PART - IV

Executive Summary

Key Findings:

- Will the app lead to increased spending on the part of customers?

- How much of an increase in spending do you expect?

- Do you expect the app's effect on spending to vary by customers' characteristics?

We looked at data comparing how much money people spent before and after using the hotel's new app. We divided people into two groups: one that used the app (treatment group) and one that didn't (control group).

Here's what we found:

Positive Impact:

- After using the app, people in the group that had it spent about $947.96 more than those who didn't have the app. This suggests that the app has a positive effect on how much customers spend.

Strong Evidence:

- The statistical tests we ran show that there's very strong evidence supporting the idea that the app has a real impact on spending. The chance of this happening randomly is extremely low (5.24e-33), so it's not just a coincidence.

Confident Range:

- We're pretty sure the actual impact of the app is somewhere between $795.40 and $1100.52 because our analysis gives us a 95% confidence interval. Since zero is not in this range, it means the impact is statistically significant.

Practical Significance:

- o The size of the impact is not just a tiny change; it's actually quite big. The app is making a real difference, and this is backed up by a power of 1.0, which means our analysis is excellent at finding true effects.

Conclusion:

Based on all of this, it looks like the hotel should definitely go ahead and launch the app. The data strongly supports the idea that the app will make customers spend more money. The impact is not just a random occurrence; it's meaningful. However, it's also important to keep checking how things go after the launch to make sure the app continues to have a positive impact and to fine-tune strategies for even better results.