

Sales Performance Analysis: Mobile Phones



Presented by
Bhone Myint San



Our Objectives

Sales Trend Analysis

Deep dive into mobilephone sales trends over the past year to identify key patterns and shifts in consumer purchasing behavior.

Influencing Factors

Analyze how pricing strategies, promotional campaigns, and seasonal demand impact overall sales performance.

Model Performance

Pinpoint top-sellingmodels and identify underperforming ones, understanding their specific market positions.

Strategic Recommendations

Develop actionable strategiestooptimize sales, inventory management, and marketing efforts for sustained growth.

Our Analytical Methodology

1

Data Collection & Cleaning

Rigorous process together raw sales data, remove inconsistencies, and unify formats for accurate analysis.

2

In-depth Analysis

Comprehensive breakdown of sales performance by mobile phone model, geographical region, and monthly variations to uncover patterns.

3

Dynamic Visualization

Creation of interactive charts and dashboards using Power BI and Tableau for clear, digestible representation of complex data.

4

Actionable Insight Generation

Translating data into strategic insights, identifying critical issues, and highlighting areas with significant growth potential.

Data Collection

- Secondary data
- Amazon Mobile phone sales from Kaggle
- <https://www.kaggle.com/datasets/shreyasur965/phone-search-dataset>

1	asin	product_t	product_p	product_o	currency	product_s	product_n	product_u	product_p	product_n	product_n	is_best_se	is_amazo	is_prime	product_a	climate_p	sales_volu	delivery	has_varia	unit_price	unit_coun	coupon_text
2	B0BQ118F	Moto G Play	\$99.00	\$169.99	USD	4	1319	https://ww	https://m.	16	\$69.88	FALSE	FALSE	TRUE	Only 1 left	FALSE	4K+ boug	FREE deliv	FALSE			
3	B0CV2W11	Samsung	\$153.99		USD	4.2	186	https://ww	https://m.	4	\$147.50	FALSE	FALSE	TRUE		FALSE	1K+ boug	FREE deliv	FALSE			
4	B09SM24S	Samsung	\$69.00	\$99.99	USD	3.8	597	https://ww	https://m.	35	\$64.99	FALSE	FALSE	TRUE		FALSE	2K+ boug	FREE deliv	TRUE			
5	B0CHH1N9	TracFone	\$49.99		USD	4.2	2814	https://ww	https://m.	3	\$43.99	FALSE	FALSE	TRUE		FALSE	500+ boug	FREE deliv	FALSE			
6	B09T3MQ9	Samsung	\$88.09	\$98.27	USD	3.8	1338	https://ww	https://m.	31	\$70.40	FALSE	FALSE	TRUE		FALSE	500+ boug	FREE deliv	FALSE			
7	B0BZG14K	Panasonic	\$49.99	\$59.99	USD	4.4	3843	https://ww	https://m.	3	\$25.19	FALSE	TRUE	TRUE		FALSE	4K+ boug	FREE deliv	FALSE	\$25.00	2	
8	B0C2SWQ1	Motorola	\$149.99	\$249.99	USD	4.2	2637	https://ww	https://m.	8	\$100.72	FALSE	FALSE	TRUE		FALSE	2K+ boug	FREE deliv	TRUE			
9	B0CTD47P	Samsung	\$149.50	\$158.00	USD	4.2	253	https://ww	https://m.	9	\$146.50	FALSE	FALSE	TRUE		FALSE	500+ boug	FREE deliv	FALSE			
10	B0CSB14R	Samsung	\$139.99		USD	4.3	573	https://ww	https://m.	15	\$136.62	FALSE	FALSE	TRUE		FALSE	1K+ boug	FREE deliv	FALSE			
11	B0CHK6LV	TracFone	\$59.99		USD	4	258	https://ww	https://m.	4	\$50.48	FALSE	FALSE	TRUE		FALSE	1K+ boug	FREE deliv	FALSE			
12	B0C5BMB1	Motorola	\$89.00		USD	4	204	https://ww	https://m.	10	\$85.44	FALSE	FALSE	TRUE		FALSE	1K+ boug	FREE deliv	FALSE			
13	B0CRVWP1	Samsung	\$195.00		USD	4	259	https://ww	https://m.	15	\$164.50	FALSE	FALSE	TRUE		FALSE	400+ boug	FREE deliv	TRUE			
14	B0CN1QSH	SAMSUNG	\$199.99		USD	4	610	https://ww	https://m.	2	\$154.00	FALSE	FALSE	TRUE		TRUE	2K+ boug	FREE deliv	TRUE			
15	B0C22BRG	OnePlus N	\$249.99	\$299.99	USD	4.3	963	https://ww	https://m.	5	\$209.28	FALSE	FALSE	TRUE		FALSE	1K+ boug	FREE deliv	FALSE			
16	B09NZQJR	VTech DEC	\$18.45		USD	4.3	9096	https://ww	https://m.	2	\$13.84	FALSE	FALSE	TRUE		FALSE	2K+ boug	FREE deliv	FALSE			
17	B09LWXHV	Apple iPhone	\$355.81	\$415.00	USD	4.1	4265	https://ww	https://m.	20	\$303.99	FALSE	FALSE	FALSE		TRUE	500+ boug	FREE deliv	TRUE			
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19	B0BQ118F	Moto G Play	\$99.00	\$169.99	USD	4	1319	https://ww	https://m.	16	\$69.88	FALSE	FALSE	TRUE	Only 3 left	FALSE	4K+ boug	FREE deliv	FALSE			
20	B09SM24S	Samsung	\$69.00	\$99.99	USD	3.8	597	https://ww	https://m.	35	\$64.99	FALSE	FALSE	TRUE		FALSE	2K+ boug	FREE deliv	TRUE			
21	B0CHH1N9	TracFone	\$49.99		USD	4.2	2814	https://ww	https://m.	3	\$43.99	FALSE	FALSE	TRUE		FALSE	500+ boug	FREE deliv	FALSE			
22	B0BZG14K	Panasonic	\$49.99	\$59.99	USD	4.4	3843	https://ww	https://m.	3	\$25.19	FALSE	TRUE	TRUE		FALSE	4K+ boug	FREE deliv	FALSE	\$25.00	2	
23	B0C2SWQ1	Motorola	\$149.99	\$249.99	USD	4.2	2637	https://ww	https://m.	8	\$100.72	FALSE	FALSE	TRUE		FALSE	2K+ boug	FREE deliv	TRUE			

