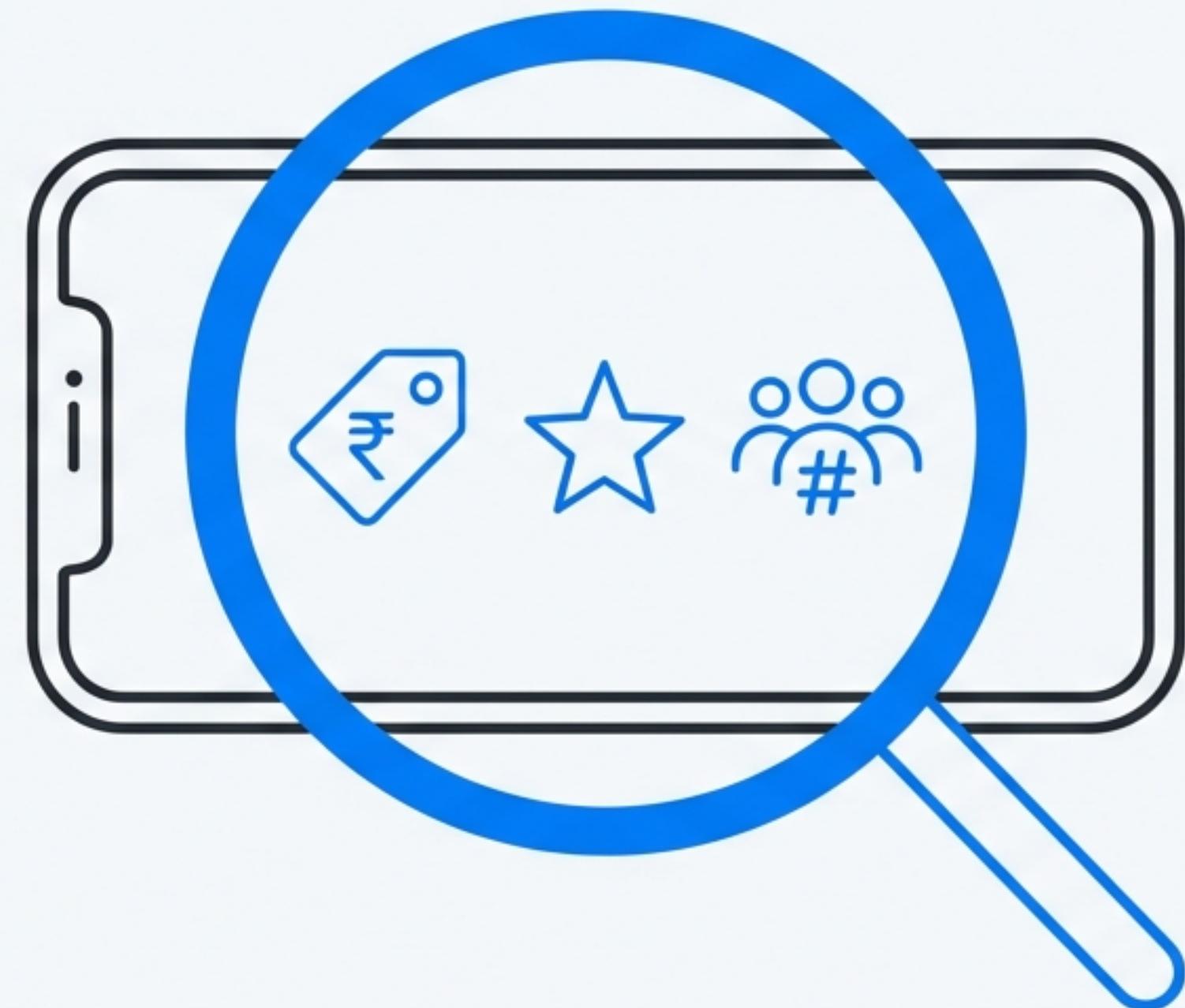


# The iPhone Value Equation

A Data-Driven Analysis of Price, Popularity, and Satisfaction on Flipkart



# Does 5x the Price Actually Equal 5x the Value?



Apple iPhone SE  
₹29,999

Apple's iPhone lineup on Flipkart ranges from the affordable iPhone SE to the premium iPhone 12 Pro.

