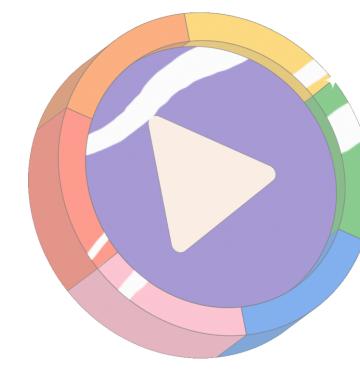




Mennatallah EL-Khateeb



Overview of the Dataset

This dataset comes from the project "The Android App Market on Google Play" published on Kaggle. It includes data about mobile apps available on the Google Play Store. The main goal of this analysis is to explore trends in the Android app ecosystem identify popular categories, user behaviors, and how certain factors like app type, price, and size influence downloads and ratings. This information can help developers create more appealing apps and improve user retention.

Dataset Contents:

apps.csv: Contains detailed information on over 10,000 apps across various categories, with 13 different features like app name, category, rating, installs, price, size, type (Free/Paid), etc.

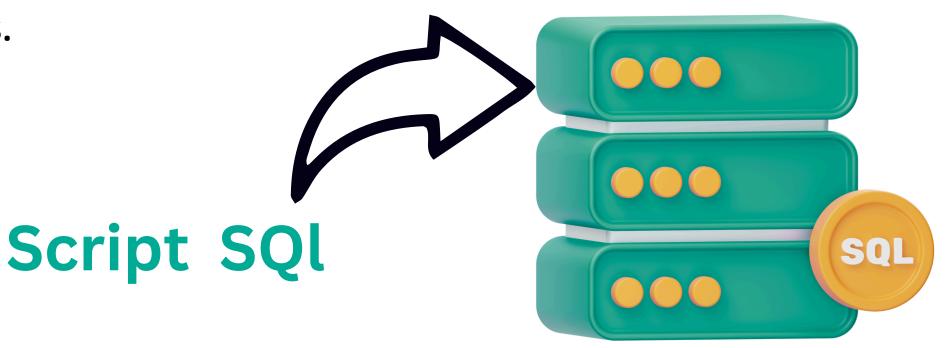




Data Cleaning Steps (Performed using SQL)

- 1. Removed missing (NULL) values in key fields like Rating, Installs, and Price.
- 2. Cleaned numeric strings:
 - Installs: Removed "," and "+", then converted to integers.
 - Price: Removed "\$" and converted to floats.
- 3. Standardized app size:
 - Converted MB, kB, and "Varies with device" entries into consistent numerical values.
- 4. Removed duplicates and inactive apps.





- Average number of reviews is 128K
- \rightarrow This means users are highly engaged and often leave feedback. It shows how valuable user reviews can be for understanding satisfaction.
 - The average app size is 19.47 MB
- → Most apps are lightweight, which helps users download them easily. Developers likely keep sizes small to improve install rates on all devices.
 - The average app price is around \$1.20
- → Most apps are free or very cheap, which encourages users to try them. The low price barrier helps boost reach and adoption.
 - Average app rating is 4.16 out of 5
- \rightarrow Overall, users are satisfied with most apps. This level of rating builds trust and encourages downloads.