Data Cleaning

1	asin	product_t	product_p	product_o	currency	product_s	product_n	product_u	product_p	product_n	product_is_best_se	is_amazo	is_prime	product_a	climate_p	sales_volu	delivery	has_varia	unit_price	unit_coun	coupon_text
2	B0BQ118F	Moto G Play	\$99.00	\$169.99	USD	4	1319	https://www	https://m.	16	\$69.88	FALSE	FALSE	TRUE	Only 1 left	FALSE	4K+ bought	FREE deliv	FALSE		
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5	B0CHH1N6	TracFone	\$49.99		USD	4.2	2814	https://www	https://m.	3	\$43.99	FALSE	FALSE	TRUE		FALSE	500+ bought	FREE deliv	FALSE		
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11	B0CHK6LW	TracFone	\$59.99		USD	4	258	https://www	https://m.	4	\$50.48	FALSE	FALSE	TRUE		FALSE	1K+ bought	FREE deliv	FALSE		
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14	B0CN1QS1	SAMSUNG	\$199.99		USD	4	610	https://www	https://m.	2	\$154.00	FALSE	FALSE	TRUE		TRUE	2K+ bought	FREE deliv	TRUE		
15	B0C22BRG	OnePlus Nord N100	\$249.99	\$299.99	USD	4.3	963	https://www	https://m.	5	\$209.28	FALSE	FALSE	TRUE		FALSE	1K+ bought	FREE deliv	FALSE		
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17	B09LKXHW	Apple iPhone 13 Pro Max	\$355.81	\$415.00	USD	4.1	4265	https://www	https://m.	20	\$303.99	FALSE	FALSE	FALSE		TRUE	500+ bought	FREE deliv	TRUE		
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20	B09SM24S	Samsung	\$69.00	\$99.99	USD	3.8	597	https://www	https://m.	35	\$64.99	FALSE	FALSE	TRUE		FALSE	2K+ bought	FREE deliv	TRUE		
21	B0CHH1N6	TracFone	\$49.99		USD	4.2	2814	https://www	https://m.	3	\$43.99	FALSE	FALSE	TRUE		FALSE	500+ bought	FREE deliv	FALSE		
22	B0BZG14K	Panasonic	\$49.99	\$59.99	USD	4.4	3843	https://www	https://m.	3	\$25.19	FALSE	TRUE	TRUE		FALSE	4K+ bought	FREE deliv	FALSE	\$25.00	2
23	B0C2SWQ1	Motorola Moto G	\$149.99	\$249.99	USD	4.2	2637	https://www	https://m.	8	\$100.72	FALSE	FALSE	TRUE		FALSE	2K+ bought	FREE deliv	TRUE		