This creates a dilemma for buyers: Does a higher price guarantee a better phone? Is the highest-rated model worth the premium?

We analyzed real sales data to find the answer.



Apple iPhone 12 Pro  
₹140,900

# Answering the Question with Real Sales Data

We analyzed a dataset of 62 iPhone listings from Flipkart, focusing on the relationship between four key factors to understand customer behavior and satisfaction.



Sale Price



Star Rating



Number of Ratings



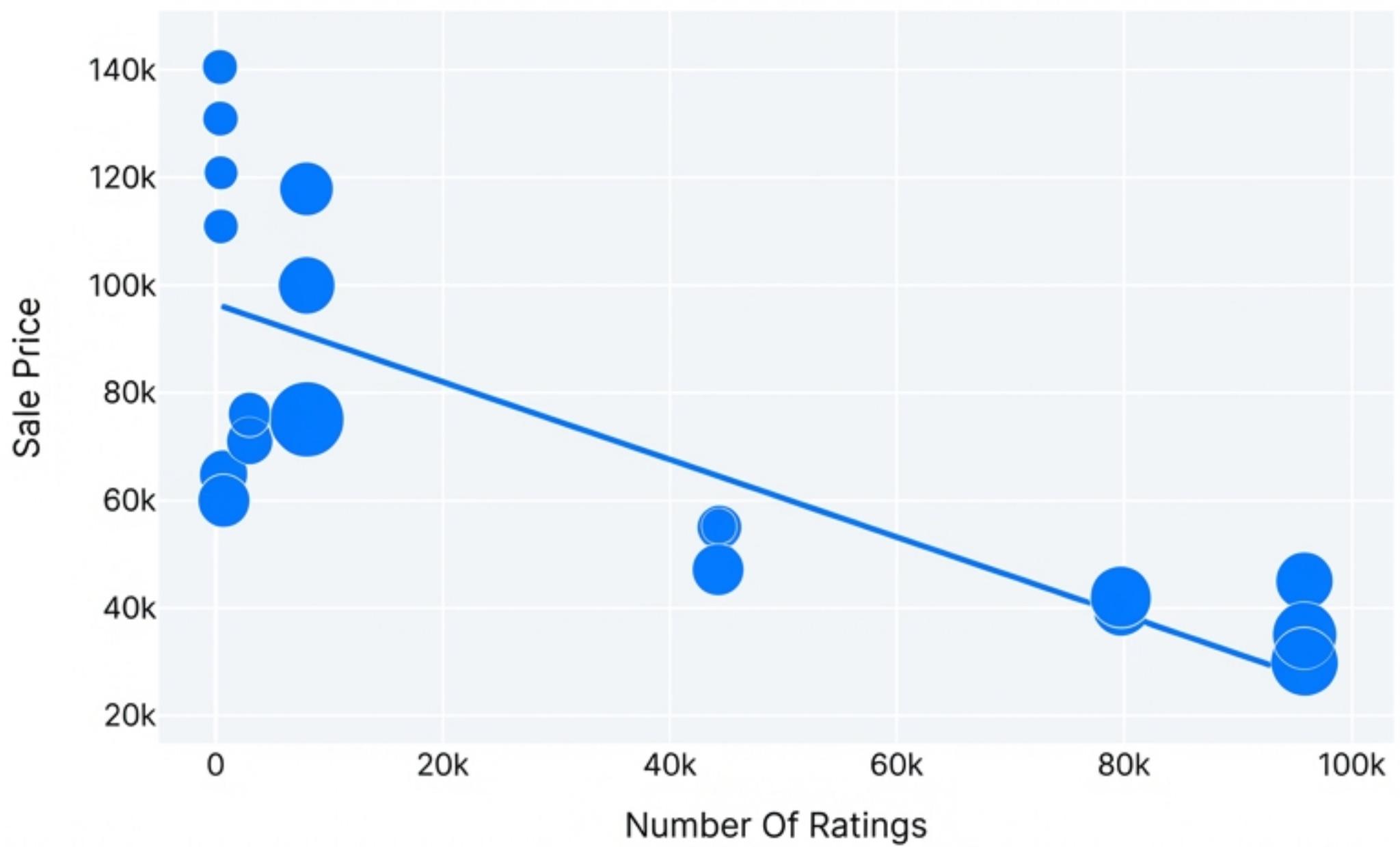
Discount Percentage

# The First Insight: Lower Prices Drive Mass Adoption

Our analysis reveals a clear negative correlation. As the sale price of an iPhone decreases, the number of ratings—a strong proxy for sales volume—dramatically increases.

