

Answer on Question #53139 – Math – Statistics and Probability

How can Statistics and probability be used in a major hotel chain for offering an incentive program for guests?

Solution

Probability and statistics are two related but separate academic disciplines. Statistical analysis often uses probability distributions, and the two topics are often studied together. However, probability theory contains much that is mostly of mathematical interest and not directly relevant to statistics. Statistics and probability can be used in a major hotel chain for offering an incentive program for guests, because we can make a research about the needs of different guests and using statistics and probabilities calculate the number of guests with particular needs to satisfy them with the help of particular incentive program.

For example, if about 55% of guests at least once had a breakfast or dinner in the hotel restaurant, then most of guests prefer to eat in the hotel sometimes, so it would be a good idea to make a discount for such guests, who eat in the hotel restaurant for 2 or more times.

In such a way the hotel can find more guests and receive higher profits.