

# Power BI: PROJECT SHOPIFY

## Project Summary

**Project Requirement** – To analyze the Shopify app landscape using data scraped from the Shopify App Store.

**Project Objective** - To uncover key factors that contribute to the success of the apps.

**Project Task** - To use apps tables and reviews tables to create visualizations in Power BI that would provide insights into app statistics, reviews, and developer responsiveness.

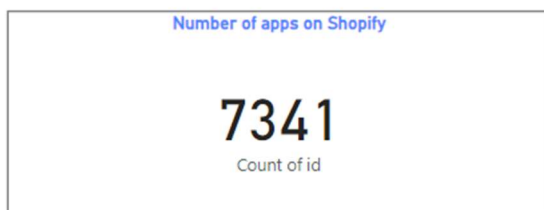
## Part 1: App Landscape

### Key Findings

- The KPI card displays 7,341 unique apps
- The line chart tracks review counts over time, showing a significant decline since May 15th, continuing the downward trend.
- Most points in the scatterplot are clustered around high average ratings (near 5) and low review counts (under 5K), suggesting that many apps maintain high ratings despite having fewer reviews.

### 1.1 Unique number of apps

Created a KPI card from the visualization pane that counts the unique number of apps. The "Apps" table contains 7,341 unique apps.



### 1.2 Review counts over time

The line chart below tracks review counts over time, showing a significant decline since May 15th, with the downward trend continuing thereafter.

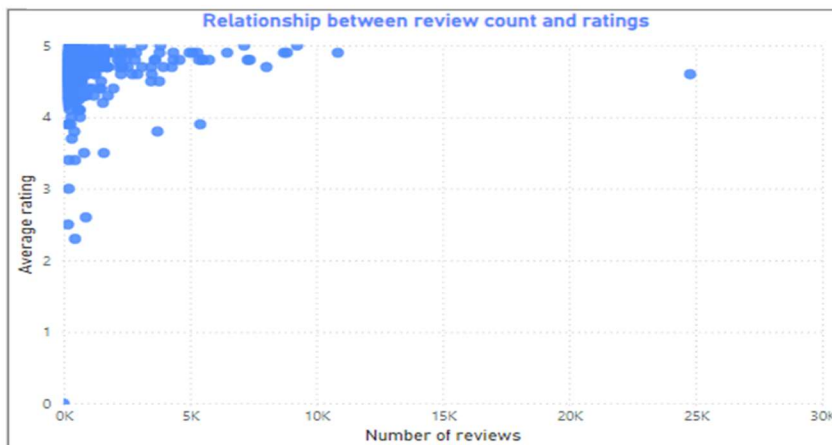


### 1.3 Relationship between review counts and average ratings

The scatterplot below visualizes the relationship between review\_count (X-axis) and average\_rating (Y-axis) to determine whether higher review counts are associated with better or worse average ratings across the apps. The chart shows that most points are clustered around

high average ratings (close to 5) and a low number of reviews (under 5K). This suggests that many apps have a relatively small number of reviews while still maintaining high average ratings.

The scatterplot chart below shows that most of the points are concentrated around high average ratings (near 5) and a low number of reviews (under 5K). This implies that many apps have a small number of reviews but still maintain high average ratings.



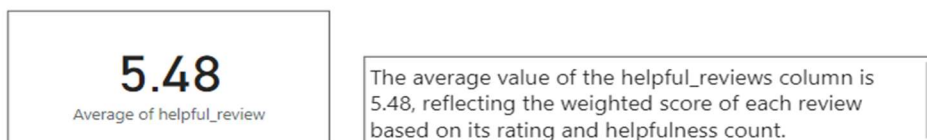
## Part 2: Reviews

### Key Findings

- The card displays an average value of 5.48 for **helpful\_reviews**, reflecting the weighted score based on rating and helpfulness.
- The scatter plot suggests an inverse relationship between developer replies and average ratings, with reviews lacking a reply having a higher average rating (4.78) compared to those with a reply (4.48), potentially indicating that users without a reply are more satisfied or feel no further engagement is needed, while replies may signal unresolved issues or dissatisfaction

