

Mobile phone sales analytics

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Domain : Retail/ E-Commerce
Project title : Mobile phone sales analytics
Submission date : 21.08.2025
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Dataset link :  Flipkart_mobile_branches_scraped_data.csv

Mini Project Report

Title: Mobile phone sales analytics

1. Introduction

The project uses a dataset scraped from Flipkart containing specifications of mobile phones available in the Indian market. The dataset has **2648 records** with **8 attributes** such as brand, model, memory, storage, ratings, and price. The main objective of this project is to analyze the dataset, perform data cleaning, and derive insights using **Excel/Power BI**.

2. Dataset Description

Attributes:

- **Brand** – Manufacturer of the mobile
- **Model** – Model name/number
- **Color** – Available colors
- **Memory (RAM)** – Example: 4GB, 6GB, 8GB
- **Storage (ROM)** – Example: 32GB, 64GB, 128GB
- **Rating** – Out of 5 (missing values = unrated)
- **Selling Price** – Discounted selling price in INR
- **Original Price** – Actual MRP in INR

Data Preprocessing

- Handling Missing Values:
 - Filled missing categorical values (Color) using Mode.
 - Filled missing numeric values (Price, Storage, Memory) where possible.
- Feature Engineering:
 - Extracted numeric values from Memory & Storage.
 - Created Price Segments (Low-range, Mid-range, Premium).
- Inconsistency Handling:
 - Standardized brand names & models.

Handling Missing Value

Checking the missing values in Original Price, Selling Price, Memory, Storage and Color:

Missing Price:

	A	B	C	D	E	F	G	H	I	J
1	Brand	Model	Color	Memory	Storage	Rating	Selling Price	Original Price	Missing	Original Price
2	OPPO	A53	Moonlight	4 GB	64 GB	4.5	11990	15990		15990
3	OPPO	A53	Mint Crean	4 GB	64 GB	4.5	11990	15990		15990
4	OPPO	A53	Moonlight	6 GB	128 GB	4.3	13990	17990		17990
5	OPPO	A53	Mint Crean	6 GB	128 GB	4.3	13990	17990		17990
6	OPPO	A53	Electric Blk	4 GB	64 GB	4.5	11990	15990		15990
7	OPPO	A53	Electric Blk	6 GB	128 GB	4.3	13990	17990		17990
8	OPPO	A12	Deep Blue	4 GB	64 GB	4.4	10490	11990		11990
9	OPPO	A12	Black	3 GB	32 GB	4.4	9490	10990		10990
10	OPPO	A12	Blue	3 GB	32 GB	4.4	9490	10990		10990
11	OPPO	A12	Flowing Sil	3 GB	32 GB	4.4	9490	10990		10990
12	OPPO	A12	Deep Blue	3 GB	32 GB	4.4	9490	10990		10990
13	OPPO	A12	Flowing Sil	4 GB	64 GB	4.4	10490	11990		11990
14	OPPO	A53s 5G	Crystal Blu	6 GB	128 GB	4.3	15990	16990		16990
15	OPPO	A53s 5G	Ink Black	6 GB	128 GB	4.3	15990	16990		16990
16	OPPO	A12	Blue	4 GB	64 GB	4.4	10490	11990		11990
17	OPPO	A53s 5G	Crystal Blu	8 GB	128 GB	4.3	17990	18990		18990
18	OPPO	A53s 5G	Ink Black	8 GB	128 GB	4.3	17990	18990		18990
19	OPPO	A33	Moonlight	3 GB	32 GB	4.3	10490	12990		12990
20	OPPO	A31	Lake Gree	4 GB	64 GB	4.3	11960	12990		12990
21	OPPO	A31	Mystery Blk	4 GB	64 GB	4.3	11779	11919		11919
22	OPPO	A74 5G	Fantastic F	6 GB	128 GB	4.3	18979		30174.3372	
23	OPPO	A11K	Flowing Sil	2 GB	32 GB	4.2	8990	10990		10990
24	OPPO	F17 Pro	Matte Blac	8 GB	128 GB	4.3	19990	25990		25990
25	OPPO	A54	Moonlight	4 GB	128 GB	4.3	15990		30199.01373	
26	OPPO	A54	Moonlight	4 GB	64 GB	4.3	14990		30199.01373	
27	OPPO	Reno6 5G	Aurora	8 GB	128 GB	4.3	29990	35990		35990
28	OPPO	Reno6 5G	Stellar Blak	8 GB	128 GB	4.3	29990	35990		35990
29	OPPO	F17 Pro	Magic Blue	8 GB	128 GB	4.3	19990	25990		25990
30	OPPO	A54	Starry Blue	4 GB	64 GB	4.3	14990		30191.20339	
31	OPPO	A54	Starry Blue	4 GB	128 GB	4.3	15990		30191.20339	
32	OPPO	A54	Moonlight	6 GB	128 GB	4.3	16990	17990		17990
33	OPPO	A54	Starry Blue	6 GB	128 GB	4.3	16990	17990		17990

Selling Price:

J2 =IF(ISBLANK(G2), AVERAGE(\$G2:\$G2648), G2)

	A	B	C	D	E	F	G	H	I	J
1	Brand	Model	Color	Memory	Storage	Rating	Selling Price	Original Price	Missing Original Price	Missing Selling Price
2	OPPO	A53	Moonlight	4 GB	64 GB	4.5	11990	15990	15990	11990
3	OPPO	A53	Mint Crear	4 GB	64 GB	4.5	11990	15990	15990	11990
4	OPPO	A53	Moonlight	16 GB	128 GB	4.3	13990	17990	17990	13990
5	OPPO	A53	Mint Crear	6 GB	128 GB	4.3	13990	17990	17990	13990
6	OPPO	A53	Electric Blk	4 GB	64 GB	4.5	11990	15990	15990	11990
7	OPPO	A53	Electric Blk	6 GB	128 GB	4.3	13990	17990	17990	13990
8	OPPO	A12	Deep Blue	4 GB	64 GB	4.4	10490	11990	11990	10490
9	OPPO	A12	Black	3 GB	32 GB	4.4	9490	10990	10990	9490
10	OPPO	A12	Blue	3 GB	32 GB	4.4	9490	10990	10990	9490
11	OPPO	A12	Flowing Sil	3 GB	32 GB	4.4	9490	10990	10990	9490
12	OPPO	A12	Deep Blue	3 GB	32 GB	4.4	9490	10990	10990	9490
13	OPPO	A12	Flowing Sil	4 GB	64 GB	4.4	10490	11990	11990	10490
14	OPPO	A53s 5G	Crystal Blu	6 GB	128 GB	4.3	15990	16990	16990	15990
15	OPPO	A53s 5G	Ink Black	6 GB	128 GB	4.3	15990	16990	16990	15990
16	OPPO	A12	Blue	4 GB	64 GB	4.4	10490	11990	11990	10490
17	OPPO	A53s 5G	Crystal Blu	8 GB	128 GB	4.3	17990	18990	18990	17990
18	OPPO	A53s 5G	Ink Black	8 GB	128 GB	4.3	17990	18990	18990	17990
19	OPPO	A33	Moonlight	13 GB	32 GB	4.3	10490	12990	12990	10490
20	OPPO	A31	Lake Gree	4 GB	64 GB	4.3	11960	12990	12990	11960
21	OPPO	A31	Mystery Blk	4 GB	64 GB	4.3	11779	11919	11919	11779
22	OPPO	A74 5G	Fantastic F	6 GB	128 GB	4.3	18979		30174.3372	18979
23	OPPO	A11K	Flowing Sil	2 GB	32 GB	4.2	8990	10990	10990	8990
24	OPPO	F17 Pro	Matte Blac	8 GB	128 GB	4.3	19990	25990	25990	19990
25	OPPO	A54	Moonlight	14 GB	128 GB	4.3	15990		30199.01373	15990
26	OPPO	A54	Moonlight	14 GB	64 GB	4.3	14990		30199.01373	14990
27	OPPO	Reno6 5G	Aurora	8 GB	128 GB	4.3	29990	35990	35990	29990
28	OPPO	Reno6 5G	Stellar Blac	8 GB	128 GB	4.3	29990	35990	35990	29990
29	OPPO	F17 Pro	Magic Blue	8 GB	128 GB	4.3	19990	25990	25990	19990
30	OPPO	A54	Starry Blue	4 GB	64 GB	4.3	14990		30191.20339	14990
31	OPPO	A54	Starry Blue	4 GB	128 GB	4.3	15990		30191.20339	15990
32	OPPO	A54	Moonlight	16 GB	128 GB	4.3	16990	17990	17990	16990
33	OPPO	A54	Starry Blu	16 GB	128 GB	4.3	16990	17990	17990	16990

< > Flipkart_mobile_brands_scraped +

Missing Values in Storage:

	A	B	C	D	E	F	G	H	I	J	K
1	Brand	Model	Color	Memory	Storage	Rating	Selling Price	Original Price	Missing Original Price	Selling Price	Missing Storage
2	OPPO	A53	Moonlight	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB
3	OPPO	A53	Mint Crear	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB
4	OPPO	A53	Moonlight	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB
5	OPPO	A53	Mint Crear	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB
6	OPPO	A53	Electric Bl	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB
7	OPPO	A53	Electric Bl	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB
8	OPPO	A12	Deep Blue	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB
9	OPPO	A12	Black	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB
10	OPPO	A12	Blue	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB
11	OPPO	A12	Flowing Sil	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB
12	OPPO	A12	Deep Blue	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB
13	OPPO	A12	Flowing Sil	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB
14	OPPO	A53s 5G	Crystal Blu	6 GB	128 GB	4.3	15990	16990	16990	15990	128 GB
15	OPPO	A53s 5G	Ink Black	6 GB	128 GB	4.3	15990	16990	16990	15990	128 GB
16	OPPO	A12	Blue	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB
17	OPPO	A53s 5G	Crystal Blu	8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB
18	OPPO	A53s 5G	Ink Black	8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB
19	OPPO	A33	Moonlight	3 GB	32 GB	4.3	10490	12990	12990	10490	32 GB
20	OPPO	A31	Lake Gree	4 GB	64 GB	4.3	11960	12990	12990	11960	64 GB
21	OPPO	A31	Mystery Bl	4 GB	64 GB	4.3	11779	11919	11919	11779	64 GB
22	OPPO	A74 5G	Fantastic F	6 GB	128 GB	4.3	18979		30174.3372	18979	128 GB
23	OPPO	A11K	Flowing Sil	2 GB	32 GB	4.2	8990	10990	10990	8990	32 GB
24	OPPO	F17 Pro	Matte Blac	8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB
25	OPPO	A54	Moonlight	4 GB	128 GB	4.3	15990		30199.01373	15990	128 GB
26	OPPO	A54	Moonlight	4 GB	64 GB	4.3	14990		30199.01373	14990	64 GB
27	OPPO	Reno6 5G	Aurora	8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB
28	OPPO	Reno6 5G	Stellar Blac	8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB
29	OPPO	F17 Pro	Magic Blue	8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB
30	OPPO	A54	Starry Blue	4 GB	64 GB	4.3	14990		30191.20339	14990	64 GB
31	OPPO	A54	Starry Blue	4 GB	128 GB	4.3	15990		30191.20339	15990	128 GB
32	OPPO	A54	Moonlight	6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB
33	OPPO	A54	Starry Blue	6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB

Missing Values in Memory:

