



# Cognia – Exploratory Data Analysis Report

**Generated:** 31 Dec 2025, 22:21  
**Total Rows:** 823 | **Total Columns:** 19

## 1 Dataset Overview

	Column Name	Dtype
0	brand	object
1	processor_brand	object
2	processor_name	object
3	processor_gnrtn	object
4	ram_gb	object
5	ram_type	object
6	ssd	object
7	hdd	object
8	os	object
9	os_bit	object
10	graphic_card_gb	object
11	weight	object
12	warranty	object
13	Touchscreen	object
14	msoffice	object
15	Price	int64
16	rating	object
17	Number of Ratings	int64
18	Number of Reviews	int64

**Duplicate Records:** 21 (2.55%)**Numeric Columns:** 3**Categorical Columns:** 16

## 2 Missing Value Analysis

	Missing Count	Missing Percent
brand	0	0.0
processor_brand	0	0.0
processor_name	0	0.0
processor_gnrtn	0	0.0
ram_gb	0	0.0
ram_type	0	0.0
ssd	0	0.0
hdd	0	0.0
os	0	0.0
os_bit	0	0.0
graphic_card_gb	0	0.0
weight	0	0.0
warranty	0	0.0
Touchscreen	0	0.0
msoffice	0	0.0
Price	0	0.0
rating	0	0.0
Number of Ratings	0	0.0
Number of Reviews	0	0.0

## 3 Statistical Summary

	Count	Mean	Std	Min	25%	50%	75%	Max	Skewness	Kurtosis
Price	823.0	76745.177	45101.791	16990.0	46095.0	64990.0	89636.0	441990.0	2.389	9.273
Number of Ratings	823.0	315.301	1047.383	0.0	0.0	17.0	139.5	15279.0	7.321	74.131
Number of Reviews	823.0	37.610	121.728	0.0	0.0	2.0	18.0	1947.0	7.817	90.766

## 4 Distribution Interpretation

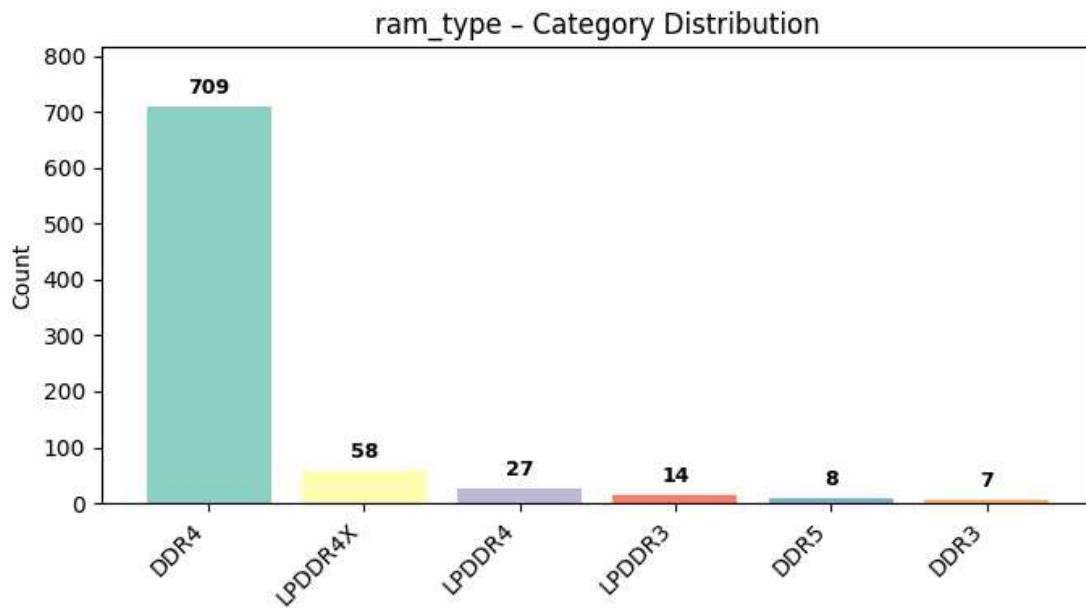
	Column	Skewness	Kurtosis	Interpretation
0	Price	2.389	9.273	The distribution is right-skewed, indicating the presence of higher-value outliers. The distribution has heavy tails, suggesting a higher likelihood of extreme values.
1	Number of Ratings	7.321	74.131	The distribution is right-skewed, indicating the presence of higher-value outliers. The distribution has heavy tails, suggesting a higher likelihood of extreme values.
2	Number of Reviews	7.817	90.766	The distribution is right-skewed, indicating the presence of higher-value outliers. The distribution has heavy tails, suggesting a higher likelihood of extreme values.

