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INNOVATION. AUTOMATION. ANALYTICS

PROJECT ON

EDA ON SMART TV

By:

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AGENDA

1.Problem Statement

2.Objective

3.Introduction

4.Data Source

5.Exploring the data

6.Visualization

7.Conclusion

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PROBLEM STATEMENT

To analyze data and determine the top SMART TV brand based on original price, pixel count,Inches, ratings, and Operating system type.
Suggesting customers best smart tv based on specifications.

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OBJECTIVE

- Collecting data from a website using python modules
  Detecting outliers.
- Checking insights of the data.
- Based on Analysis suggesting the best Smart TV to customers.

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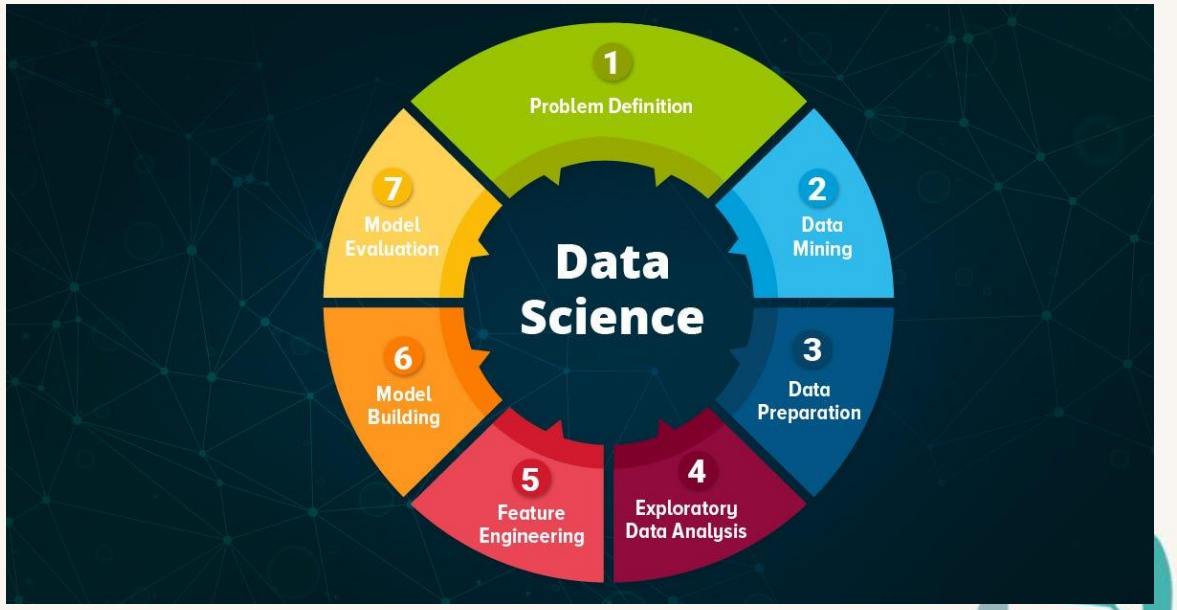
INTRODUCTION TO EDA

- Exploratory Data Analysis(EDA) is an approach to analyzing data sets to summarize their main characters , often with visual methods.



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DATA SOURCE

FLIPKART uses algorithms to analyze customer data and behavior to suggest products that customers are likely to be interested in. For example, if a customer frequently buys electronic accessories, the algorithm will show similar products when the customer visits the website

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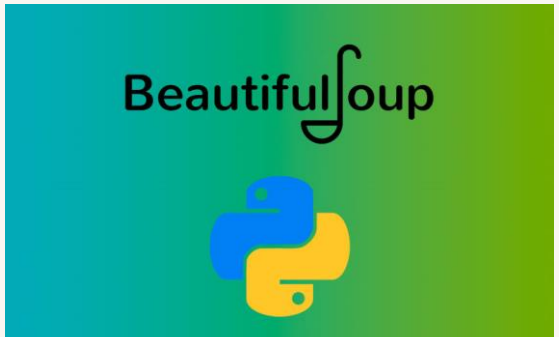
EXPLORING THE DATA AND VISUALIZATION

The Exploring of the data is done by using the pandas and python by creating the data frame using Web Scraping From the FLIPKART website . Such as knowing the column names, Data Types, Mean E.T.C Now, the visualization of the data is done by using the module called “seaborn”. we will perform the various types of analysis by plotting the data in various Graphical Representations.



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Overview of the DataFrame

	MODEL	OS	PIXEL	INCH	LAUNCHYEAR	PRICE	RATINGS	WARRANTY(YRS)
0	Thomson	Android	(1366, 768)	32	2023	10499	4.3	1
1	Thomson	Google TV	(3840, 2160)	65	2023	44999	4.5	1
2	Mi	Google TV	(1366, 768)	32	2024	12990	4.3	1
3	Infinix	Linux	(1366, 768)	32	2024	8499	4.2	1
4	Coocaa	Coolita	(1920, 1080)	43	2024	12499	4.2	1
...	...	...	...	...	...	...	...	...
595	Acer	Google TV	(1366, 768)	32	2024	9999	4.1	1
596	Coocaa	Coolita	(1366, 768)	32	2024	7999	4.2	1
597	MOTOROLA	Google TV	(3840, 2160)	55	2023	31999	4.3	1
598	Acer	Google TV	(1366, 768)	32	2024	10499	4.2	1
599	Mi	Google TV	(3840, 2160)	43	2024	26999	4.3	2

