



# SMARTPHONE BRAND PERFORMANCE ANALYSIS

USING EXCEL

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# DATA DESCRIPTION

1. Dataset collected from online website “Kaggle”.
2. Includes **888 smartphone models** across **17 popular brands**.
3. Dataset consists of 3115 rows and 12 columns
4. Key columns Details :

**Brands:** The brands of smartphones included in the dataset.

**Colors:** The colors available for the smartphones.

**Memory:** The storage capacity of the smartphones, typically measured in gigabytes (GB) or megabytes(MB)

**Storage:** The internal storage capacity of the smartphones, often measured in gigabytes (GB) or megabytes (MB).

**Rating:** The user ratings or scores assigned to the smartphones, reflecting user satisfaction or performance.

**Selling Price:** The price at which the smartphones are sold to consumers.

**Original Price:** The original or list price of the smartphones before any discounts or promotions.

**Mobile Name :** Name of the smartphones .

**Discount:** The discount applied to the original price to calculate the selling price.

**Discount percentage:** The percentage discount applied to the original price to calculate the selling price.

5. Data types: mix of **categorical** (brand, model), **numerical** (price, rating, discount).

# DATA CLEANING

1. Removed 109 duplicate records to ensure data accuracy.
2. **Handled missing values:**
  - Storage & Memory:** Filled missing entries using **most frequent value**.
  - User Rating:** Imputed missing ratings with **brand-level averages**.
3. **Standardized data formats:**
  - Converted prices and discount to **INR**.
  - Unified storage values or memory to **GB**.
  - Converted discount percentage to %.**
4. **Standardized brand , model and mobile names** to fix inconsistencies (e.g., “Samsung” vs “SAMSUNG”)

# OBJECTIVE

To analyse and compare smartphone brands based on user ratings, pricing, and discount strategies to identify top-performing brands and understand how these factors influence consumer perception and market competitiveness .

## RESEARCH QUESTIONS

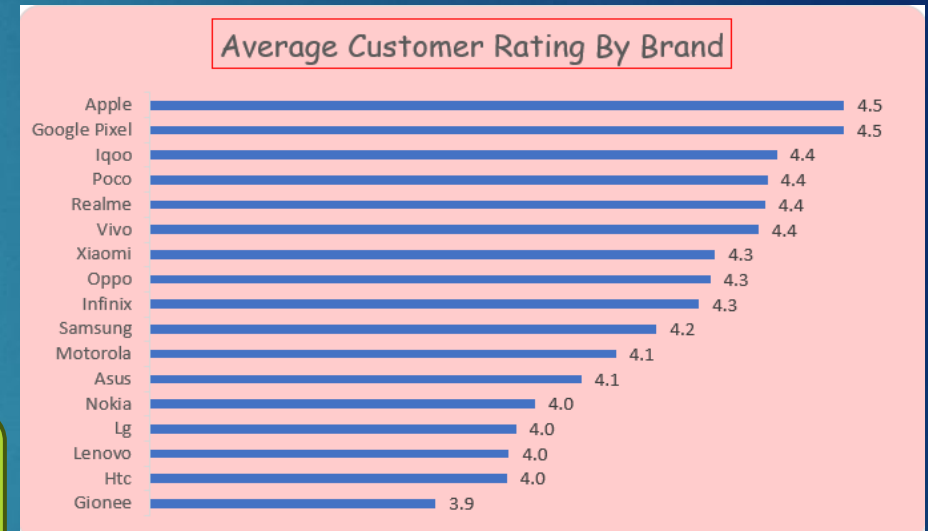
1. How do different smartphone brands perform in terms of average User ratings?
2. What is the average selling price for each brand?
3. Which brands offer the highest and lowest average discounts?
4. Is there a relationship between brand pricing and user ratings?
5. How does storage capacity impact the pricing and ratings within each brand?