### 2.1 Weighting Reviews Based on rating and helpful\_count

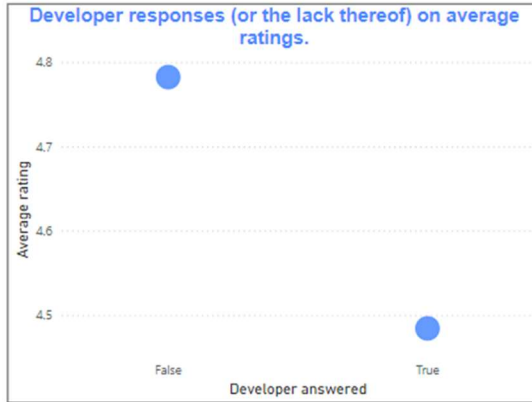
Added new columns to the Reviews tables using Data Analysis Expressions (DAX) to evaluate review helpfulness and developer response. The card below shows the average value of the helpful\_reviews column, which is 5.48, reflecting the weighted score of each review based on its rating and helpfulness. This provides an overview of the overall quality and helpfulness of the app reviews.



### 2.2 Developer responses (or the lack thereof) impact on the average ratings

The Scatter plot below suggests an interesting inverse relationship between the presence of developer replies and the average rating

- Higher Ratings when No Developer Reply (False): The average rating of 4.78 for reviews with no developer reply is notably higher than the 4.48 for reviews where the developer has responded. This could suggest that users who left reviews without a reply from the developer are generally more satisfied, as they tend to give higher ratings. One possible explanation could be that these reviewers didn't feel the need for further engagement, possibly indicating a more positive experience.
- Lower Ratings when Developer Replies (True): The lower average rating of 4.48 when the developer responds could imply that users who receive a reply are either expressing concerns or dissatisfaction, leading to slightly lower ratings. It's also possible that developers' replies may not fully resolve issues or may even cause frustration, leading to lower ratings in some cases.



#### Analysis

The average rating of 4.78 for reviews with no developer reply is notably higher than the 4.48 for reviews where the developer has responded. This could suggest that users who left reviews without a reply from the developer are generally more satisfied, as they tend to give higher ratings. The lower average rating of 4.48 when the developer responds could imply that users who receive a reply are either expressing concerns or dissatisfaction, leading to slightly lower ratings.

