GB ROM                        | 16.74 cm (6.59 inch) Display                 | 64MP Rear Camera   16MP Front Camera     | 5000 mAh Battery              | 12 Months  |
| 5 | 6 GB RAM   128 GB ROM   Expandable Upto 1 TB | 16.76 cm (6.6 inch) Full HD+ Display         | 50MP + 2MP   13MP Front Camera           | 6000 mAh Battery              | Exynos 1330, Octa Core Processor                           |
| 6 | 6 GB RAM   128 GB ROM                        | 16.71 cm (6.58 inch) Full HD+ Display        | 50MP + 2MP   8MP Front Camera            | 5000 mAh Battery              | Dimensity 6020 Processor                                   |
| 7 | 128 GB ROM                                   | 15.49 cm (6.1 inch) Super Retina XDR Display | 12MP + 12MP   12MP Front Camera          | Bionic Chip, 6 Core Processor | Warranty for Phone and 6 Months Warranty for In-Box Access |
| 8 | 6 GB RAM   128 GB ROM   Expandable Upto 1 TB | 17.25 cm (6.79 inch) Full HD+ Display        | 50MP + 8MP + 2MP   8MP Front Camera      | 5000 mAh Battery              | Helio G88 Processor  |
| 9 | 6 GB RAM   128 GB ROM   Expandable Upto 1 TB | 17.04 cm (6.71 inch) HD+ Display             | 50MP Dual Rear Camera   5MP Front Camera | 5000 mAh Battery              | Mediatek Helio G85 Processor                               |
| 0 | 4 GB RAM   64 GB ROM   Expandable Upto 1 TB  | 17.04 cm (6.71 inch) HD+ Display             | 50MP Rear Camera   5MP Front Camera      | 5000 mAh Battery              | Helio G85 Processor  |
| 1 | 6 GB RAM   128 GB ROM                        | 16.71 cm (6.58 inch) Full HD+ Display        | 50MP + 2MP   8MP Front Camera            | 5000 mAh Battery              | Dimensity 6020 Processor                                   |
| 2 | 8 GB RAM   128 GB ROM                        | 16.71 cm (6.58 inch) Full HD+ Display        | 50MP + 2MP   8MP Front Camera            | 5000 mAh Battery              | Dimensity 6020 Processor                                   |
| 3 | 8 GB RAM   128 GB ROM                        | 16.71 cm (6.58 inch) Full HD+ Display        | 50MP + 2MP   8MP Front Camera            | 5000 mAh Battery              | Dimensity 6020 Processor                                   |
| 4 | 4 GB RAM   128 GB ROM                        | 16.71 cm (6.58 inch) Full HD+ Display        | 50MP + 2MP   8MP Front Camera            | 5000 mAh Battery              | Dimensity 6020 Processor                                   |

| Ram  | Rom    | Display | Camera                 | Battery  |
|------|--------|---------|------------------------|----------|
| 6 GB | 128 GB | 16.76cm | 50MP + 2MP   13MP      | 6000 mAh |
| 6 GB | 128 GB | 16.76cm | 50MP + 2MP   13MP      | 6000 mAh |
| 6 GB | 128 GB | 16.74cm | 64MP   16MP            | 5000 mAh |
| 6 GB | 128 GB | 16.76cm | 50MP + 2MP   13MP      | 6000 mAh |
| 6 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 8 GB | 128 GB | 15.49cm | 12MP + 12MP   12MP     | 5000 mAh |
| 6 GB | 128 GB | 17.25cm | 50MP + 8MP + 2MP   8MP | 5000 mAh |
| 6 GB | 128 GB | 17.04cm | 50MP   5MP             | 5000 mAh |
| 4 GB | 64 GB  | 17.04cm | 50MP   5MP             | 5000 mAh |
| 6 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 8 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 8 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 4 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 4 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 4 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 4 GB | 64 GB  | 16.56cm | 8MP   5MP              | 5000 mAh |
| 4 GB | 128 GB | 17.25cm | 50MP + 8MP + 2MP   8MP | 5000 mAh |
| 4 GB | 64 GB  | 16.51cm | 13MP + 2MP   5MP       | 5000 mAh |
| 6 GB | 128 GB | 17.25cm | 50MP + 8MP + 2MP   8MP | 5000 mAh |

- Using Star,Ratings,Reviews Value as separated columns and applied **Numeric Values**.

**Before**

| Stars | Ratings          | Reviews        |
|-------|------------------|----------------|
| 4.2   | 65,587 Ratings   | 4,599 Reviews  |
| 4.2   | 65,587 Ratings   | 4,599 Reviews  |
| 4.4   | 1,33,702 Ratings | 9,324 Reviews  |
| 4.2   | 65,587 Ratings   | 4,599 Reviews  |
| 4.4   | 2,45,230 Ratings | 13,393 Reviews |
| 4.6   | 2,31,506 Ratings | 8,887 Reviews  |
| 4.2   | 22,389 Ratings   | 1,569 Reviews  |
| 4.2   | 85,891 Ratings   | 5,085 Reviews  |
| 4.2   | 9,001 Ratings    | 482 Reviews    |
| 4.4   | 2,45,230 Ratings | 13,393 Reviews |
| 4.3   | 49,056 Ratings   | 2,898 Reviews  |
| 4.3   | 49,056 Ratings   | 2,898 Reviews  |

**After**

| Star: | Ratings  | Reviews |
|-------|----------|---------|
| 4.2   | 65,587   | 4,599   |
| 4.2   | 65,587   | 4,599   |
| 4.4   | 1,33,702 | 9,324   |
| 4.2   | 65,587   | 4,599   |
| 4.4   | 2,45,230 | 13,393  |
| 4.6   | 2,31,506 | 8,887   |
| 4.2   | 22,389   | 1,569   |
| 4.2   | 85,891   | 5,085   |
| 4.2   | 9,001    | 482     |
| 4.4   | 2,45,230 | 13,393  |
| 4.3   | 49,056   | 2,898   |
| 4.3   | 49,056   | 2,898   |
| 4.4   | 1,26,853 | 6,707   |
| 4.4   | 1,26,853 | 6,707   |
| 4.4   | 1,26,853 | 6,707   |
| 4     | 1,29,671 | 7,248   |

- (Ctrl + H) Replace ₹ - INTO - (₹ )RUPEES using Discount formula [B2-(0.1\*B2)] into separate column as “DISCOUNT PRICE”

| Price    | Price    | Discount Price |
|----------|----------|----------------|
| ₹ 14,990 | ₹ 14,990 | ₹ 13,491       |
| ₹ 14,990 | ₹ 14,990 | ₹ 13,491       |
| ₹ 16,990 | ₹ 16,990 | ₹ 15,291       |
| ₹ 14,990 | ₹ 14,990 | ₹ 13,491       |
| ₹ 12,999 | ₹ 12,999 | ₹ 11,699       |
| ₹ 61,999 | ₹ 61,999 | ₹ 55,799       |
| ₹ 10,499 | ₹ 10,499 | ₹ 9,449        |
| ₹ 7,999  | ₹ 7,999  | ₹ 7,199        |
| ₹ 6,799  | ₹ 6,799  | ₹ 6,119        |
| ₹ 12,999 | ₹ 12,999 | ₹ 11,699       |

- Using =IF(ISNUMBER(SEARCH("5G", B2)), "5G", "Not 5G") got a

“5G Support Column” with two separate ranges as 5G and Not 5G in the column .