## 5 Outlier Analysis

	Column	Outlier Count	Outlier Percent
0	Price	50	6.08
1	Number of Ratings	134	16.28
2	Number of Reviews	133	16.16

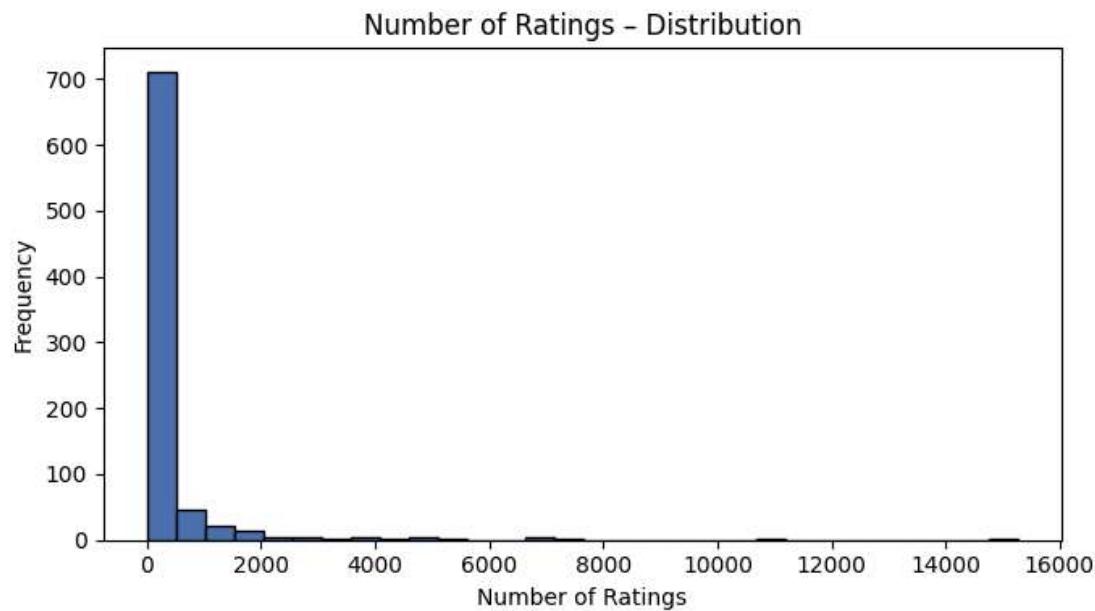
## 6 Categorical Column Explorer

ram\_type

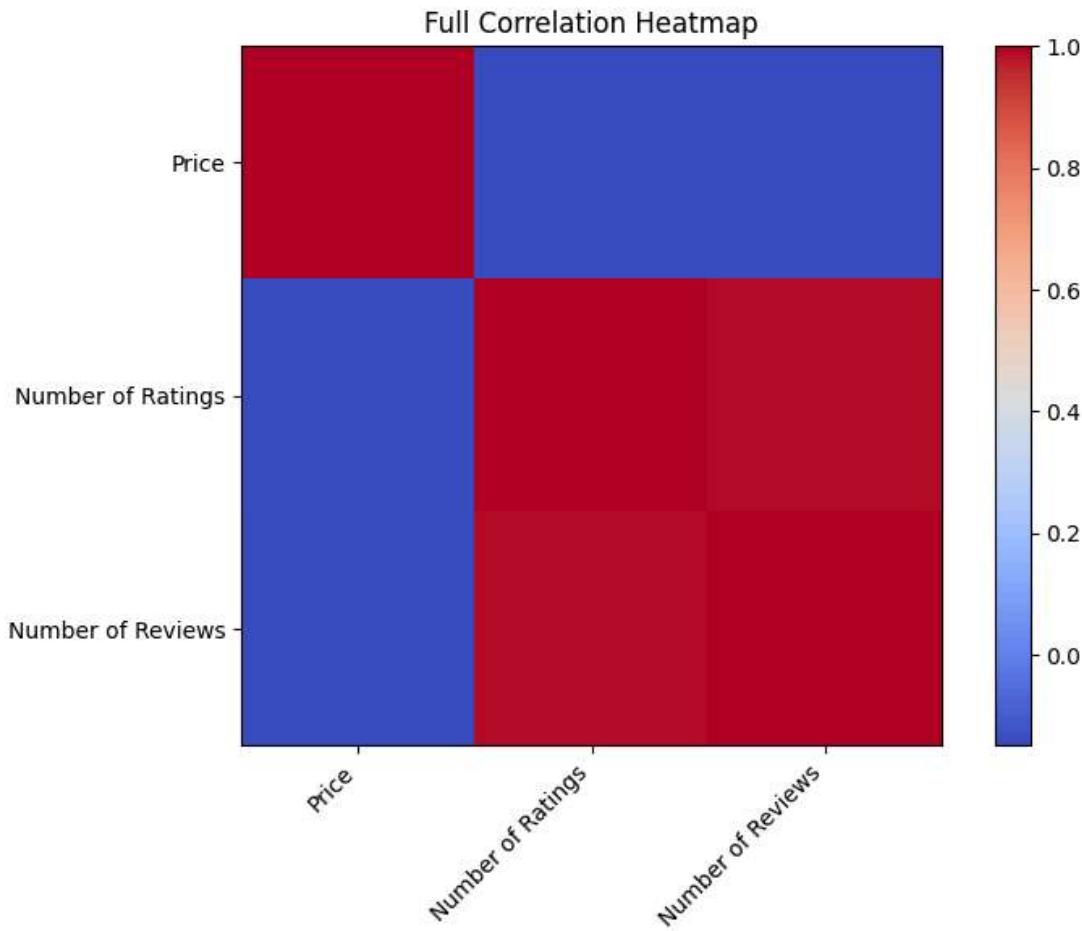


## 7 Numeric Column Explorer

Number of Ratings



## Correlation Analysis



### ⚠️ Alerts & Warnings

- ⚠️ Price has moderate skewness (skew = 2.39)
- ⚠️ Number of Ratings is severely right-skewed (skew = 7.32)
- ⚠️ Number of Reviews is severely right-skewed (skew = 7.82)
- ⚠️ Number of Ratings has 16.28% outliers
- ⚠️ Number of Reviews has 16.16% outliers