	A	B	C	D	E	F	G	H	I	J	K	Formula Bar	M	N
1	Brand	Model	Color	Memory	Storage	Rating	Selling Price	Original Price	Missing Original Price	Selling Price	Missing Storage	Missing Memory	Missing Color	
2	OPPO	A53	Moonlight	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Moonlight Black	
3	OPPO	A53	Mint Crear	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Mint Cream	
4	OPPO	A53	Moonlight	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Moonlight Black	
5	OPPO	A53	Mint Crear	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Mint Cream	
6	OPPO	A53	Electric Blt	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Electric Black	
7	OPPO	A53	Electric Blt	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Electric Black	
8	OPPO	A12	Deep Blue	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Deep Blue	
9	OPPO	A12	Black	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Black	
10	OPPO	A12	Blue	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Blue	
11	OPPO	A12	Flowing Sil	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Flowing Silver	
12	OPPO	A12	Deep Blue	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Deep Blue	
13	OPPO	A12	Flowing Sil	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Flowing Silver	
14	OPPO	A53s 5G	Crystal Blu	6 GB	128 GB	4.3	15990	16990	16990	15990	128 GB	6 GB	Crystal Blue	
15	OPPO	A53s 5G	Ink Black	6 GB	128 GB	4.3	15990	16990	16990	15990	128 GB	6 GB	Ink Black	
16	OPPO	A12	Blue	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Blue	
17	OPPO	A53s 5G	Crystal Blu	8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB	8 GB	Crystal Blue	
18	OPPO	A53s 5G	Ink Black	8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB	8 GB	Ink Black	
19	OPPO	A33	Moonlight	13 GB	32 GB	4.3	10490	12990	12990	10490	32 GB	3 GB	Moonlight Black	
20	OPPO	A31	Lake Gree	4 GB	64 GB	4.3	11960	12990	12990	11960	64 GB	4 GB	Lake Green	
21	OPPO	A31	Mystery Blt	4 GB	64 GB	4.3	11779	11919	11919	11779	64 GB	4 GB	Mystery Black	
22	OPPO	A74 5G	Fantastic F	6 GB	128 GB	4.3	18979		30174.3372	18979	128 GB	6 GB	Fantastic Purple	
23	OPPO	A11K	Flowing Sil	2 GB	32 GB	4.2	8990	10990	10990	8990	32 GB	2 GB	Flowing Silver	
24	OPPO	F17 Pro	Matte Blac	8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB	8 GB	Matte Black	
25	OPPO	A54	Moonlight	14 GB	128 GB	4.3	15990		30199.01373	15990	128 GB	4 GB	Moonlight Gold	
26	OPPO	A54	Moonlight	4 GB	64 GB	4.3	14990		30199.01373	14990	64 GB	4 GB	Moonlight Gold	
27	OPPO	Reno6 5G	Aurora	8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB	8 GB	Aurora	
28	OPPO	Reno6 5G	Stellar Blac	8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB	8 GB	Stellar Black	
29	OPPO	F17 Pro	Magic Bla	8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB	8 GB	Magic Blue	
30	OPPO	A54	Starry Blue	4 GB	64 GB	4.3	14990		30191.20335	14990	64 GB	4 GB	Starry Blue	
31	OPPO	A54	Starry Blue	4 GB	128 GB	4.3	15990		30191.20339	15990	128 GB	4 GB	Starry Blue	
32	OPPO	A54	Moonlight	6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB	6 GB	Moonlight Gold	
33	OPPO	A54	Starry Bla	6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB	6 GB	Starry Bla	

Missing Categorical Data in Color:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Brand	Model	Color	Memory	Storage	Rating	Selling Price	Original Price	Missing Original Price	Selling Price	Missing Storage	Missing Memory	Missing Color	
2	OPPO	A53	Moonlight	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Moonlight Black	
3	OPPO	A53	Mint Crear	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Mint Cream	
4	OPPO	A53	Moonlight	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Moonlight Black	
5	OPPO	A53	Mint Crear	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Mint Cream	
6	OPPO	A53	Electric Blt	4 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Electric Black	
7	OPPO	A53	Electric Blt	6 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Electric Black	
8	OPPO	A12	Deep Blue	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Deep Blue	
9	OPPO	A12	Black	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Black	
10	OPPO	A12	Blue	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Blue	
11	OPPO	A12	Flowing Sil	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Flowing Silver	
12	OPPO	A12	Deep Blue	3 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Deep Blue	
13	OPPO	A12	Flowing Sil	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Flowing Silver	
14	OPPO	A53s 5G	Crystal Blu	6 GB	128 GB	4.3	15990	16990	16990	15990	128 GB	6 GB	Crystal Blue	
15	OPPO	A53s 5G	Ink Black	6 GB	128 GB	4.3	15990	16990	16990	15990	128 GB	6 GB	Ink Black	
16	OPPO	A12	Blue	4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Blue	
17	OPPO	A53s 5G	Crystal Blu	8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB	8 GB	Crystal Blue	
18	OPPO	A53s 5G	Ink Black	8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB	8 GB	Ink Black	
19	OPPO	A33	Moonlight	13 GB	32 GB	4.3	10490	12990	12990	10490	32 GB	3 GB	Moonlight Black	
20	OPPO	A31	Lake Gree	4 GB	64 GB	4.3	11960	12990	12990	11960	64 GB	4 GB	Lake Green	
21	OPPO	A31	Mystery Blt	4 GB	64 GB	4.3	11779	11919	11919	11779	64 GB	4 GB	Mystery Black	
22	OPPO	A74 5G	Fantastic F	6 GB	128 GB	4.3	18979		30174.3372	18979	128 GB	6 GB	Fantastic Purple	
23	OPPO	A11K	Flowing Sil	2 GB	32 GB	4.2	8990	10990	10990	8990	32 GB	2 GB	Flowing Silver	
24	OPPO	F17 Pro	Matte Blac	8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB	8 GB	Matte Black	
25	OPPO	A54	Moonlight	14 GB	128 GB	4.3	15990		30199.01373	15990	128 GB	4 GB	Moonlight Gold	
26	OPPO	A54	Moonlight	4 GB	64 GB	4.3	14990		30199.01373	14990	64 GB	4 GB	Moonlight Gold	
27	OPPO	Reno6 5G	Aurora	8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB	8 GB	Aurora	
28	OPPO	Reno6 5G	Stellar Blac	8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB	8 GB	Stellar Black	
29	OPPO	F17 Pro	Magic Bla	8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB	8 GB	Magic Blue	
30	OPPO	A54	Starry Blue	4 GB	64 GB	4.3	14990		30191.20335	14990	64 GB	4 GB	Starry Blue	
31	OPPO	A54	Starry Blue	4 GB	128 GB	4.3	15990		30191.20339	15990	128 GB	4 GB	Starry Blue	
32	OPPO	A54	Moonlight	6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB	6 GB	Moonlight Gold	
33	OPPO	A54	Starry Bla	6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB	6 GB	Starry Bla	

Product Features

RAM(Numeric): Extract numbers from Memory.

Storage (Numeric): Extract number from Storage.

Memory	Storage	Rating	Selling Price	Original Price	Missing Original Price	Missing Selling Price	Missing Storage	Missing Memory	Missing Color	RAM	Storage
14 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Moonlight Black	4	64
14 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Mint Cream	4	64
16 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Moonlight Black	6	128
16 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Mint Cream	6	128
14 GB	64 GB	4.5	11990	15990	15990	11990	64 GB	4 GB	Electric Black	4	64
16 GB	128 GB	4.3	13990	17990	17990	13990	128 GB	6 GB	Electric Black	6	128
4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Deep Blue	4	64
32 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Black	3	32
32 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Blue	3	32
32 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Flowing Silver	3	32
32 GB	32 GB	4.4	9490	10990	10990	9490	32 GB	3 GB	Deep Blue	3	32
4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Flowing Silver	4	64
16 GB	128 GB	4.3	15990	16990	16990	15990	128 GB	6 GB	Crystal Blue	6	128
6 GB	128 GB	4.3	15990	16990	16990	15990	128 GB	6 GB	Ink Black	6	128
4 GB	64 GB	4.4	10490	11990	11990	10490	64 GB	4 GB	Blue	4	64
8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB	8 GB	Crystal Blue	8	128
8 GB	128 GB	4.3	17990	18990	18990	17990	128 GB	8 GB	Ink Black	8	128
13 GB	32 GB	4.3	10490	12990	12990	10490	32 GB	3 GB	Moonlight Black	3	32
4 GB	64 GB	4.3	11960	12990	12990	11960	64 GB	4 GB	Lake Green	4	64
4 GB	64 GB	4.3	11779	11919	11919	11779	64 GB	4 GB	Mystery Black	4	64
6 GB	128 GB	4.3	18979	30174.3372	30174.3372	18979	128 GB	6 GB	Fantastic Purple	6	128
2 GB	32 GB	4.2	8990	10990	10990	8990	32 GB	2 GB	Flowing Silver	2	32
8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB	8 GB	Matte Black	8	128
4 GB	128 GB	4.3	15990	30199.01373	30199.01373	15990	128 GB	4 GB	Moonlight Gold	4	128
4 GB	64 GB	4.3	14990	30199.01373	30199.01373	14990	64 GB	4 GB	Moonlight Gold	4	64
8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB	8 GB	Aurora	8	128
8 GB	128 GB	4.3	29990	35990	35990	29990	128 GB	8 GB	Stellar Black	8	128
8 GB	128 GB	4.3	19990	25990	25990	19990	128 GB	8 GB	Magic Blue	8	128
4 GB	64 GB	4.3	14990	30191.20339	30191.20339	14990	64 GB	4 GB	Starry Blue	4	64
4 GB	128 GB	4.3	15990	30191.20339	30191.20339	15990	128 GB	4 GB	Starry Blue	4	128
6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB	6 GB	Moonlight Gold	6	128
6 GB	128 GB	4.3	16990	17990	17990	16990	128 GB	6 GB	Crystal Blue	6	128

Finding Inconsistency

Brand	Model	Color	Memory	Storage	Rating	Selling Price	Original Price	Missing Memory	Missing Storage	Missing Rating
OPPO	Reno5 Pro 5G	Starry Black	8 GB	128 GB	4.4	35990	38990 8 GB	128 GB	128 GB	4.4
OPPO	F5	Red	6 GB	64 GB	4.4	24990	24990 6 GB	64 GB	64 GB	4.4
OPPO	A5s	Blue	2 GB	32 GB	4.3	8990	12990 2 GB	32 GB	32 GB	4.3
OPPO	Reno	JET BLACK	8 GB	128 GB	4.4	29999	29999 8 GB	128 GB	128 GB	4.4
OPPO	Reno2 Z	Luminous Black	8 GB	256 GB	4.5	29489	29489 8 GB	256 GB	256 GB	4.5
OPPO	Reno6 Pro 5G	Aurora	12 GB	256 GB	4.4	39990	46990 12 GB	256 GB	256 GB	4.4
OPPO	F15	Unicorn White	4 GB	128 GB	4.4	15990	20990 4 GB	128 GB	128 GB	4.4
OPPO	F19	Prism Black	6 GB	128 GB	4.2	19990	20990 6 GB	128 GB	128 GB	4.2
OPPO	K1	Piano Black	6 GB	64 GB	4.3	13990	20990 6 GB	64 GB	64 GB	4.3
OPPO	F17	Classic Silver	6 GB	128 GB	4.2	20999	20999 6 GB	128 GB	128 GB	4.2
OPPO	F15	Lightening Black	4 GB	128 GB	4.4	15990	20990 4 GB	128 GB	128 GB	4.4
OPPO	Reno3 Pro	Sky White	8 GB	128 GB	4.4	24719	25489 8 GB	128 GB	128 GB	4.4
OPPO	Reno3 Pro	Midnight Black	8 GB	128 GB	4.4	24768	24990 8 GB	128 GB	128 GB	4.4
OPPO	A9 2020	Marine Green	4 GB	128 GB	4.3	14990	18990 4 GB	128 GB	128 GB	4.3
OPPO	Find X	Bordeaux Red	8 GB	256 GB	4.6	60990	60990 8 GB	256 GB	256 GB	4.6
OPPO	Reno4 Pro Special Edition	Galactic Blue	8 GB	128 GB	4.4	34990	37990 8 GB	128 GB	128 GB	4.4
OPPO	F11	Marble Green	6 GB	128 GB	4.4	17990	23990 6 GB	128 GB	128 GB	4.4
OPPO	A5	Diamond Blue	4 GB	64 GB	4.4	15990	15990 4 GB	64 GB	64 GB	4.4
OPPO	Reno4 Pro	Silky White	8 GB	128 GB	4.4	34990	37990 8 GB	128 GB	128 GB	4.4
OPPO	Reno4 Pro	Starry Night	8 GB	128 GB	4.4	34990	37990 8 GB	128 GB	128 GB	4.4
OPPO	F19	Space Silver	6 GB	128 GB	4.2	19990	20990 6 GB	128 GB	128 GB	4.2
OPPO	A12	Black	4 GB	64 GB	4.4	10990	10990 4 GB	64 GB	64 GB	4.4
OPPO	A9 2020	Space Purple	4 GB	128 GB	4.3	14990	18990 4 GB	128 GB	128 GB	4.3
OPPO	Reno2 F	Sky White	8 GB	128 GB	4.4	21990	28990 8 GB	128 GB	128 GB	4.4
OPPO	A5 2020	Dazzling White	3 GB	64 GB	4.4	12990	14990 3 GB	64 GB	64 GB	4.4
OPPO	F3 Deepika Padukone Limited Edition	Rose Gold	4 GB	64 GB	4.3	17000	17000 4 GB	64 GB	64 GB	4.3
OPPO	F1 Plus	Gold	4 GB	64 GB	4	27500	27500 4 GB	64 GB	64 GB	4
OPPO	K1	Piano Black	4 GB	64 GB	4.4	15000	15000 4 GB	64 GB	64 GB	4.4
OPPO	A83 2018 Edition	Blue	4 GB	64 GB	4.3	15000	15000 4 GB	64 GB	64 GB	4.3
OPPO	F3	Rose Gold	4 GB	64 GB	4.3	18000	18000 4 GB	64 GB	64 GB	4.3
OPPO	F15	Blazing Blue	4 GB	128 GB	4.4	15990	20990 4 GB	128 GB	128 GB	4.4
OPPO	A3s	Purple	4 GB	64 GB	4.3	15000	15000 4 GB	64 GB	64 GB	4.3
OPPO	A9 2020	Cloud Grey	8 GB	128 GB	4.0	14990	14990 8 GB	128 GB	128 GB	4.0

