

WHY n=400?

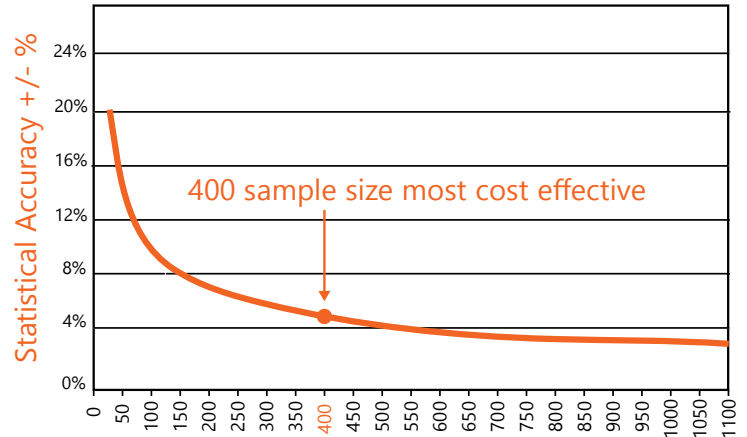
Statistical accuracy is a function of the sample size. The larger the sample size, the greater the statistical accuracy of the results. Keep in mind that we often look at a subset of the entire sample that we call a "cell" or "cut" (i.e. small companies versus large companies). The statistical accuracy depends on the number of people in each cell.

The chart to the right shows that gains in statistical accuracy are not proportional to increases in the sample size. There are "diminishing returns." At some point, the increase in statistical accuracy may not be worth the additional cost.

A sample size of 400 gives a statistical accuracy of $\pm 5\%$ and is often thought of as the most cost effective sample size.

The table to the right shows the statistical accuracy calculated for various cell sizes.

Statistical Accuracy
(at 95% Confidence)



Number of Responses per Cell	Confidence Interval 95% Confidence
1000	±3.1%
800	±3.5%
600	±4.0%
400	±4.9%
300	±5.7%
250	±6.2%
200	±6.9%
150	±8.0%

A cell size of 400 with a 95% confidence level can be interpreted as follows: If we repeated the survey 100 times, we would expect the answer to any question to vary less than +/- 4.9% in 95 of the 100 cases.