- Raw Data
- 340 rows, 22 columns
- Price columns stored as text with symbols (\$99.00)
- sales_volume values in text form (“4K+ bought in past month”)
- Many missing values in product_original_price and product_star_rating
- Extra columns not needed for analysis (URLs, product photos, delivery info, etc.)
- Hard to calculate discounts, revenue, or segment products

Data Cleaning

Clean Data

- 293 rows, 15 columns (streamlined dataset)
- Remove unnecessary rows and columns
- Prices converted to numeric
- Sales volume converted to numeric (e.g., 4K → 4000)
- New calculated fields(KPIs):
 - Category
 - Discount
 - Discount %
 - Price Tier (Budget, Mid, Premium)
 - Estimated Monthly Revenue
- Missing values handled and irrelevant fields dropped

KPIs

sales_volume_past_month	Discount Amount	Discount Percentage	Estimated Monthly Revenue	Price Tier
4000	70.99	41.76%	396000	Budget (<\$100)
1000	-153.99	0.00%	153990	Mid-Range (\$100-\$300)
2000	30.99	30.99%	138000	Budget (<\$100)
500	-49.99	0.00%	24995	Budget (<\$100)
500	10.18	10.36%	44045	Budget (<\$100)
4000	10	16.67%	199960	Budget (<\$100)
2000	100	40.00%	299980	Mid-Range (\$100-\$300)
500	8.5	5.38%	74750	Mid-Range (\$100-\$300)
1000	-139.99	0.00%	139990	Mid-Range (\$100-\$300)
1000	-59.99	0.00%	59990	Budget (<\$100)
1000	-89	0.00%	89000	Budget (<\$100)
400	-195	0.00%	78000	Mid-Range (\$100-\$300)
2000	-199.99	0.00%	399980	Mid-Range (\$100-\$300)
1000	50	16.67%	249990	Premium (\$300-\$700)
2000	-18.45	0.00%	36900	Budget (<\$100)
500	59.19	14.26%	177905	Mid-Range (\$100-\$300)
1000	-153.99	0.00%	153990	Mid-Range (\$100-\$300)
4000	70.99	41.76%	396000	Premium (\$300-\$700)

1	Product_name	Product Category	product_title	product_price	product_original_price	Price Tier	product_star_rating	product_num_ratings	is_best_seller	is_amazon_choice	is_prime	sales_volume_past_month	Discount Amount	Discount Percentage	Estimated Monthly Revenue
2	Moto G Play 2023	Motorola	Moto G Play 2023 3-Day Battery	99	169.99	Budget (<\$100)	4	1319	FALSE	FALSE	TRUE	4000	70.99	41.76%	396000
3	Samsung Galaxy A15	Samsung Galaxy	Samsung Galaxy A15 (SM-155M/	153.99		Mid-Range (\$100-\$300)	4.2	186	FALSE	FALSE	TRUE	1000	-153.99	0.00%	153990
4	Samsung Galaxy A03s	Samsung Galaxy	Samsung Galaxy A03s Cell Phone	69	99.99	Budget (<\$100)	3.8	597	FALSE	FALSE	TRUE	2000	30.99	30.99%	138000
5	Motorola Moto g Pure	Motorola	TracFone Motorola Moto g Pure	49.99		Budget (<\$100)	4.2	2814	FALSE	FALSE	TRUE	500	-49.99	0.00%	24995
6	Samsung Galaxy A13	Samsung Galaxy	Samsung Galaxy A13 5G Cell Pho	88.09	98.27	Budget (<\$100)	3.8	1338	FALSE	FALSE	TRUE	500	10.18	10.36%	44045
7	Panasonic Cordless Phone	Cordless Phone	Panasonic Cordless Phone with	49.99	59.99	Budget (<\$100)	4.4	3843	FALSE	TRUE	TRUE	4000	10	16.67%	199960
8	Motorola Moto G 5G	Motorola	Motorola Moto G 5G 2023 Un	149.99	249.99	Mid-Range (\$100-\$300)	4.2	2637	FALSE	FALSE	TRUE	2000	100	40.00%	299980
9	Samsung Galaxy A15	Samsung Galaxy	Samsung Galaxy A15 A155M 128	149.5	158	Mid-Range (\$100-\$300)	4.2	253	FALSE	FALSE	TRUE	500	8.5	5.38%	74750
10	Samsung Galaxy A15	Samsung Galaxy	Samsung Galaxy A15 A155M 128	139.99		Mid-Range (\$100-\$300)	4.3	573	FALSE	FALSE	TRUE	1000	-139.99	0.00%	139990
11	Samsung Galaxy A03s	Samsung Galaxy	TracFone Samsung Galaxy A03	59.99		Budget (<\$100)	4	258	FALSE	FALSE	TRUE	1000	-59.99	0.00%	59990
12	Motorola One Ace	Motorola	Motorola One Ace 2021 2-Da	89		Budget (<\$100)	4	204	FALSE	FALSE	TRUE	1000	-89	0.00%	89000
13	Samsung Galaxy A25 5G	Samsung Galaxy	Samsung Galaxy A25 5G A256E 1	195		Mid-Range (\$100-\$300)	4	259	FALSE	FALSE	TRUE	400	-195	0.00%	78000
14	SAMSUNG Galaxy A15 5G	Samsung Galaxy	SAMSUNG Galaxy A15 5G A Series	199.99		Mid-Range (\$100-\$300)	4	610	FALSE	FALSE	TRUE	2000	-199.99	0.00%	399980
15	OnePlus Nord N30 5G	OnePlus	OnePlus Nord N30 5G Unlocke	249.99	299.99	Mid-Range (\$100-\$300)	4.3	963	FALSE	FALSE	TRUE	1000	50	16.67%	249990
16	VTech DECT 6.0 Cordless Phone	Cordless Phone	VTech DECT 6.0 Cordless Phone	18.45		Budget (<\$100)	4.3	9096	FALSE	FALSE	TRUE	2000	-18.45	0.00%	36900
17	Apple iPhone 13 Mini	Apple iPhone	Apple iPhone 13 Mini, 128GB, Bl	355.81	415	Premium (\$300-\$700)	4.1	4265	FALSE	FALSE	FALSE	500	59.19	14.26%	177905
18	Samsung Galaxy A15	Samsung Galaxy	Samsung Galaxy A15 (SM-155M/	153.99		Mid-Range (\$100-\$300)	4.2	186	FALSE	FALSE	TRUE	1000	-153.99	0.00%	153990
19	Moto G Play 2023	Motorola	Moto G Play 2023 3-Day Battery	99	169.99	Budget (<\$100)	4	1319	FALSE	FALSE	TRUE	4000	70.99	41.76%	396000

