

SMART Questions

Question No.	Question	Statistical Test
1.	Do customers who make special requests tend to cancel less often than those who don't?	T test
2.	Are guests with no previous cancellations more likely to avoid canceling their current booking?	Chi-square Test
3.	What specific factors contribute most significantly to booking cancellations in hotels?	Correlation Matrix
4.	What effect does seasonality have on cancellation rates? And which variables have the most impact on cancellations during a specific season? (spring/fall/winter/summer/holidays/low season)	EDA & Correlation Matrix
5.	How do cancellation rates vary based on meal plan type, lead time, room type, and market segment type, and can we estimate the confidence interval for these rates to better understand their impact on cancellations?	Z Test

Rephrased:

Question No.	Question	Statistical Test
1.	How much less frequently do customers who make special requests cancel compared to those who don't over a 12/24 -month period?	T test
2.	Are guests with no previous cancellations more likely to avoid canceling their current booking?	Chi-square Test
3.	What are the key factors that show the strongest correlation with booking cancellations?	Correlation Matrix
4.	How do hotel cancellation rates change across different seasons (spring, fall, winter, summer, holidays, low season), and which factors (e.g., lead time, room type/) correlate most strongly with cancellations during each season?	EDA & Correlation Matrix
5.	What are the differences in cancellation rates based on meal plan type, lead time, room type, and market segment, and what are the 95% confidence intervals for these rates?	Z Test