AirBnb Market Analysis for Oceanside Property Management

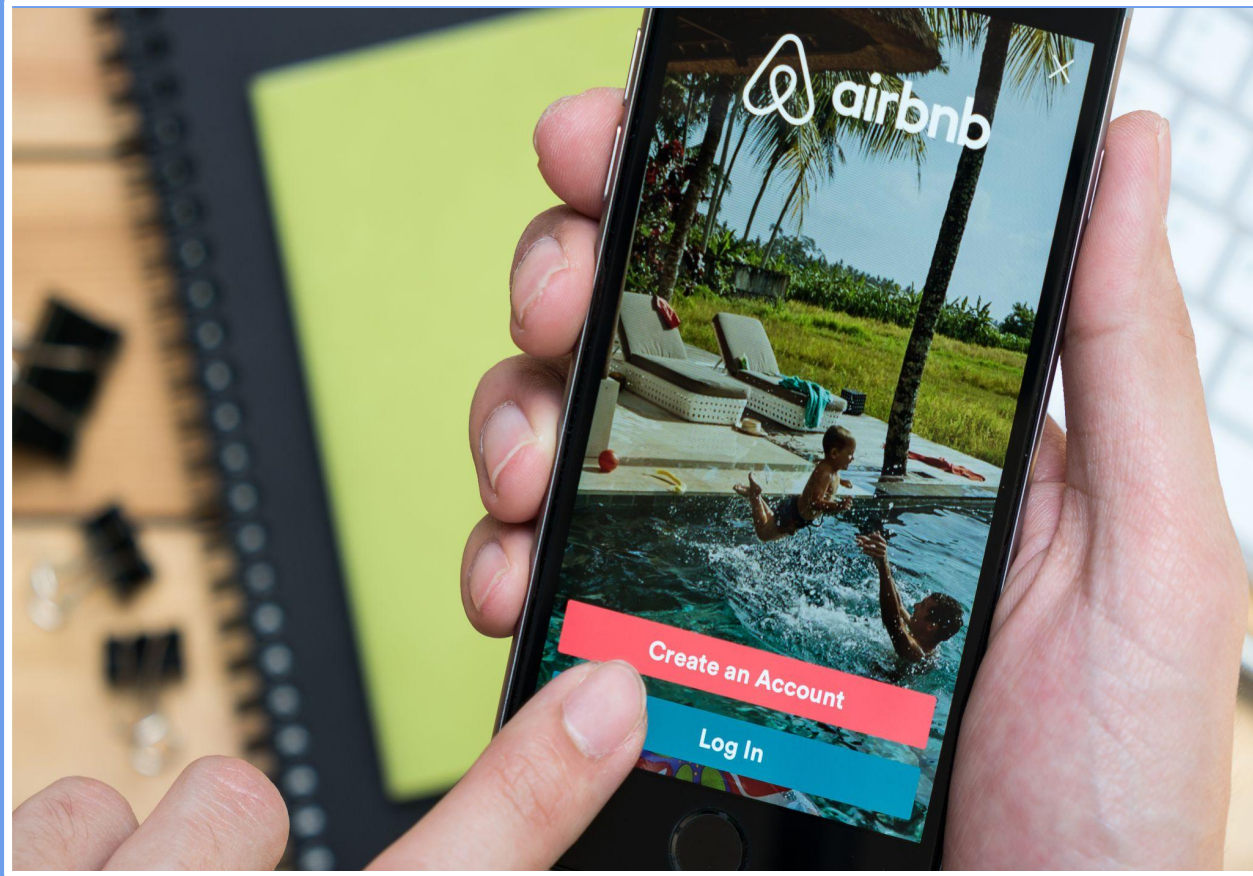**Presented By: Jonathan Holt**
Data Scientist

Why I'm Here

Should You Start A Consulting Service?

Top Questions

1) "What can I do to get more 5 star ratings?
2) "Can you help me reach Superhost status? (or maintain Superhost status)?"

Questions That You Want Answered

1) Is there a **significant advantage to being a superhost?**
2) **What features are most important** in getting 5 Star reviews?
3) Can you develop a **Model which predicts whether hosts will get 5 star reviews** based on all other available information?

My Data

Obtained through
Insideairbnb.com

Over 10,000 records. All
from San Diego.

Regularly updated with the
most Recent Data Available.

My Data

Key Data Points:

Review Scores: Overall, Accuracy, Cleanliness, Location, Communication, Check-in, Value

Descriptive Features: # of bedrooms, amenities, etc

Host Information: Response Rate, # of Listings, SuperHost Status

Problem #1

Guests assume airbnb's review scale is the same as a hotel review scale.

