Hotel Cancel Culture

Predicting Reservation Cancellations

Goal:

To identify the top and bottom 3 attributes to predict whether a reservation will cancel.

Recommendation Rationale:

Cancel or Check-Out?

What is the likelihood of a given reservation canceling?

Pros and Cons

- Practical use for same-day decision-making

- Useful for forecasting future demand

Guest Generalizations

Can we generalize certain attributes are more/less likely to cancel?
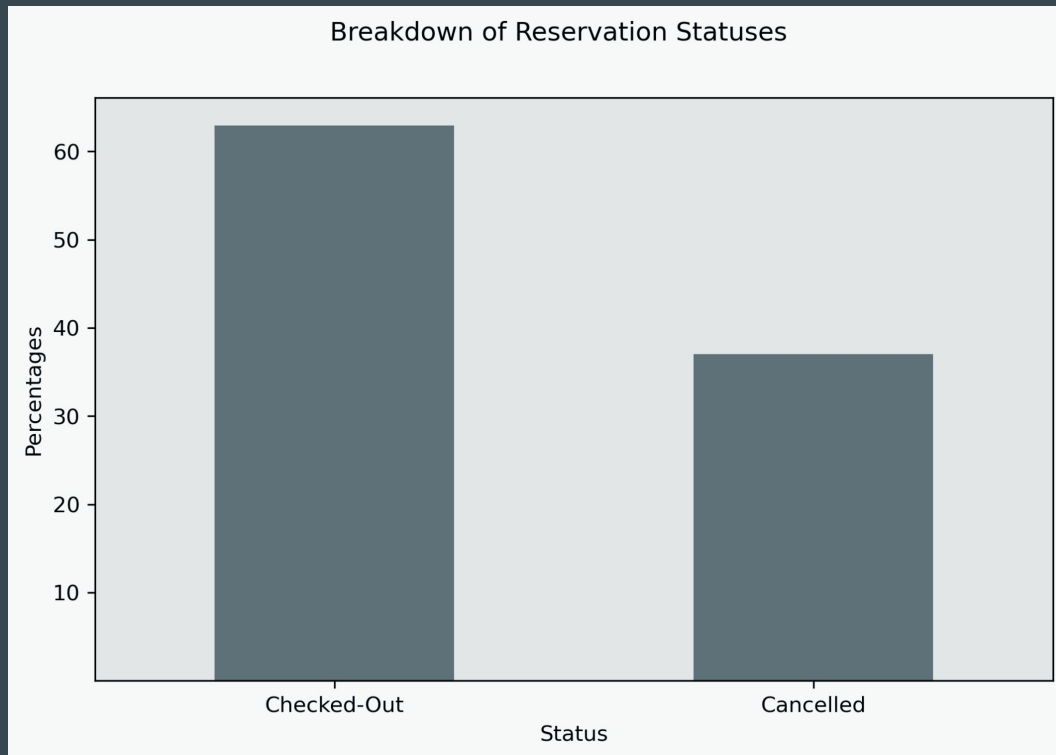
Pros and Cons

- Simple/easily understood

- Less accurate vs. full analysis

- May lead to biases about guests

Data Details

- Hotel reservation data from two European hotels

- Reservations from 2015 to 2017 including common reservation details

- Analyzed over 30 different reservation attributes

Checkouts vs. Cancellations

Getting to Know Your Guests

Cancellations are Most Likely When...

