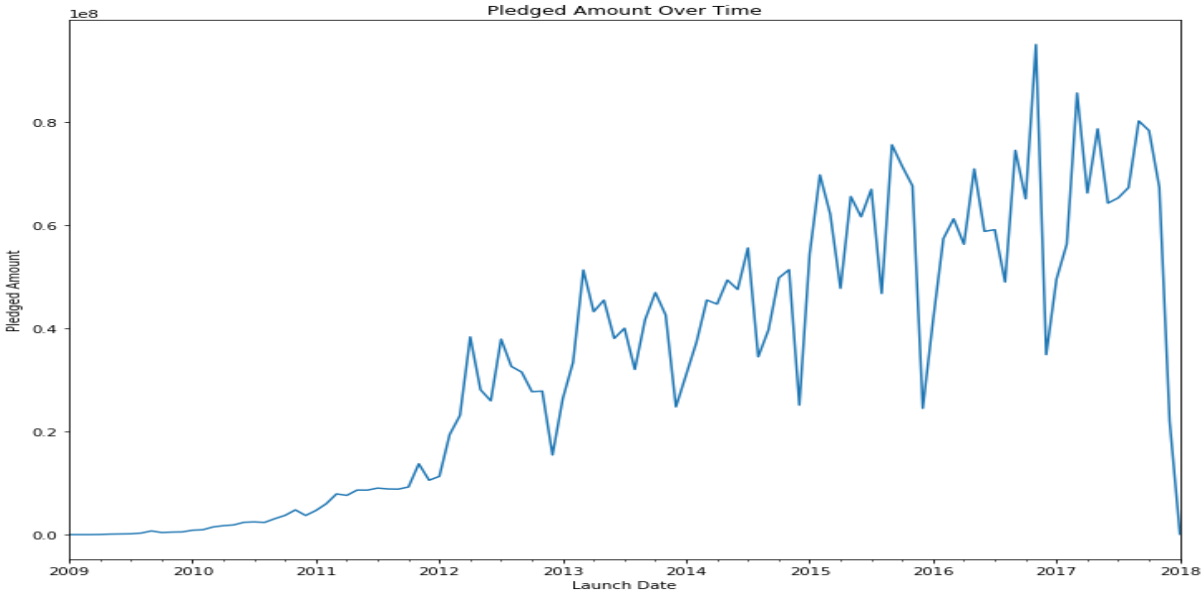
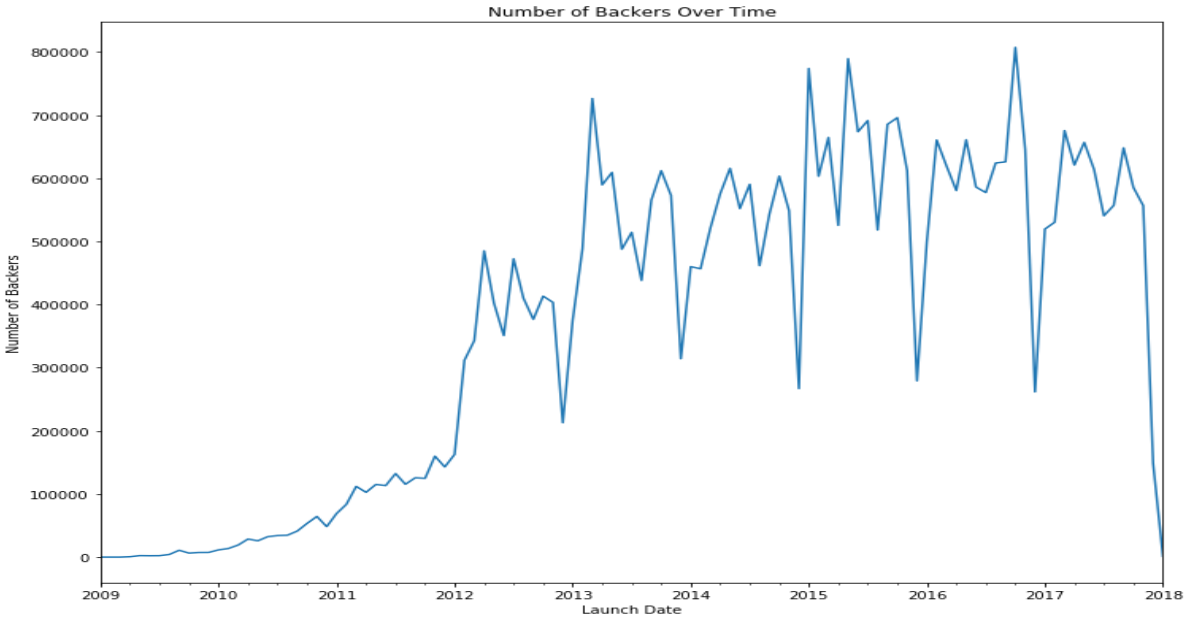
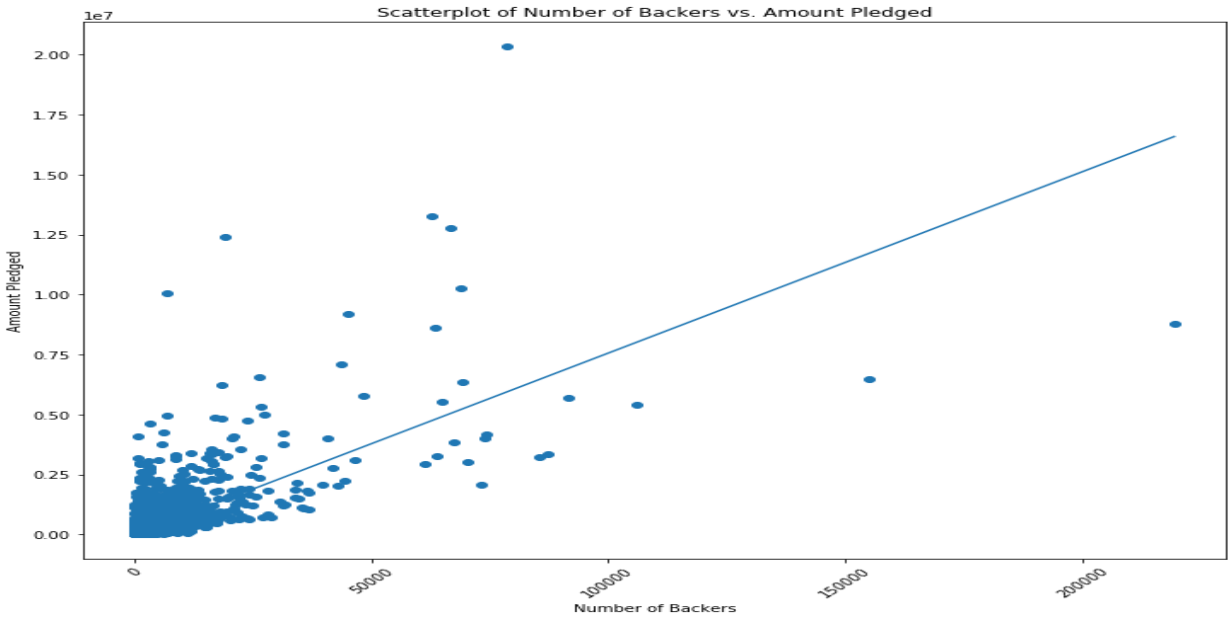
As the dataset has been cleaned, some Exploratory Data Analysis has been performed on the cleaned dataset. From the exploratory graphs generated, launch date has strong impact on whether the projects gets fund. Moreover, launch date not only impact the pledged amount, but also number of backers. It seems that the pledged amount and number of backers show a strong seasonality from the initial observation. For example, during end of the year when everybody is celebrating the holiday, people tends to spend less time on pledge money to the crowdfunding website, there are also less number of backers during that period of time. The peak season of both pledge amount and number of backers are at the beginning of the year where people started their new year with extra money from their company bonus payout. The above observation can be seen from below two graphs.





There is a correlation between number of backers and pledged from initial scatter plot with the linear regression line. Generally, as the number of backers goes up, the amount pledged also goes up. This make senses as more backers typically means more fundings.



Pearson Correlation Coefficient has been calculated and a two-sample z-test was run for those two variables.

Null Hypothesis: There is no correlation between Number of Backers and Amount of Pledged

Alternative Hypothesis: There is a positive correlation between Number of Backers and Amount of Pledged

The Test Results are shown below:

The Pearson Correlation Coefficient is: 0.7178584514187824

The p-value is: 0.0

The z-test p value is 0 which is less than alpha = 0.05, therefore, we can reject the null hypothesis.

The Pearson Correlation Coefficient showed a strong positive correlation between Number of Backers and Amount Pledged.