Executive Summary

The mobile application market is filled with endless opportunity, the recent creation of the smartphone and tablet application markets have enabled companies to develop apps which can result in significant gains from revenue and a revitalized opportunity to interact with consumers. There is difficulty in determining how to best enter this market as a new entrant, necessitating the need to leverage data to make an informed decision. The question that arises when approaching this complication is how success in the app market should be defined, and can this definition be used as leverage in an effort to successfully enter the market.
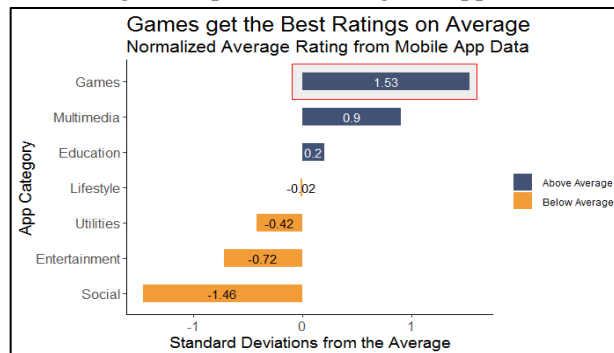
With the absence of some traditional financial measures of success (i.e., total profit from apps), the definition of success in the observed market relies on three key features that are observed in the data:

1. Rank - Apps which have a lower rank in an app market are indicative of success due to increased downloads and higher demand relative to competitors
2. Rating - Apps which receive high ratings from users may be indicative of success regarding app design (i.e., users enjoy the experience and were inclined to give an exceptional rating)
3. Number of Ratings per Day - Apps which receive a high number of ratings per day may convey success regarding interactivity of an app (i.e., users felt strongly enough about the app to give it a rating in the store)

Keeping these metrics of success in consideration, there are a multitude of options for how to proceed in the construction of an app, and what strategic platforms should be utilized as part of an introductory app release. Some important options to consider when launching a new app include the app characteristics (i.e., category, inclusion of in-app ads), and app distribution type (i.e., device, app marketplace, region). Before the discussion of optimal avenues of entry into the market, it should be noted that the observed data is generally focused on top-ranked app developers, and insights may not assuredly translate to success for a new entrant into the market. As such, our focus is on launching an app that will exhibit sustainable success.

App Characteristics

We recommend launching a free game app that includes in-app ads and in-app purchases. With respect to selecting which category to enter, we analyzed the ratings and rank of apps by category. On average, games receive the best average ratings from users of those apps (relative to the overall average), suggesting that users tend to have a good experience with game apps, as shown in the table below.

Games get the Best Ratings on Average
Normalized Average Rating from Mobile App Data

App Category	Standard Deviations from the Average
Games	1.53
Multimedia	0.9
Education	0.2
Lifestyle	-0.02
Utilities	-0.42
Entertainment	-0.72
Social	-1.46

Further, as shown in the figures below, game apps comprise the greatest share of the top 25 free and paid apps than any other category, which displays the popularity of the apps with respect to downloads.
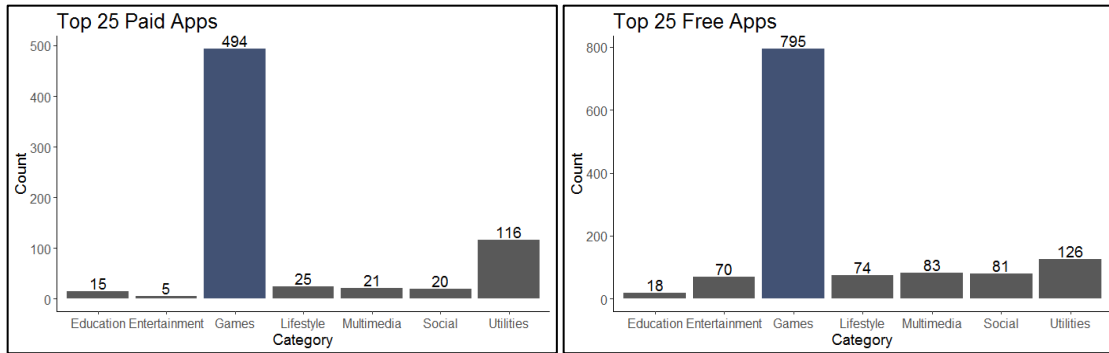
In addition, we recommend offering the game app for free to download. As a new entrant in the market, we must first focus on building name recognition and establishing an app that can generate short-term popularity to generate long term sustainable success. As such, it is best to enter the market as a free app.
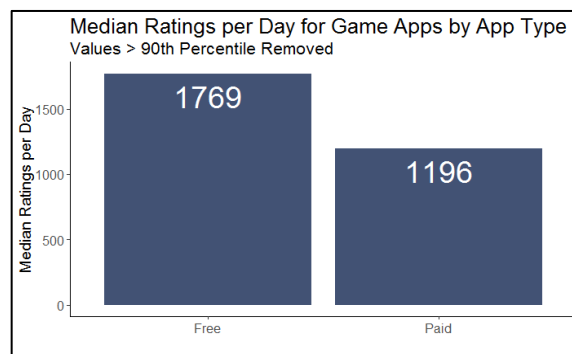

Free apps receive significantly more ratings per day than paid apps, suggesting that users continue to use free apps more regularly than paid apps, which is somewhat surprising given it is likely that users would want to recover the cost of purchasing free apps. While our sample primarily consists of established apps, this still provides a rough approximation of the potential increase in activity that free new apps would offer relative to a paid free app.

