

# Statistical Calculations and Analysis

## The mean number of backers

*Count of Backers*

Successful	851
Failed	586

## The median number of backers

Successful	201
Failed	115

## The minimum number of backers

Successful	16
Failed	0

## The maximum number of backers

Successful	7,295
Failed	6,080

## The variance of the number of backers

Successful	1,603,374
Failed	921,575

## The standard deviation of the number of backers

Successful	1,266
Failed	960

**Use your data to determine whether the mean or the median better summarizes the data.**

The median better summarizes the data because of the high variability within the data set. In addition to the data not being symmetrical, a z-score has not been calculated to understand if outliers exist (and if so, how many), furthering supporting why the mid-point of the data set provides a better summary of the data.

**Use your data to determine if there is more variability with successful or unsuccessful campaigns.  
Does this make sense? Why or why not?**

Successful campaigns have a higher standard deviation (1,267) and variance (1,603,374) compared to unsuccessful campaigns (960 and 921,575), indicating more variability in successful campaigns. The data is more spread out in successful campaigns from the mean/average, therefore, aligning with the conclusion there is more variability with successful campaign outcomes.