B195 Ravichandran Ashwin Limited Edition										
Brand	Model	Color	Memory	Storage	Rating	Selling Price	Original Price	Missing Memory	Missing Storage	Missing Rating
171	OPPO A5 2020	Mirror Black	3 GB	64 GB	4.4	14990	14990 3 GB	64 GB	64 GB	4.4
172	OPPO A83	Champagne	4 GB	64 GB	4.3	16990	16990 4 GB	64 GB	64 GB	4.3
173	OPPO F5	Gold	4 GB	32 GB	4.4	19990	19990 4 GB	32 GB	32 GB	4.4
174	OPPO K3	Jade Black	6 GB	64 GB	4.3	24990	24990 6 GB	64 GB	64 GB	4.3
175	OPPO A71k	Gold	3 GB	16 GB	4.4	10990	10990 3 GB	16 GB	16 GB	4.4
176	OPPO Neo 7 4G	White	1 GB	16 GB	3.8	8490	8490 1 GB	16 GB	16 GB	3.8
177	OPPO K1	Astral Blue	4 GB	64 GB	4.4	14990	18990 4 GB	64 GB	64 GB	4.4
178	OPPO K1	Astral Blue	Find and Replace	64 GB	4.4	10990	10990 6 GB	64 GB	64 GB	4.3
179	OPPO K3	Jade Blue	Find	Replace	5990 4 GB	5990 4 GB	64 GB	128 GB	128 GB	4.2
180	OPPO A5s	Black	Find	Replace	1990 4 GB	1990 4 GB	64 GB	64 GB	64 GB	4.4
181	OPPO F9	Stellar	Replace with:	F3 Plus	5990 4 GB	5990 4 GB	64 GB	64 GB	64 GB	4.3
182	OPPO F3	Black	Within:	Sheet	1990 6 GB	1990 6 GB	64 GB	64 GB	64 GB	4.3
183	OPPO A57	Black	Match case:	No Format Set	2990 6 GB	2990 6 GB	64 GB	64 GB	64 GB	4.3
184	OPPO A9	Marble	Replace with:	No Format Set	2990 6 GB	2990 6 GB	64 GB	64 GB	64 GB	4.3
185	OPPO A9	Fluorite	Search:	Match entire cell contents	2990 6 GB	2990 6 GB	64 GB	64 GB	64 GB	4.3
186	OPPO F3 Plus	Black	Look in:	Formulas	2990 6 GB	2990 6 GB	64 GB	64 GB	64 GB	4.3
187	OPPO F3 Plus	Gold	Options <<	Replace All	2990 4 GB	2990 4 GB	64 GB	64 GB	64 GB	4.3
188	OPPO F3 Plus	Black	Replace	Replace	2990 4 GB	2990 4 GB	64 GB	64 GB	64 GB	4.3
189	OPPO Rohit Sharma Limited Edition	Black	Find All	Find Next	2990 4 GB	2990 4 GB	64 GB	64 GB	64 GB	4.4
190	OPPO F17 PRO	Gold	Close	Close	2990 4 GB	2990 4 GB	128 GB	128 GB	128 GB	4.3
191	OPPO Hardik Pandya Limited Edition	Black	2990 4 GB	2990 4 GB	64 GB	64 GB	64 GB	64 GB	64 GB	4.4
192	OPPO Reno4 Pro Special Edition	Starry Night	2990 4 GB	2990 4 GB	128 GB	128 GB	128 GB	128 GB	128 GB	4.4
193	OPPO F3 Plus	Black	2990 4 GB	2990 4 GB	64 GB	64 GB	64 GB	64 GB	64 GB	4.4
194	OPPO Reno4 Pro Special Edition	Starry Night	2990 4 GB	2990 4 GB	128 GB	128 GB	128 GB	128 GB	128 GB	4.4
195	OPPO Ravichandran Ashwin Limited Edition	Black	2990 4 GB	2990 4 GB	64 GB	64 GB	64 GB	64 GB	64 GB	4.4
196	OPPO F3 Plus	Gold	2990 4 GB	2990 4 GB	64 GB	64 GB	64 GB	64 GB	64 GB	4.3
197	OPPO F11 Pro	Waterfall Grey	2990 6 GB	2990 6 GB	128 GB	128 GB	128 GB	128 GB	128 GB	4.5
198	OPPO F11 Pro	Aurora Green	2990 6 GB	2990 6 GB	128 GB	128 GB	128 GB	128 GB	128 GB	4.5
199	OPPO R1 R829	White	21452 1 GB	21452 1 GB	1 GB	16 GB	21452 1 GB	16 GB	16 GB	3
200	OPPO F11	Fluorite Purple	23990 6 GB	23990 6 GB	6 GB	128 GB	23990 6 GB	128 GB	128 GB	4.4
201	OPPO F11	Fluorite Purple	21990 4 GB	21990 4 GB	4 GB	128 GB	21990 4 GB	128 GB	128 GB	4.4
202	OPPO A9 2020	Vanilla Mint	21990 6 GB	21990 6 GB	8 GB	128 GB	21990 6 GB	128 GB	128 GB	4.3
203	OPPO A9 2020	Blush	24990 1 GB	24990 1 GB	12 GB	128 GB	24990 1 GB	128 GB	128 GB	4.3

VLOOKUP

Based on Brand specifying the Model

Exploratory Data Analysis (EDA)

Key Insights Explored:

- Different price range segments in Indian mobile market.
- Top brands with the most product offerings.
- Most common specifications (e.g., 4GB RAM + 64GB storage).
- Premium offerings by top brands.
- Most popular mobile colors.
- Relationship between Ratings & Prices.

DATA TRANSFORMATION:

Different Price range segments for mobiles in India

Add Conditional Column

Add a conditional column that is computed from the other columns or values.

New column name
Price Segment

	Column Name	Operator	Value ⓘ		Output ⓘ
If	Missing Original P...	is less than or equ...	ABC 123 ▾ 10000	Then	ABC 123 ▾ "Budget"
Else If	Missing Original P...	is less than or equ...	ABC 123 ▾ 20000	Then	ABC 123 ▾ "Lower Mid-Range"
Else If	Missing Original P...	is less than or equ...	ABC 123 ▾ 30000	Then	ABC 123 ▾ "Mid-Range"
Else If	Missing Original P...	is less than or equ...	ABC 123 ▾ 50000	Then	ABC 123 ▾ "Upper Mid-Range"
Else If	Missing Original P...	is less than or equ...	ABC 123 ▾ 70000	Then	ABC 123 ▾ "Premium"
...					
Add Clause					
Else ⓘ	ABC 123 ▾	"Ultra Premium"			

[OK](#) [Cancel](#)

Original Price | Missing Original Price | Missing Selling Price | Missing Storage | Missing Memory | Missing Color | Price Segment

	Original Price	Missing Original Price	Missing Selling Price	Missing Storage	Missing Memory	Missing Color	Price Segment
1	990	15990	15990	11990 64 GB	4 GB	Moonlight Black	"Lower Mid-Range"
2	990	15990	15990	11990 64 GB	4 GB	Mint Cream	"Lower Mid-Range"
3	990	17990	17990	13990 128 GB	6 GB	Moonlight Black	"Lower Mid-Range"
4	990	17990	17990	13990 128 GB	6 GB	Mint Cream	"Lower Mid-Range"
5	990	15990	15990	11990 64 GB	4 GB	Electric Black	"Lower Mid-Range"
6	990	17990	17990	13990 128 GB	6 GB	Electric Black	"Lower Mid-Range"
7	990	11990	11990	10490 64 GB	4 GB	Deep Blue	"Lower Mid-Range"
8	990	10990	10990	9490 32 GB	3 GB	Black	"Lower Mid-Range"
9	990	10990	10990	9490 32 GB	3 GB	Blue	"Lower Mid-Range"
10	990	10990	10990	9490 32 GB	3 GB	Flowing Silver	"Lower Mid-Range"
11	990	10990	10990	9490 32 GB	3 GB	Deep Blue	"Lower Mid-Range"
12	990	11990	11990	10490 64 GB	4 GB	Flowing Silver	"Lower Mid-Range"
13	990	16990	16990	15990 128 GB	6 GB	Crystal Blue	"Lower Mid-Range"
14	990	16990	16990	15990 128 GB	6 GB	Ink Black	"Lower Mid-Range"
15	990	11990	11990	10490 64 GB	4 GB	Blue	"Lower Mid-Range"
16	990	18990	18990	17990 128 GB	8 GB	Crystal Blue	"Lower Mid-Range"
17	990	18990	18990	17990 128 GB	8 GB	Ink Black	"Lower Mid-Range"
18	990	12990	12990	10490 32 GB	3 GB	Moonlight Black	"Lower Mid-Range"
19	960	12990	12990	11990 64 GB	4 GB	Lake Green	"Lower Mid-Range"
20	779	11919	11919	11779 64 GB	4 GB	Mystery Black	"Upper Mid-Range"
21	1979	null	30174	18979 128 GB	6 GB	Fantastic Purple	"Upper Mid-Range"
22	990	10990	10990	8990 32 GB	2 GB	Flowing Silver	"Lower Mid-Range"
23	990	25990	25990	19990 128 GB	8 GB	Matte Black	"Mid-Range"
24	990	null	30199	15990 128 GB	4 GB	Moonlight Gold	"Upper Mid-Range"
25	990	null	30199	14990 64 GB	4 GB	Moonlight Gold	"Upper Mid-Range"
26	990	35990	35990	29990 128 GB	8 GB	Aurora	"Upper Mid-Range"
27	990	35990	35990	29990 128 GB	8 GB	Stellar Black	"Upper Mid-Range"
28	990	25990	25990	19990 128 GB	8 GB	Magic Blue	"Mid-Range"
29	990	null	30191	14990 64 GB	4 GB	Starry Blue	"Upper Mid-Range"
30	990	null	30191	15990 128 GB	4 GB	Starry Blue	"Upper Mid-Range"
31	990	17990	17990	16990 128 GB	6 GB	Moonlight Gold	"Lower Mid-Range"
32	990	17990	17990	16990 128 GB	6 GB	Starry Blue	"Lower Mid-Range"
33	990	null	30217	14990 64 GB	4 GB	Crystal Black	"Upper Mid-Range"
34	990	25990	25990	19990 128 GB	8 GB	Metallic White	"Mid-Range"
35	199	12319	12319	12199 64 GB	4 GB	Fantasy White	"Lower Mid-Range"
36	990	null	30241	21990 128 GB	8 GB	Navy Blue	"Upper Mid-Range"

PROPERTIES
Name: Flipkart_mobile_brands_scraped_

APPLIED STEPS
Source, Navigation, Promoted Headers, Changed Type, Filtered Rows, Replaced Value in model, Filtered Rows 1, Changed Type 1, Added Conditional Column Pr..., > Changed data type in price se...