Feature #1

Details here

Feature #2

Details here

Feature #3

Details here

Cancellations are Least Likely When...
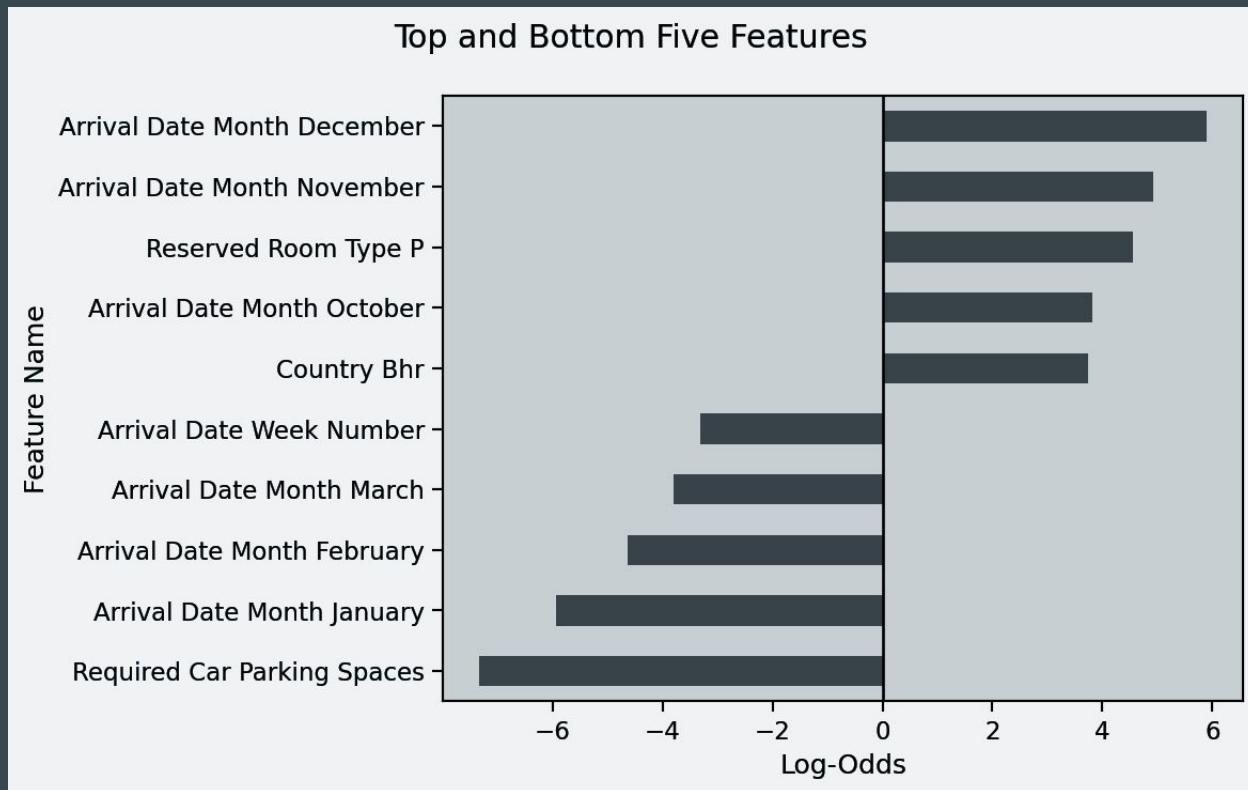
Feature #1

Details here

Feature #2

Details here

Feature #3

Details here

Visualizing Results

RESULTS HERE

Top and Bottom Five Features

Recommendations:

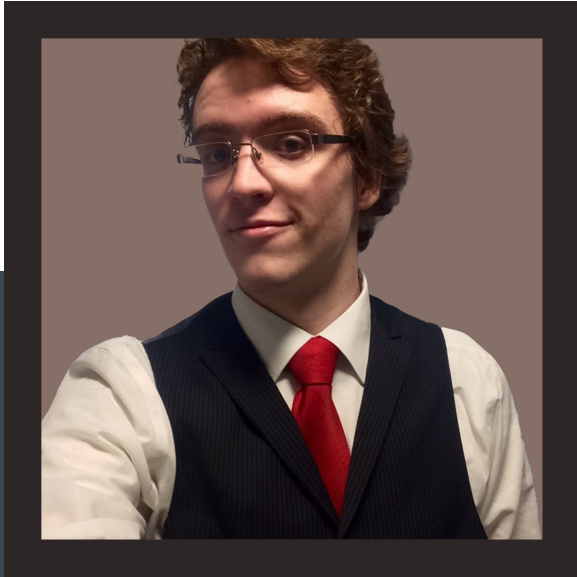| #1 Recommendation | • Observation |
| #2 Recommendation | • Observation |
| #3 Recommendation | • Observation |

What's Next?

- Consider additional factors
  - Holidays, recurring local events
  - Sales/promotions
  - Group sales/events

- Forecasting cancellations

- Predicting and forecasting bookings by room type

Thank You!

Benjamin McCarty

Email: bmccarty505@gmail.com

Github: github.com/BenJMcCarty

LinkedIn: linkedin.com/in/bmccarty505