# 1. How do different smartphone brands perform in terms of average User/Customer ratings?

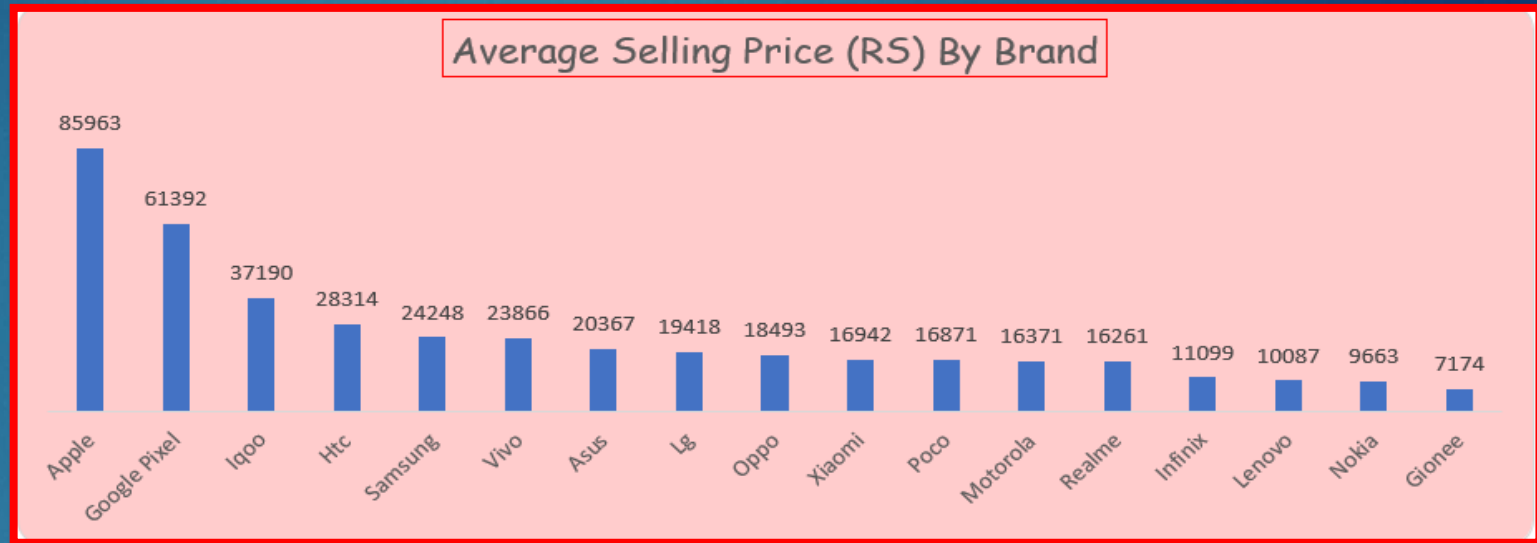
**Apple and Google Pixel** share the top spot with an average customer rating of **4.5** each.

**Iqoo, Poco, Realme, and Vivo** follow closely at **4.4**, reflecting strong user satisfaction.

**Gionee** stands out with the lowest rating at **3.9**, while most brands cluster between **4.0 and 4.3**, indicating a generally favorable perception among users.



## 2. What is the average selling price for each brand?



**Apple and Google Pixel** have the highest average selling prices, indicating their positioning in the **premium market segment**

Brands like **Infinix, Gionee, and Realme** target budget-conscious consumers

Most brands fall within the mid-range category, showing a balanced pricing strategy to appeal to a wider market.