3 = average,

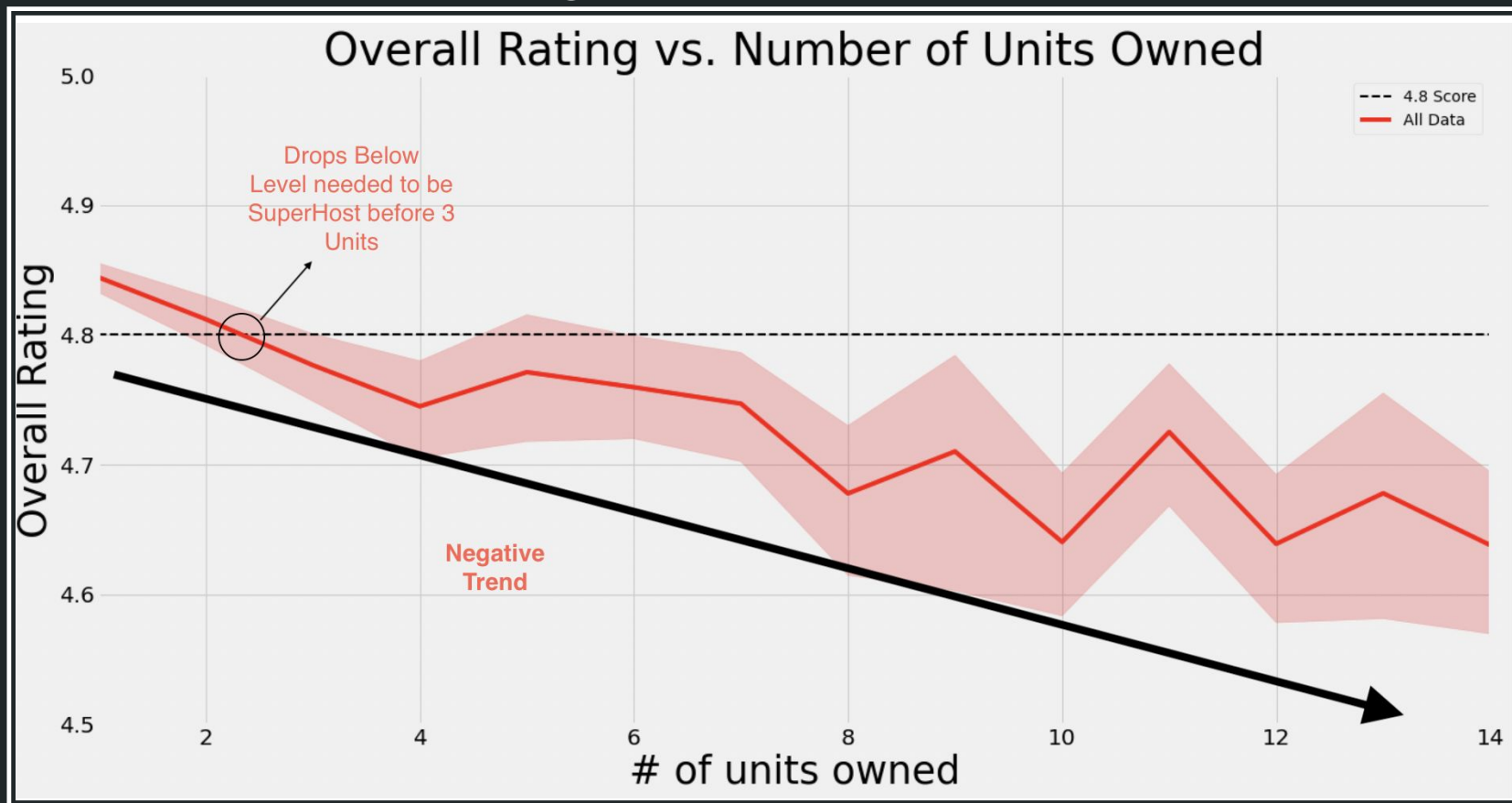4 = above average

5 =   the best possible experience.
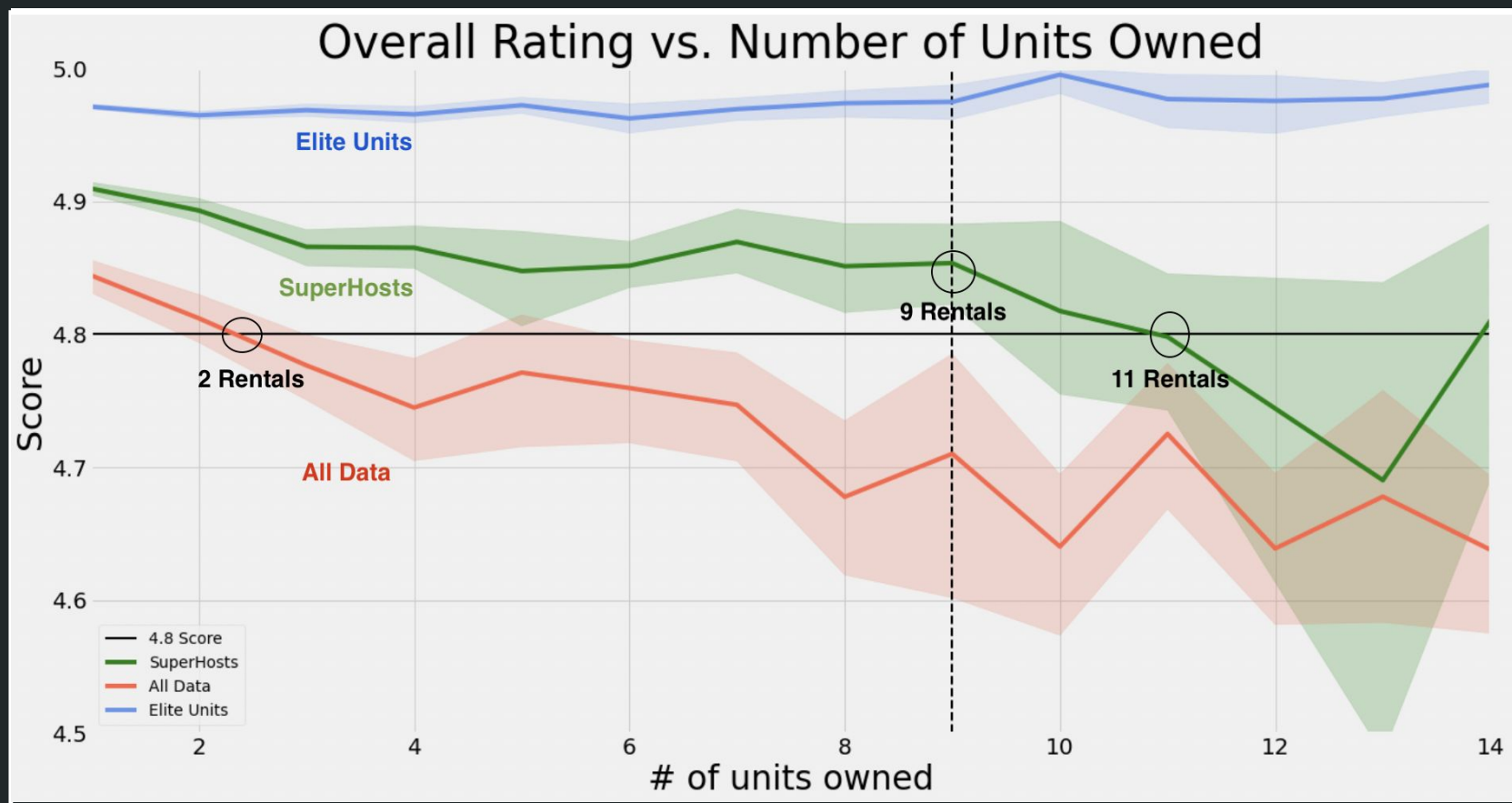
Problem #1