600 rows × 8 columns

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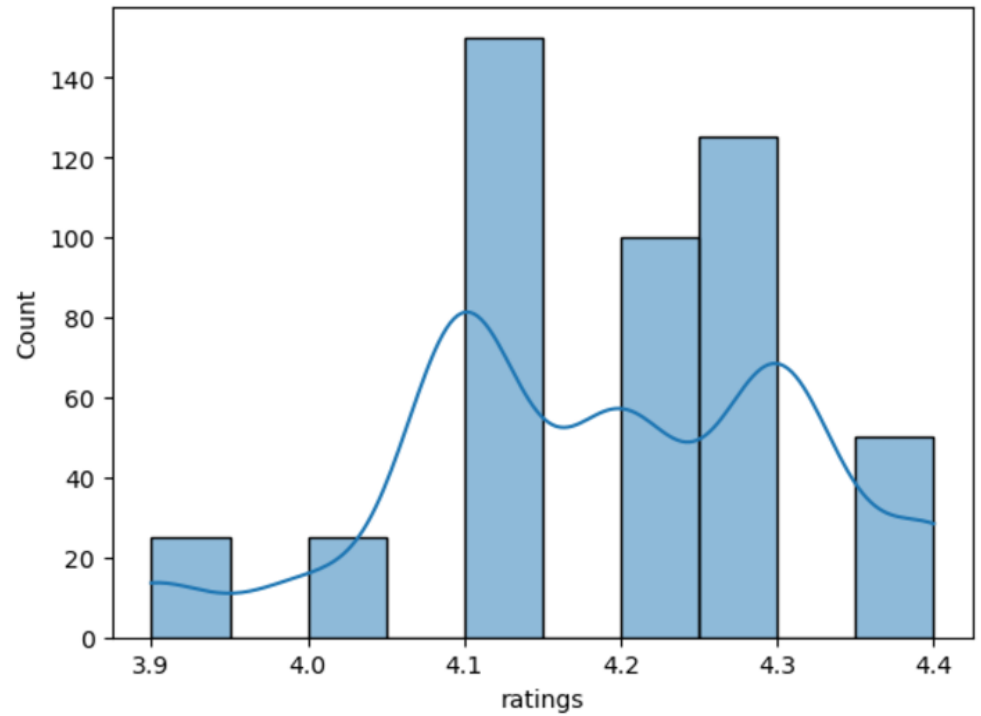
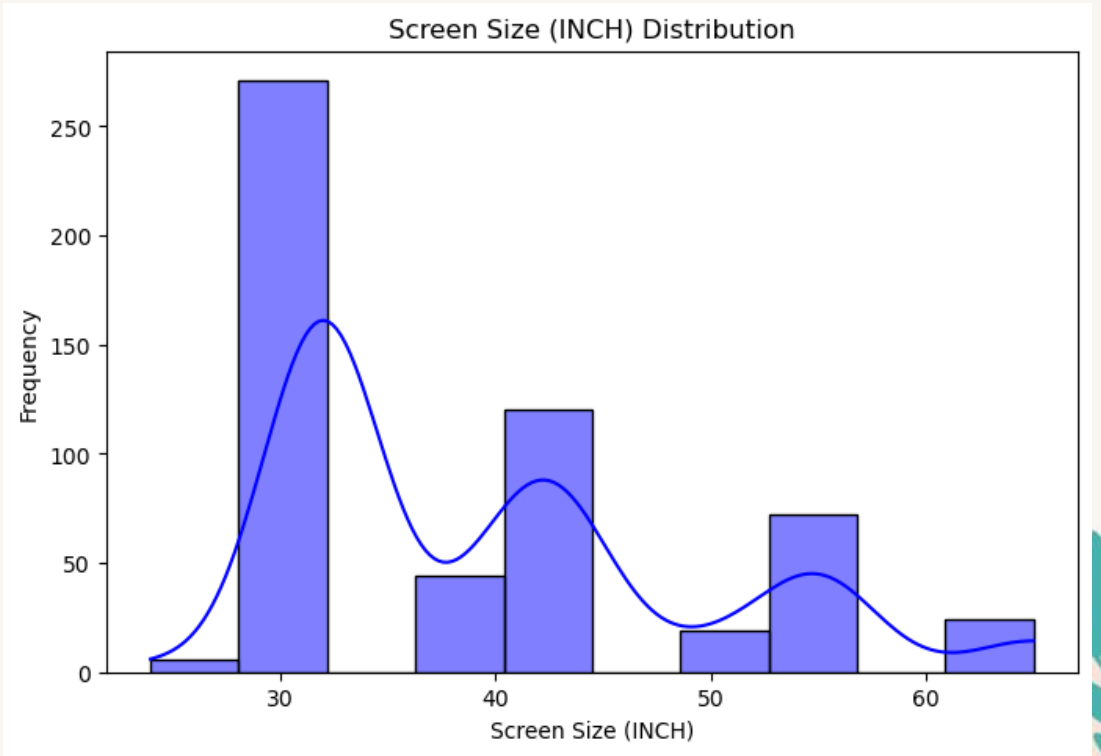
Average Customer Ratings

This Distribution shows the count of ratings.



Screen Size(INCH)