### 3. Which brands offer the highest and lowest discounts percentage ?

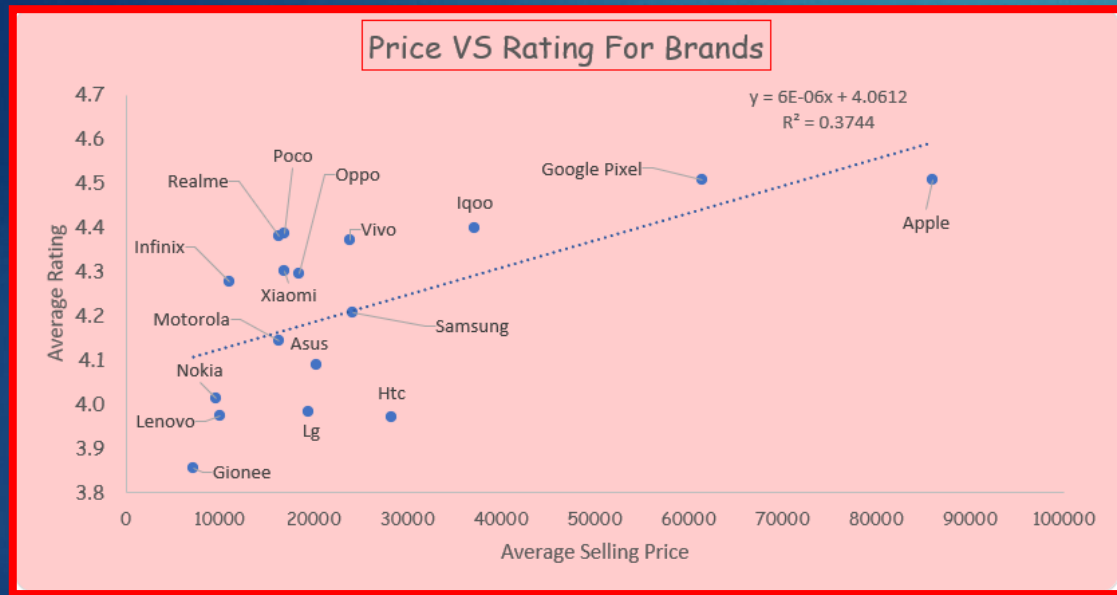
Highest average discounts % are offered by **Poco** and **Motorola**

Lowest average discounts % are offered by **Lenovo** ,**Google pixel** ,**Asus** and **HTC**

Brands	Average of Discount Percentage
Poco	14%
Motorola	13%
Iqoo	9%
Lg	9%
Realme	9%
Oppo	9%
Infinix	7%
Gionee	6%
Samsung	6%
Vivo	6%
Nokia	5%
Xiaomi	4%
Apple	4%
Lenovo	2%
Google Pixel	2%
Asus	2%
Htc	0%



## 4. Is there are relationship between brand pricing and user rating ?



There is a positive correlation between price and user rating

The relationship between **average selling price** and **user ratings** is weak to moderate.

**Premium brands** like **Apple** and **Google Pixel** have **high ratings and high prices**.

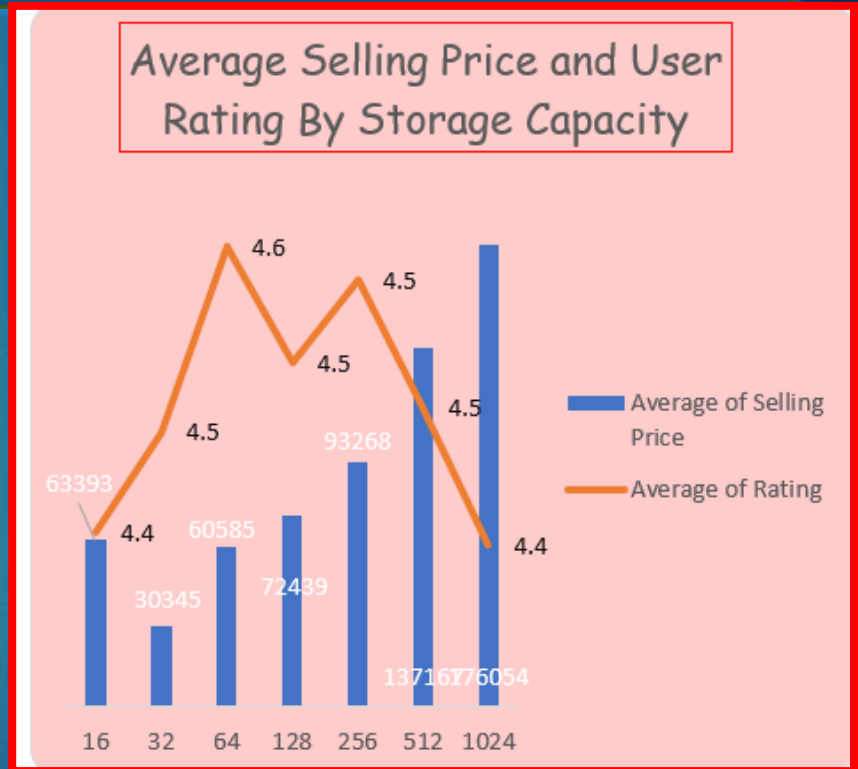
Some **budget brands** (e.g., Realme, Poco) also receive **strong ratings**, proving price alone doesn't dictate satisfaction.