In reality:

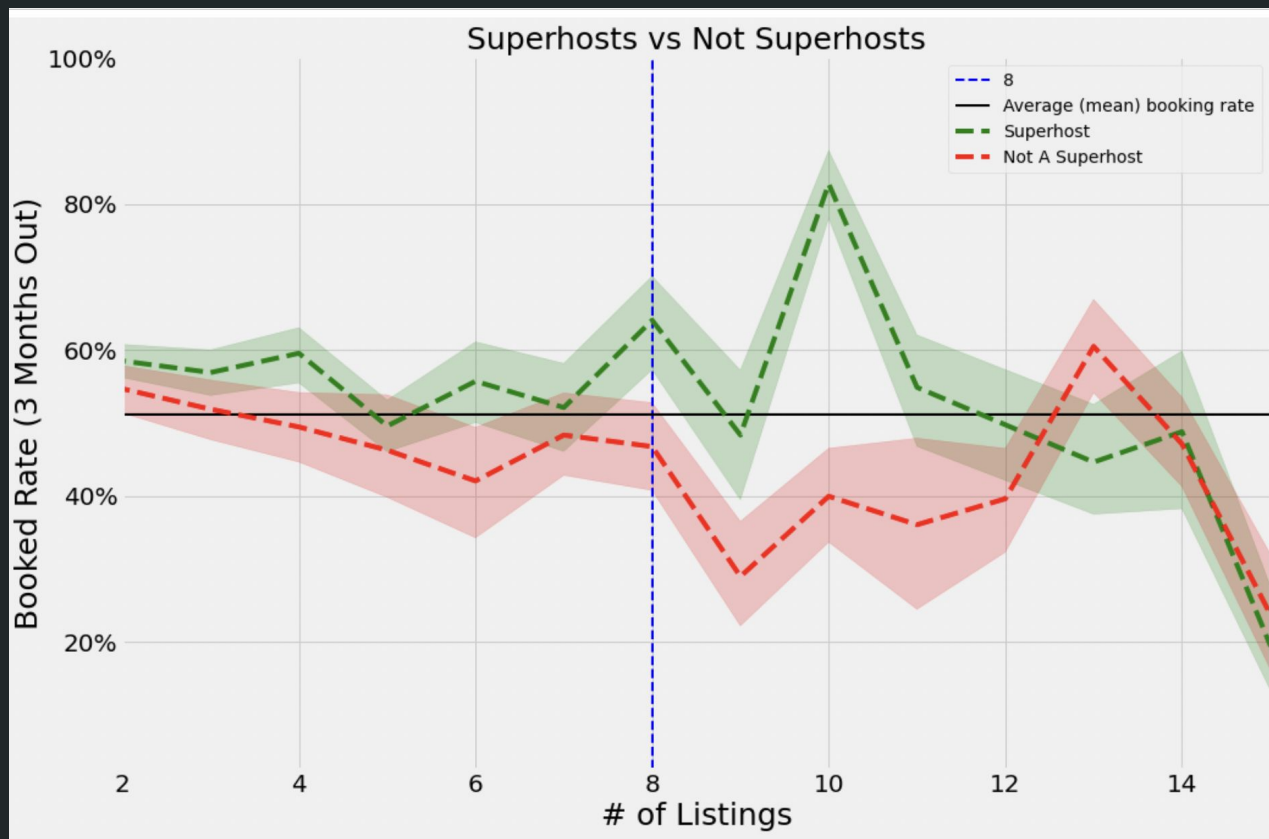**4 Star Reviews are seen as BAD** and too many of them will cause a Host to be kicked off the service.