Brand with most product offerings for the Indian Market

Query Settings

PROPERTIES

Name: Flipkart_mobile_brands_scraped_

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Filtered Rows
- Replaced Value in model
- Filtered Rows1
- Changed Type1
- Added Conditional Column Pr...
- Changed data type in price se...
- Grouped Rows IN BRANDS

Sorted Rows IN DESCENDING

The screenshot shows a data analysis interface with a table on the left and a properties panel on the right.

Table Data:

Rank	Brand	Count
1	SAMSUNG	695
2	Apple	364
3	realme	285
4	OPPO	244
5	Nokia	212
6	Xiaomi	164
7	GIONEE	129
8	Lenovo	121
9	ASUS	113
10	Motorola	105
11	LG	99
12	vivo	57
13	Google Pixel	29
14	POCO	20
15	IQOO	5
16	HTC	5

Properties Panel:

- PROPERTIES**: Shows the name of the query as "Flipkart_mobile_brands_scraped_" and links to "All Properties".
- APPLIED STEPS**: Lists the following steps in descending order of application:
 - Source
 - Navigation
 - Promoted Headers
 - Changed Type
 - Filtered Rows
 - Replaced Value in model
 - Filtered Rows1
 - Changed Type1
 - Added Conditional Column Pr...
 - Changed data type in price se...
 - Grouped Rows IN BRANDS
- A message at the bottom of the steps list says "Sorted Rows IN DESCENDING".

Brand catering to all different segments (low range, mid-range, premium - *an additional data column would be required to sort the data in the above segments)

Add Conditional Column

Add a conditional column that is computed from the other columns or values.

New column name
selling price segment

Column Name	Operator	Value	Output				
If	Missing Selling Pr...	is less than or equ...	ABC 123	10000	Then	ABC 123	"Low Range"
Else If	Missing Selling Pr...	is less than or equ...	ABC 123	25000	Then	ABC 123	"Mid Range"
Add Clause							
Else	ABC 123	"Premium"					

OK **Cancel**

= Table.AddColumn(#"Changed data type in price segment", "selling price segment", each if [Missing Selling Price] <= 10000 then ""Low Range" else if [Missing Selling Price] <= 25000 then "Mid Range" else "Premium")

	Missing Selling Price	Missing Storage	Missing Memory	Missing Color	Price Segment	selling price segment
1	15990	11990 64 GB	4 GB	Moonlight Black	"Lower Mid-Range"	"Mid Range"
2	15990	11990 64 GB	4 GB	Mint Cream	"Lower Mid-Range"	"Mid Range"
3	17990	13990 128 GB	6 GB	Moonlight Black	"Lower Mid-Range"	"Mid Range"
4	17990	13990 128 GB	6 GB	Mint Cream	"Lower Mid-Range"	"Mid Range"
5	15990	11990 64 GB	4 GB	Electric Black	"Lower Mid-Range"	"Mid Range"
6	17990	13990 128 GB	6 GB	Electric Black	"Lower Mid-Range"	"Mid Range"
7	11990	10490 64 GB	4 GB	Deep Blue	"Lower Mid-Range"	"Mid Range"
8	10990	9490 32 GB	3 GB	Black	"Lower Mid-Range"	"Low Range"
9	10990	9490 32 GB	3 GB	Blue	"Lower Mid-Range"	"Low Range"
10	10990	9490 32 GB	3 GB	Flowing Silver	"Lower Mid-Range"	"Low Range"
11	10990	9490 32 GB	3 GB	Deep Blue	"Lower Mid-Range"	"Low Range"
12	11990	10490 64 GB	4 GB	Flowing Silver	"Lower Mid-Range"	"Mid Range"
13	16990	15990 128 GB	6 GB	Crystal Blue	"Lower Mid-Range"	"Mid Range"
14	16990	15990 128 GB	6 GB	Ink Black	"Lower Mid-Range"	"Mid Range"
15	11990	10490 64 GB	4 GB	Blue	"Lower Mid-Range"	"Mid Range"
16	18990	17990 128 GB	8 GB	Crystal Blue	"Lower Mid-Range"	"Mid Range"
17	18990	17990 128 GB	8 GB	Ink Black	"Lower Mid-Range"	"Mid Range"
18	12990	10490 32 GB	3 GB	Moonlight Black	"Lower Mid-Range"	"Mid Range"
19	12990	11960 64 GB	4 GB	Lake Green	"Lower Mid-Range"	"Mid Range"
20	11191	11779 64 GB	4 GB	Mystery Black	"Lower Mid-Range"	"Mid Range"
21	30174	18979 128 GB	6 GB	Fantastic Purple	"Upper Mid-Range"	"Mid Range"
22	10990	8990 32 GB	2 GB	Flowing Silver	"Lower Mid-Range"	"Low Range"
23	25990	19990 128 GB	8 GB	Matte Black	"Mid-Range"	"Mid Range"
24	30199	15990 128 GB	4 GB	Moonlight Gold	"Upper Mid-Range"	"Mid Range"
25	30199	14990 64 GB	4 GB	Moonlight Gold	"Upper Mid-Range"	"Mid Range"
26	35990	29990 128 GB	8 GB	Aurora	"Upper Mid-Range"	"Premium"
27	35990	29990 128 GB	8 GB	Stellar Black	"Upper Mid-Range"	"Premium"
28	25990	19990 128 GB	8 GB	Magic Blue	"Mid-Range"	"Mid Range"
29	30191	14990 64 GB	4 GB	Starry Blue	"Upper Mid-Range"	"Mid Range"
30	30191	15990 128 GB	4 GB	Starry Blue	"Upper Mid-Range"	"Mid Range"
31	17990	16990 128 GB	6 GB	Moonlight Gold	"Lower Mid-Range"	"Mid Range"
32	17990	16990 128 GB	6 GB	Starry Blue	"Lower Mid-Range"	"Mid Range"
33	30217	14990 64 GB	4 GB	Crystal Black	"Upper Mid-Range"	"Mid Range"
34	25990	19990 128 GB	8 GB	Metallic White	"Mid-Range"	"Mid Range"
35	12319	12199 64 GB	4 GB	Fantasy White	"Lower Mid-Range"	"Mid Range"
36	30241	21990 128 GB	8 GB	Navy Blue	"Upper Mid-Range"	"Mid Range"

Group by Selling Price segment with brand

= Table.Group(#"Renamed Columns", {"Brand", "selling price segment"}, {"Count", each Table.RowCount(_), Int64.Type})

	A# Brand	ABC selling price segment	i ² 3 Count
1	OPPO	"Mid Range"	181
2	OPPO	"Low Range"	25
3	OPPO	"Premium"	38
4	HTC	"Premium"	1
5	HTC	"Mid Range"	4
6	IQOO	"Premium"	5
7	Google Pixel	"Premium"	28
8	LG	"Low Range"	35
9	LG	"Premium"	28
10	LG	"Mid Range"	36
11	Google Pixel	"Mid Range"	1
12	ASUS	"Premium"	27
13	ASUS	"Mid Range"	37
14	ASUS	"Low Range"	49
15	realme	"Low Range"	73
16	realme	"Mid Range"	183
17	realme	"Premium"	29
18	GIONEE	"Low Range"	111
19	GIONEE	"Mid Range"	18
20	Nokia	"Low Range"	138
21	Nokia	"Mid Range"	65
22	Nokia	"Premium"	9
23	Apple	"Premium"	355
24	Apple	"Mid Range"	9
25	SAMSUNG	"Mid Range"	310
26	SAMSUNG	"Low Range"	192
27	SAMSUNG	"Premium"	193
28	Lenovo	"Low Range"	81
29	Lenovo	"Mid Range"	39
30	Lenovo	"Premium"	1
31	Motorola	"Low Range"	34
32	Motorola	"Mid Range"	63
33	Motorola	"Premium"	8
34	POCO	"Mid Range"	12
35	POCO	"Low Range"	8
36	vivo	"Mid Range"	38
37	vivo	"Premium"	18

Most common specs offered by various brands (eg. if 4 GB memory and 64GB storage models are more commonly offered by all brands)

Table.Sort(#"Grouped Rows",{{"Count", Order.Descending}})

#	Brand	Missing Storage	Missing Memory	Count
1	SAMSUNG	128 GB	6 GB	101
2	SAMSUNG	64 GB	4 GB	87
3	SAMSUNG	128 GB	8 GB	76
4	SAMSUNG	32 GB	3 GB	69
5	realme	64 GB	4 GB	65
6	Xiaomi	64 GB	4 GB	61
7	OPPO	64 GB	4 GB	56
8	SAMSUNG	16 GB	2 GB	46
9	realme	128 GB	8 GB	43
10	Apple	256 GB	4GB	42
11	OPPO	128 GB	8 GB	39
12	OPPO	128 GB	6 GB	37
13	Motorola	64 GB	4 GB	37
14	SAMSUNG	8 GB	1 GB	36
15	realme	32 GB	3 GB	35
16	Nokia	64 GB	4 GB	34
17	Lenovo	32 GB	3 GB	31
18	Apple	64 GB	4GB	31
19	Xiaomi	128 GB	6 GB	30
20	realme	128 GB	6 GB	29
21	Nokia	32 GB	3 GB	28
22	SAMSUNG	32 GB	4 GB	28
23	Nokia	4 MB	4 MB	27
24	GIONEE	32 GB	3 GB	26
25	Nokia	16 GB	2 GB	25
26	Apple	128 GB	4GB	25
27	SAMSUNG	32 GB	2 GB	24
28	SAMSUNG	64 GB	6 GB	24
29	realme	128 GB	4 GB	24
30	Xiaomi	32 GB	3 GB	24
31	LG	64 GB	4 GB	23
32	Lenovo	16 GB	2 GB	22
33	ASUS	32 GB	3 GB	22
34	OPPO	32 GB	3 GB	21
35	SAMSUNG	128 GB	4 GB	20
36	Apple	256 GB	3 GB	20
37	ASUS	16 GB	2 GB	19

Profiling based on top 1000 rows.

