

COMPOTRONICS

Clustering and learning based analytical suggester for mobile phones

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Introduction

- -> There are times when people do not know about what's new in the market or what are the phones whose features meet his/her requirements.
- -> Even when a person knows which features to go for, they do not know which company's mobile phone would be the best for them.
- -> To solve such issues and give an insight about the market trends, our application comes into picture.
- -> The application also provides comprehensive comparison of phones of all the major companies.

Objectives

- -> To provide the user various parameters on the basis of which it can decide which phone is better according to his/her specifications.
- -> To display charts and graphs which are descriptive enough to help the user make a decision.
- -> To make a detailed study regarding the trends of a particular parameter.
- -> To find a pattern among different patterns of sales or of features.

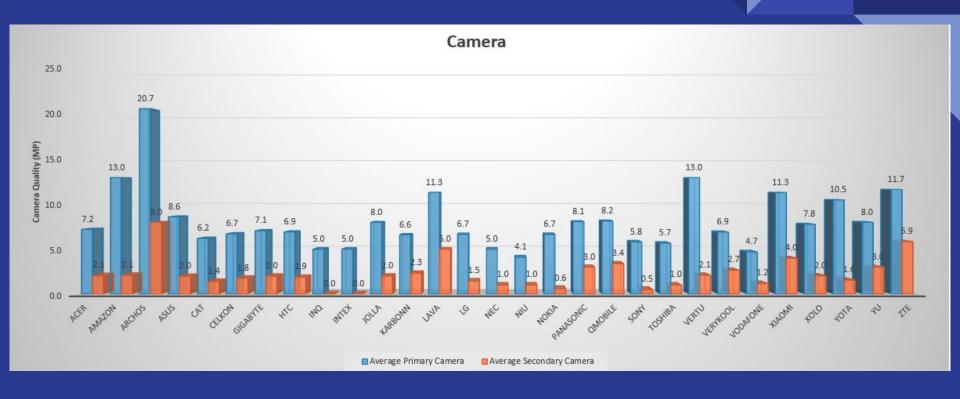
Motivation

- -> Everyone customer to get best phone at the best available price in the market.
- -> The application is not just useful for people looking to buy or phone, it could be used for analysing the market trends.
- For people buying the phone: they can check the companies which offers best camera resolution.
- The application through its dynamic dashboard can help deriving important conclusions on the basis of trends.