Mobile Phone Sales Performance Dashboard

Product Category

Price Tier

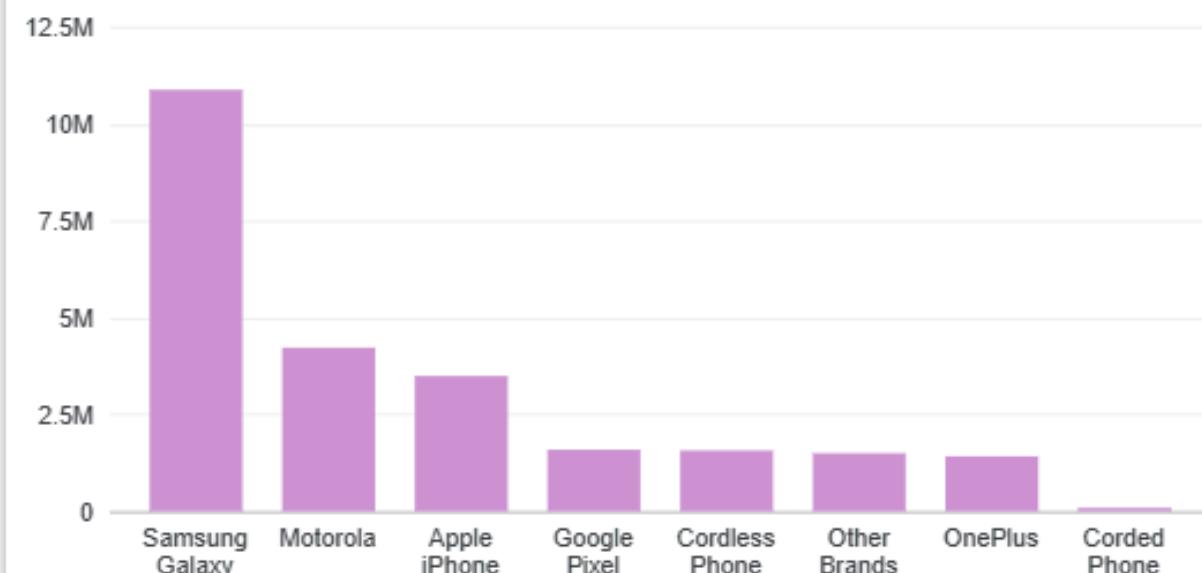
Record Count
293

Total Estimated Units Sold
152.3K

Estimated Monthly Revenue
24.7M

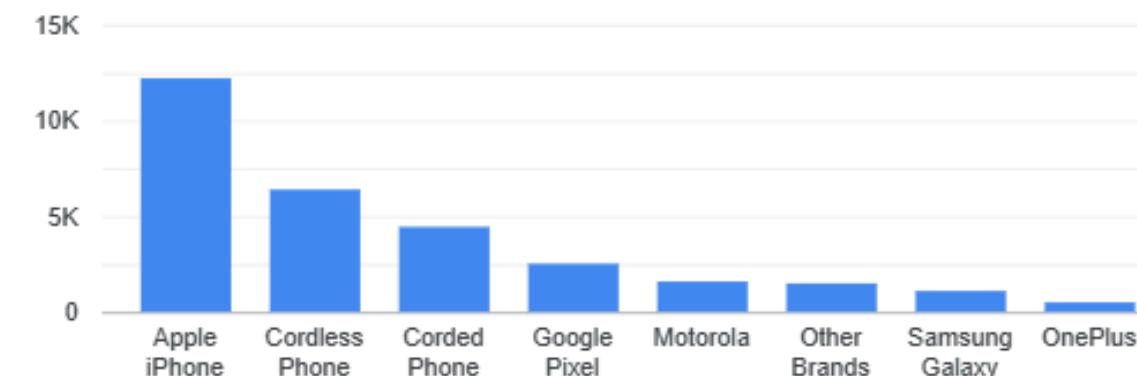
Estimated Monthly Revenue by Product Category

Estimated Monthly Revenue

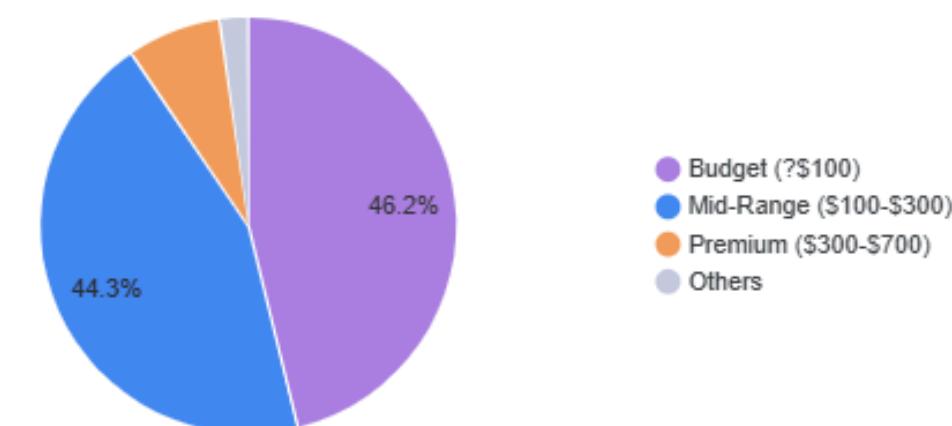


product_num_ratings by Product Category

product_num_ratings



Units Sold by Price Tier



Top 10 Products by Revenue

Product_name	sales_volume_past month	product_price	Estimated Monthly Revenue	product_star_rating
Moto G Power	10,000	179.99	1,799,900	4.2
Samsung Galaxy A15	9,900	1,312.39	1,460,716	37.8
SAMSUNG Galaxy A15 5G	6,000	906.16	1,144,895	20.7
SAMSUNG Galaxy S24+ Plus	1,000	798	798,000	4.5
Moto G Play 2023	8,000	198	792,000	8
Panasonic Cordless Phone	10,400	429.95	687,896	21.8
Samsung Galaxy S21 Ultra 5G	2,200	628.98	611,778	8
Motorola Moto G 5G	4,000	299.98	599,960	8.4
Apple iPhone 12	2,000	287.3	574,600	4.1
Samsung Galaxy S21 5G	2,400	658.93	515,576	11.9

Data Visualization

- Connected cleaned dataset
- Dashboard included:
 - Scorecards (Units Sold, Revenue, Count of Products)
 - Bar Charts (Revenue by Brand, Ratings by Brand)
 - Pie Chart (Sales by Price Tier)
 - Table (Top 10 Products by Revenue)
- Interactive filters (Product Category, Price Tier)
- <https://lookerstudio.google.com/reporting/f211aal-26ec-4bfb-90b7-9db6b90ec073>