| A  | B            | C              |            |
|----|--------------|----------------|------------|
| 1  | Mobile Brand | Model          | 5G Support |
| 2  | SAMSUNG      | Galaxy F14     | 5G         |
| 3  | SAMSUNG      | Galaxy F14     | 5G         |
| 4  | OnePlus      | Nord CE 2 Lite | 5G         |
| 5  | SAMSUNG      | Galaxy F14     | 5G         |
| 6  | vivo         | T2x            | 5G         |
| 7  | APPLE        | iPhone 14      | Not 5G     |
| 8  | REDMI        | 12             | Not 5G     |
| 9  | POCO         | C55            | Not 5G     |
| 10 | REDMI        | 12C            | Not 5G     |
| 11 | vivo         | T2x            | 5G         |
| 12 | vivo         | T2x            | 5G         |
| 13 | POCO         | C51            | 5G         |
| 14 | REDMI        | 12             | 5G         |
| 15 | SAMSUNG      | Galaxy F04     | 5G         |
| 16 | REDMI        | 12             | 5G         |
| 17 | REDMI        | 12C            | Not 5G     |
| 18 | SAMSUNG      | Galaxy F04     | Not 5G     |
| 19 | APPLE        | iPhone 12      | Not 5G     |
| 20 | POCO         | M5             | Not 5G     |
| 21 | REDMI        | 12C            | Not 5G     |

# DATA VISUALIZATION USING POWER BI

## 7. DATA TRANSFORMATION IN POWER BI

### Key Steps

- Load the Cleaned Dataset in Power Query with 4 Tables
- Table1 as “Cleaned Dataset”.
- Table 2 as “Price Values”.
- Table 3 as “Feedback Values”.
- Table 4 as “Mobile Memory Values”.

The screenshot shows the Power Query Editor interface. The ribbon at the top includes File, Home, Transform, Add Column, View, Tools, and Help. The Transform tab is selected. The main area displays a table with columns: RAM, ROM, Display, Camera, and Battery. The formula bar above the table shows the command: `= Table.TransformColumns(#"Renamed Columns", {"RAM", Text.Upper, type text})`. On the left, there is a list of four queries: PRICE VALUES, Cleaned Dataset, FEEDBACK VALUES, and MOBILE MEMORY VALUES. The 'Cleaned Dataset' query is currently selected.

In Table 1 Cleaned Dataset Table Changed Mobile Brand and Model Columns as Text Range.

The screenshot shows the Power Query Editor interface. The ribbon at the top includes File, Home, Transform, Add Column, View, Tools, and Help. The Transform tab is selected. The main area displays a table with columns: Mobile Brand, Model, Price, Discount Price, Stars, Ratings, and Reviews. The formula bar above the table shows the command: `= Table.TransformColumnTypes(#"Promoted Headers", {"Model", type text, "Mobile Brand", type text})`. On the left, there is a list of four queries: PRICE VALUES, Cleaned Dataset, FEEDBACK VALUES, and MOBILE MEMORY VALUES. The 'Cleaned Dataset' query is currently selected. To the right, there are 'Query Settings' panels for 'PROPERTIES' (Name: Cleaned Dataset) and 'APPLIED STEPS' (Source, Navigation, Promoted Headers, Changed Type).

In Table 2 Price Values Renamed the Price and Discount Price Columns as Price (INR) and Discount Price (INR).

Queries [4]

Cleaned Dataset

PRICE VALUES

FEEDBACK VALUES

MOBILE MEMORY VALUES

= Table.TransformColumnTypes(#"Renamed Columns",{{"Ratings", Int64.Type}, {"Reviews", Int64.Type}, {"Ram", type text}})

| Mobile Brand | Model      | Price (INR) | Discount Price (INR) | Stars | Ratings | Reviews |
|--------------|------------|-------------|----------------------|-------|---------|---------|
| SAMSUNG      | Galaxy F14 | 14990       | 13491                | 4,2   | 65587   |         |
| SAMSUNG      | Galaxy F14 | 14990       | 13491                | 4,2   | 65587   |         |
| OnePlus      | Nord CE    | 16990       | 15291                | 4,4   | 133702  |         |
| SAMSUNG      | Galaxy F14 | 14990       | 13491                | 4,2   | 65587   |         |
| vivo         | T2x        | 12999       | 11699,1              | 4,4   | 245230  |         |
| APPLE        | iPhone 14  | 61999       | 55799,1              | 4,6   | 231506  |         |
| REDMI        | 12         | 10499       | 9449,1               | 4,2   | 22389   |         |
| POCO         | C55        | 7999        | 7199,1               | 4,2   | 85891   |         |
| REDMI        | 12C        | 6799        | 6119,1               | 4,2   | 9001    |         |
| vivo         | T2x        | 12999       | 11699,1              | 4,4   | 245230  |         |
| vivo         | T2x        | 14999       | 13499,1              | 4,3   | 49056   |         |
| vivo         | T2x        | 14999       | 13499,1              | 4,3   | 49056   |         |

Query Settings

PROPERTIES

Name: Cleaned Dataset

All Properties

APPLIED STEPS

Source, Navigation, Promoted Headers, Filtered Rows, Changed Type, Renamed Columns, **Changed Type1**

In Table 3 Feedback Values Changed the Column type as Decimal Number in Star column, Whole Number in Both Ratings and Reviews Column.

Queries [4]

FEEDBACK VALUES

PRICE VALUES

Cleaned Dataset

MOBILE MEMORY VALUES

= Table.TransformColumnTypes(#"Removed Columns",{{"Stars", type number}, {"Ratings", Int64.Type}, {"Reviews", Int64.Type}})

| Stars | Ratings | Reviews |
|-------|---------|---------|
| 4,2   | 65587   | 4599    |
| 4,2   | 65587   | 4599    |
| 4,4   | 133702  | 9324    |
| 4,2   | 65587   | 4599    |
| 4,4   | 245230  | 13393   |
| 4,6   | 231506  | 8887    |
| 4,2   | 22389   | 1569    |
| 4,2   | 85891   | 5085    |
| 4,2   | 9001    | 482     |
| 4,4   | 245230  | 13393   |
| 4,3   | 49056   | 2898    |
| 4,3   | 49056   | 2898    |

Query Settings

PROPERTIES

Name: FEEDBACK VALUES

All Properties

APPLIED STEPS

Source, Navigation, Promoted Headers, Changed Type, Removed Columns, **Changed Type1**

In Table 4 Mobile Memory Values of RAM, ROM, DISPLAY, CAMERA, BATTERY as in the format of GB, cm, mAh

Queries [4]

MOBILE MEMORY VALUES

PRICE VALUES

Cleaned Dataset

FEEDBACK VALUES

| RAM  | ROM    | Display | Camera                 | Battery  |
|------|--------|---------|------------------------|----------|
| 6 GB | 128 GB | 16.76cm | 50MP + 2MP   13MP      | 6000 mAh |
| 6 GB | 128 GB | 16.76cm | 50MP + 2MP   13MP      | 6000 mAh |
| 6 GB | 128 GB | 16.74cm | 64MP   16MP            | 5000 mAh |
| 6 GB | 128 GB | 16.76cm | 50MP + 2MP   13MP      | 6000 mAh |
| 6 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |
| 8 GB | 128 GB | 15.49cm | 12MP + 12MP   12MP     | 5000 mAh |
| 6 GB | 128 GB | 17.25cm | 50MP + 8MP + 2MP   8MP | 5000 mAh |
| 6 GB | 128 GB | 17.04cm | 50MP   5MP             | 5000 mAh |
| 4 GB | 64 GB  | 17.04cm | 50MP   5MP             | 5000 mAh |
| 6 GB | 128 GB | 16.71cm | 50MP + 2MP   8MP       | 5000 mAh |

