



## Table of Contents

Introduction.....	3
Are Google Play Apps free? .....	3
Difference between ratings of Apps .....	4
Prediction of Price.....	6
Exploratory Analysis of Two Categorical Variables .....	7
Recommendation .....	8
References.....	9

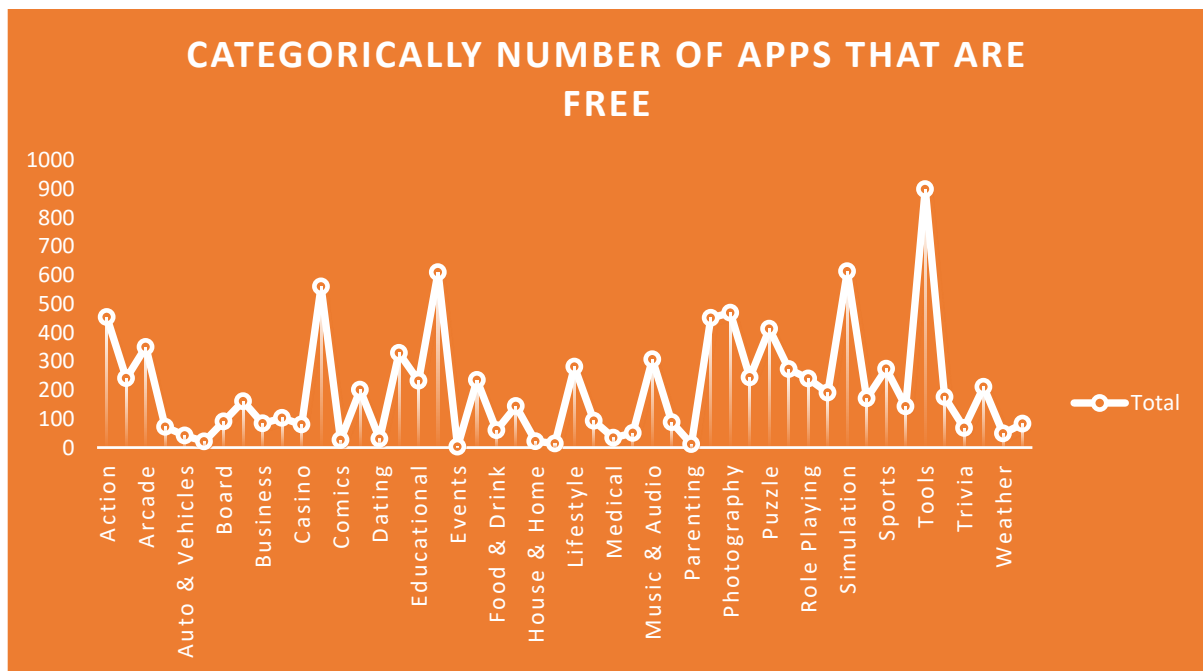
Statistics and Data Analysis Sample By Call Assignment Help

## **Introduction**

The data analysis is one of the most profound modern tools that is essentially used to make better prediction and understanding of the events ongoing in the data. The collected data set has been utilized to conduct analysis, histogram analysis, descriptive analysis, exploratory analysis, and visual analysis. This method of analysis has been utilised for the people to answer certain questions or to depict a particular prediction proposition. The purpose of this analysis is to review the apps present at Google Play Store to comprehend its availability in terms of pricing for essential use. The data set provided for the analysis has been divided into two parts that is data set one in data set 2. The data set one consists of the aim of the applications based on its category defining whether it is free or not. It also contains information of rating that is given for each of the applications by the users. The proposition regarding pricing is to review whether a given application is free and if it is not then what is their cost. Data set 2 is basically for the consumers who wish to get apps over the platform based on payment. Consumer behavior has been categorized in accordance with gender based on their preferences for or getting apps. Both the data sets are comprehensive and exhaustive in their own representation. The data set contains 10000 rows where the data set contains 30 data.

## **Are Google Play Apps free?**

Google Play Store has earned quite a name for facilitating huge amounts of applications for free of cost. Despite there being many applications that do cost something depending upon the production and manufacturing company, most of the applications are free. The important element to understand in this is that Google Play is dedicated to providing platforms for several developers who wish to build their app and market them for helping with certain usability. The applications presented on Google Play Store are basically used for essential activities. There is the availability of numerals apps which can be alternatively used if something is not up to the mark. The presence of applications being free on the platform allows the developer to market their product easily at a reduced cost (Frie, et al. 2017).