Data Visualization

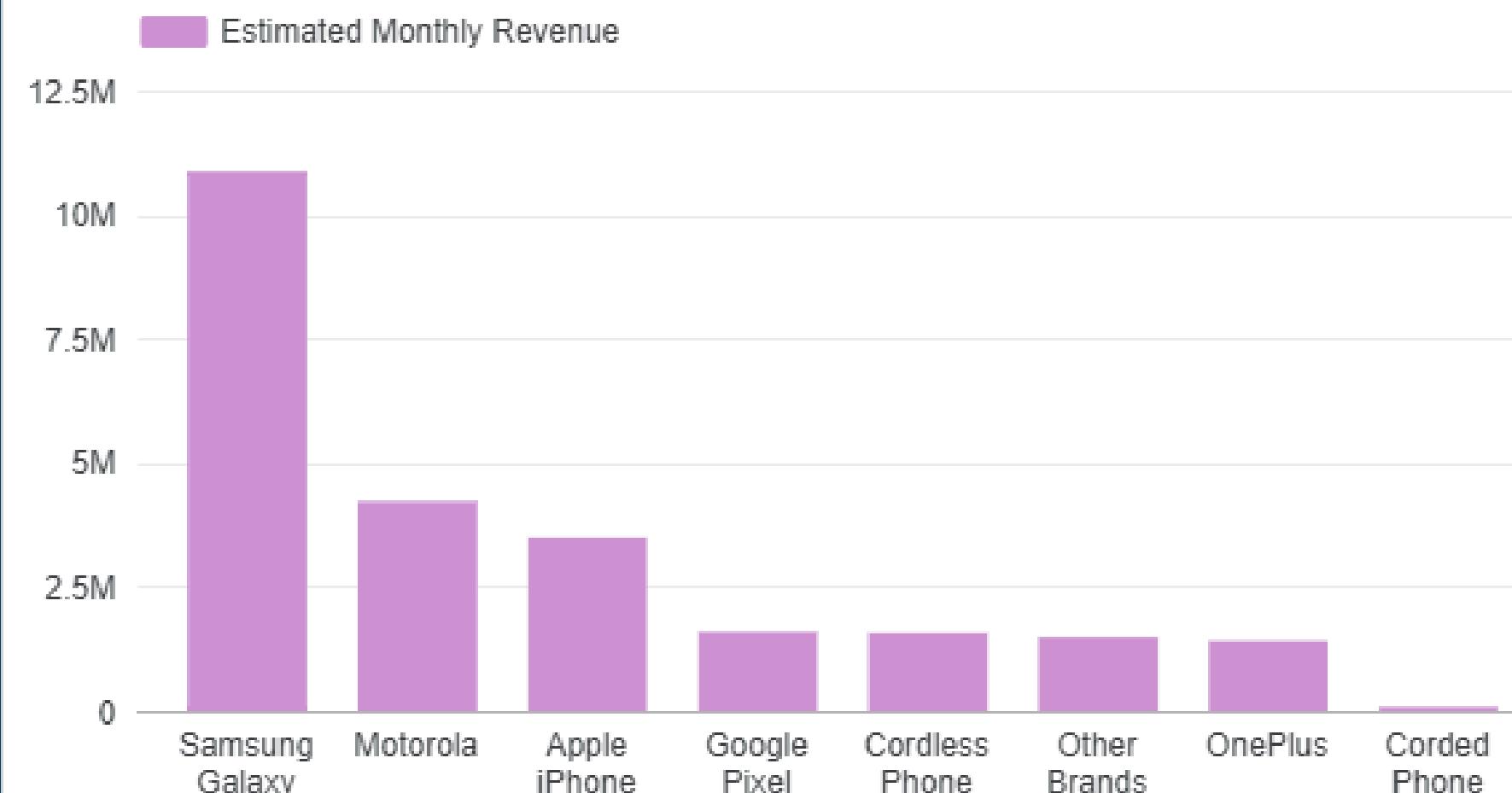
Record Count
293

Total Estimated Units Sold
152.3K

Estimated Monthly Revenue
24.7M

- We analyzed 293 mobile phone products.
- Together, these account for about 152,300 estimated units sold per month.
- The total monthly revenue is \$24.7 million.

Estimated Monthly Revenue by Product Category



- Samsung Galaxy leads with \$11M per month.
- Motorola and Apple follow, with around \$4M and \$3.5M respectively.
- Other brands like Google Pixel and OnePlus contribute smaller shares.

