Executive Summary of Mobile App Efficacy

Problem Statement / Key Findings:

- 1-Will the app lead to increased spending on the part of customers?
- 2-How much of an increase in spending do you expect?
- 3-Do you expect the app's effect on spending to vary by customers' characteristics?

Insights:

Yes,we can definitely say that the using the mobile app in hotel chain management system will increase the popularity and the engagement on the Hotel chain this will increase the result the growth of the hotel chain.

Principal Results:

Treatment Effect: After app adoption, there was around \$948 spending difference between the treatment and control groups which we got by doing the Pinguoin test. This shows that the app has done a beneficial effect on expenditure on Hotel.

Testing Hypotheses:

Strong evidence against the null hypothesis is indicated by the p-value of roughly 1.8852e-143, which supports the existence of a meaningful treatment effect. The results' statistical significance is further supported by the t-statistic of 30.285. Interval of Confidence: The spending difference's 95% confidence interval, which ranges from 805.33, 916.92, indicates where the real impact is most likely to be. Since zero is not included in this interval, the impact is statistically significant.

	T	dof	alternative	p-val	CI95%	cohen-d	BF10	power
T-test	30.285769	999	two-sided	1.828852e-143	[805.33, 916.92]	1.354689	3.478e+139	1.0

This is the output we are getting from the python notebook after running the code.

The treatment effect's are practically significance and are highlighted by the Cohen's d effect size of approximately 1.35. The approach is well-suited to identify real effect and will recommended that the hotel chain move forward with the app.

Conclusions:

Every hotel chain have to understand the power of the mobile efficacy this will lead and became the main source of the publicity. By which customer will get in touch with the hotel and this will increase in the Engagement of the hotel. All the Hotel chain Should definitely go for the Mobile app and list on it.