Histogram of Screen Size In INCHES



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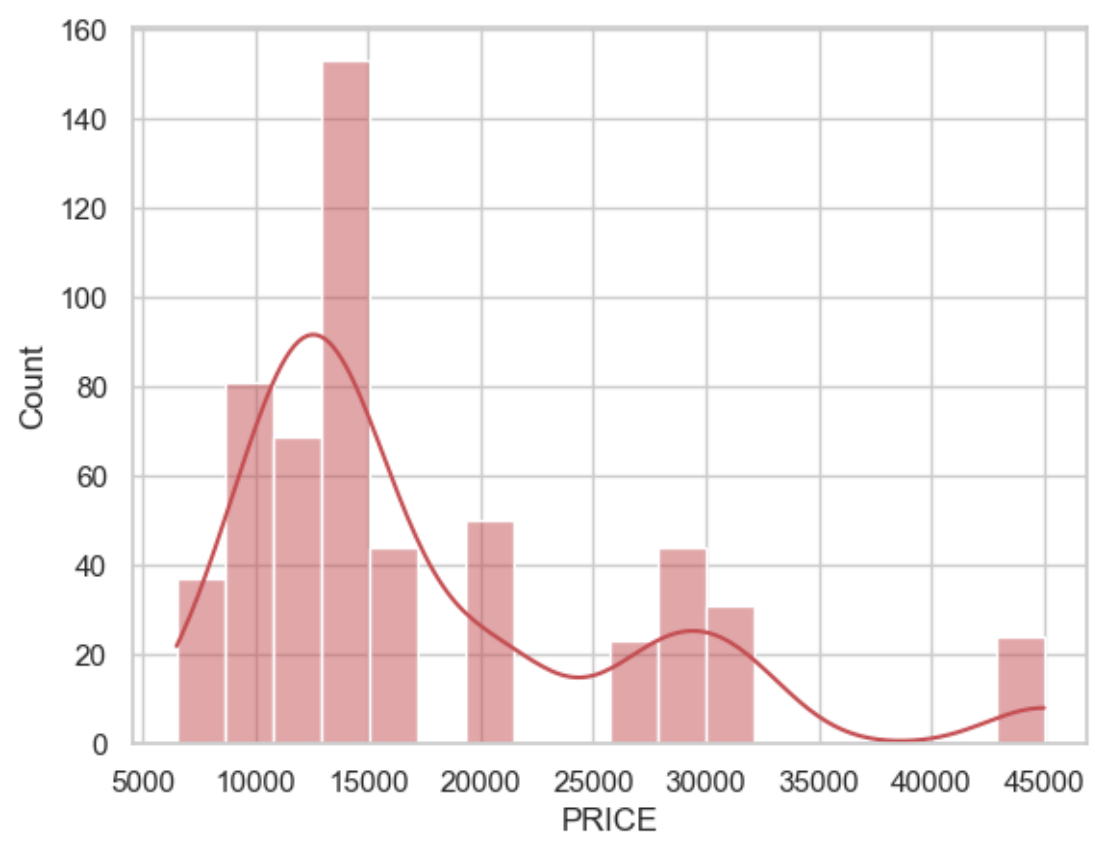
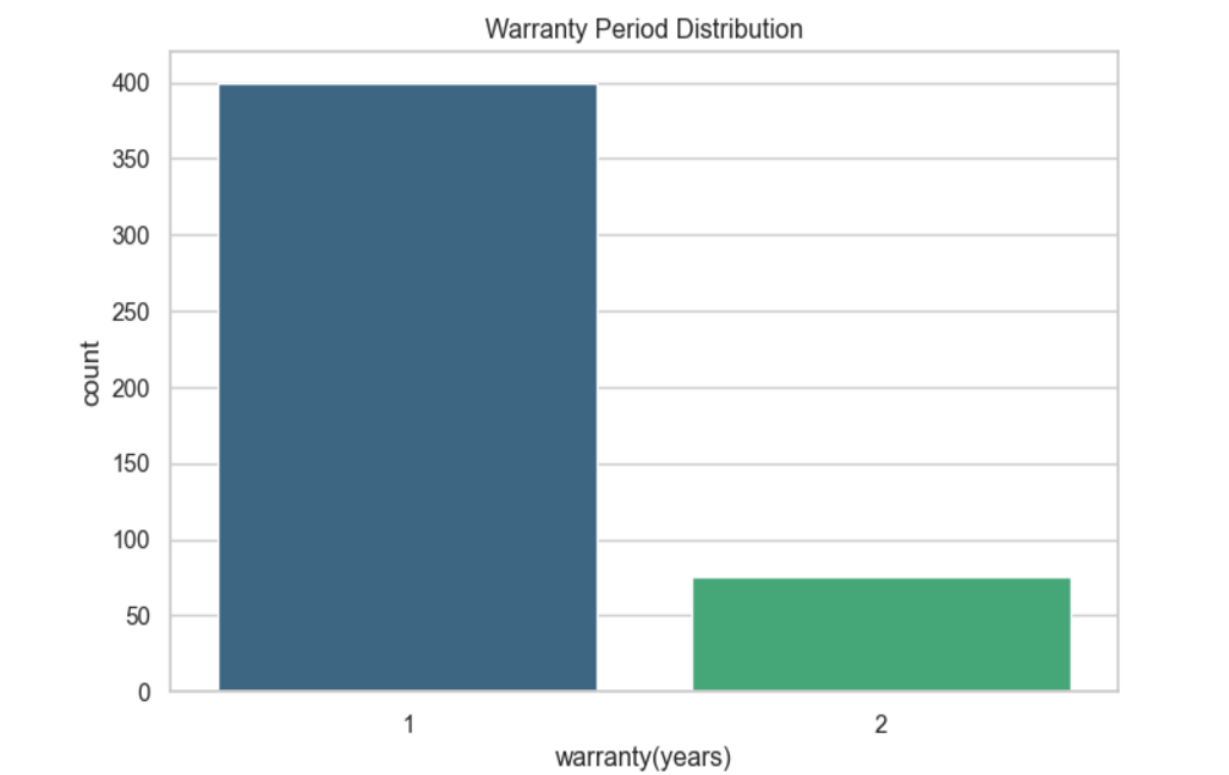
Price Ranges

Distribution Of Different PRICE RANGES.