Query Settings

PROPERTIES

All Properties

APPLIED STEPS

Source, Navigation, Promoted Headers, Changed Type, **Changed Type1**

# CALCULATED COLUMNS & MEASURES

## Calculated Columns

**Price-Band Column:** Price\_Band = SWITCH ( TRUE(), [Price (INR)] < 10000, "Under 10K", [Price (INR)] < 15000, "10K - 15K", [Price (INR)] < 20000, "15K - 20K", [Price (INR)] < 30000, "20K - 30K", "Above 30K")

|         | Mobile Brand | Model | Price (INR) | Discount Price (INR) | Price Category | Price_Band         | Mobiles_Full Name | Discount_Amount | Discount_Percentage |
|---------|--------------|-------|-------------|----------------------|----------------|--------------------|-------------------|-----------------|---------------------|
| SAMSUNG | Galaxy F14   | 14990 | 13491       | Mid-Range            | 10K - 15K      | SAMSUNG Galaxy F14 | 1499              | 10.00%          |                     |
| SAMSUNG | Galaxy F14   | 14990 | 13491       | Mid-Range            | 10K - 15K      | SAMSUNG Galaxy F14 | 1499              | 10.00%          |                     |
| OnePlus | Nord CE      | 16990 | 15291       | Mid-Range            | 15K - 20K      | OnePlus Nord CE    | 1699              | 10.00%          |                     |
| SAMSUNG | Galaxy F14   | 14990 | 13491       | Mid-Range            | 10K - 15K      | SAMSUNG Galaxy F14 | 1499              | 10.00%          |                     |
| vivo    | T2x          | 12999 | 11699       | Mid-Range            | 10K - 15K      | vivo T2x           | 1300              | 10.00%          |                     |
| APPLE   | iPhone 14    | 61999 | 55799       | Premium              | Above 30K      | APPLE iPhone 14    | 6200              | 10.00%          |                     |
| REDMI   | 12           | 10499 | 9449        | Mid-Range            | 10K - 15K      | REDMI 12           | 1050              | 10.00%          |                     |
| POCO    | C55          | 7999  | 7199        | Budget               | Under 10K      | POCO C55           | 800               | 10.00%          |                     |
| REDMI   | 12C          | 6799  | 6179        | Budget               | Under 10K      | REDMI 12C          | 680               | 10.00%          |                     |
| vivo    | T2x          | 12999 | 11699       | Mid-Range            | 10K - 15K      | vivo T2x           | 1300              | 10.00%          |                     |
| vivo    | T2x          | 14999 | 13499       | Mid-Range            | 10K - 15K      | vivo T2x           | 1500              | 10.00%          |                     |

**Price-Category Column:** Price\_Category =SWITCH( TRUE(),[Price (INR)] < 10000, "Budget", [Price (INR)] < 20000, "Mid-Range", [Price (INR)] < 40000, "Upper Mid-Range", [Price (INR)] >= 40000, "Premium")

|         | Mobile Brand | Model | Price (INR) | Discount Price (INR) | Price_Band | Price_Category     | Mobiles_Full Name | Discount_Amount | Discount_Percentage |
|---------|--------------|-------|-------------|----------------------|------------|--------------------|-------------------|-----------------|---------------------|
| SAMSUNG | Galaxy F14   | 14990 | 13491       | Mid-Range            | 10K - 15K  | SAMSUNG Galaxy F14 | 1499              | 10.00%          |                     |
| SAMSUNG | Galaxy F14   | 14990 | 13491       | Mid-Range            | 10K - 15K  | SAMSUNG Galaxy F14 | 1499              | 10.00%          |                     |
| OnePlus | Nord CE      | 16990 | 15291       | Mid-Range            | 15K - 20K  | OnePlus Nord CE    | 1699              | 10.00%          |                     |
| SAMSUNG | Galaxy F14   | 14990 | 13491       | Mid-Range            | 10K - 15K  | SAMSUNG Galaxy F14 | 1499              | 10.00%          |                     |
| vivo    | T2x          | 12999 | 11699       | Mid-Range            | 10K - 15K  | vivo T2x           | 1300              | 10.00%          |                     |
| APPLE   | iPhone 14    | 61999 | 55799       | Premium              | Above 30K  | APPLE iPhone 14    | 6200              | 10.00%          |                     |
| REDMI   | 12           | 10499 | 9449        | Mid-Range            | 10K - 15K  | REDMI 12           | 1050              | 10.00%          |                     |
| POCO    | C55          | 7999  | 7199        | Budget               | Under 10K  | POCO C55           | 800               | 10.00%          |                     |
| REDMI   | 12C          | 6799  | 6179        | Budget               | Under 10K  | REDMI 12C          | 680               | 10.00%          |                     |
| vivo    | T2x          | 12999 | 11699       | Mid-Range            | 10K - 15K  | vivo T2x           | 1300              | 10.00%          |                     |
| vivo    | T2x          | 14999 | 13499       | Mid-Range            | 10K - 15K  | vivo T2x           | 1500              | 10.00%          |                     |
| vivo    | T2x          | 14999 | 13499       | Mid-Range            | 10K - 15K  | vivo T2x           | 1500              | 10.00%          |                     |
| vivo    | T2x          | 11999 | 10799       | Mid-Range            | 10K - 15K  | vivo T2x           | 1200              | 10.00%          |                     |
| vivo    | T2x          | 11999 | 10799       | Mid-Range            | 10K - 15K  | vivo T2x           | 1200              | 10.00%          |                     |

**Total Rating score Column:** Total\_Rating\_score = 'FEEDBACK VALUES'[Ratings]\*'FEEDBACK VALUES'[Stars]

|            | Ratings | Reviews | Rating_Catagory | Total_Rating_score | Popularity_Index |
|------------|---------|---------|-----------------|--------------------|------------------|
| Table view | 65587   | 4599    | Good            | 275465             | 4599             |
| 4.2        | 65587   | 4599    | Good            | 275465             | 4599             |
| 4.2        | 65587   | 4599    | Good            | 275465             | 4599             |
| 4.2        | 22389   | 1569    | Good            | 94034              | 1569             |
| 4.2        | 85891   | 5085    | Good            | 360742             | 5085             |
| 4.2        | 9001    | 482     | Good            | 37804              | 482              |
| 4.2        | 78065   | 4401    | Good            | 327873             | 4401             |
| 4.2        | 22389   | 1569    | Good            | 94034              | 1569             |
| 4.2        | 9001    | 482     | Good            | 37804              | 482              |
| 4.2        | 78065   | 4401    | Good            | 327873             | 4401             |
| 4.2        | 11727   | 799     | Good            | 49253              | 799              |

## Final Price Column: Final Price = 'Cleaned Dataset'[Discount Price (INR)]

The screenshot shows the Power BI Data View with a table titled '1 Final Price = "Cleaned Dataset"[Discount Price (INR)]'. The table contains 10 rows of data. The columns include: NR, Discount Price (INR), Stars, Ratings, Reviews, Ram, Rom, Display, Camera, Battery, 5G Support, Final Price, Discount %, and Total\_Phones. The 'Final Price' column is highlighted in yellow. The Data pane on the right shows various measures and columns, with 'Final Price' also highlighted.