PREVIEW DOWNLOADED AT 16:13

Compare premium offerings by top brands

	A ^B _C Brand	A ^B _C selling price segment	1 ² ₃ Count
1	OPPO	"Premium"	38
2	HTC	"Premium"	1
3	IQOO	"Premium"	5
4	Google Pixel	"Premium"	28
5	LG	"Premium"	28
6	ASUS	"Premium"	27
7	realme	"Premium"	29
8	Nokia	"Premium"	9
9	Apple	"Premium"	355
10	SAMSUNG	"Premium"	193
11	Lenovo	"Premium"	1
12	Motorola	"Premium"	8
13	vivo	"Premium"	18
14	Xiaomi	"Premium"	19

Most commonly offered colors by all Brands

colors by brand - Power Query Editor

Queries [8]

- Group by Brand
- Flipkart_mobile_brands_scraped...
- Group by Brand with...
- Group byMost comm...
- Premium in brands
- colors by brand

Query Settings

APPLIED STEPS

Source
Navigation
Promoted Headers
Changed Type
Filtered Rows
Replaced Value in model
Filtered Rows1
Changed Type1
Added Conditional Column Pr...
Changed data type in price se...
Added Conditional Column Se...
Renamed Column
Comparing "Premium" in Top ...
Changed Type2
Removed Duplicates
X Grouped Rows

A _c Brand	A _c Color	Count
1 OPPO	Aurora	1
2 HTC	Amazing Silver	1
3 IQOO	Quantum Silver	1
4 Google Pixel	Just Black	1
5 LG	Aurora Silver	1
6 ASUS	Black	1
7 realme	Arctic White	1
8 Nokia	Blue	1
9 Apple	White	1
10 SAMSUNG	Cream	1
11 Lenovo	Starry Night Black	1
12 Motorola	Frosted Emerald	1
13 vivo	Midnight Blue	1
14 Xiaomi	Coral Green	1

Queries [9]

- Group by Brand
- Flipkart_mobile_brands_scraped...
- Group by Brand with...
- Group byMost comm...
- Premium in brands
- colors by brand
- Flipkart_mobile_brands_scraped...
- colors_by_brand
- Flipkart_mobile_brands_scrap...

Query Settings

APPLIED STEPS

Source
Navigation
Promoted Headers
Changed Type
Filtered Rows
Replaced Value in model
Filtered Rows1
Changed Type1
Added Conditional Column Pr...
Changed data type in price se...
Added Conditional Column Se...
Renamed Column
Comparing "Premium" in Top ...
Changed Type2
Added Custom in price range
X Changed Type in price range

A _c Missing Storage	A _c Missing Memory	A _c Missing Color	A _c Original Price Segment	A _c selling price segment	Price Range
1 1990 64 GB	4 GB	Moonlight Black	"Lower Mid-Range"	"Mid Range"	4000
2 1990 64 GB	4 GB	Mint Cream	"Lower Mid-Range"	"Mid Range"	4000
3 1990 128 GB	6 GB	Moonlight Black	"Lower Mid-Range"	"Mid Range"	4000
4 1990 128 GB	6 GB	Mint Cream	"Lower Mid-Range"	"Mid Range"	4000
5 1990 64 GB	4 GB	Electric Black	"Lower Mid-Range"	"Mid Range"	4000
6 1990 128 GB	6 GB	Electric Black	"Lower Mid-Range"	"Mid Range"	4000
7 1990 64 GB	4 GB	Deep Blue	"Lower Mid-Range"	"Mid Range"	1500
8 1990 32 GB	3 GB	Black	"Lower Mid-Range"	"Low Range"	1500
9 1990 32 GB	3 GB	Blue	"Lower Mid-Range"	"Low Range"	1500
10 1990 32 GB	3 GB	Flowing Silver	"Lower Mid-Range"	"Low Range"	1500
11 1990 32 GB	3 GB	Deep Blue	"Lower Mid-Range"	"Low Range"	1500
12 1990 64 GB	4 GB	Flowing Silver	"Lower Mid-Range"	"Mid Range"	1500
13 1990 128 GB	6 GB	Crystal Blue	"Lower Mid-Range"	"Mid Range"	1000
14 1990 128 GB	6 GB	Ink Black	"Lower Mid-Range"	"Mid Range"	1000
15 1990 64 GB	4 GB	Blue	"Lower Mid-Range"	"Mid Range"	1500
16 1990 128 GB	8 GB	Crystal Blue	"Lower Mid-Range"	"Mid Range"	1000
17 1990 128 GB	8 GB	Ink Black	"Lower Mid-Range"	"Mid Range"	1000
18 1990 32 GB	3 GB	Moonlight Black	"Lower Mid-Range"	"Mid Range"	2500
19 1990 64 GB	4 GB	Lake Green	"Lower Mid-Range"	"Mid Range"	1030
20 1779 64 GB	4 GB	Mystery Black	"Lower Mid-Range"	"Mid Range"	140
21 8979 128 GB	6 GB	Fantastic Purple	"Upper Mid-Range"	"Mid Range"	11195
22 1990 32 GB	2 GB	Flowing Silver	"Lower Mid-Range"	"Low Range"	2000
23 1990 128 GB	8 GB	Matte Black	"Mid-Range"	"Mid Range"	6000
24 1990 128 GB	4 GB	Moonlight Gold	"Upper Mid-Range"	"Mid Range"	14209
25 1990 64 GB	4 GB	Moonlight Gold	"Upper Mid-Range"	"Mid Range"	15209
26 1990 128 GB	8 GB	Aurora	"Upper Mid-Range"	"Premium"	6000
27 1990 128 GB	8 GB	Stellar Black	"Upper Mid-Range"	"Premium"	6000
28 1990 128 GB	8 GB	Magic Blue	"Mid-Range"	"Mid Range"	6000
29 1990 64 GB	4 GB	Starry Blue	"Upper Mid-Range"	"Mid Range"	15201
30 1990 128 GB	4 GB	Starry Blue	"Upper Mid-Range"	"Mid Range"	14201
31 1990 128 GB	6 GB	Moonlight Gold	"Lower Mid-Range"	"Mid Range"	1000
32 1990 128 GB	6 GB	Starry Blue	"Lower Mid-Range"	"Mid Range"	1000
33 1990 64 GB	4 GB	Crystal Black	"Upper Mid-Range"	"Mid Range"	15227
34 1990 128 GB	8 GB	Metallic White	"Mid-Range"	"Mid Range"	6000
35 1299 64 GB	4 GB	Fantasy White	"Lower Mid-Range"	"Mid Range"	120
36 1990 128 GB	8 GB	Navy Blue	"Upper Mid-Range"	"Mid Range"	8251

Data Preprocessing

- Imported the **Mobile dataset** (CSV/Excel).
- Missing Values: Filled missing categorical values (Color) with Mode; numeric values filled where possible.
- Feature Engineering: Extracted numeric values from RAM & Storage; created Price Segments (Low, Mid, Premium).
- Inconsistencies: Standardized Brand and Model names.
- **New Columns (DAX)**
 - Price Segment (Low/Mid/Premium)
 - Discount Amount = Original Price – Selling Price
 - Profit Margin % = (Original – Selling)/Original
 - Rating Status (Excellent / Good / Average / Poor)
- **Measures (DAX)**
 - **Total Sales** = SUM(Selling Price)
 - **Average Rating** = AVERAGE(Rating)
 - **Profit Margin** = SUM(Original Price) – SUM(Selling Price)

Creating a new column using custom column added discount amount.

Queries [8]

- Table.TransformColumnTypes("#Added Custom", {"Discount Amount", Int64.Type})

	ice	A ₁ % Missing Storage	A ₂ % Missing Memory	A ₃ % Missing Color	I ₁ ₂ RAM	I ₂ ₃ Storage_1	I ₂ ₃ Discount Amount
1	11990	64 GB	4 GB	Moonlight Black	4	64	4000
2	11990	64 GB	4 GB	Mint Cream	4	64	4000
3	13990	128 GB	6 GB	Moonlight Black	6	128	4000
4	13990	128 GB	6 GB	Mint Cream	6	128	4000
5	11990	64 GB	4 GB	Electric Black	4	64	4000
6	13990	128 GB	6 GB	Electric Black	6	128	4000
7	10490	64 GB	4 GB	Deep Blue	4	64	1500
8	9490	32 GB	3 GB	Black	3	32	1500
9	9490	32 GB	3 GB	Blue	3	32	1500
10	9490	32 GB	3 GB	Flowing Silver	3	32	1500
11	9490	32 GB	3 GB	Deep Blue	3	32	1500
12	10490	64 GB	4 GB	Flowing Silver	4	64	1500
13	15990	128 GB	6 GB	Crystal Blue	6	128	1000
14	15990	128 GB	6 GB	Ink Black	6	128	1000
15	10490	64 GB	4 GB	Blue	4	64	1500
16	17990	128 GB	8 GB	Crystal Blue	8	128	1000
17	17990	128 GB	8 GB	Ink Black	8	128	1000
18	10490	32 GB	3 GB	Moonlight Black	3	32	2500
19	11960	64 GB	4 GB	Lake Green	4	64	1030
20	11779	64 GB	4 GB	Mystery Black	4	64	140
21	18979	128 GB	6 GB	Fantastic Purple	6	128	11195
22	8990	32 GB	2 GB	Flowing Silver	2	32	2000
23	19990	128 GB	8 GB	Matte Black	8	128	6000
24	15990	128 GB	4 GB	Moonlight Gold	4	128	14209
25	14990	64 GB	4 GB	Moonlight Gold	4	64	15209
26	29990	128 GB	8 GB	Aurora	8	128	6000
27	29990	128 GB	8 GB	Stellar Black	8	128	6000
28	19990	128 GB	8 GB	Magic Blue	8	128	6000
29	14990	64 GB	4 GB	Starry Blue	4	64	15201
30	15990	128 GB	4 GB	Starry Blue	4	128	14201
31	16990	128 GB	6 GB	Moonlight Gold	6	128	1000
32	16990	128 GB	6 GB	Starry Blue	6	128	1000
33	14990	64 GB	4 GB	Crystal Black	4	64	15227
34	19990	128 GB	8 GB	Metallic White	8	128	6000
35	12199	64 GB	4 GB	Fantasy White	4	64	120
36	21990	128 GB	8 GB	Navy Blue	8	128	8251
37							

Merged new column using merge column for brand and model and named as "Mobile".

Mobile	A ^B _C Mobile	A ^B _C Missing Color	1.2 Missing Original Price	1.2 Missing Selling Price	A ^B _C Missing Memory	A ^B _C Missing Storage
Group byMost common...	1 OPPO A53	Moonlight Black	15990	11990 4 GB	64 GB	
Group by Brand with pri...	2 OPPO A53	Mint Cream	15990	11990 4 GB	64 GB	
Group by Brand	3 OPPO A53	Moonlight Black	17990	13990 6 GB	128 GB	
Flipkart_mobile_brands_s...	4 OPPO A53	Mint Cream	17990	13990 6 GB	128 GB	
Flipkart_mobile_brands_s...	5 OPPO A53	Electric Black	15990	11990 4 GB	64 GB	
colors by brand	6 OPPO A53	Electric Black	17990	13990 6 GB	128 GB	
Brand (Mobile)	7 OPPO A12	Deep Blue	11990	10490 4 GB	64 GB	
Merge brand and model	8 OPPO A12	Black	10990	9490 3 GB	32 GB	
	9 OPPO A12	Blue	10990	9490 3 GB	32 GB	
	10 OPPO A12	Flowing Silver	10990	9490 3 GB	32 GB	
	11 OPPO A12	Deep Blue	10990	9490 3 GB	32 GB	
	12 OPPO A12	Flowing Silver	11990	10490 4 GB	64 GB	
	13 OPPO A53s 5G	Crystal Blue	16990	15990 6 GB	128 GB	
	14 OPPO A53s 5G	Ink Black	16990	15990 6 GB	128 GB	
	15 OPPO A12	Blue	11990	10490 4 GB	64 GB	
	16 OPPO A53s 5G	Crystal Blue	18990	17990 8 GB	128 GB	
	17 OPPO A53s 5G	Ink Black	18990	17990 8 GB	128 GB	
	18 OPPO A33	Moonlight Black	12990	10490 3 GB	32 GB	
	19 OPPO A31	Lake Green	12990	11960 4 GB	64 GB	
	20 OPPO A31	Mystery Black	11919	11779 4 GB	64 GB	
	21 OPPO A74 5G	Fantastic Purple	30174.3372	18979 6 GB	128 GB	
	22 OPPO A11K	Flowing Silver	10990	8990 2 GB	32 GB	
	23 OPPO F17 Pro	Matte Black	25990	19990 8 GB	128 GB	
	24 OPPO A54	Moonlight Gold	30199.01373	15990 4 GB	128 GB	
	25 OPPO A54	Moonlight Gold	30199.01373	14990 4 GB	64 GB	
	26 OPPO Reno6 5G	Aurora	35990	29990 8 GB	128 GB	
	27 OPPO Reno6 5G	Stellar Black	35990	29990 8 GB	128 GB	
	28 OPPO F17 Pro	Magic Blue	25990	19990 8 GB	128 GB	
	29 OPPO A54	Starry Blue	30191.20339	14990 4 GB	64 GB	
	30 OPPO A54	Starry Blue	30191.20339	15990 4 GB	128 GB	
	31 OPPO A54	Moonlight Gold	17990	16990 6 GB	128 GB	
	32 OPPO A54	Starry Blue	17990	16990 6 GB	128 GB	
	33 OPPO A54	Crystal Black	30217.10828	14990 4 GB	64 GB	
	34 OPPO F17 Pro	Metallic White	25990	19990 8 GB	128 GB	
	35 OPPO A31	Fantasy White	12319	12199 4 GB	64 GB	
	36 OPPO F17	Navy Blue	30240.64574	21990 8 GB	128 GB	

Conditional column:

Add a new conditional column named “RAM Size” based on the values “RAM” column. The conditions are follows:

Add Conditional Column

Add a conditional column that is computed from the other columns or values.