Warranty

Count of TV With Specific Years Of Warranty



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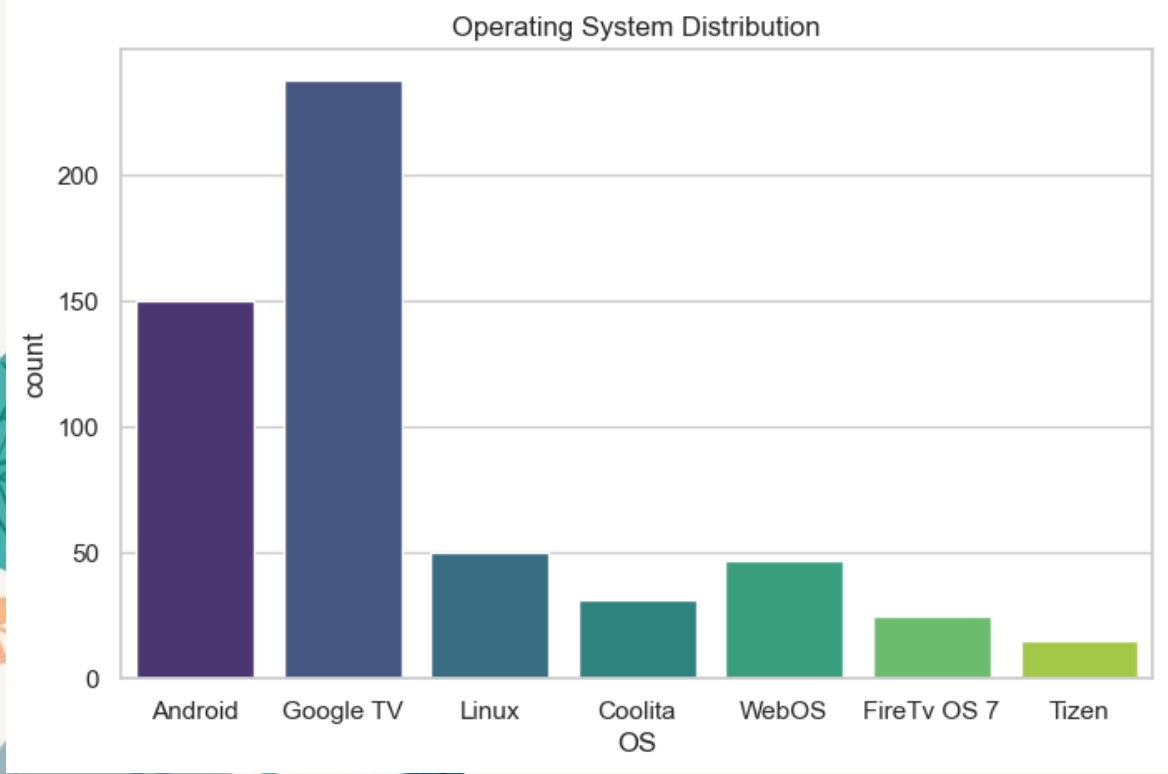
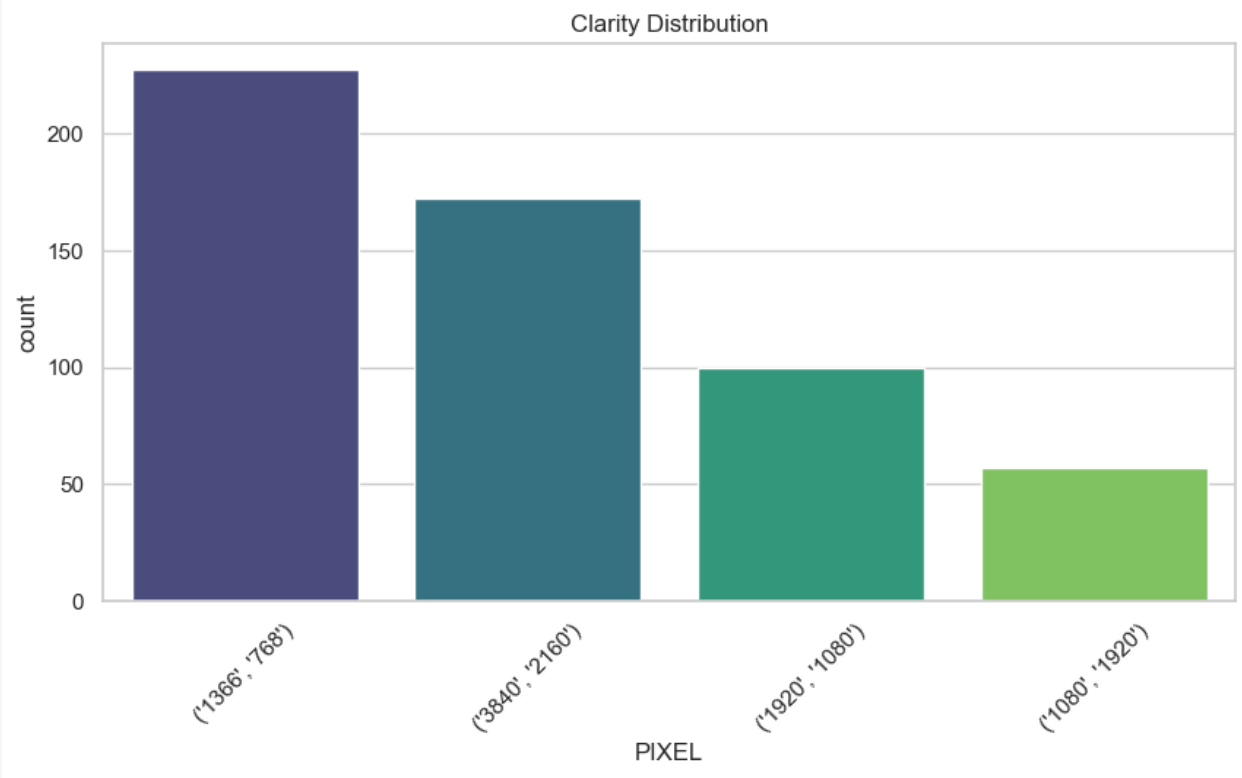
Usage of different Operating Systems