## Popularity Index Column: Popularity\_Index = ('FEEDBACK VALUES'[Reviews]\*0.6)+('FEEDBACK VALUES'[Reviews]\*0.4)

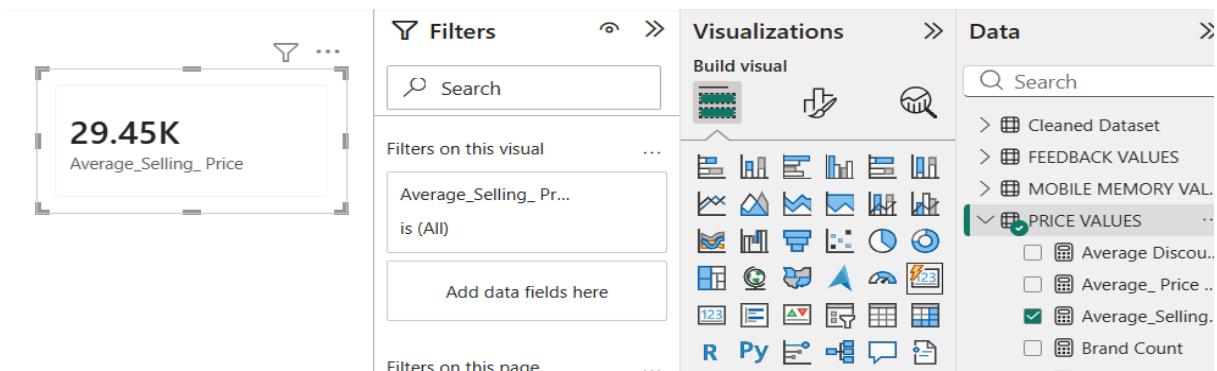
The screenshot shows the Power BI Data View with a table titled '1 Popularity\_Index = ("FEEDBACK VALUES"[Reviews]\*0.6)+("FEEDBACK VALUES"[Reviews]\*0.4)'. The table contains 10 rows of data. The columns include: Stars, Ratings, Reviews, Rating\_Category, Total\_Rating\_score, and Popularity\_Index. The 'Popularity\_Index' column is highlighted in yellow. The Data pane on the right shows various measures and columns, with 'Popularity\_Index' also highlighted.

## Calculated Measures

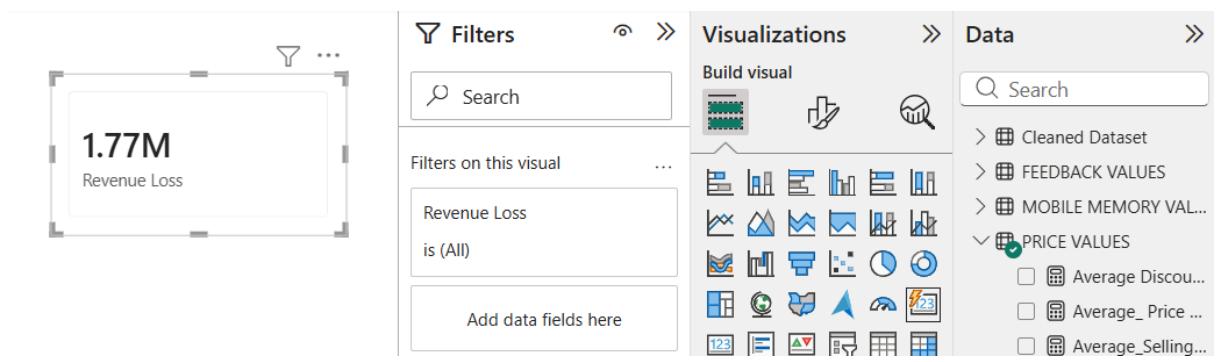
Total\_Revenue\_ = SUM('PRICE VALUES'[Price (INR)])

The screenshot shows the Power BI Analysis View. On the left, there is a visual displaying the value '18M' with the text 'Total\_Revenue\_'. To the right of the visual are three tabs: 'Filters', 'Visualizations', and 'Data'. The 'Filters' tab shows a search bar and a section for 'Filters on this visual' containing the measure 'Total\_Revenue\_'. The 'Visualizations' tab shows various chart icons. The 'Data' tab shows a search bar and a list of columns from the 'Cleaned Dataset', including '5G Support', 'Avera', and 'Avera'.

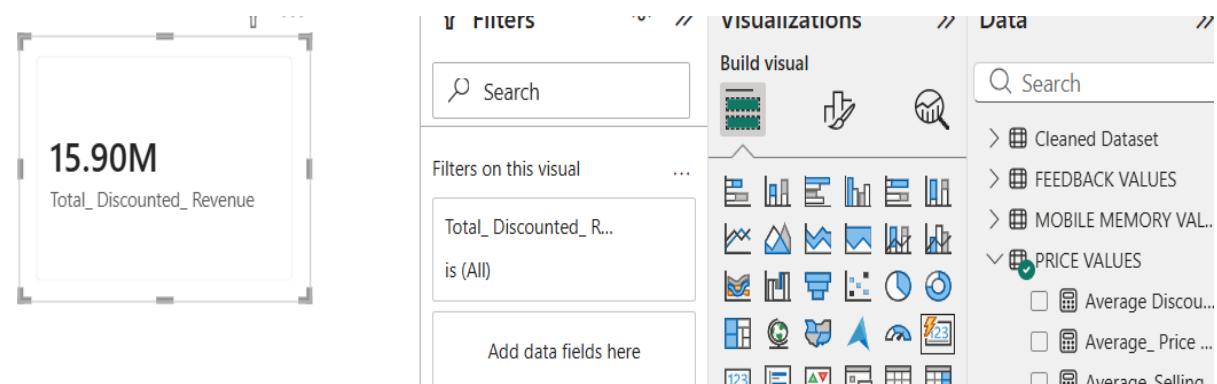
**Average\_Selling\_Price = AVERAGE('PRICE VALUES'[Price (INR)])**