Lower-priced models are the most purchased and trusted by the masses.

Relationship between Sales Price and Number of Rating



# The Satisfaction Myth: Premium Price Doesn't Buy a Better Rating

This is our most powerful finding. Despite a price difference of over ₹110,000, virtually all iPhones share the same user satisfaction rating, consistently falling between 4.5 and 4.7 stars. The 'Pro' label does not guarantee a happier user.



Price: ₹29,999

Star Rating: 4.5 ★



Price: ₹140,900

Star Rating: 4.5 ★

# A Simpler Way to Think About It: The Hotel Room Analogy

Buying an iPhone is like booking a hotel.  
You can pay ₹5,000 for a standard room or  
₹25,000 for the presidential suite.

Our data shows that while the price is  
vastly different, the sleep quality  
(customer satisfaction rating) is exactly the  
same—4.6 stars—in both rooms.

For most people, the standard room is the  
smarter financial choice.

Standard Room



₹5,000

4.6 ★

Presidential Suite



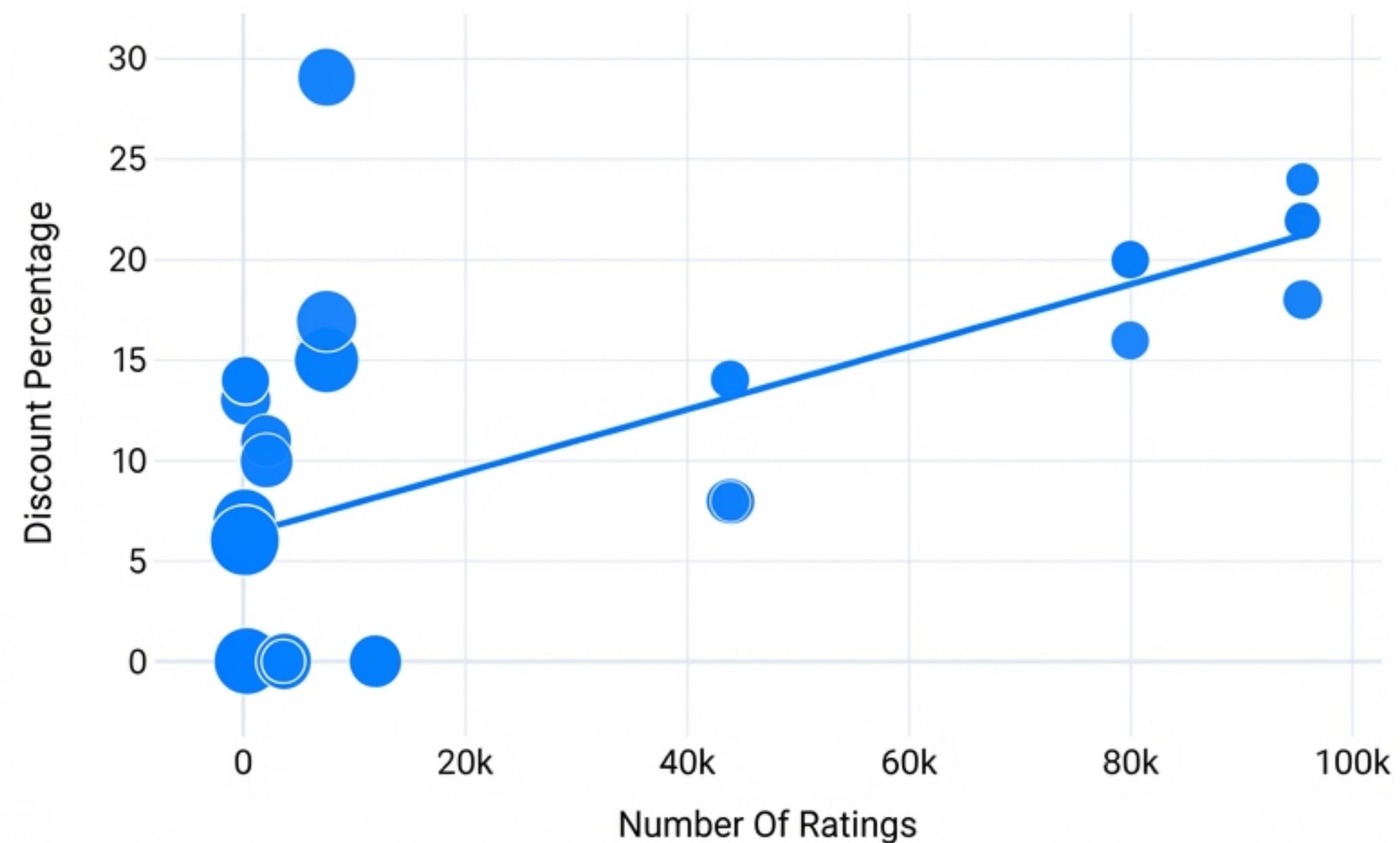
₹25,000

4.6 ★

# The Discount Effect: Price Cuts Directly Correlate with Higher Engagement

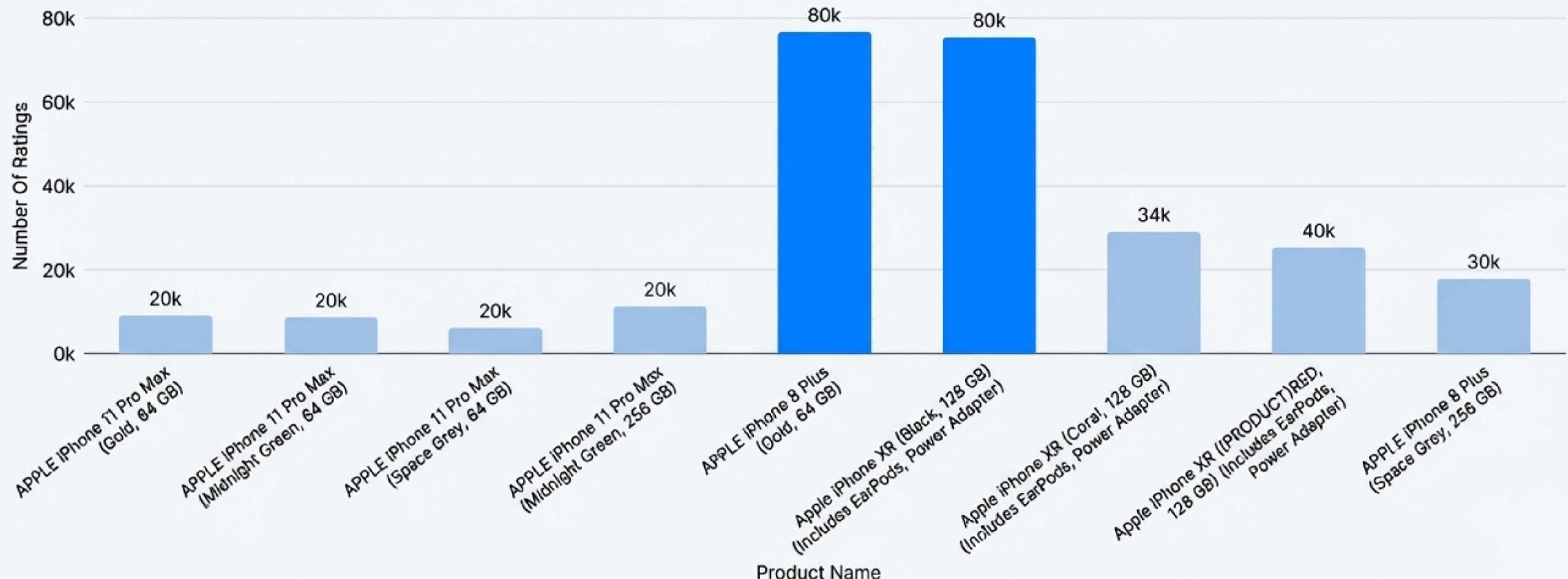
We found a clear positive trend between the discount percentage and the number of ratings. Heavier discounting appears to be an effective strategy for driving sales volume and user engagement, particularly for higher-priced models.

