Crowdfunding Statistical Analysis

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Based on the statistics (shown on the *Statistical Analysis* worksheet), the backers count data is better represented by the median (201 successful / 114.5 failed) than the mean (851 successful / 586 failed) because the data is not normally distributed, but rather heavily skewed to the right. This is due to the limits on the lower and upper bounds. Logically, the lower limit is 0 for failed campaigns and 1 for successful campaigns. The upper limit for failed campaigns is constrained by each campaign’s respective (unmet) goal, but for successful campaigns the upper limit is theoretically infinite. Histograms of the number of backers for both successful and failed campaigns illustrate this on the *Backers Count* sheet, with successful campaigns having higher counts in brackets further to the right and capping out at a greater amount than failed campaigns (the maximum count for any successful campaign is 7295 versus 6080 for failed campaigns).

The data also show greater variability in successful campaigns (σ ≈ 1267) versus failed campaigns (σ ≈ 961). Again, this is expected due to the lack of an upper limit on the number of backers for successful campaigns, while failed campaigns are constrained by an inherent upper limit, as they will become successful once that limit is exceeded.