**Lower-priced brands** (e.g., Gionee) tend to have **lower ratings**, suggesting possible quality or performance issues.

## 5. How does storage(in GB) capacity impact the pricing and rating with in each brand (Apple,Google Pixel,others)?

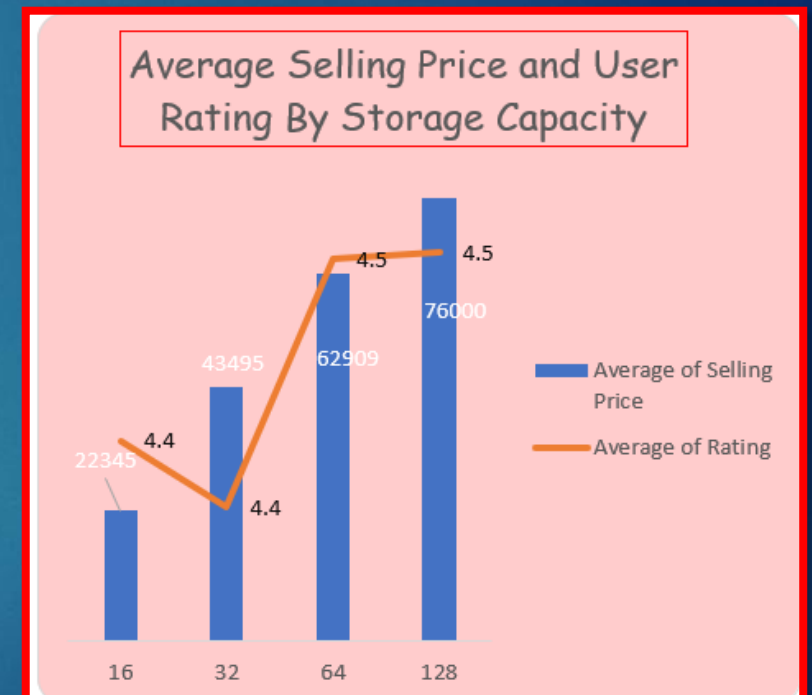
**Higher storage** capacity generally correspond to **higher selling prices** in apple brand.

**Rating scales between 4.3 to 4.6**



Same as Apple Higher storage capacity generally correspond to higher selling prices in Google Pixel brand

Rating 4.4 and 4.5



**Higher storage capacities generally correspond to higher selling prices** across all brands.

User ratings remain relatively stable across storage options for most brands like **Xiaomi**, **Realme**, and **Vivo**, with only slight variations

The impact of storage on user ratings is less significant than on price, indicating other factors like software, camera, and design affect customer satisfaction more.

# SMARTPHONE BRAND PERFORMANCE ANALYSIS

- Brands
- Apple
- Asus
- Gionee
- Google Pixel
- Htc
- Infinix
- Iqoo
- Lenovo
- Lg
- Motorola
- Nokia
- Oppo
- Poco
- Realme
- Samsung
- Vivo
- Xiaomi