**Revenue Loss = SUM('PRICE VALUES'[Discount\_Amount])**

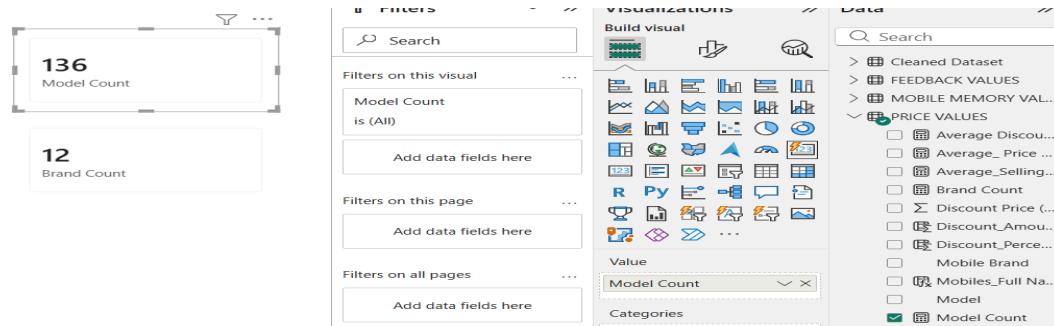


**Total\_Discounted\_Revenue = SUM('PRICE VALUES'[Discount Price (INR)])**



**Model Count = DISTINCTCOUNT('PRICE VALUES'[Model])**

**Brand Count = DISTINCTCOUNT('PRICE VALUES'[Mobile Brand])**



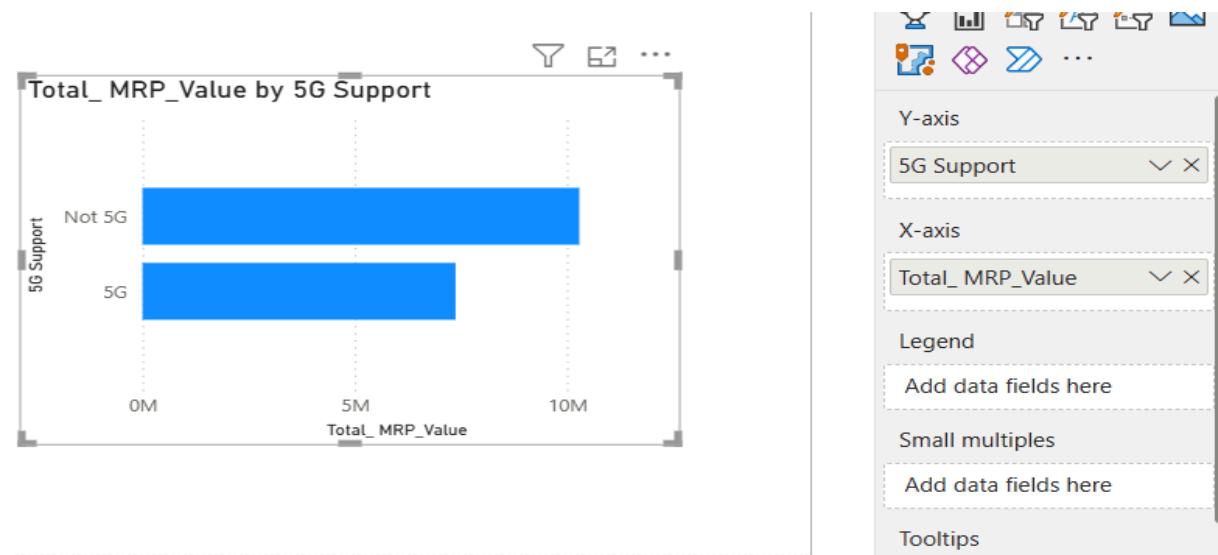
## 9. DASHBOARD PLANNING & VISUALIZATION

### Charts

#### **BAR CHART : TOTAL\_MRP\_VALUE and 5G SUPPORT**

**X- Axis:** Total\_MRP-Value

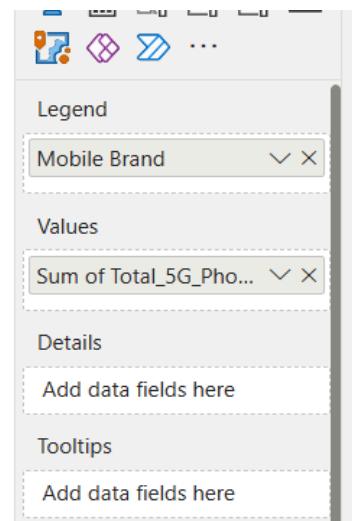
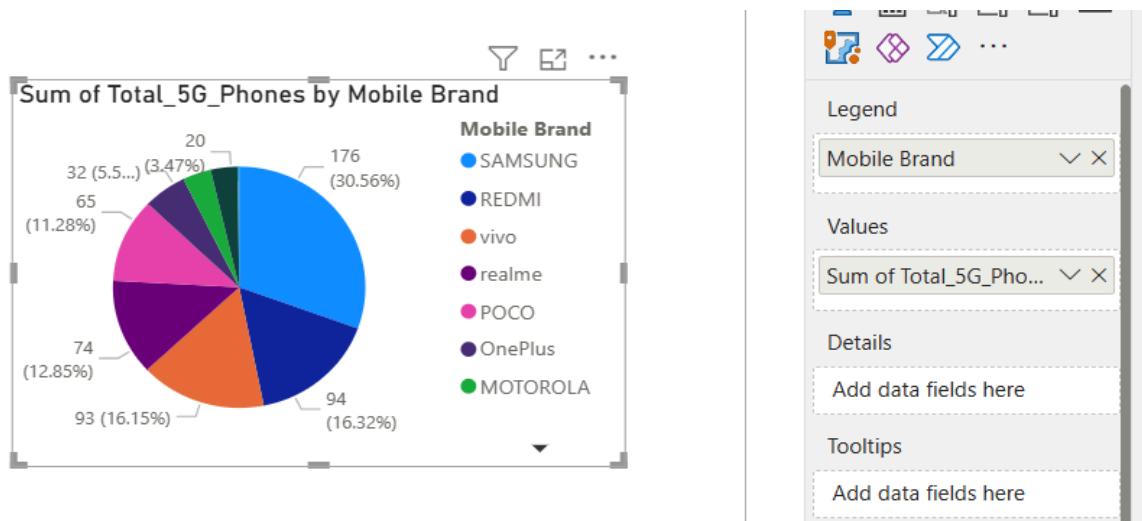
**Y- Axis:** 5G Support



## PIE CHART : MOBILE BRAND and SUM OF TOTAL 5G PHONES

**LEGEND:** Mobile Brand

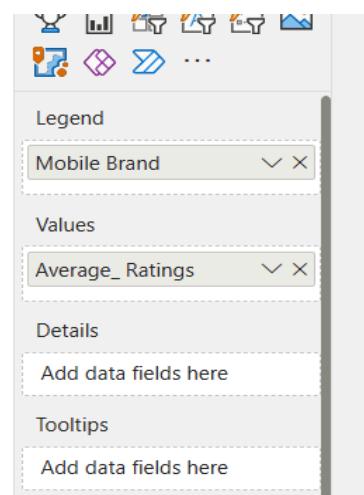
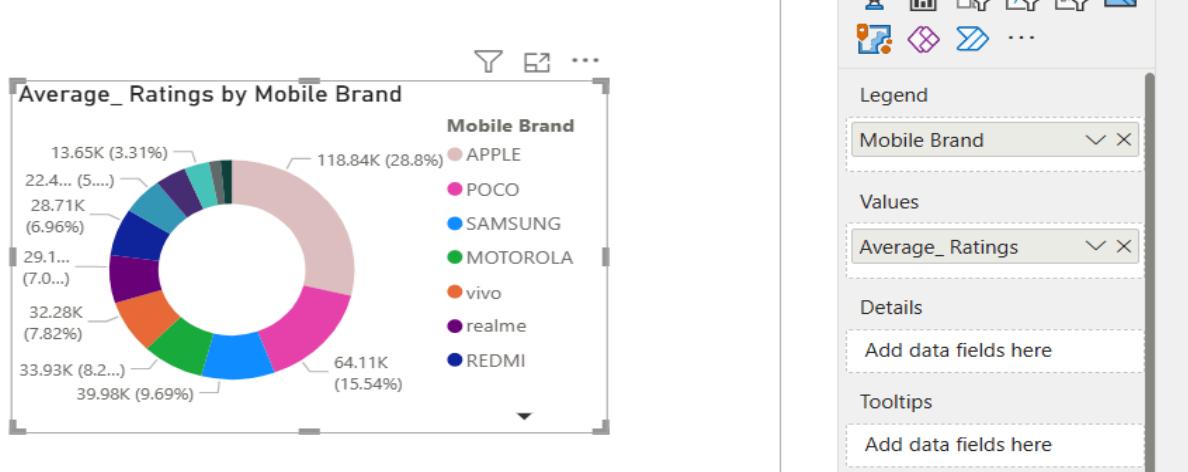
**VALUE:** Sum of Total 5G Phones