Count Of TV With Various OS



Resolutions

Count Of TV On Various Resolutions



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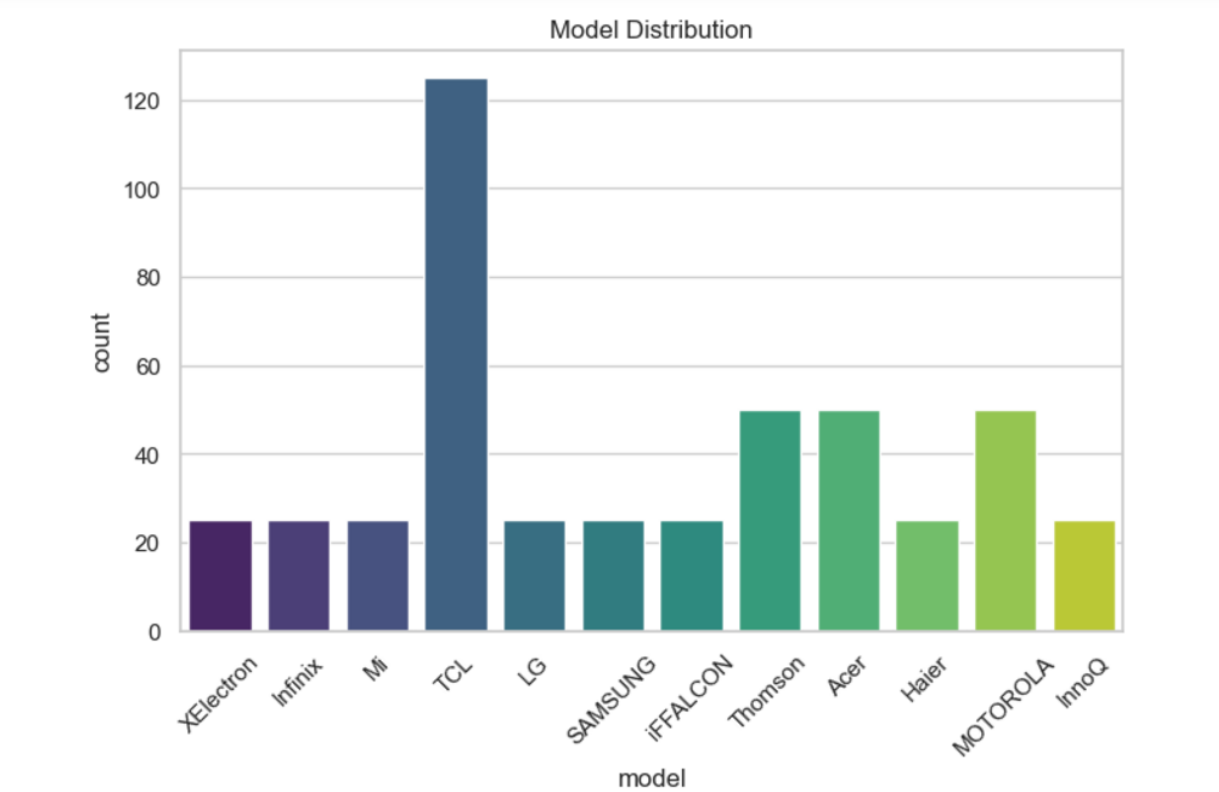
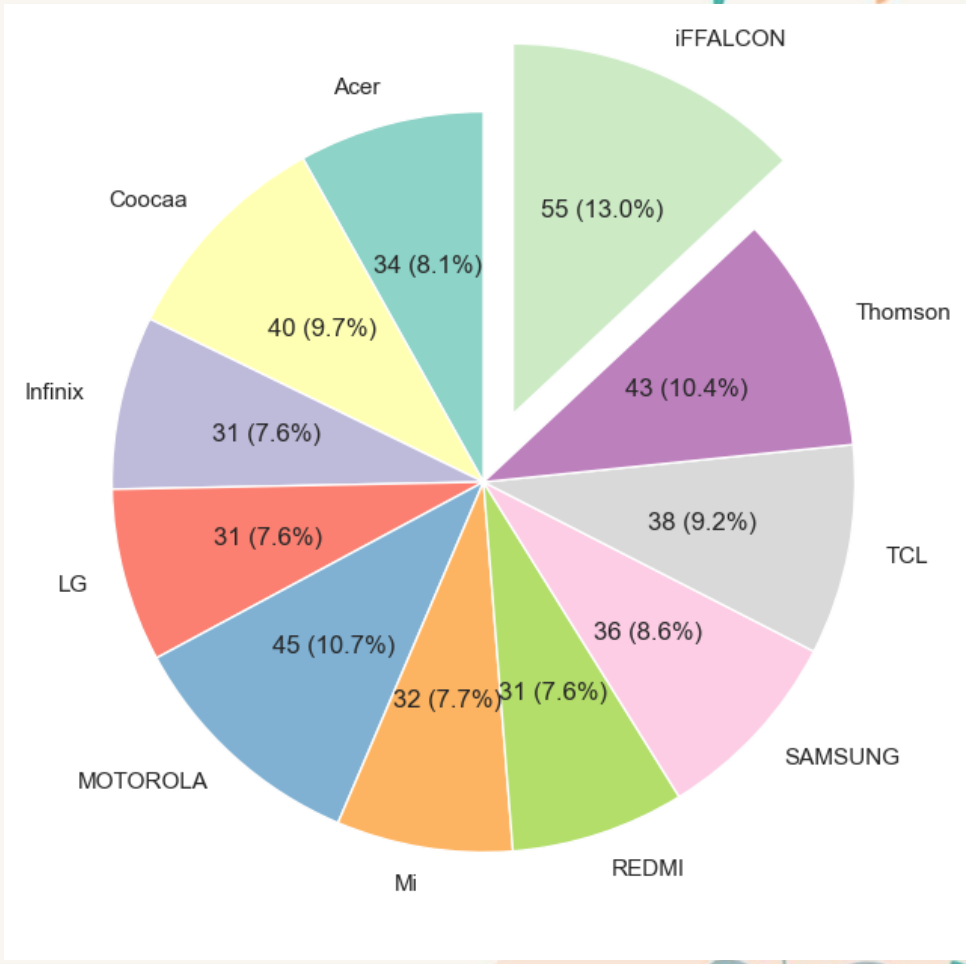
Model

Shows The Frequency Of Each Tv Model



Average INCH for various model



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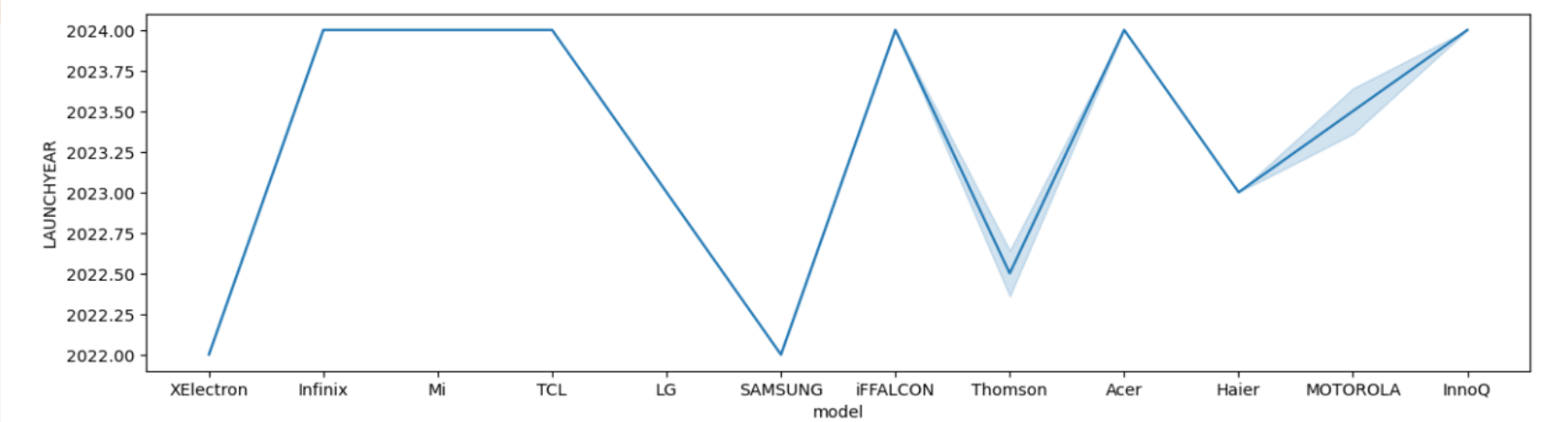
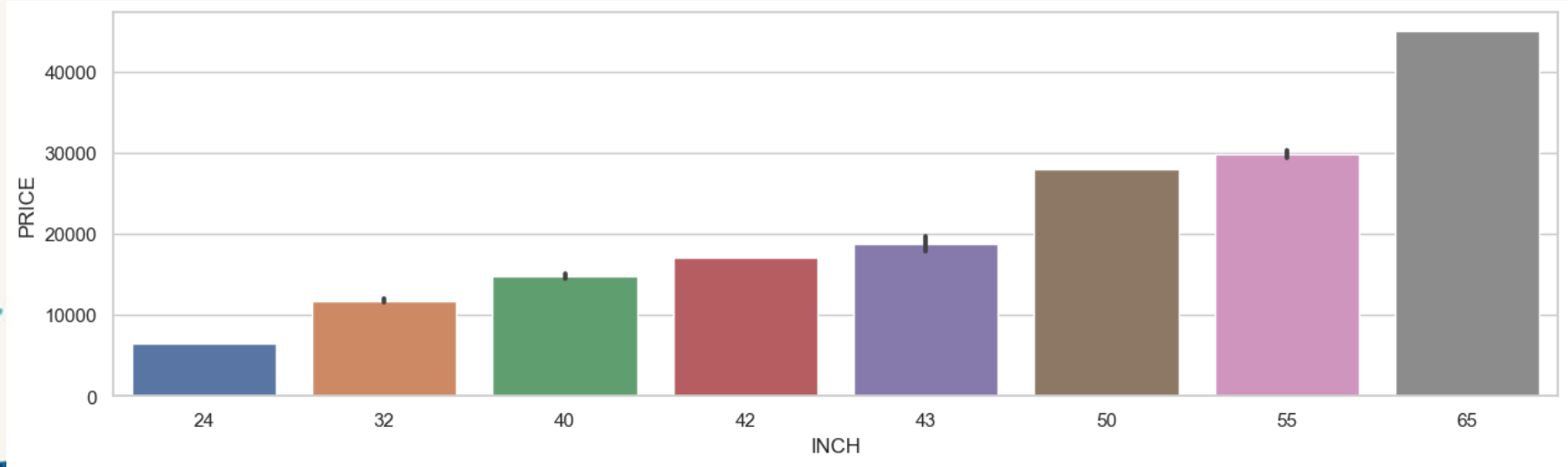
Frequency of models launched as per year



