# Module 1 Challenge

### Given the provided data, what are three conclusions that we can draw about crowdfunding campaigns?

* Category: is a factor in success. The categories film & video, music, and theater had higher success rates.
* Goal Based: Outcomes with funding goals between $15,000 to $30,000 had the highest success. The success rates drops as the goal amount increases.
* Time of year: The summer months had higher success rates with rates declining in fall and winter. Theater/play were more popular in the summer. While other project categories were

### What are some limitations of this dataset?

Sample size is too small. The dataset only included 1,000 records which may not be an adequate representation of all crowdfunding initiatives.

### What are some other possible tables and/or graphs that we could create, and what additional value would they provide?

* Graph showing the length of time the Kickstarter project had to reach target goal per category
* Graph breaking down the average individual contributions per project

# Data Summarization

After analyzing the provided data, the median best summarizes the data. For both successful and failed outcomes, the mean is much higher than the median. The mean is higher in both cases due to the number of outliers inflating the value.

# Variability

There is more variability in the number of backers for successful outcomes than for failed outcomes. This is evident in the fact that the variance and standard deviation are higher for successful outcomes, as shown below.

|  |  |  |
| --- | --- | --- |
| **Outcome** | **Variance** | **Standard**  **Deviation** |
| Successful | 1,603,373.73 | 1,266.24 |
| Failed | 921,574.68 | 959.99 |

This indicates that there is a wider spread of backer counts for successful outcomes. This could be because successful outcomes are more popular, therefore, attracting a larger audience with varying levels of funding. Failed outcomes do not attract the same level of participation, resulting in a more homogenous level of support.