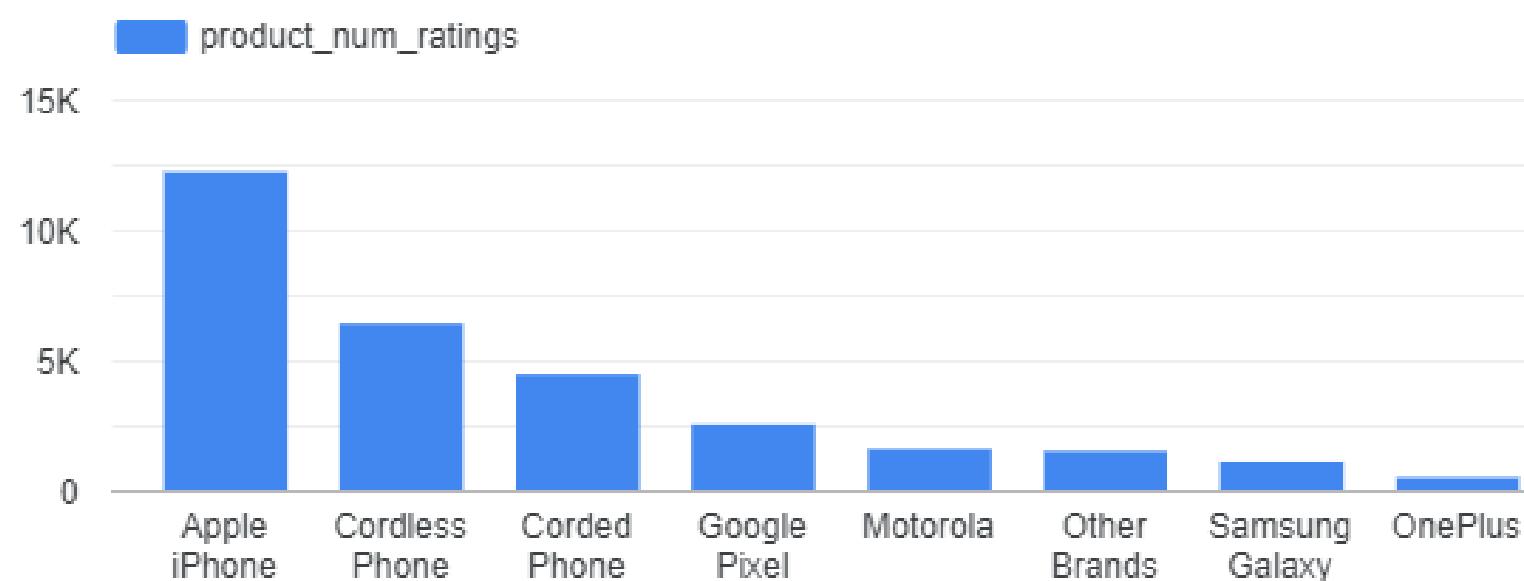
Data Visualization

Top 10 Products by Revenue

Product_name	sales_volume_past month	product_price	Estimated Monthly Revenue	product_star_rating
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3. SAMSUNG Galaxy A15 5G	6,000	906.16	1,144,895	20.7
4. SAMSUNG Galaxy S24+ Plus	1,000	798	798,000	4.5
5. Moto G Play 2023	8,000	198	792,000	8
6. Panasonic Cordless Phone	10,400	429.95	687,896	21.8
7. Samsung Galaxy S21 Ultra 5G	2,200	628.98	611,778	8
8. Motorola Moto G 5G	4,000	299.98	599,960	8.4
9. Apple iPhone 12	2,000	287.3	574,600	4.1
10. Samsung Galaxy S21 5G	2,400	658.93	515,576	11.9

- Moto G Power tops the list, selling 10,000 units and generating nearly \$1.8M revenue.
- Samsung Galaxy A15 and Galaxy A15 5G are also strong performers.
- The list also includes premium models like the Galaxy S21 Ultra 5G and Apple iPhone 12.
- This shows that both budget and premium products appear in the top revenue list, but budget models dominate in sales volume.