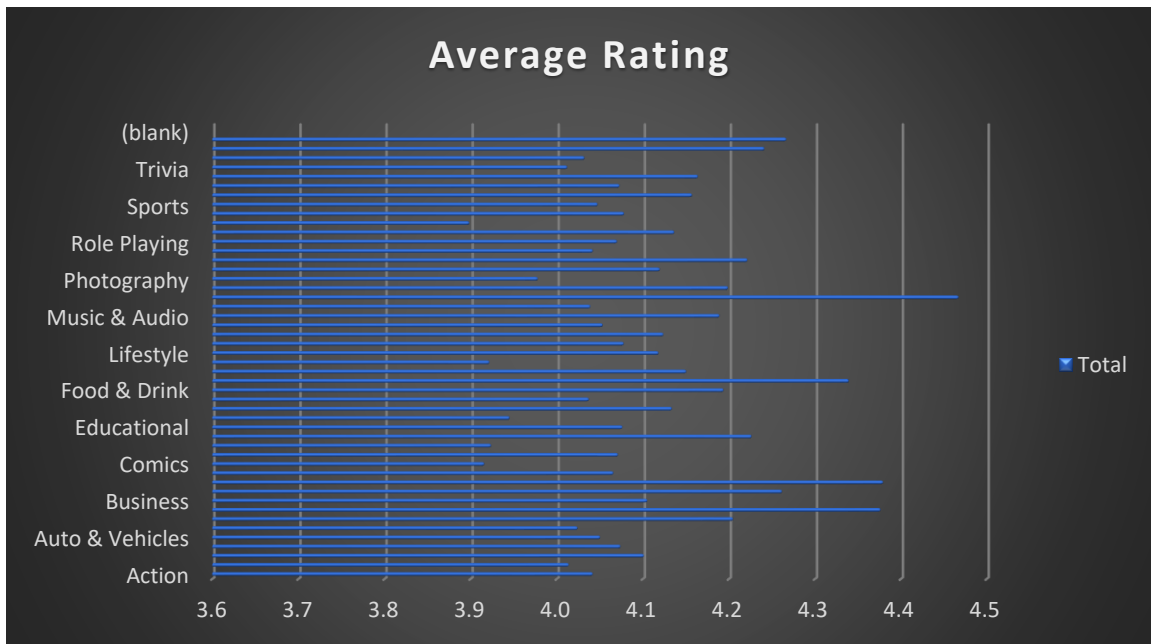
In the given data set 1, the products have been categorically divided into the types of applications. This allowed a comprehensive analysis of the presence of applications in particular groups being certain of use as well as its depiction for being free. Most of their applications taken in the data set are one hour free of cost and among them, the quantity is quite high in the category of tools which demonstrates that essential applications are mostly free of cost. This gives two levels of idea for developers that are the greatest number of application tools present on Google place for essential usage and the scope of making an application at a certain cost lies at certain low lying categories.

#### **Difference between ratings of Apps**

The notion of rating for a particular app showcases its quality and representation. It is often considered that any application over the rating of 3.5 is considered usable where more than 4 makes it exceptionally applicable to be used. Since all the application names used in the data set one is discrete and cannot be comprehended to find out which one is most suitable to be downloaded and used. But a categorical representation of applications can be analysed in terms of finding the average rating of all the applications present in a particular category. This also gives the choice of users for applications based on the ratings they have given in that particular category and this also gives an idea of the number of bogus or less good applications present in a particular category (Mahmood, 2020).

<i>Ratings of Apps</i>	
<b>Mean</b>	4.08756
<b>Standard Error</b>	0.004347208
<b>Median</b>	4.2
<b>Mode</b>	4.2
<b>Standard Deviation</b>	0.434720766
<b>Sample Variance</b>	0.188982145
<b>Kurtosis</b>	3.04449101
<b>Skewness</b>	- 1.306645614
<b>Range</b>	3.6
<b>Minimum</b>	1.3
<b>Maximum</b>	4.9
<b>Sum</b>	40875.6
<b>Count</b>	10000

The above given table contains the mean, maximum, and minimum of the ratings as Google Play has defined that if the app is having an average rating of 1 will be delisted. The minimum rating by any category is 1.3 where the largest is 4.9 which shows that there are few apps out there uh are exceptionally preferable by the consumers. The graph showcasing the categories of application and their average rating shows that photography has the highest rating on average. This shows the orientation of consumers towards the applications which are associated with photographic representation being a preferable choice of lucrative representation (Grundy, et al. 2019).



### Prediction of Price

One of the most important elements of data analysis for any kind of data set is predictions for upcoming things. Here, for the given data set the production price is one of the most profound and elemental things that can be considered. The popularity of any application makes it bound to have a certain kind of attraction in terms of pricing where people are actively paying, especially gaming applications. Similarly, there are scenarios where comprehensive analysis takes into consideration the availability of features and the complexity of demands marking is important for an application to set price. The proposition of analysis of applications at Google Store for prices has been done through descriptive analysis given in the table below. The table clearly demonstrates that the median and mode of 10,000 entries is zero whereas the mean stands at 0.008 which is extremely low in terms of pricing. In fact, among all the applications present in the data set, the costliest one is priced at 10 (Grundy, et al. 2017).

#### *Column1*

<i>Mean</i>	0.008573
<i>Standard Error</i>	0.002064196
<i>Median</i>	0
<i>Mode</i>	0

<i>Standard Deviation</i>	0.20641956
<i>Sample Variance</i>	0.042609035
<i>Kurtosis</i>	1118.083203
<i>Skewness</i>	31.05652457
<i>Range</i>	9.99
<i>Minimum</i>	0
<i>Maximum</i>	9.99
<i>Sum</i>	85.73
<i>Count</i>	10000

Google Play Store is popular and most widely used because of its subsidiary being with Android. Another most important proposition associated with Google play store is that most of the applications present on the platform are free. The applications are built on an open - source platform where the developers can think of modification and inculcate it accordingly. The developers have designed and built their applications that collect data of use that can be considered as a secondary source of income for each of the applications.