- Brands Imp...
- Apple
- Asus
- Gionee
- Google Pixel

Total Models

888

Average Rating

4.2 /5

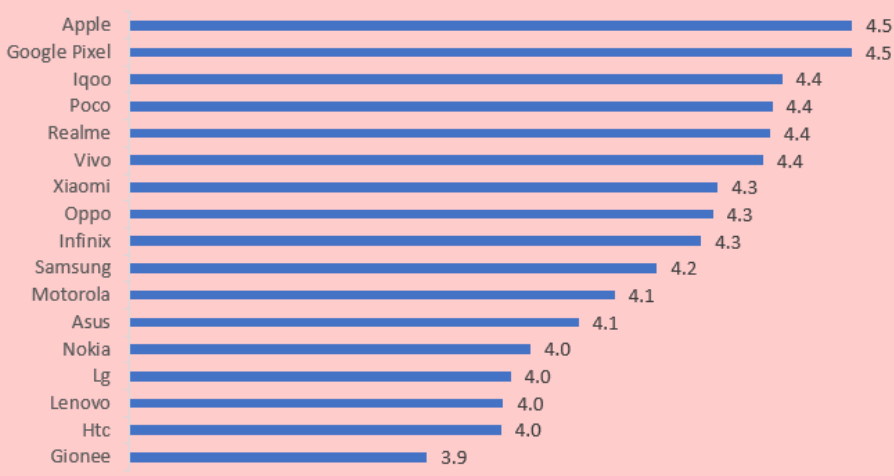
Average Selling Price

₹ 25,848

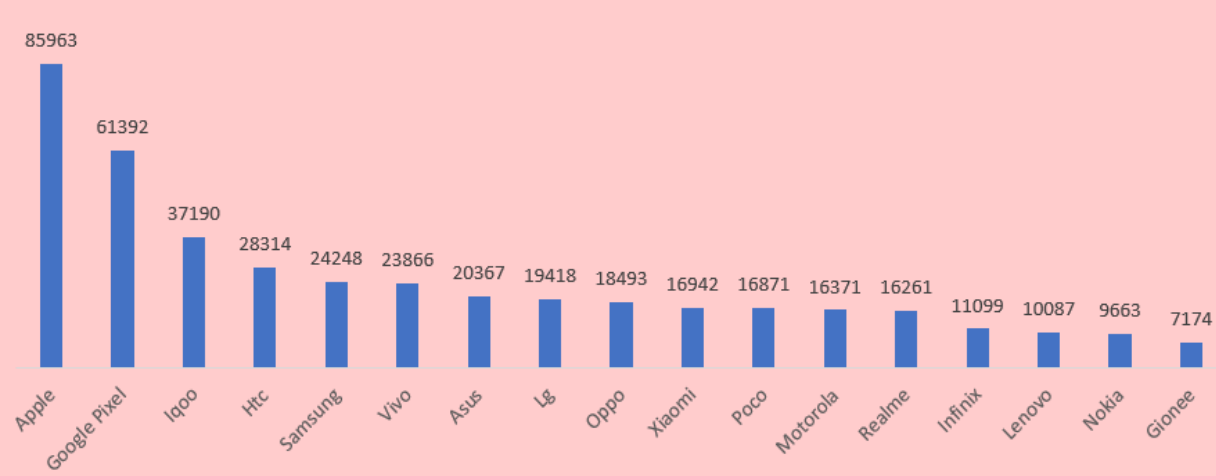
Average Discount Offered

₹ 1,881

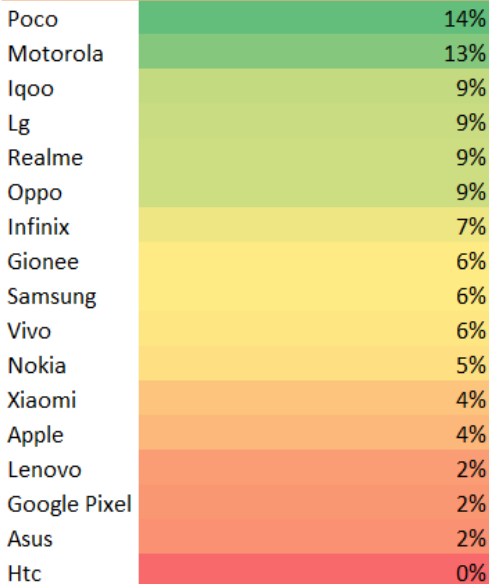
Average Customer Rating By Brand



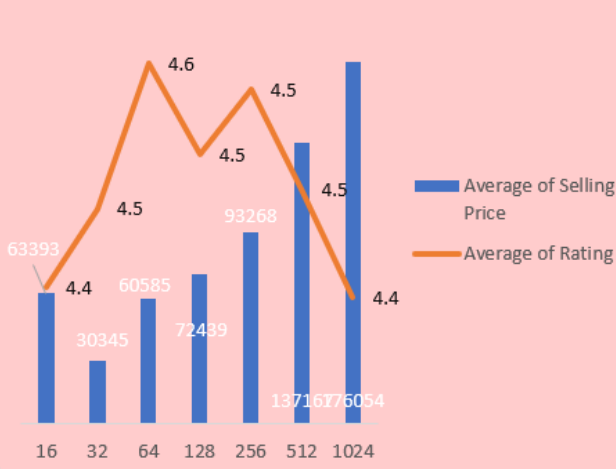
Average Selling Price (RS) By Brand



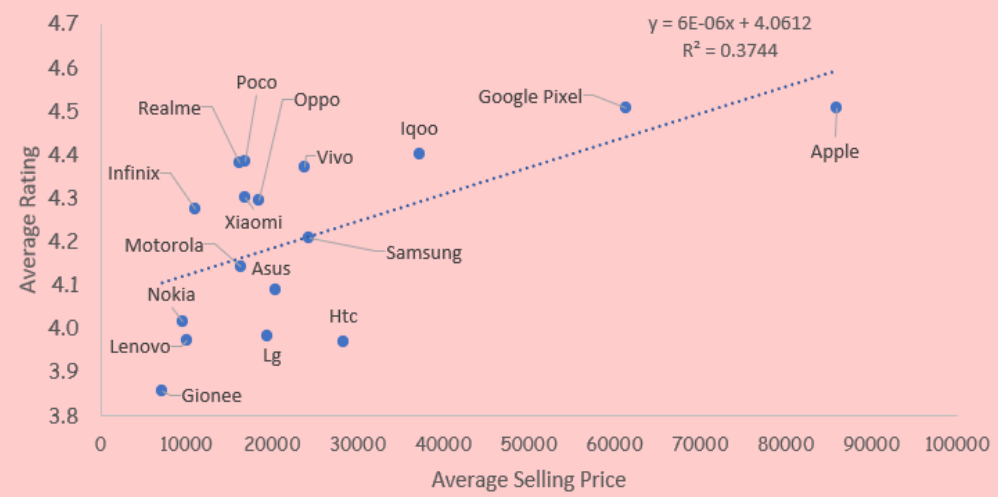
Average of Discount Percentage



Average Selling Price and User Rating By Storage Capacity



Price VS Rating For Brands



# KPI

Total Models Across Brands: **888**

Average User Rating: **4.2 out of 5**, indicating strong overall satisfaction

Average Selling Price: **₹25,848**, reflecting a diverse pricing strategy

Average Discount Offered: **₹1,881** , showing competitive discounting tactics

# SLICER

Brands



# RECOMMENDATIONS

Brands with lower user ratings(**Gionee**) should focus on improving product quality, customer support, and user experience, while top-rated brands(**Apple , Google pixel**)should leverage their high satisfaction scores in marketing to strengthen brand loyalty and trust.

Premium brands should continue to justify their higher prices through innovation and value-added features, while budget and mid-range brands can strengthen market share by offering competitive pricing without compromising on essential quality and performance.

Brands giving big discounts should make sure they are still making enough profit. Premium brands can keep prices high to protect their brand value. All brands should offer discounts during special sales like (festivals or product launch) to attract more customers.





Brands should focus on giving good value at any price. Expensive Brands must offer great features and performance, while cheaper brands should improve quality to keep customers satisfied.

Brands should offer different storage options to meet customer needs and budgets. Higher storage can cost more, but it should also give good value. Ratings don't change much with storage, so focus on overall performance and user experience.