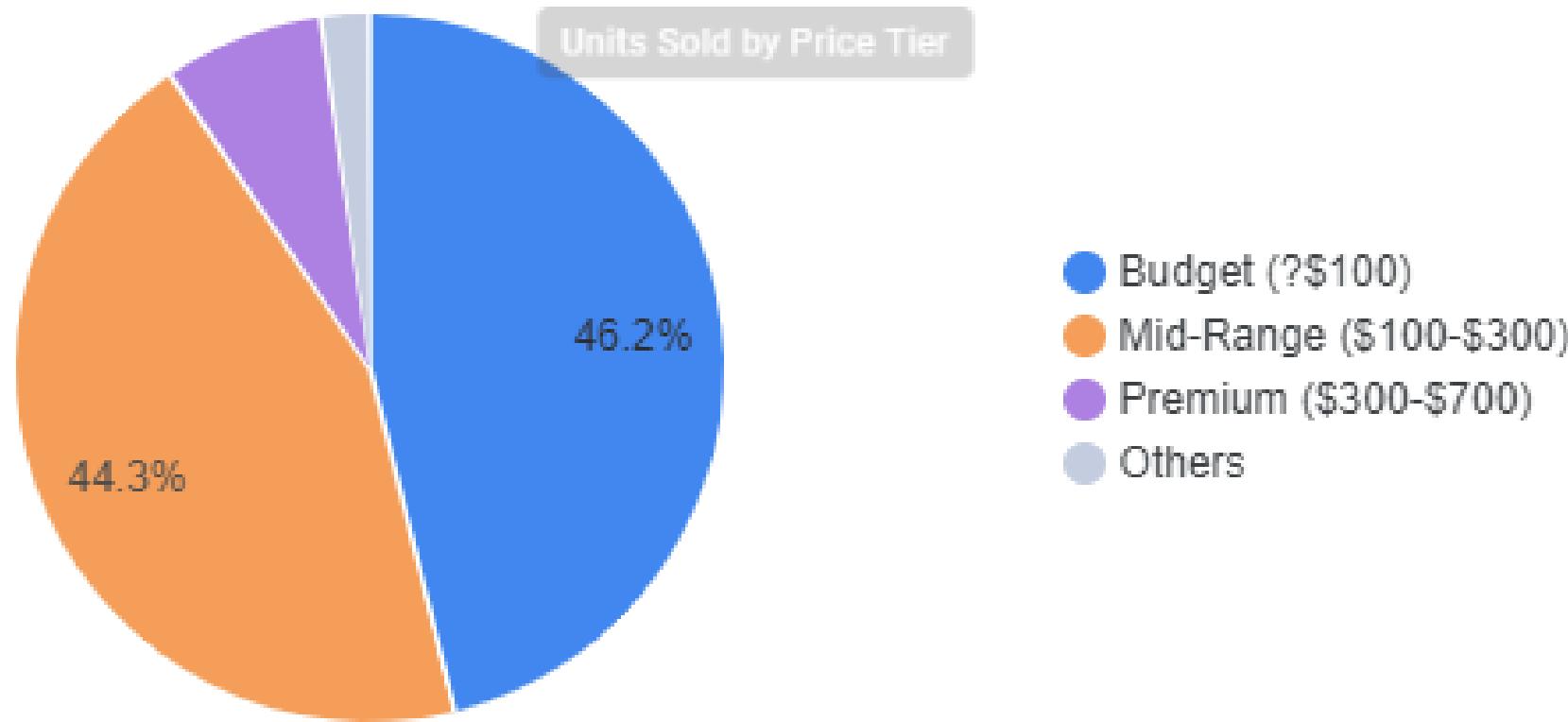
product_num_ratings by Product Category



- Apple iPhones dominate with over 12,000 ratings.
- Cordless and Corded Phones also received strong attention.
- Samsung, Motorola, and OnePlus have lower review counts compared to Apple.
- This indicates that Apple has the highest customer interaction and trust.

Data Visualization

Units Sold by Price Tier



- Budget phones (<\$100) make up 46.2% of sales.
- Mid-Range (\$100–\$300) is close behind at 44.3%.
- Premium models (\$300–\$700) only account for a small fraction, but they often have higher ratings.
- This confirms that the market is volume-driven by Budget and Mid-Range tiers



Result

- Dataset analyzed: 293 products from Amazon listings
- Total: 152K estimated units sold monthly
- Revenue: \$24.7M per month
- Samsung Galaxy dominates with ~\$11M monthly revenue
- Apple iPhone has the highest customer ratings & engagement (~12K reviews)
- Budget (46.2%) + Mid-Range (44.3%) phones = nearly 90% of sales
- Top products: Moto G Power, Samsung Galaxy A15, Galaxy A15 5G



Insights & Recommendations

- Samsung & Motorola lead in revenue → Maintain strong distribution & promotions
- Apple dominates customer trust → Leverage premium positioning & loyalty marketing
- Budget & Mid-Range drive sales volume → Focus promotions, bundle offers, and seasonal campaigns here
- Premium phones show highest ratings → Market them as prestige/flagship products to build brand value
- Best Seller tags & Amazon Prime listings → Increase product visibility and conversions



Thank You