New column name
RAM Size

Column Name	Operator	Value ⓘ	Output ⓘ
If	RAM	is greater than or... ABC 123	12 Then ABC 123 "High-End"
Else If	RAM	is greater than or... ABC 123	8 Then ABC 123 "Upper Mid"
Else If	RAM	is greater than or... ABC 123	6 Then ABC 123 "Mid"

Add Clause

Else ⓘ ABC 123 "Entry Level"

OK Cancel

Queries [11]

= Table.RemoveRowsWithErrors("#"Changed Type2", {"RAM Size"})

ge	A _c Missing Memory	A _c Missing Color	i ₃ RAM	i ₃ Storage_1	i ₃ Discount Amount	A _c RAM Size
1	4 GB	Moonlight Black	4	64	4000	"Entry Level"
2	4 GB	Mint Cream	4	64	4000	"Entry Level"
3	6 GB	Moonlight Black	6	128	4000	"Mid"
4	6 GB	Mint Cream	6	128	4000	"Mid"
5	4 GB	Electric Black	4	64	4000	"Entry Level"
6	6 GB	Electric Black	6	128	4000	"Mid"
7	4 GB	Deep Blue	4	64	1500	"Entry Level"
8	3 GB	Black	3	32	1500	"Entry Level"
9	3 GB	Blue	3	32	1500	"Entry Level"
10	3 GB	Flowing Silver	3	32	1500	"Entry Level"
11	3 GB	Deep Blue	3	32	1500	"Entry Level"
12	4 GB	Flowing Silver	4	64	1500	"Entry Level"
13	6 GB	Crystal Blue	6	128	1000	"Mid"
14	6 GB	Ink Black	6	128	1000	"Mid"
15	4 GB	Blue	4	64	1500	"Entry Level"
16	8 GB	Crystal Blue	8	128	1000	"Upper Mid"
17	8 GB	Ink Black	8	128	1000	"Upper Mid"
18	3 GB	Moonlight Black	3	32	2500	"Entry Level"
19	4 GB	Lake Green	4	64	1030	"Entry Level"
20	4 GB	Mystery Black	4	64	140	"Entry Level"
21	6 GB	Fantastic Purple	6	128	11195	"Mid"
22	2 GB	Flowing Silver	2	32	2000	"Entry Level"
23	8 GB	Matte Black	8	128	6000	"Upper Mid"
24	4 GB	Moonlight Gold	4	128	14209	"Entry Level"
25	4 GB	Moonlight Gold	4	64	15209	"Entry Level"
26	8 GB	Aurora	8	128	6000	"Upper Mid"
27	8 GB	Stellar Black	8	128	6000	"Upper Mid"
28	8 GB	Magic Blue	8	128	6000	"Upper Mid"
29	4 GB	Starry Blue	4	64	15201	"Entry Level"
30	4 GB	Starry Blue	4	128	14201	"Entry Level"
31	6 GB	Moonlight Gold	6	128	1000	"Mid"
32	6 GB	Starry Blue	6	128	1000	"Mid"
33	4 GB	Crystal Black	4	64	15227	"Entry Level"
34	8 GB	Metallic White	8	128	6000	"Upper Mid"
35	4 GB	Fantasy White	4	64	120	"Entry Level"
36	8 GB	Navy Blue	8	128	8251	"Upper Mid"

Add a new conditional column named “Storage” based on the values “Storage” column. The conditions are follows:

Add Conditional Column

Add a conditional column that is computed from the other columns or values.

New column name

Column Name	Operator	Value ⓘ	Output ⓘ
If	Storage_1	is greater than or...	ABC 123 256 Then ABC 123 ""Ultra""
Else If	Storage_1	is greater than or...	ABC 123 128 Then ABC 123 ""High""
Else If	Storage_1	is greater than or...	ABC 123 64 Then ABC 123 ""Medium""

Add Clause

Else ⓘ ABC 123 ""Low""

OK **Cancel**

Queries [11]

	Missing Memory	Missing Color	RAM	Storage_1	Discount Amount	Storage Category
1	4 GB	Moonlight Black	4	64	4000	"Medium"
2	4 GB	Mint Cream	4	64	4000	"Medium"
3	6 GB	Moonlight Black	6	128	4000	"High"
4	6 GB	Mint Cream	6	128	4000	"High"
5	4 GB	Electric Black	4	64	4000	"Medium"
6	6 GB	Electric Black	6	128	4000	"High"
7	4 GB	Deep Blue	4	64	1500	"Medium"
8	3 GB	Black	3	32	1500	"Low"
9	3 GB	Blue	3	32	1500	"Low"
10	3 GB	Flowing Silver	3	32	1500	"Low"
11	3 GB	Deep Blue	3	32	1500	"Low"
12	4 GB	Flowing Silver	4	64	1500	"Medium"
13	6 GB	Crystal Blue	6	128	1000	"High"
14	6 GB	Ink Black	6	128	1000	"High"
15	4 GB	Blue	4	64	1500	"Medium"
16	8 GB	Crystal Blue	8	128	1000	"High"
17	8 GB	Ink Black	8	128	1000	"High"
18	3 GB	Moonlight Black	3	32	2500	"Low"
19	4 GB	Lake Green	4	64	1030	"Medium"
20	4 GB	Mystery Black	4	64	140	"Medium"
21	6 GB	Fantastic Purple	6	128	11195	"High"
22	2 GB	Flowing Silver	2	32	2000	"Low"
23	8 GB	Matte Black	8	128	6000	"High"
24	4 GB	Moonlight Gold	4	128	14209	"High"
25	4 GB	Moonlight Gold	4	64	15209	"Medium"
26	8 GB	Aurora	8	128	6000	"High"
27	8 GB	Stellar Black	8	128	6000	"High"
28	8 GB	Magic Blue	8	128	6000	"High"
29	4 GB	Starry Blue	4	64	15201	"Medium"
30	4 GB	Starry Blue	4	128	14201	"High"
31	6 GB	Moonlight Gold	6	128	1000	"High"
32	6 GB	Starry Blue	6	128	1000	"High"
33	4 GB	Crystal Black	4	64	15227	"Medium"
34	8 GB	Metallic White	8	128	6000	"High"
35	4 GB	Fantasy White	4	64	120	"Medium"
36	8 GB	Navy Blue	8	128	8251	"High"

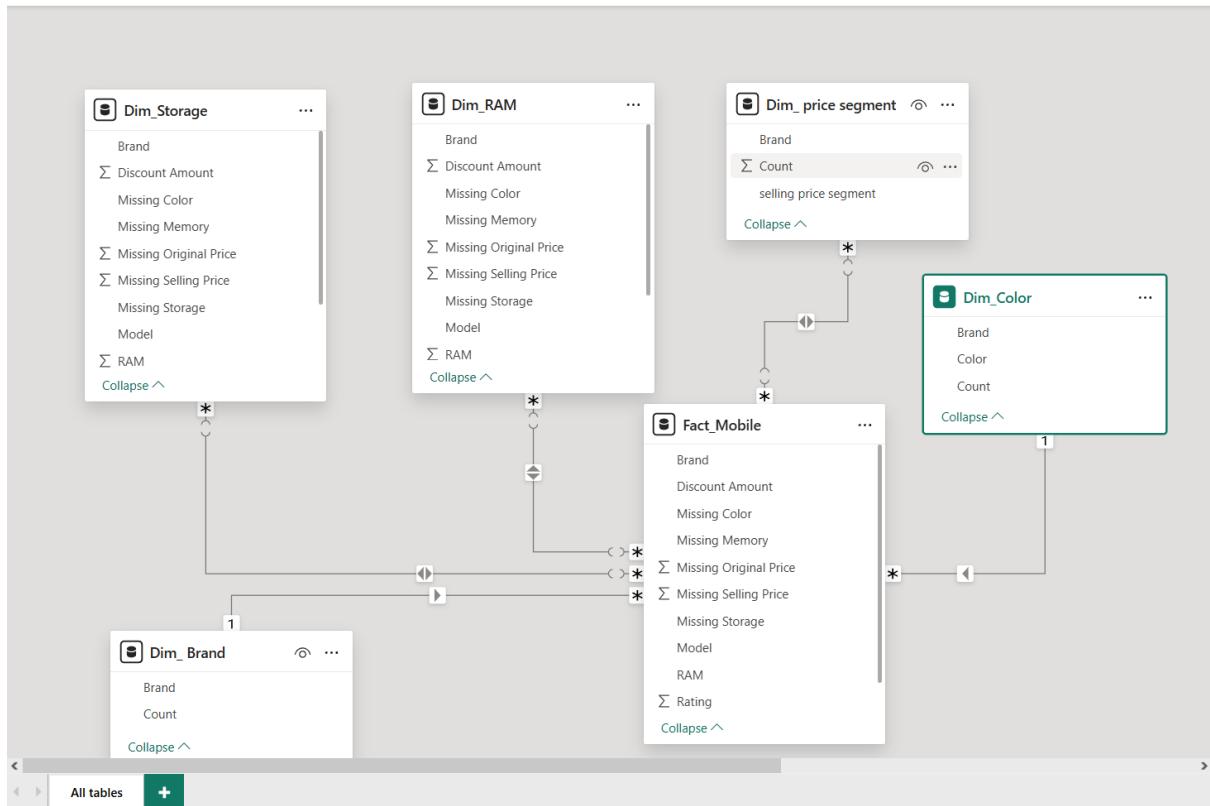
Data Modeling

Relationships

- Brand_Dim[Brand] → Mobile_Sales[Brand]

- Specs_Dim[Spec_ID] → Mobile_Sales[Spec_ID]
- Color_Dim[Color] → Mobile_Sales[Color]

These relationships formed a **star schema**, making queries faster and easier to analyze.



Calculated columns:

Create a Calculated column for “Memory”. Add a calculated column in the *fact mobile* tables that combines the **RAM** and **storage** columns into a single “Memory” column.