## DONUT CHART : MOBILE BRAND and AVERAGE RATINGS

**LEGEND:** Mobile Brand

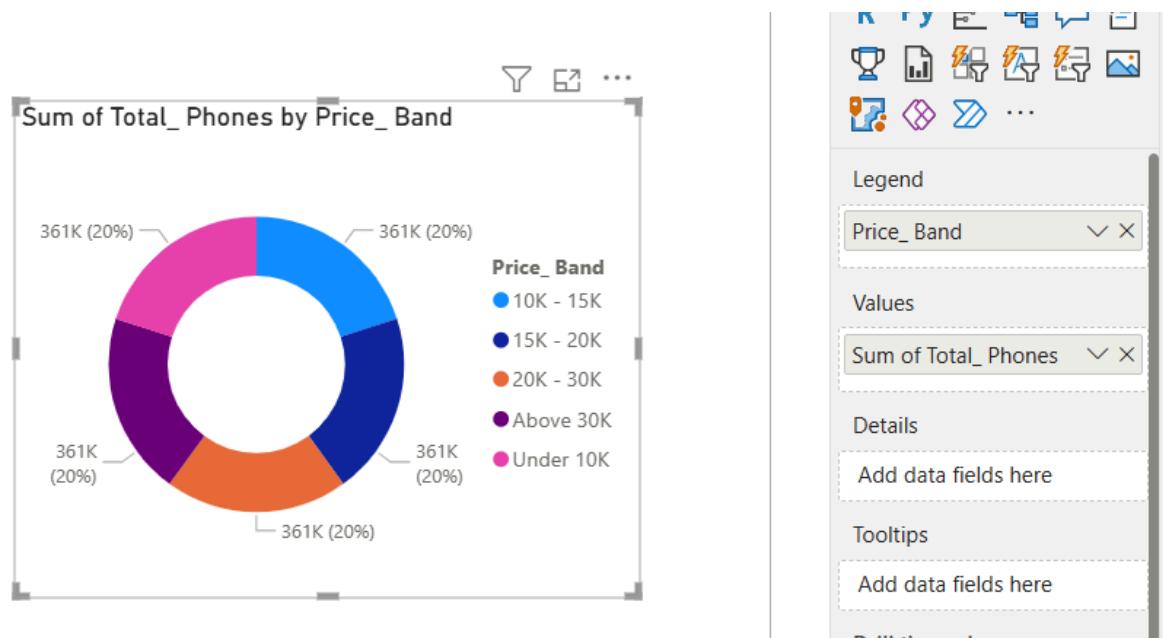
**VALUE:** Average Ratings



## DONUT CHART : PRICE BAND and SUM OF TOTAL PHONES

**LEGEND:** Price Band

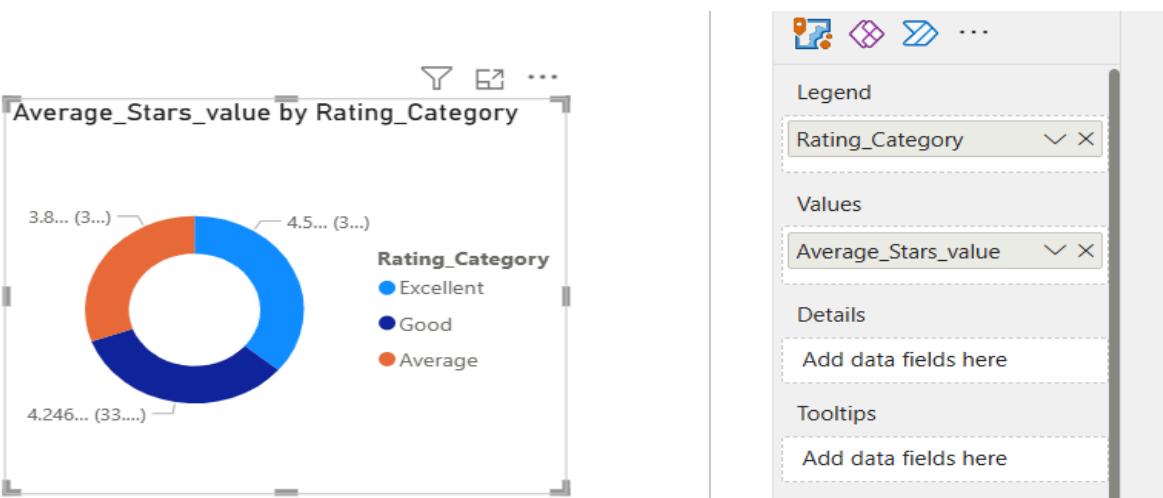
**VALUE:** Sum of Total 5G Phones



## DONUT CHART : RATING CATEGORY and AVERAGE STARS VALUE

**LEGEND:** Rating Category

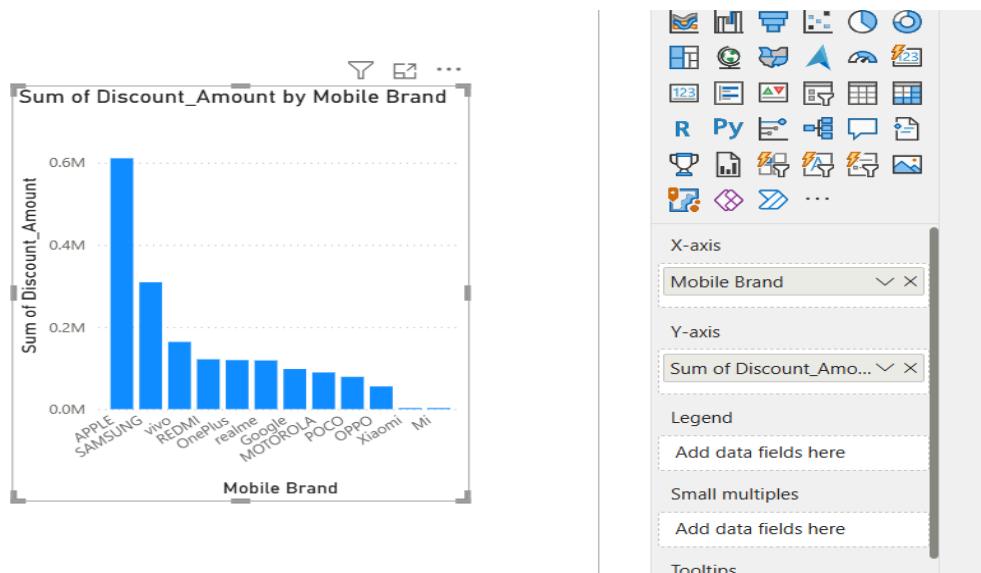
**VALUE:** Average Stars Value



## COLUMN CHART : SUM OF DISCOUNTED AMOUNT and MOBILE BRAND

X- Axis: Mobile Brand

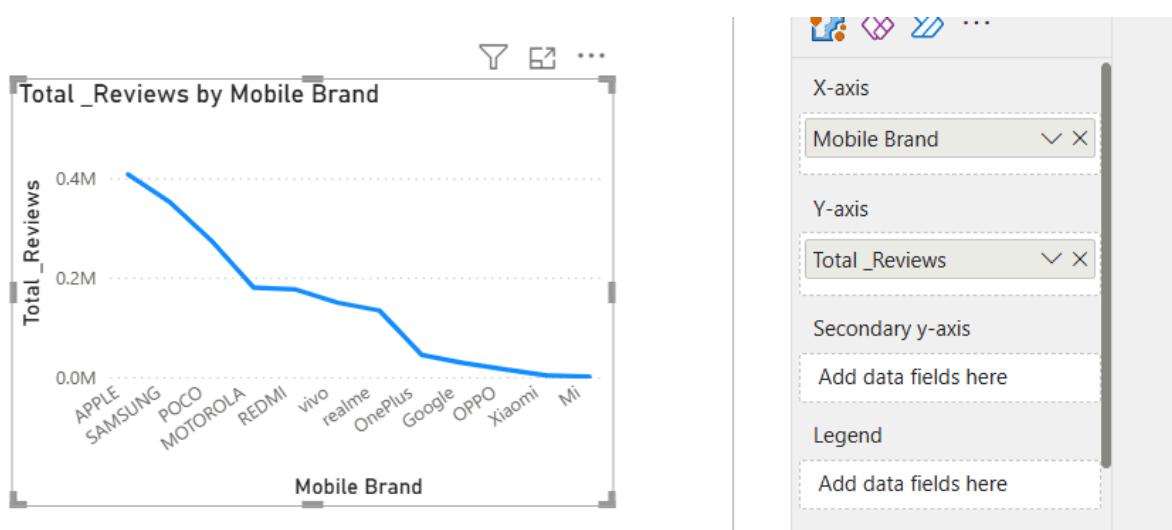
Y- Axis: Sum of Discounted Amount



## LINE CHART : TOTAL REVIEWS and MOBILE BRAND

X- Axis: Mobile Brand

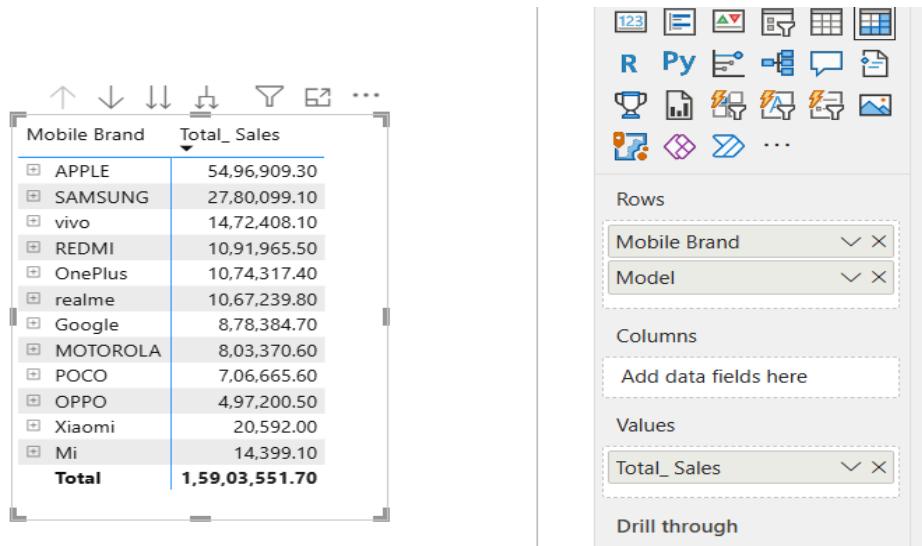
Y- Axis: Total Reviews