Price vs Inch



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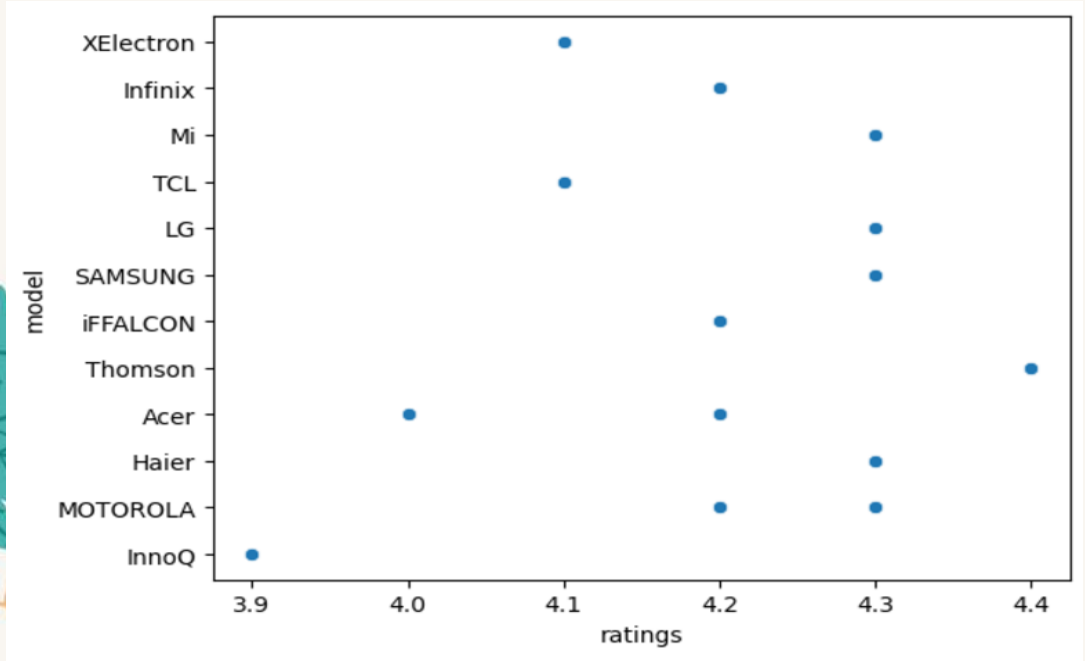
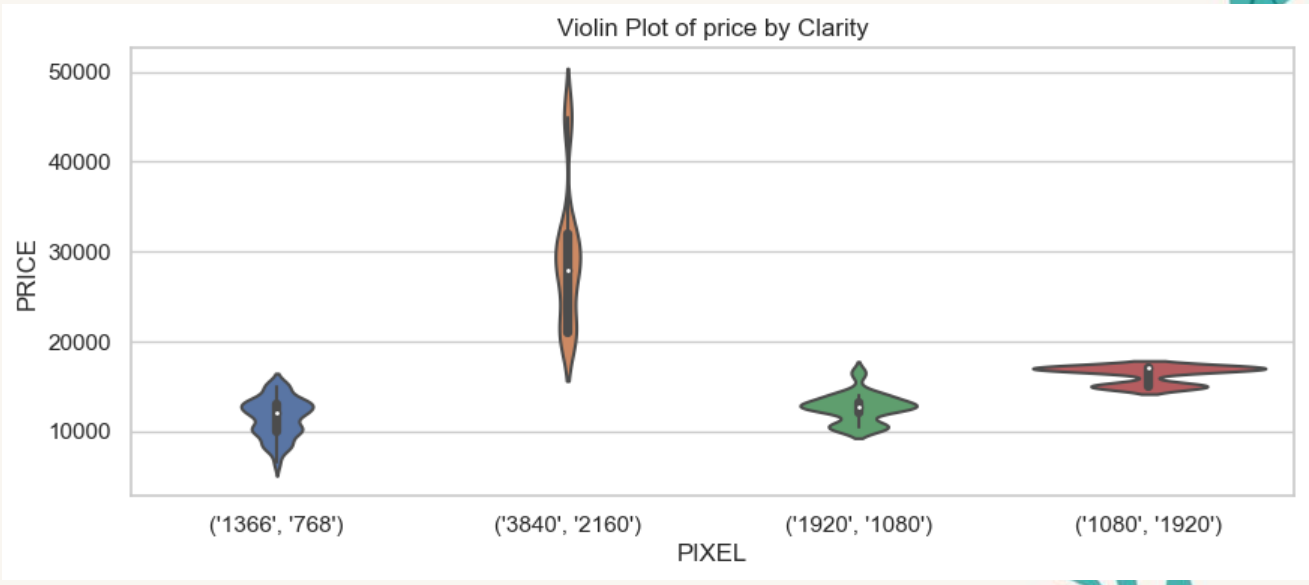
Model vs Ratings