1 Memory = Fact_Mobile[RAM] & "GB RAM + " & Fact_Mobile[Storage_1] & "GB Storage"													
Model	Rating	Missing Original Price	Missing Selling Price	Missing Storage	Missing Memory	Missing Color	RAM	Storage_1	Discount Amount	Memory			
	4.3	12990	11960	64 GB	4 GB	Lake Green	4	64	1030	4GB RAM + 64GB Storage			
	4.3	11919	11779	64 GB	4 GB	Mystery Black	4	64	140	4GB RAM + 64GB Storage			
	4.3	30199	14990	64 GB	4 GB	Moonlight Gold	4	64	15209	4GB RAM + 64GB Storage			
	4.3	30191	14990	64 GB	4 GB	Starry Blue	4	64	15201	4GB RAM + 64GB Storage			
	4.3	30217	14990	64 GB	4 GB	Crystal Black	4	64	15227	4GB RAM + 64GB Storage			
	4.3	12319	12199	64 GB	4 GB	Fantasy White	4	64	120	4GB RAM + 64GB Storage			
	4.3	13990	12990	64 GB	4 GB	Dynamic Black	4	64	1000	4GB RAM + 64GB Storage			
	4.3	13990	12990	64 GB	4 GB	Rainbow Silver	4	64	1000	4GB RAM + 64GB Storage			
	4.3	12989	12889	64 GB	4 GB	Fancy White	4	64	700	4GB RAM + 64GB Storage			
	4.3	30509	17000	64 GB	4 GB	Rose Gold	4	64	13509	4GB RAM + 64GB Storage			
2018 Edition	4.3	30509	15000	64 GB	4 GB	Blue	4	64	15509	4GB RAM + 64GB Storage			
	4.3	30509	18000	64 GB	4 GB	Rose Gold	4	64	12509	4GB RAM + 64GB Storage			
	4.3	30520	15000	64 GB	4 GB	Purple	4	64	15520	4GB RAM + 64GB Storage			
	4.3	30543	13990	64 GB	4 GB	Red	4	64	16553	4GB RAM + 64GB Storage			
	4.3	30543	18000	64 GB	4 GB	Gold	4	64	12543	4GB RAM + 64GB Storage			
	4.3	30774	18000	64 GB	4 GB	Red	4	64	16784	4GB RAM + 64GB Storage			
	4.3	30789	16990	64 GB	4 GB	Champagne	4	64	13799	4GB RAM + 64GB Storage			
	4.3	30841	20990	64 GB	4 GB	Black	4	64	9851	4GB RAM + 64GB Storage			
US	4.3	30873	30990	64 GB	4 GB	Black	4	64	-117	4GB RAM + 64GB Storage			
US	4.3	30857	12990	64 GB	4 GB	Gold	4	64	17867	4GB RAM + 64GB Storage			
	4.3	30968	18990	64 GB	4 GB	Grey	4	64	11978	4GB RAM + 64GB Storage			
	4.3	30968	18990	64 GB	4 GB	Rose Gold	4	64	11978	4GB RAM + 64GB Storage			
	4.3	30968	18990	64 GB	4 GB	Gold	4	64	11978	4GB RAM + 64GB Storage			
One Max Pro M1	4.3	30788	15599	64 GB	4 GB	Grey	4	64	15189	4GB RAM + 64GB Storage			
One Max Pro M1	4.3	30757	15599	64 GB	4 GB	Blue	4	64	15158	4GB RAM + 64GB Storage			
One Max Pro M1	4.3	30757	15599	64 GB	4 GB	Black	4	64	15158	4GB RAM + 64GB Storage			
One Max M2	4.3	30757	14999	64 GB	4 GB	Black	4	64	15758	4GB RAM + 64GB Storage			
One Max M2	4.3	30757	14999	64 GB	4 GB	Silver	4	64	15758	4GB RAM + 64GB Storage			
One Max Pro M1	4.3	30534	15599	64 GB	4 GB	Blue	4	64	14935	4GB RAM + 64GB Storage			
One Max M2	4.3	30534	14999	64 GB	4 GB	Blue	4	64	15535	4GB RAM + 64GB Storage			
One Max Pro M2	4.3	30477	17999	64 GB	4 GB	Blue	4	64	12478	4GB RAM + 64GB Storage			
One Max Pro M2	4.3	30408	17999	64 GB	4 GB	Titanium	4	64	12409	4GB RAM + 64GB Storage			
30	4.3	14999	13499	64 GB	4 GB	Racing Blue	4	64	1500	4GB RAM + 64GB Storage			
30	4.3	14999	13499	64 GB	4 GB	Racing Silver	4	64	1500	4GB RAM + 64GB Storage			

Create a Calculated column for “RATING STATUS”. Add a calculated column in the *fact mobile* tables that categorize each Rating as per based on the status which is greater than 4.5 = “Excellent”, if greater than 4 then “Average”, “Good”, “Poor”.

														Rating_Status
4.3	12990	11960	64 GB	4 GB	Lake Green	4	64	1030	4GB RAM + 64GB Storage	Average				
4.3	11919	11779	64 GB	4 GB	Mystery Black	4	64	140	4GB RAM + 64GB Storage	Average				
4.3	30199	14990	64 GB	4 GB	Moonlight Gold	4	64	15209	4GB RAM + 64GB Storage	Average				
4.3	30191	14990	64 GB	4 GB	Starry Blue	4	64	15201	4GB RAM + 64GB Storage	Average				
4.3	30217	14990	64 GB	4 GB	Crystal Black	4	64	15227	4GB RAM + 64GB Storage	Average				
4.3	12319	12199	64 GB	4 GB	Fantasy White	4	64	120	4GB RAM + 64GB Storage	Average				
4.3	13990	12990	64 GB	4 GB	Dynamic Black	4	64	1000	4GB RAM + 64GB Storage	Average				
4.3	13990	12990	64 GB	4 GB	Rainbow Silver	4	64	1000	4GB RAM + 64GB Storage	Average				
4.3	12989	12889	64 GB	4 GB	Fancy White	4	64	100	4GB RAM + 64GB Storage	Average				
4.3	30509	17000	64 GB	4 GB	Rose Gold	4	64	13509	4GB RAM + 64GB Storage	Average				
4.3	30509	15000	64 GB	4 GB	Blue	4	64	15509	4GB RAM + 64GB Storage	Average				
4.3	30509	18000	64 GB	4 GB	Rose Gold	4	64	12509	4GB RAM + 64GB Storage	Average				
4.3	30520	15000	64 GB	4 GB	Purple	4	64	15520	4GB RAM + 64GB Storage	Average				
4.3	30543	13990	64 GB	4 GB	Red	4	64	16553	4GB RAM + 64GB Storage	Average				
4.3	30543	18000	64 GB	4 GB	Gold	4	64	12543	4GB RAM + 64GB Storage	Average				
4.3	30774	13990	64 GB	4 GB	Red	4	64	16784	4GB RAM + 64GB Storage	Average				
4.3	30789	16990	64 GB	4 GB	Champagne	4	64	13799	4GB RAM + 64GB Storage	Average				
4.3	30841	20990	64 GB	4 GB	Black	4	64	9851	4GB RAM + 64GB Storage	Average				
4.3	30873	30990	64 GB	4 GB	Black	4	64	-117	4GB RAM + 64GB Storage	Average				
4.3	30857	12990	64 GB	4 GB	Gold	4	64	17867	4GB RAM + 64GB Storage	Average				
4.3	30968	18990	64 GB	4 GB	Grey	4	64	11978	4GB RAM + 64GB Storage	Average				
4.3	30968	18990	64 GB	4 GB	Rose Gold	4	64	11978	4GB RAM + 64GB Storage	Average				
4.3	30968	18990	64 GB	4 GB	Gold	4	64	11978	4GB RAM + 64GB Storage	Average				
4.3	30788	15599	64 GB	4 GB	Grey	4	64	15189	4GB RAM + 64GB Storage	Average				
4.3	30757	15599	64 GB	4 GB	Blue	4	64	15158	4GB RAM + 64GB Storage	Average				
4.3	30757	15599	64 GB	4 GB	Black	4	64	15158	4GB RAM + 64GB Storage	Average				
4.3	30757	14999	64 GB	4 GB	Black	4	64	15758	4GB RAM + 64GB Storage	Average				
4.3	30757	14999	64 GB	4 GB	Silver	4	64	15758	4GB RAM + 64GB Storage	Average				
4.3	30534	15599	64 GB	4 GB	Blue	4	64	14935	4GB RAM + 64GB Storage	Average				
4.3	30534	14999	64 GB	4 GB	Blue	4	64	15535	4GB RAM + 64GB Storage	Average				
4.3	30477	17999	64 GB	4 GB	Blue	4	64	12478	4GB RAM + 64GB Storage	Average				
4.3	30408	17999	64 GB	4 GB	Titanium	4	64	12409	4GB RAM + 64GB Storage	Average				
4.3	14999	13499	64 GB	4 GB	Racing Blue	4	64	1500	4GB RAM + 64GB Storage	Average				
4.3	14999	13499	64 GB	4 GB	Racing Silver	4	64	1500	4GB RAM + 64GB Storage	Average				

Calculated Measure

Total Sales

```
1 Total sales = SUM(Fact_Mobile[Missing Selling Price])
```

₹ 69.92M

Total sales

Average selling price

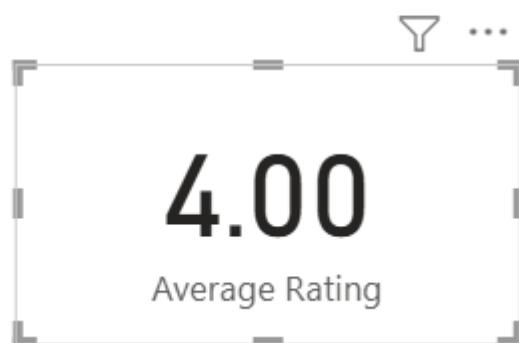
```
1 Average selling price = AVERAGE(Fact_Mobile[Missing Selling Price])
```

26.71K

Average selling price

Average Rating

```
1 Average Rating = AVERAGE('Brand (Mobile)'[Rating])
```



Dashboards & Visualizations

Brand-Level Insights

- **Clustered Bar Chart:** Top-selling models (X-axis: Model, Y-axis: Total Sales).
- **Pie Chart:** Market share by brand (based on total revenue).
- Shows **which brands dominate in the market.**

Price & Discount Analysis

- **Line Chart:** Compare *Original Price vs Selling Price* per model.
- **Scatter Plot:** Selling Price (X) vs Rating (Y), grouped by Brand → shows **value-for-money phones.**

Specifications (RAM/Storage)

- **Treemap:** Brand vs Memory (RAM) → shows **which RAM options each brand sells most.**
- **Stacked Column Chart:** Sales distribution by Storage (32GB, 64GB, 128GB) across brands.

Profitability & Performance

- **Gauge Chart:** Actual Sales vs Target Sales → to measure performance.
- **Matrix Table:** Brand-wise summary (Avg Storage, Avg Profit Margin, Units Sold).

1. Brand-Level Analysis

Clustered Bar Chart

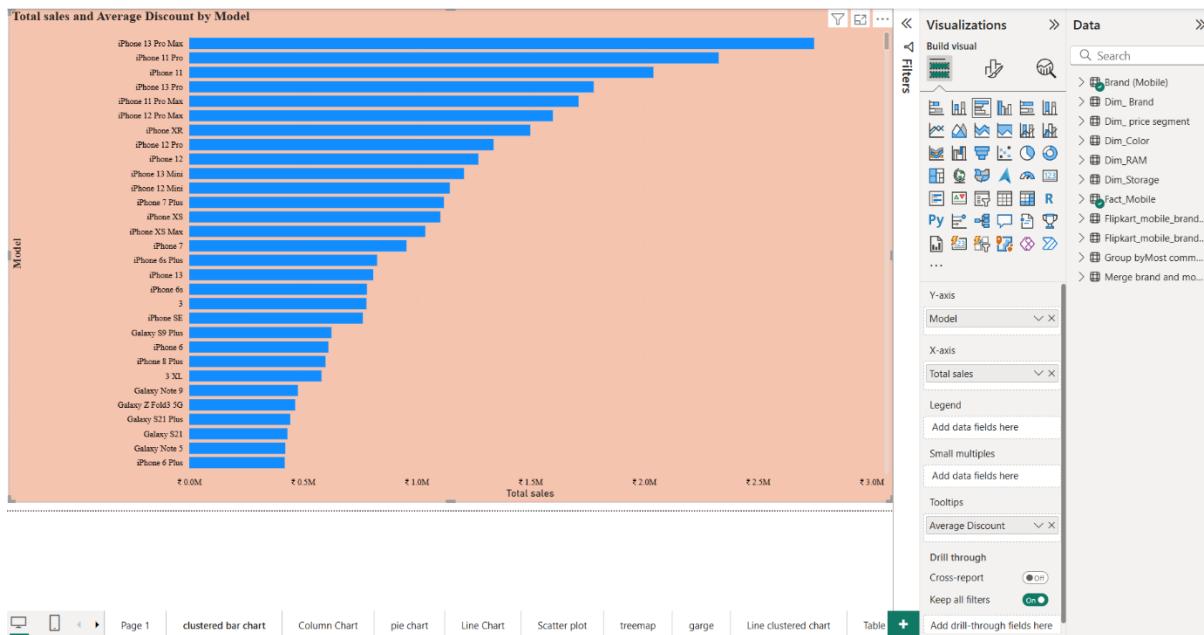
Top selling model

X-Axis: Model

Y-Axis: Total Sales

Tooltip: average discount

It helps to reveals which models drive the most revenue.