## MATRIX : TOTAL SALES and MOBILE BRAND&MODEL

**Rows:** Mobile Brand & Model

**Values:** Total Sales

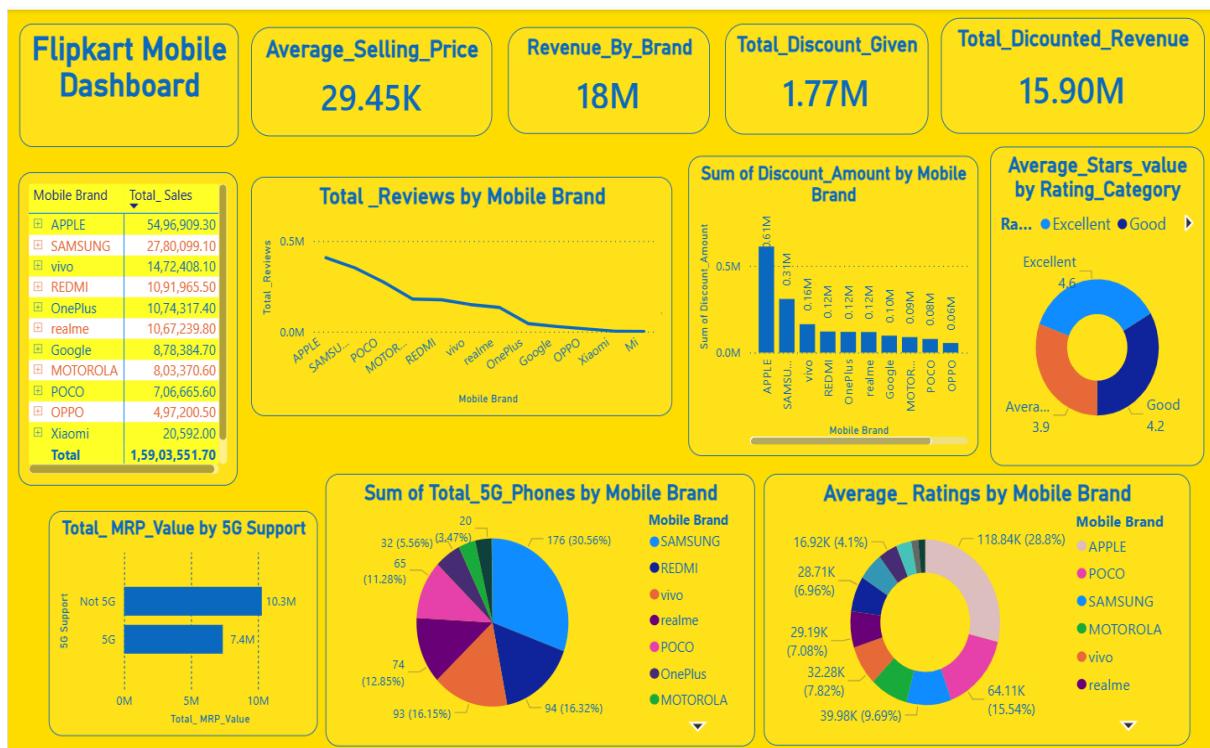


## FINAL DASHBOARD:FLIPKART MOBILE DATA DASHBOARD

### Using Measure Values and Charts

- 1.Average Selling Price
- 2.Revenue By Brand
- 3.Total Discount Given
- 4.Total Discounted Revenue
- 5.Bar Chart
- 6.Column Chart
- 7.Pie Chart
- 8.Donut Chart
- 9.Line Chart
- 10.Matrix

# DASHBOARD



## Slicers

1. Slicers using Mobile Brand and Model,
2. Price Category and Price Band,
3. Total Phones Stars,Ratings,Reviews.

**Mobile Brand, Model**

- All
  - APPLE
  - Google
  - Mi
  - MOTOROLA
  - OnePlus
  - OPPO

**Price\_Catagory, Price\_Band**

- Budget
  - Under 10K
- Mid-Range
  - 10K - 15K
  - 15K - 20K
- Premium
  - Upper Mid-Range