Distribution Shows The Ratings Of Various Model



Clarity vs Price

Price Ranges Based On Clarity



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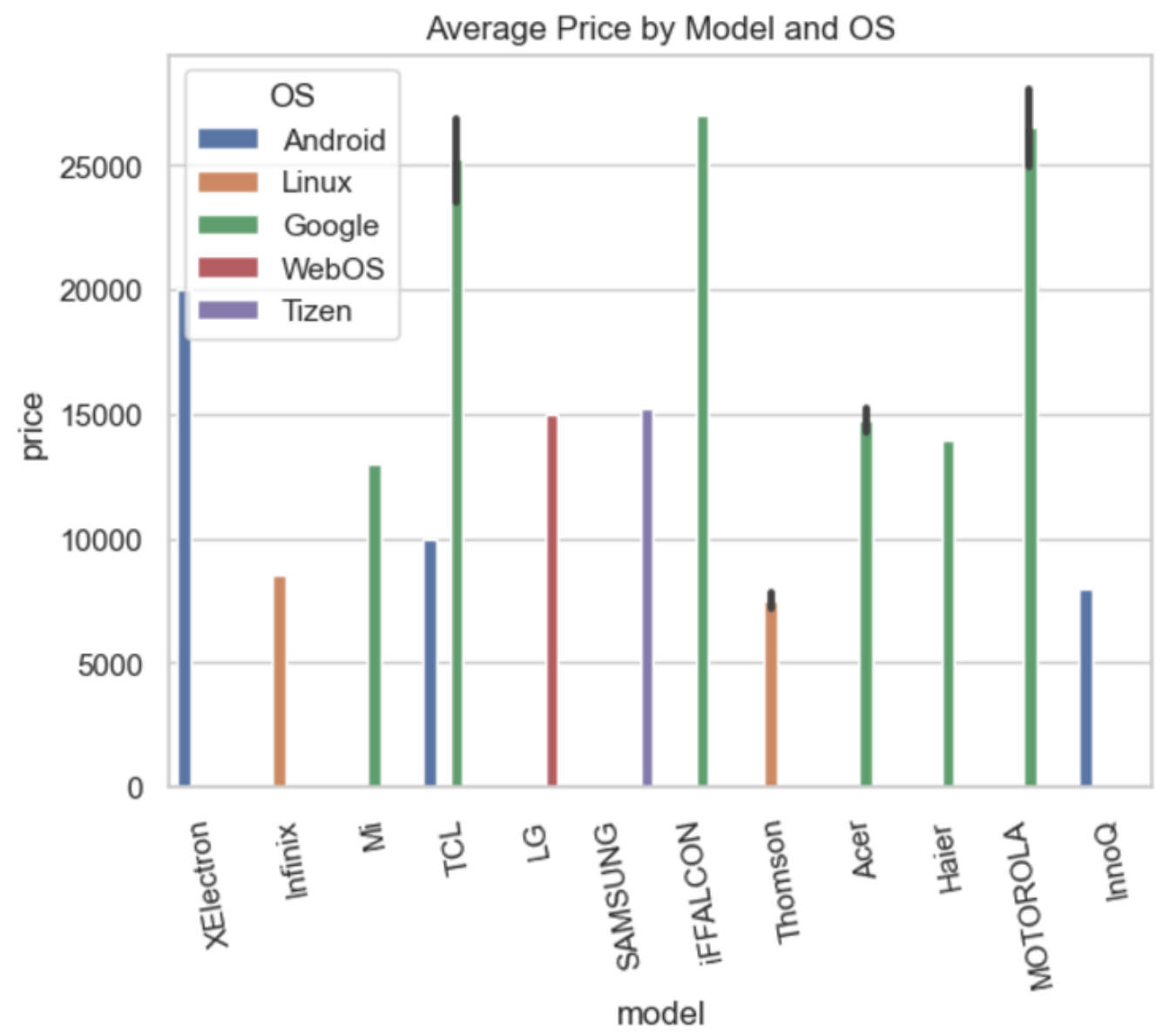
Price Ranges Based On Model And it’s OS



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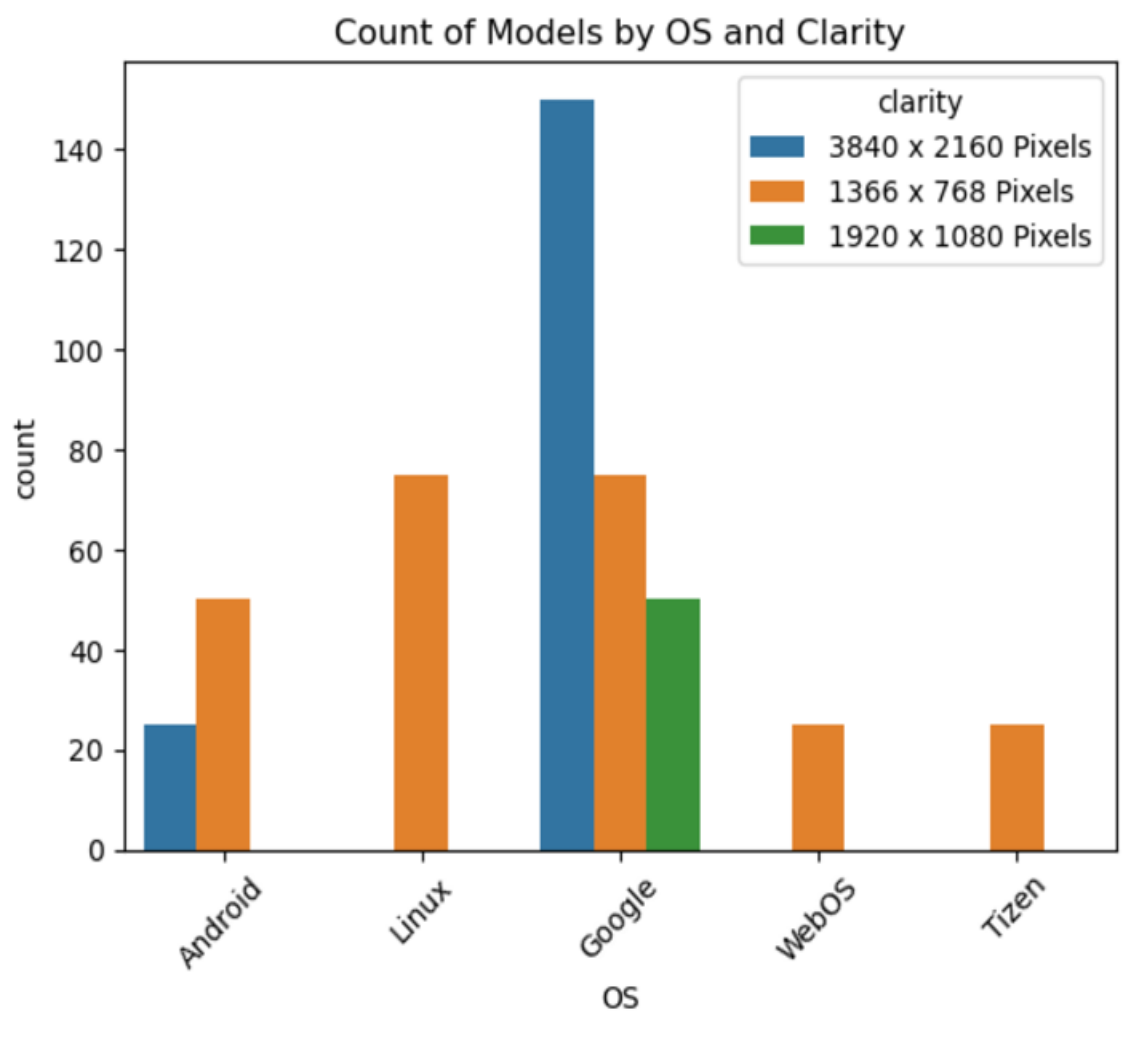
Relation b/w Price,Ratings,Warranty and CM