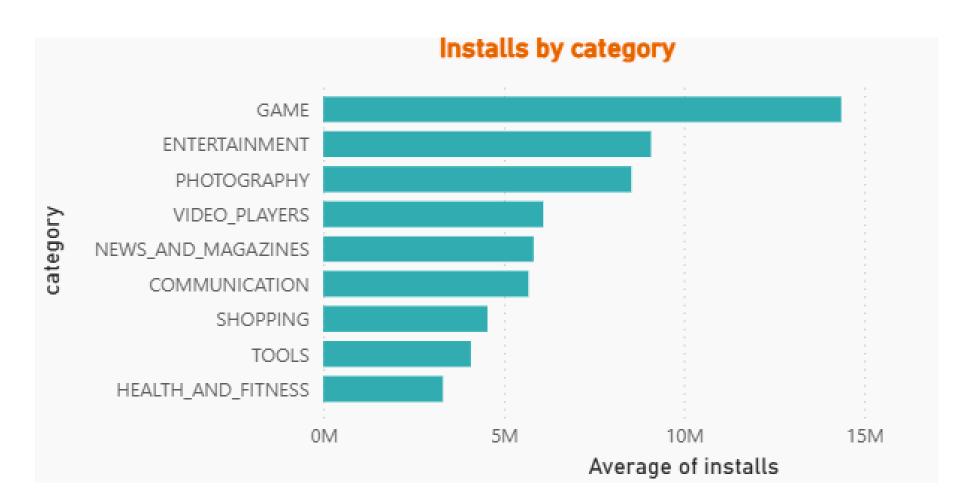
Games are the most downloaded category

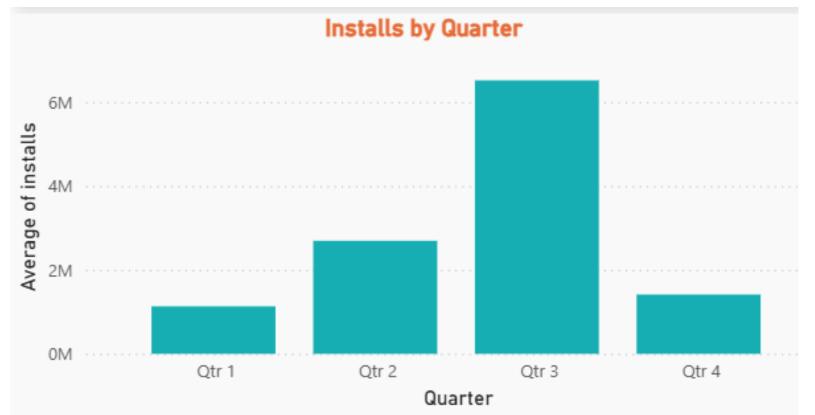
→ People love entertainment apps, especially games. Even with slightly lower ratings, they still get massive downloads.

• Quarter 3 (Q3) has the highest downloads

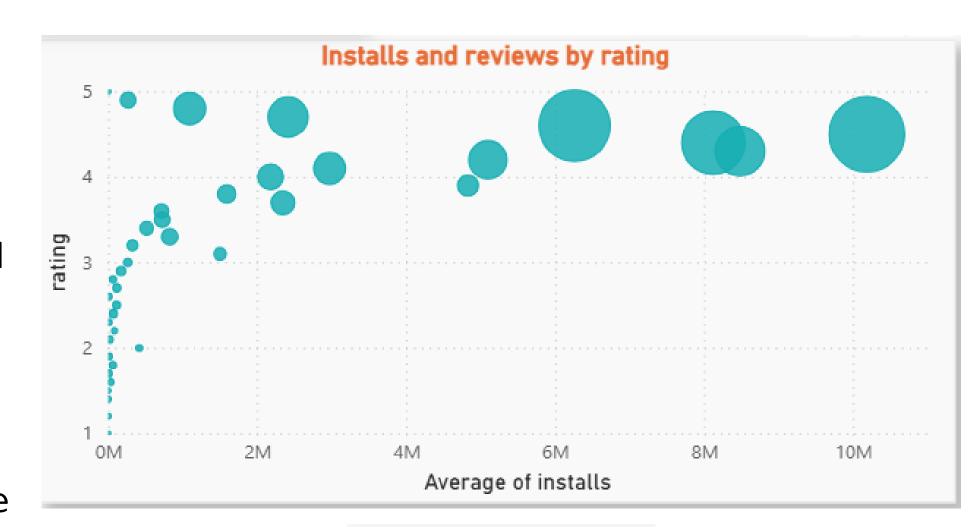
→ Likely due to summer vacations when users spend more time on phones. This could be a strategic time to launch or promote apps.







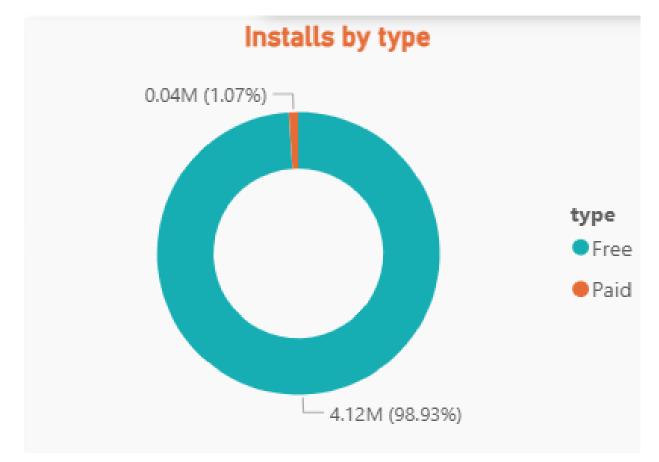
- More installs = more ratings
- → As more people use an app, more of them leave reviews. Popularity naturally drives engagement and feedback.
 - Paid apps have higher ratings than free ones
- → Paid users tend to be more satisfied, possibly due to better quality. Developers may put more effort into premium apps.







