



PRESENTED BY KHIZR AMIR

APP PROFILE ANALYSIS

01 *Project Background*

02 *Aim*

03 *Methodology*

04 *Application Analysis*

09 *Limitations & Recommendations*

10 *Conclusion*

CONTENTS



PROJECT BACKGROUND

01

Performing analysis of the Google Play data by loading them in a Jupyter notebook and write python code to collect the desired dataset. This project identifies the mobile application that are profitable to make a data driven decisions when building applications

AIM

02

Our aim in this project is to find mobile application profiles that are profitable for the Google Play market. We're working as data analysts for a company that builds Android mobile apps, and our job is to enable our team of developers to make data-driven decisions with respect to the kind of apps they build. At our company, we only build apps that are free to download and install, and our main source of revenue consists of in-app ads. This means that our revenue for any given app is mostly influenced by the number of users that use our app. Our goal for this project is to analyze data to help our developers understand what kinds of apps are likely to attract more users.

METHODOLOGY

03

- Perform analysis of the data by loading them in a Jupyter notebook
- Write python code to collect & clean the desired dataset
- Identify the mobile app that are profitable to make a data driven decisions when building apps

APP ANALYSIS

04

- Dataset containing data of about approximately 10 thousand Android applications from Google Play were loaded using pandas into the Jupyter notebook

```
android = pd.read_csv("googleplaystore.csv")
```

```
android.head(3)
```

	App	Category	Rating	Reviews	Size	Installs	Type	Price	Content Rating	Genres	Last Updated
0	Photo Editor & Candy Camera & Grid & ScrapBook	ART_AND_DESIGN	4.1	159	19M	10,000+	Free	0	Everyone	Art & Design	January 7, 2018
1	Coloring book moana	ART_AND_DESIGN	3.9	967	14M	500,000+	Free	0	Everyone	Art & Design;Pretend Play	January 15, 2018
2	U Launcher Lite – FREE Live Cool Themes, Hide ...	ART_AND_DESIGN	4.7	87510	8.7M	5,000,000+	Free	0	Everyone	Art & Design	August 1, 2018

APP ANALYSIS

05

- Clean the data by erasing the duplicates in the dataset based on maximum reviews

```
android[android["App"] == "Instagram"]
```

	App	Category	Rating	Reviews	Size	Installs	Type	Price	Content Rating	Genres	Last Updated	Current Ver
2545	Instagram	SOCIAL	4.5	66577313	Varies with device	1,000,000,000+	Free	0	Teen	Social	July 31, 2018	Varies with device
2604	Instagram	SOCIAL	4.5	66577446	Varies with device	1,000,000,000+	Free	0	Teen	Social	July 31, 2018	Varies with device

	App	Category	Rating	Reviews	Size	Installs	Type	Price	Content Rating	Genres	Last Updated	Current Ver
2544	Facebook	SOCIAL	4.1	78158306.0	Varies with device	1,000,000,000+	Free	0	Teen	Social	August 3, 2018	Varies with device
381	WhatsApp Messenger	COMMUNICATION	4.4	69119316.0	Varies with device	1,000,000,000+	Free	0	Everyone	Communication	August 3, 2018	Varies with device
2604	Instagram	SOCIAL	4.5	66577446.0	Varies with device	1,000,000,000+	Free	0	Teen	Social	July 31, 2018	Varies with device

APP ANALYSIS

06

- Data is further cleaned based on the application to be free and in English
- Total number of apps were found to be 8,878 from initial 10,000 applications
- Further analysis is performed based on the popularity of the category

```
android_final["Category"].value_counts().head(5)
```

FAMILY	1680
GAME	861
TOOLS	750
BUSINESS	408
LIFESTYLE	348

APP ANALYSIS

07

- Categories were further sorted based on maximum number of downloads
- Average download for each category was then calculated
- Communication Category was found with the highest number of downloads

```
Sorted_Category.head()
```

Category	
COMMUNICATION	3.832263e+07
VIDEO_PLAYERS	2.472787e+07
SOCIAL	2.325365e+07
PHOTOGRAPHY	1.777202e+07

APP ANALYSIS

08

- Applications shown below are the most downloaded applications in the category of communication

```
Communication[["App", "Installs"]]\n.sort_values("Installs", ascending = False).head(5)
```

	App	Installs
381	WhatsApp Messenger	1000000000
468	Skype - free IM & video calls	1000000000
464	Hangouts	1000000000
451	Gmail	1000000000

LIMITATIONS & RECOMMENDATIONS

09

- Downloading trend of the applications could be visualized with matplotlib library in Python
- Due to the lack of data further statistical analysis could not be performed

CONCLUSION

10

- Performed cleaning of the 10,000 dataset according to the need
- Found the category with the highest number of download
- Found the application with the maximum number of installation
- Communication category has big businesses such as Whatsaap, Skype, Gmail, Instagram, etc
- Communication might not be a feasible category to penetrate into due to high competition
- Type of application can be chosen based on further requirement of the business