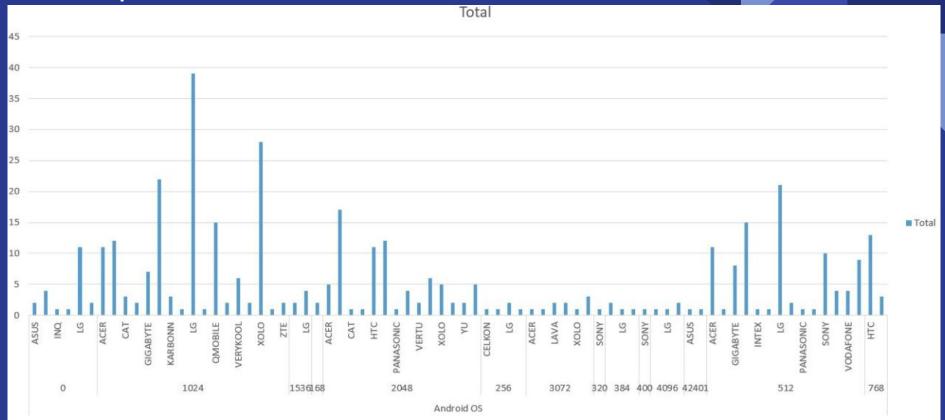
Web Scraping

Data Profiling

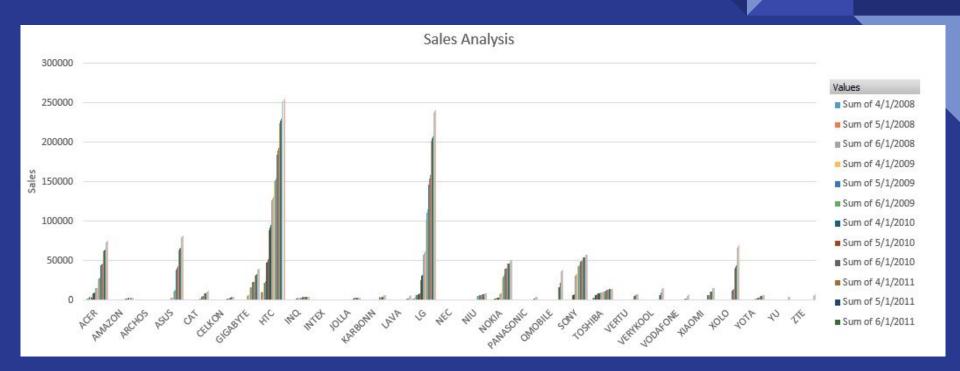
Comparing the camera resolution



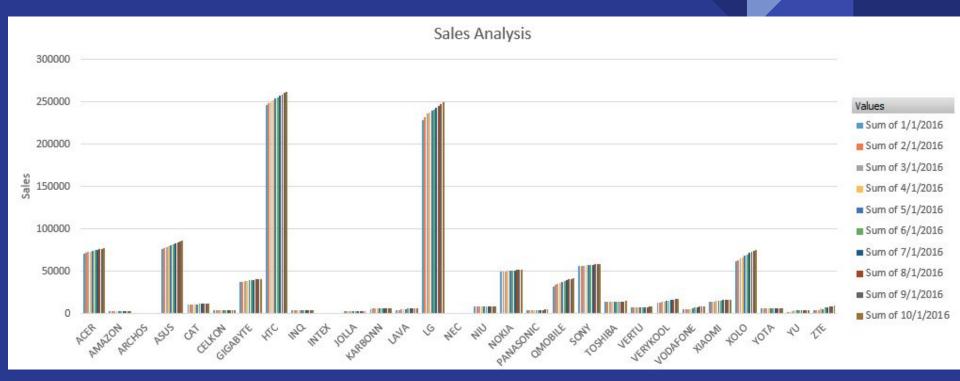
Comparison between Android OS and RAM



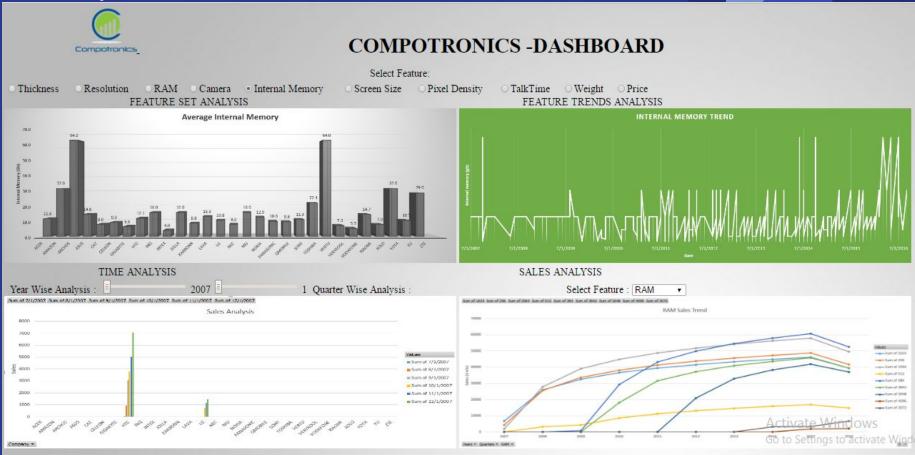
Sales analysis (quarter)



Sales analysis (2016)



Compotronics - Dashboard



Results

- The resolution of phones manufactured by all the companies has been found to increase exponentially.
- Prices of phones have fluctuated but lately they have increased.
- The RAM of phones has increased significantly.
- Weight has remained more or less the same.
- The internal memory provided by phones has increased.
- The screen size has increased for the phones.
- The thickness of the phones have linearly decreased over the years

Improvements

- -> The project considers that any particular feature is equally important for a customer. It might be the case that the customer prefers one feature over the other. The importance of one feature over the other can be specified by the user. The customer can assign weight values to each of the feature and then can make a decision on the basis of the overall score obtained after multiplying the weight with the features.
- -> The sale forecast could be done for the retailers so that they can decide how many units of phones they need to buy for their shops.

References

-> gsmarena.com for getting the data