Due to the recommendation of entering the market as a free app, we recommend including in-app advertisements and in-app purchases in order to generate revenue. As the app gains popularity (as we expect it to, given our careful placement as a free game app), the amount to charge to advertisers will continue to increase, leading to revenue gains in the long term. In addition, the number of ratings per day for free games with in-app advertisements are higher than for free games without in-app advertisements, as the figure below displays.
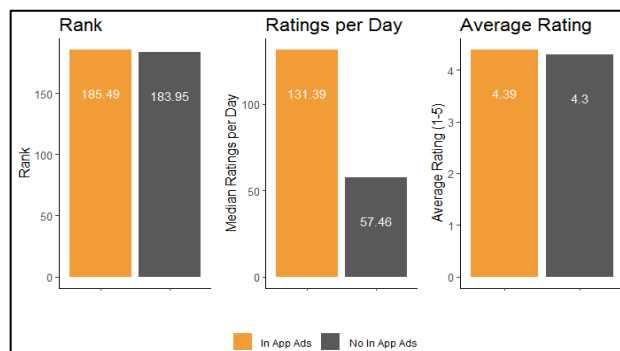
This suggests that users will continue to use apps that have in-app ads. The average rank in the app store of free games with in-app ads is comparable to the average rank of free games without in-app adds, which further supports the notion that users will not abandon the app if it contains in-app ads.

In addition, as the app gains popularity, the likelihood of users making in-app purchases increases, thereby generating incremental revenue. The number of ratings per day for free games with in-app purchases compared to those without in-app purchases, as shown in the figure below, is slightly higher, suggesting that users are not overwhelmingly discouraged by the presence of optional in-app purchases. As such, it is likely that including optional in-app purchases will yield additional revenue that outweighs any concerns related to detracting from the customer experience (that is necessary to build popularity and lead to growth).
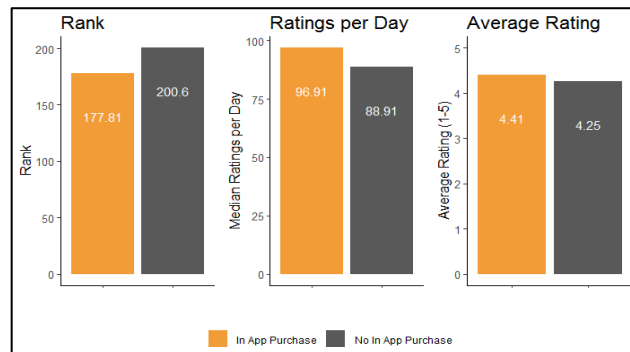
App Platform/Distribution

Launching apps in multiple app stores, for various devices and many regions would ideally be the most profitable spot for a developer. But for firms that potentially have constraints on resources, developing apps that are available to be released in multiple stores and platforms can be expensive. Thus, we have identified specific platforms, devices, and regions that would be ideal for a firm to enter upon. We believe that launching an app in US, for smartphones in Google Play would be the most successful scenario for a firm.

Apps that are released in the US have a significantly high number of ratings per day compared to apps that released in China. The statistic is revealing when the regions are combined with app stores. Ratings per day for apps in google play outnumbers the median ratings per day for Apple store by a high margin which notifies us that an app in google play store in US is the best situation to start with.
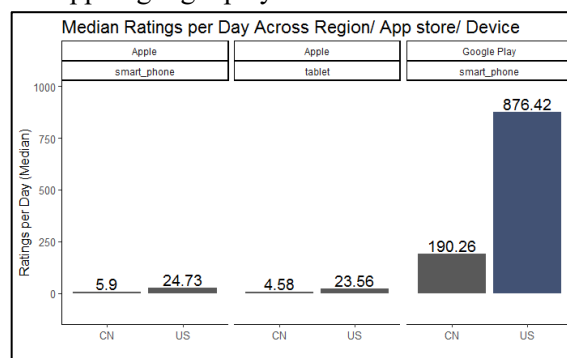
Across devices, smartphones have a high market share in terms of number of apps released. With plenty of people using smartphones, it gives us a strong platform to focus on, we want to maximize accessibility for potential customers. Considering the average ratings per day across devices, number of ratings for smartphones surpasses the ratings for tablets, supporting the proposition that smartphones are the best platform to launch an app.