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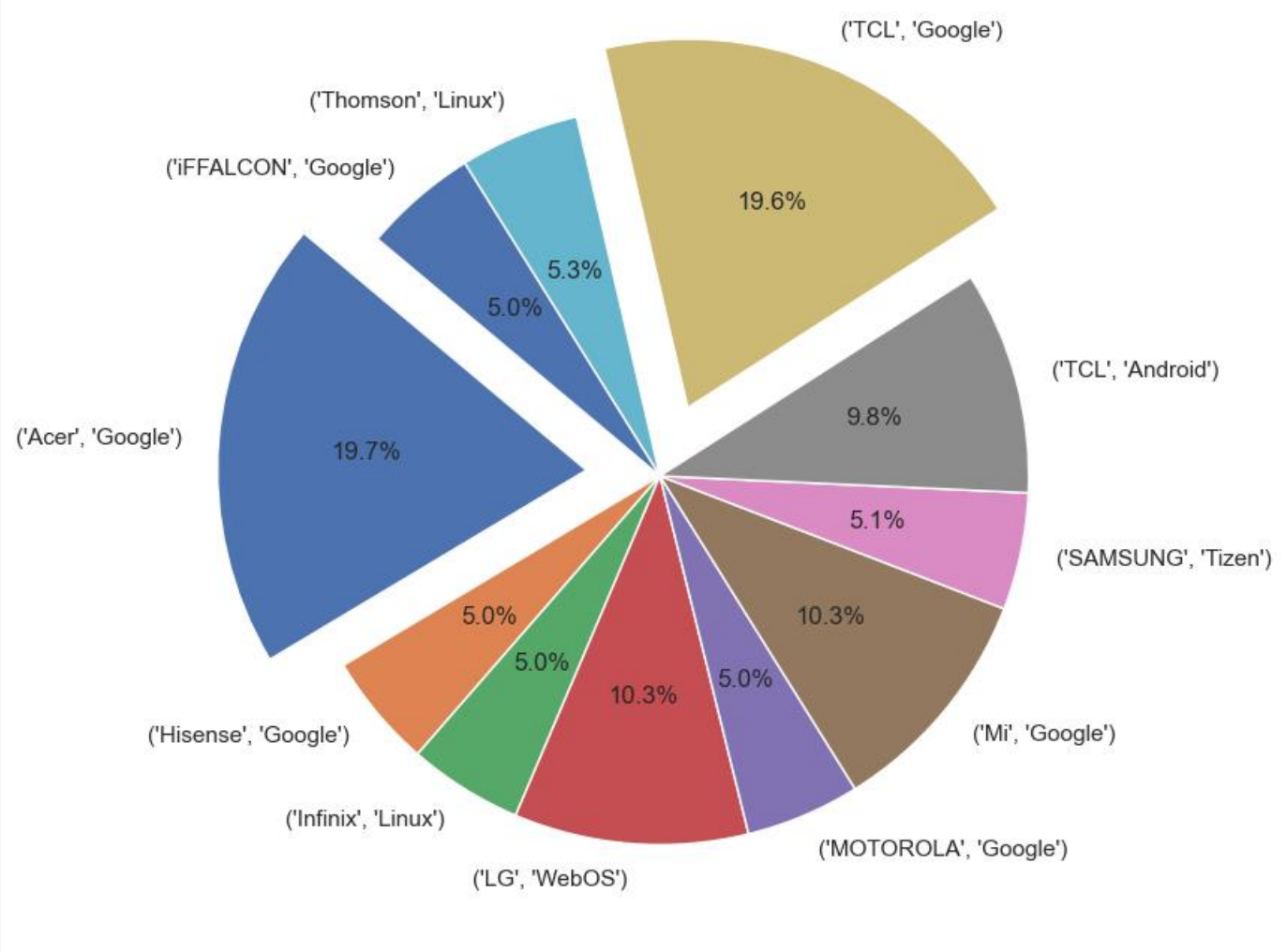
This Pie-Chart Gives The information Of Maximum OS Usage In Various Model.



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CONCLUSION

- From the above data we conclude that first we have done web-scraping and also web cleaning.
- Next we have plotted Univariate , Bivariate and Multivariate based on the data types I.e; categorical data and numerical data by each analysis we found out how it relates to each other column.
- Based on Ratings ,Price ,OS ,Warranty We can conclude that TCL,ACER and IFFALCON has the best Specifications.
- By top most Ratings and specifications most of the users prefer TCL,ACER and IFFFALCON.

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Any
Questions?

THANK YOU

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