- 98% of downloads go to free apps
- → Most users prefer trying apps without paying first. Free apps clearly dominate in accessibility and reach.
 - Highest prices are in Finance, Lifestyle, and Medical categories
- → These apps offer valuable or specialized services, which users are willing to pay for. Think money management, wellness, or health tracking tools.

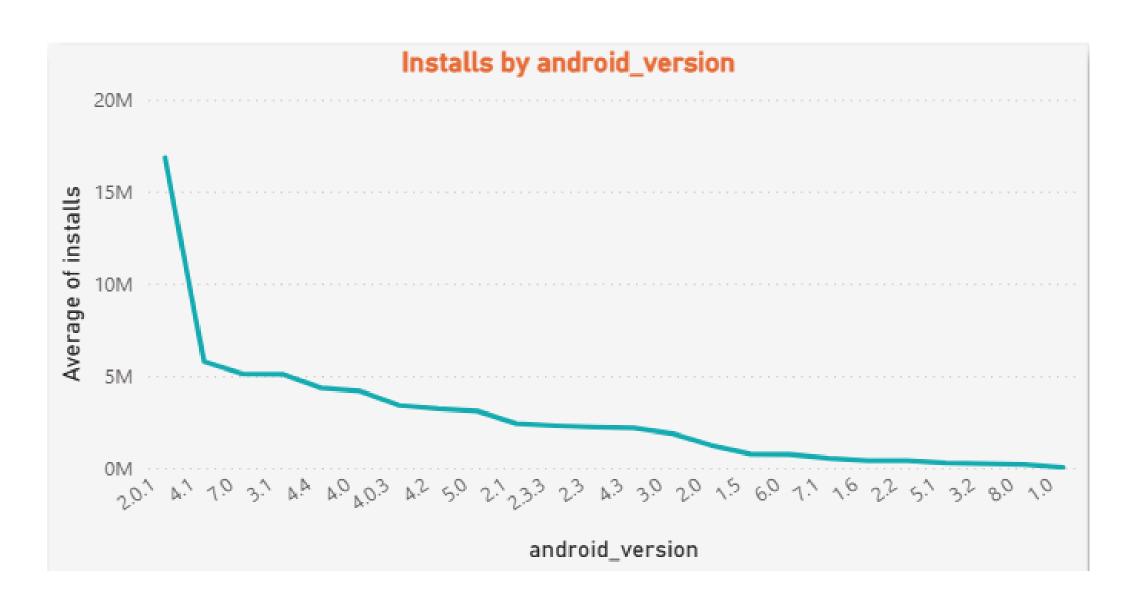




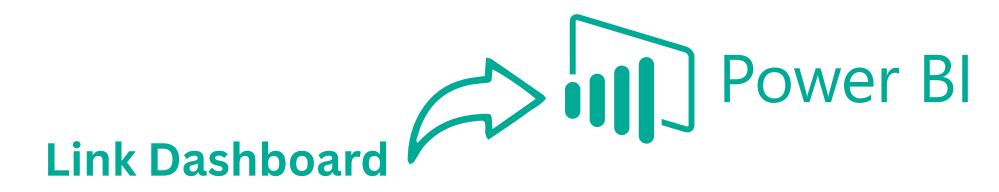


- Most installs happened on Android version 2.0.1
- → That version was probably the most common in the dataset's time frame.

 It helps developers know which versions to support for wider reach.







Conclusion

• This analysis shows that users prefer free, lightweight, easy-to-install apps, especially games. Summer appears to be a peak time for downloads, suggesting seasonal marketing opportunities. While paid apps receive fewer downloads, they often achieve higher user satisfaction. Developers should focus on offering high-quality, value-driven apps, and optimize for the most-used Android versions. Understanding user behavior, timing releases, and targeting popular categories can significantly improve app success on the Google Play Store.



Recommendations

- Focus on Free Apps First: Since free apps dominate in downloads, offer a free version with in-app purchases or ads to maximize reach.
- **Prioritize Gaming and Entertainment Categories:** These consistently perform well; they can be great entry points for user acquisition.
- Launch During Q3 (Summer): This period sees the highest activity ideal for new releases and marketing campaigns.
- **Optimize App Size:** Keep your app lightweight (under 20MB) to increase install rates, especially in areas with limited storage.
- Invest in Paid App Quality: If offering a paid version, ensure premium features and excellent performance to maintain high ratings.
- Use User Reviews for Continuous Improvement: High engagement with reviews can provide valuable feedback for updates.
- Support Older Android Versions: Maintain compatibility with versions like 2.0.1 to reach a wider audience.
- Target High-Value Categories with Care: If developing in Finance, Lifestyle, or Medical, justify pricing with high utility and UX.

Thank you

I wait your opinion



Mennatallah EL-Khateeb

Data Analyst

