Statistical analysis of the table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Successful Campaigns** |  |  | **Unsucessful Campaigns** |  |
| Mean | 194.41 |  | Mean | 72.52 |
| Median | 168 |  | Median | 67 |
| Minimum number | 67 |  | Minimum Number | 7 |
| Maximum Number | 555 |  | Maximum Number | 226 |
| Variance | 9994.02 |  | Variance | 1963.28 |
| Standard Deviation | 99.97 |  | Standard Deviation | 44.31 |

2. We'll analyze by the above data for both successful and unsuccessful campaigns to see if the mean or the median more accurately captures the data. We'll think about several things:  
A comparison between the median and the mean  
Skewedness is present  
Possible anomalies  
Variety of data

1.In the case of successful campaigns, the data is probably better summarized by the median (168). The high highest value and the significant disparity between mean and median imply that some particularly effective efforts are pushing the mean upward. These outliers have less of an impact on the median, which most likely indicates a more usual campaign outcome.

2. The decision is less obvious in the case of unsuccessful campaigns. There is greater correspondence between the mean (72.52) and median (67), suggesting a more symmetrical distribution. Although either might be utilized, the median may still be better because it is less impacted by any outliers and the skew.

In conclusion, presenting both the mean and the median would result in the most illuminating summary of these datasets, even if the median is probably the superior single summary statistic.

3. To determine if there is more variability with successful or unsuccessful campaigns, we'll compare the measures of variability provided in the data. The key measures of variability here are variance and standard deviation.

Successful Campaigns: Variance: 9994.02 Standard Deviation: 99.97

Unsuccessful Campaigns: Variance: 1963.28 Standard Deviation: 44.31

Comparing these figures:

1. There is a significant difference between the variance of successful campaigns (9994.02) and unsuccessful efforts (1963.28).

2. Moreover, the successful campaigns' standard deviation (99.97) is higher than the unsuccessful campaigns' standard deviation (44.31).

The standard deviation and variance both quantify how far out from the mean the data are. There is greater variety in the data set when the value is higher.

We can infer from this data that initiatives that are effective exhibit greater variety than those that are unsuccessful.

This is reasonable for a number of reasons:

1. Range: Successful campaigns have a wider range (difference between highest and minimum values) (555 - 67 = 488) than do unsuccessful efforts (226 - 7 = 219). This implies a larger distribution of data for efforts that are successful.

2. Success criteria: Campaigns that are effective may This makes sense for a number of reasons: more diverse outcomes due to a greater range of techniques, financing levels, and supporter bases.

3. Growth potential: While failing campaigns could perform more constrainedly, successful campaigns have greater opportunity to surpass expectations.