**Total\_Phones, Stars, Ratings, Reviews**

- 601
  - 3.80
  - 3.90
  - 3451
  - 6733
  - 21807
  - 4.00
  - 60
  - 497

**Build visual**

**File**

**Search**

Cleaned Dataset  
FEEDBACK VALUES  
MOBILE MEMORY VAL.  
PRICE VALUES

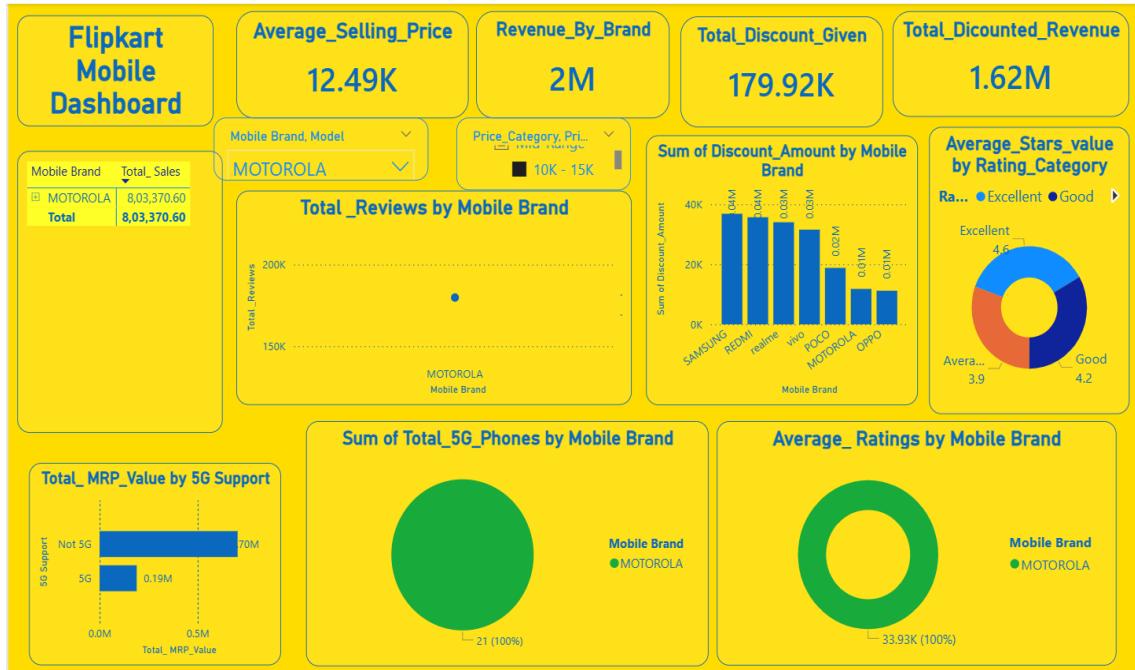
Mobile Brand  
Model

## After Using Slicers: Slicers between

Mobile Brand&Mobile: MOTOROLA

Price Category: 10k -15k

Price Band:Budget

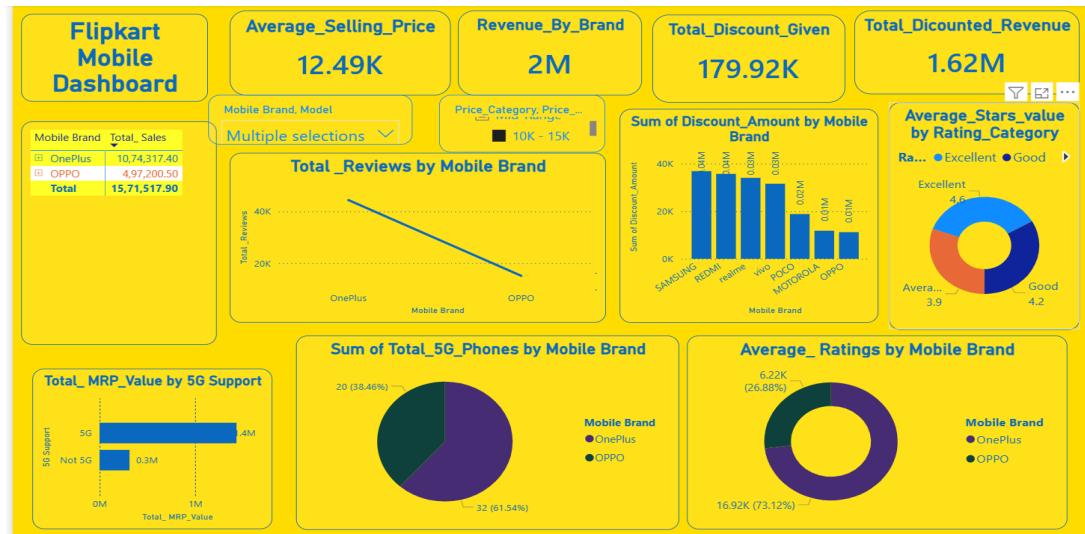


## After Using Slicers: Slicers between

Mobile Brand&Mobile: ONEPLUS,OPPO

Price Category: 15k -20k

Price Band: Mid-Range



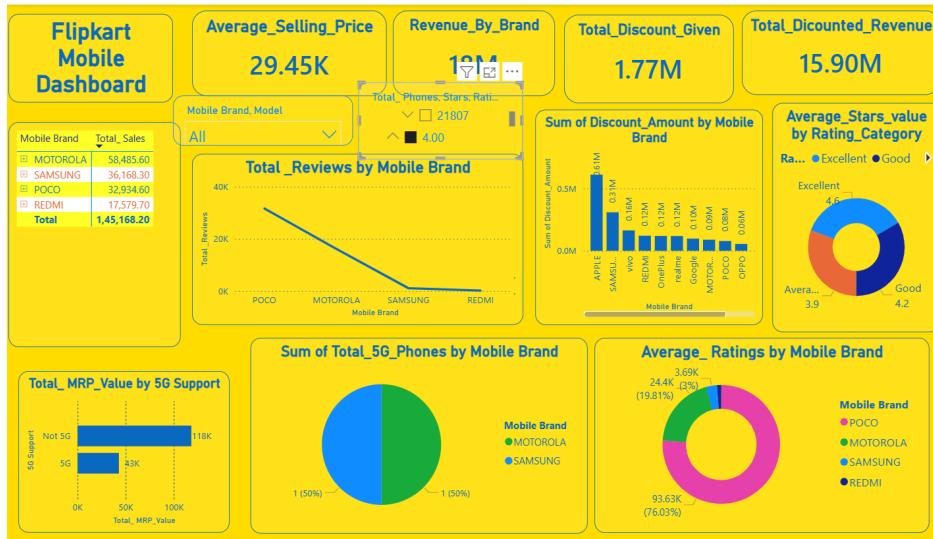
## After Using Slicers: Slicers between

Mobile Brand&Mobile:SAMSUNG,POCO,REDMI,MOTOROLA

Star Value : 4

Rating :1436

Review: 5061



## 10. INSIGHTS & KEY FINDINGS

- **Samsung and Redmi** dominate the market by number of models
- **5G phones** now represent more than 65% of listings
- **Budget and Mid-range** smartphones make up the majority
- Models with **higher reviews generally fall in mid-range price**
- **Flagship models** have higher ratings but fewer reviews
- Brands like **Mi and POCO offer high specs at lower price**

## **11. CONCLUSION**

This project converts e-commerce mobile listings into valuable insights.

Using Excel and Power BI, you built a complete data analytics pipeline including cleaning, transformation, modeling, visualization, and reporting.

## **12. FUTURE ENHANCEMENTS**

- Add competitor data (Amazon, Croma)
- Add dynamic price change tracking
- Forecast pricing using time-series modeling
- Build machine learning model for "price prediction"
- Include sentiment analysis of reviews.