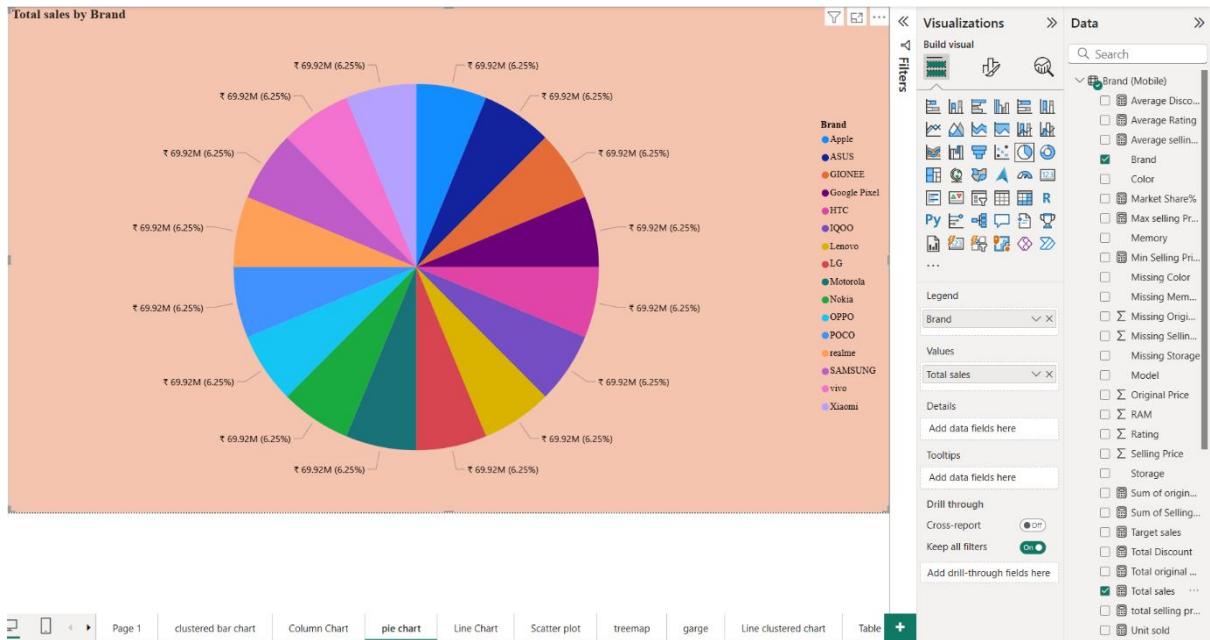
Pie Chart

Market Share By Brand

Values: Total Sales

Legend: Brand

It shows how much revenue each brand contributes.



2. Price & Discount Insights

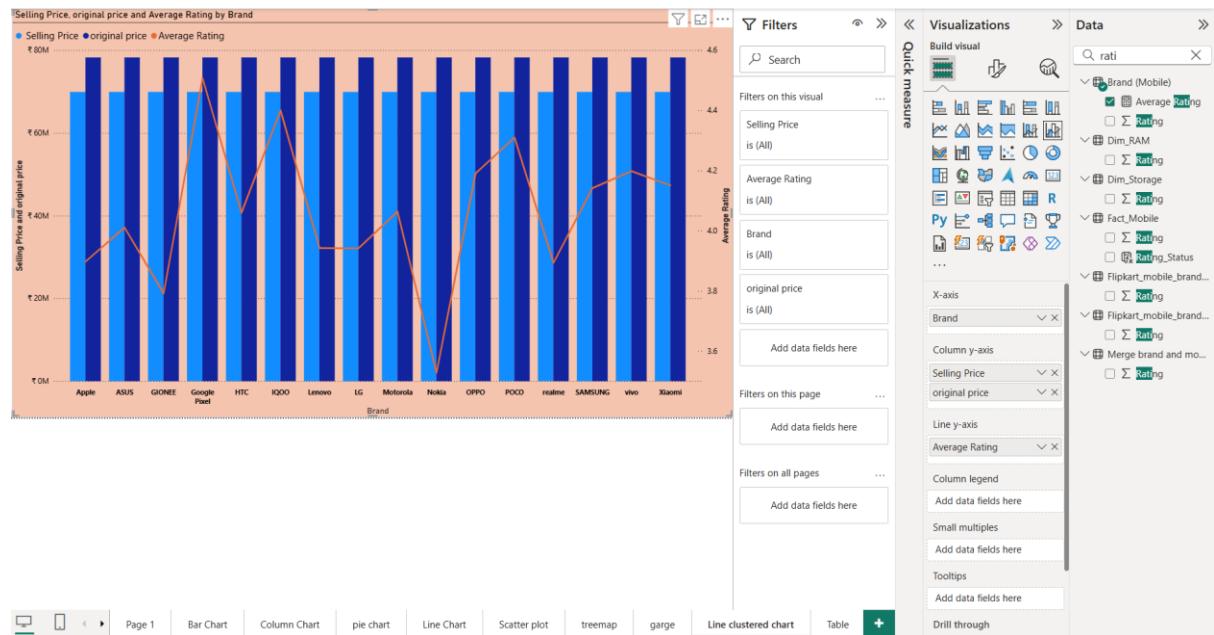
Line Clustered Chart

To find Avg Rating vs Sales per brand

X-Axis: Brand

Column Y-Axis: Sum of selling Price and sum of original price

Line Y-Axis: Average Rating



Scatter Plot Setup:

X-Axis: selling Price

Y-Axis: Rating

Detail: Brand

To see brand-Level Grouping.



3. Memory & specs Insights

Tree map

Category: Brand

Details: Memory

Values: Total sales



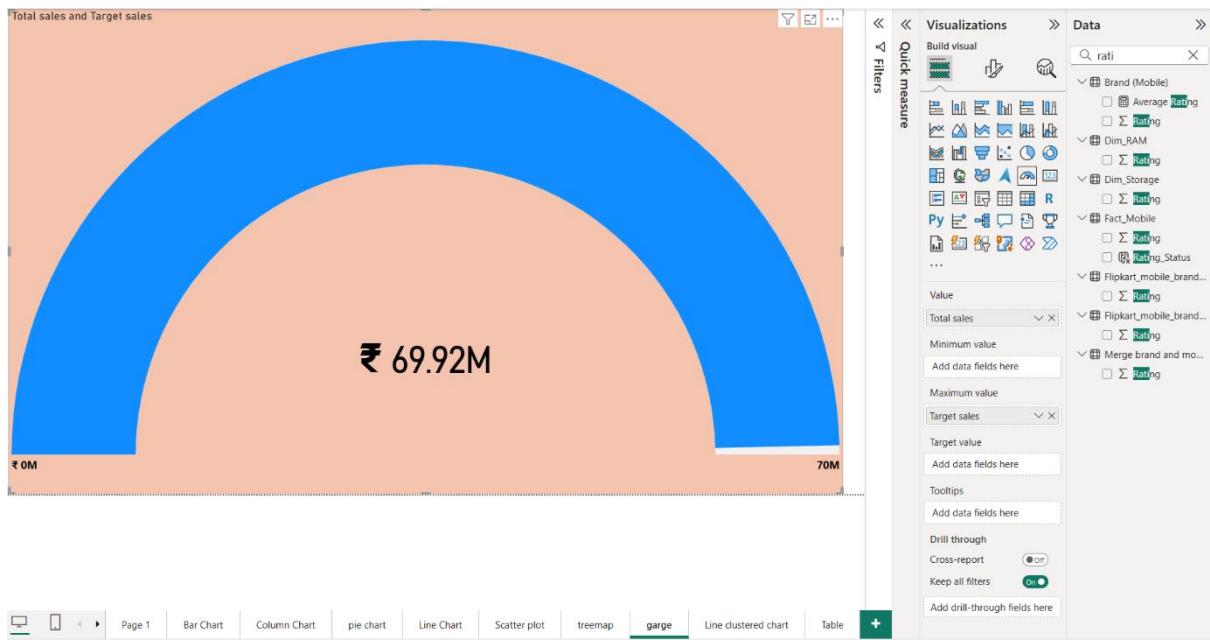
4. Profitability

Gauge chart

Values: Total sales

Maximum values: Target Sales

Values: Total Sales

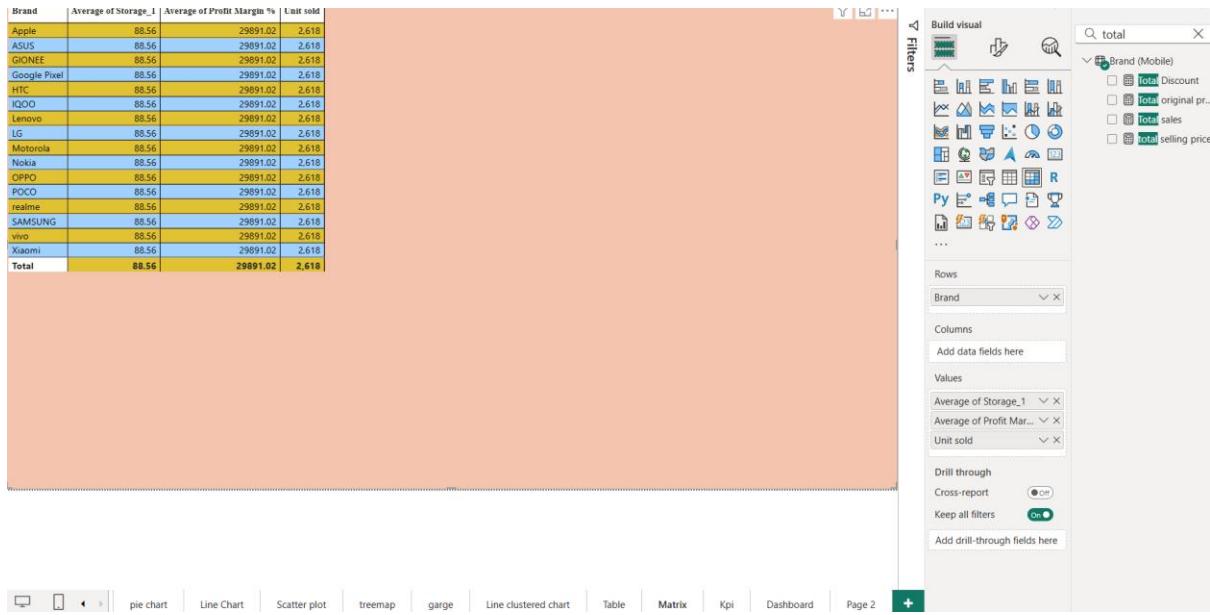


5. Matrix chart

Row: Brand

Values: Average of Storage, Average of Profit Margin and Unit sold.

To show the detailed lookup of product.



The Power BI dashboard was designed to uncover **brand performance, pricing strategy, specifications trends, and customer preferences**. Below is a breakdown of each dashboard component with analysis:

- Some high-rated mobiles are not always the most expensive, showing **value-for-money offerings**.
- A few brands (e.g., Samsung, Xiaomi) cater to **all segments** effectively.

Conclusion

This project demonstrates how a real-world e-commerce dataset can be cleaned, transformed, and analyzed to uncover market trends and customer preferences. The insights can help brands **strategize product launches, pricing, and promotions**.