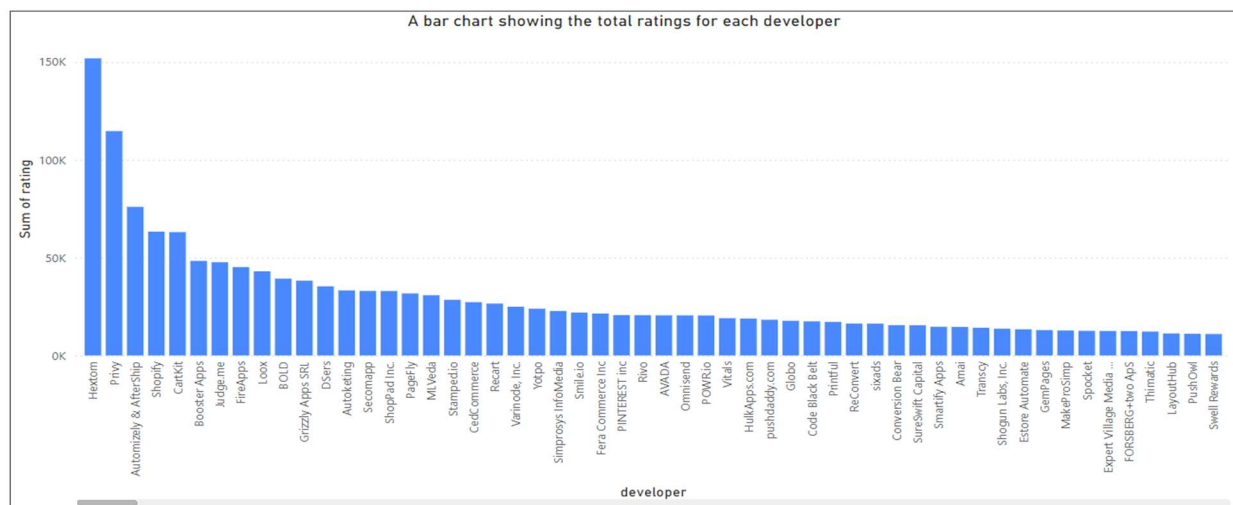
## Part 3: App Reviews

### Key Findings

- Sum of ratings VS developers -The bar chart illustrates the total ratings for each developer, with Hextom receiving the highest total of 15,861 ratings.
- Average of helpful reviews VS developers - The bar chart highlights developers with the highest average helpful reviews, where Pictorem leads with an average of 50.0 helpful reviews.
- Responsiveness VS developers - The bar chart also shows developer responsiveness to user feedback, with FireApps providing the most responses, totaling 6,008 answers.

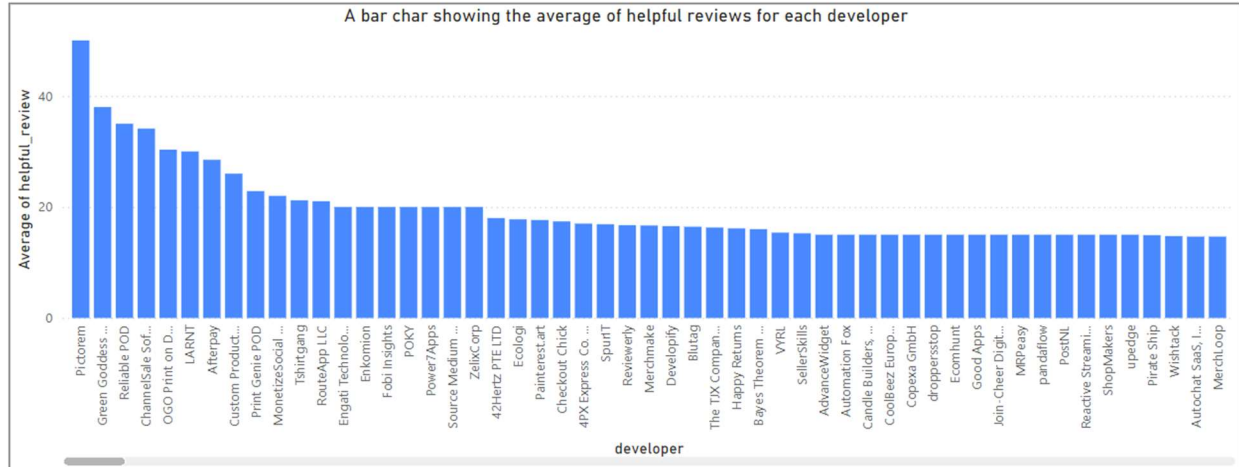
### 3.1 Sum of rating by Developers

The bar chart below displays developer on the X-Axis and the sum of ratings on the Y-Axis. This chart allows to analyze and compare the total ratings associated with each developer by providing a clear visual of which developers have the highest aggregate ratings and which ones might need improvement. This analysis could help identify trends in developer performance and app quality, such as whether certain developers consistently receive higher ratings.



### 3.2 Average of helpful\_review by Developers

The bar chart below displays developer on the X-Axis and the average of helpful\_rating on the Y-Axis. This chart allows to analyze which developers have the most helpful reviews on average, highlighting trends in developer engagement.



### 3.3 Sum of developer\_answered by Developers

The bar chart displays the developer names on the X-Axis and their responsiveness (from the developer\_answered column) on the Y-Axis, only for apps with more than 500 reviews. This visualization allows to analyses which developers are most responsive to user feedback, allowing you to assess developer engagement and review management for more established apps.