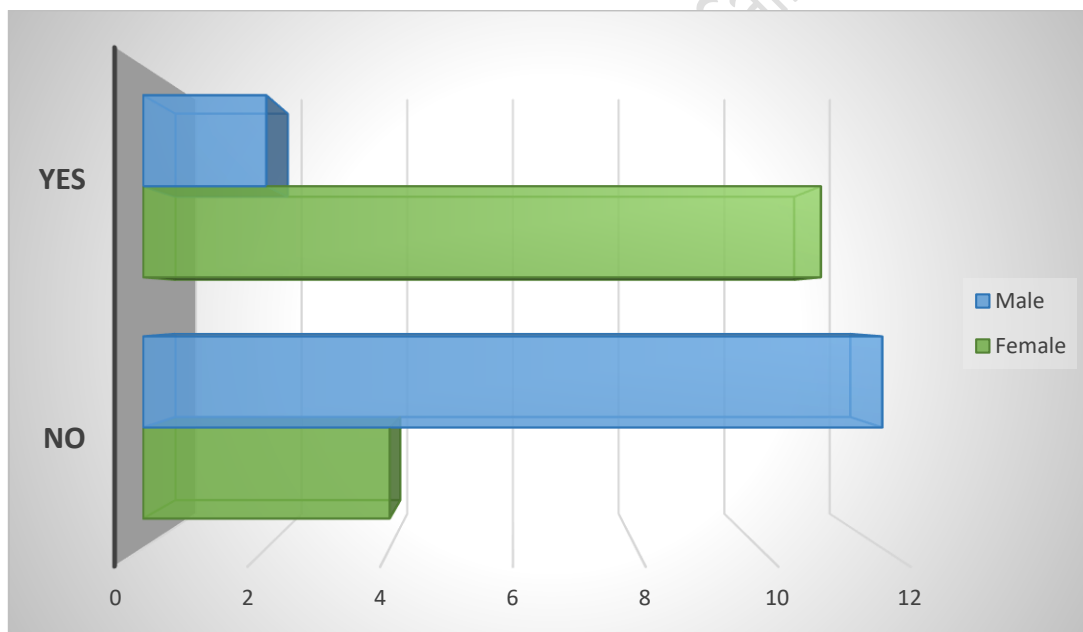
### Exploratory Analysis of Two Categorical Variables

The analysis is needed to be done in Dataset 2. In this particular analysis, the objective was to evaluate and comprehend the behavior of consumers that have been demographically defined in terms of genders. There always has been a proposition regarding certain behavior of people based on their genders. In the given data set, the proposition was to find whether males or females are more inclined towards payable apps or free apps. The table given below showcases the count of males in comparison to females opting for shopping applications which is quite high for females. The data clearly shows the most females show oriented for shopping applications in comparison to males (Meyer, et al. 2019).

Count of Yes	Column Labels		
	Female	Male	Grand Total
Row Labels			
No		4	12
Yes		11	2

<b>Grand</b>	<b>15</b>	<b>14</b>	<b>29</b>
<b>Total</b>			

The graphical representation given below is the representation of the above given data in terms of a 3D bar graph. The green bar shows the choice of females for shopping applications where the blue bar shows the choice of meals for shopping applications. The bar graph clearly shows that most of the mail choose for no whereas most of the females choose for us while shopping applications over spot applications. This analysis is critically important to marketers as they can utilize this information while targeting their audience for the advertisement. This means they can develop certain kinds of applications for its advertisement which can attract male consumers to buy as well as have information regarding targeting female consumers when they need to make applications that are not free. The graphical representation of above given table is below -



### **Recommendation**

Google Play Store is itself the largest platform for containing applications for a variety of uses and it's an ideal platform where any developer can put their application to test on launch it full - fledged. From the given data set for the analysis, it is clear that most of the applications present on Google Play Store are free of cost whereas the categorical representation has given more insights about the choice of the application for developers to see if they want to get will recognize. The second data set was essentially for marketing



based on segmentation and classification on gender basis of what is specifically considered as demographic classification.

### **Conclusion**

Data and visual analysis are one of the most powerful tools that can be essentially utilized to seek insights for a better understanding of the data presented. The world of application developers is ever increasing and expanding and making the place for any application is not an easy task. Analysis of applications can be utilized by the developers to complement the application with certain attributes and parameters that can facilitate a more comprehensive approach. The digital world is filled with data which can be essential to utilize certain methods and procedures to find several numerical and categorical values in terms of actual as well as instructive information. The application Google Play Store is downloaded in billions of amounts in a year and certain parameters that allow its representation in advertising are based on ratings and reviews. This is why analysis of it is extremely important for developing better information.

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