Relationship Between Discount and Number of Ratings of iPhones



# Beyond Stars: Social Proof is the Ultimate Signal of Trust

While many phones share high star ratings, the *\*number\** of ratings tells a different story. Models like the iPhone XR and iPhone 8 Plus have overwhelmingly more ratings than even premium “Pro” models, signaling long-term reliability and widespread user trust.



# The Verdict: Identifying the Smartest iPhone Buys

Based on the data, we can categorize the top models to guide smart purchasing decisions.



## Best Overall Value

iPhone SE Variants

Offer premium **4.5★ ratings** at approximately **¼ the price** of flagship models.



## Most Trusted (Social Proof)

iPhone XR & iPhone 8 Plus

Possess the **highest number of ratings**, demonstrating proven reliability and mass-market approval.



## Premium Performers

iPhone 11 Pro / 12 Pro

Top-tier specs for a **top-tier price**, but without a corresponding increase in user satisfaction ratings.

# From Raw Data to Actionable Intelligence

This analysis successfully transformed a raw retail dataset into clear, actionable insights for consumers and retailers alike. It demonstrates the power of data storytelling to debunk common myths and empower smarter decisions.

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**Key Takeaway:** The data is clear: you don't need the most expensive model to be a happy iPhone user.

# Our Analytical Process at a Glance



# The Tools That Powered This Analysis

The project was built using industry-standard tools for data analysis and visualization in Python.



Python



Pandas



NumPy



Plotly



Jupyter Notebook

## APPENDIX

# A Snapshot of the Raw Dataset

The analysis was based on a clean dataset of 62 Apple product listings. The statistical summary below provides an overview of key data columns like price and ratings.

data.head()								
	Product Name	Product URL	Brand	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Star Rating
0	Apple Rihoin Roder Klimed iPrad	https://www.com/thenedienonomes-ip...	Apple	6790.00	14390.00	22.0	260	Normal
1	Apple Ribble liffad (Polaty olderG ISGHs)	https://www.com/thenedienonomes.n87J86IN2partner-health...	Apple	2890.00	2490.00	17.0	1057	Normal
2	Apple Ribble iwoxtmo Ulling (982-9...)	https://www.com/theneasnonomes.ni27DABIN2partner-health...	Apple	2090.00	11290.00	1.6	73	Normal
3	Apple Ribble Ainaes Conneuter EK...	https://www.com/thenedisnonomes.n2/986IN2partner-health...	Apple	7890.00	6705.00	4.0	128	Normal
5	Apple Ribble Memordik Mac One D6IJ RO...	https://www.com/thenedianonomes.n27B88IN2partner-health...	Apple	4890.00	2793.00	4.0	184	Normal

data.describe()							
	Sale Price	Mrp	Discount Percentage	Number Of Ratings	Number Of Reviews	Star Rating	
count	62.000000.000	62.300000.000	0.0	62.000.000	62.000.000	621.0000	
mean	3476.500	5970.000	24.35	136.867	378.952	4.5000	
std	1222.424	1895.636	12.55	13.755	38.336	4.5000	
min	725.000	725.000	0.00	5.000	10.000	2.5000	
25%	2033.000	2033.000	7.05	126.000	390.000	4.5000	
50%	2500.000	2500.000	5.00	186.000	500.000	4.5000	
75%	3090.000	3090.000	3.00	350.000	369.000	4.5000	
count	62.300000.000	62.300000.000	0.0	62.000.000	62.000.000	621.0000	
mean	2629.792	2638.356	0.0	84	109	4.5	
std	422.2765	537.9392	0.0	23	23	4.0	
min	0.000	0.000	0.0	30	25	4.0	
25%	255.000	55.000	0.0	68	56	4.0	
50%	500.000	500.000	0.0	68	43	4.0	
75%	755.000	755.000	0.0	34	26	4.0	
max	28000.000	22500.000	2.0	36	16	6.0	