Problem #2: Rating Declines as # of Rentals Increases

Overall Rating vs. Number of Units Owned

The Solution

Overall Rating vs. Number of Units Owned

Is There a Significant Advantage to Being a SuperHost?

YES!

<u>Superhosts</u>

- Book above average.
- **21% more likely to be Elite Units**
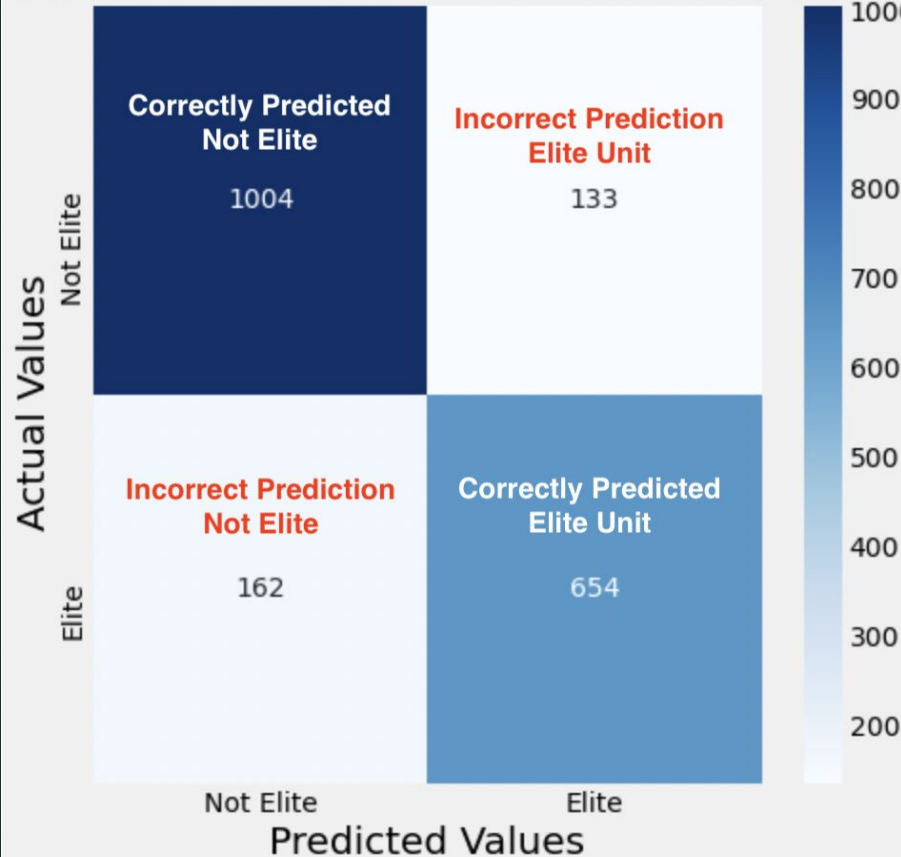- Can handle more units than non-SuperHosts.

What Do We Want to Predict?

Elite Units: 4.9 - 5.0 Overall Rating.

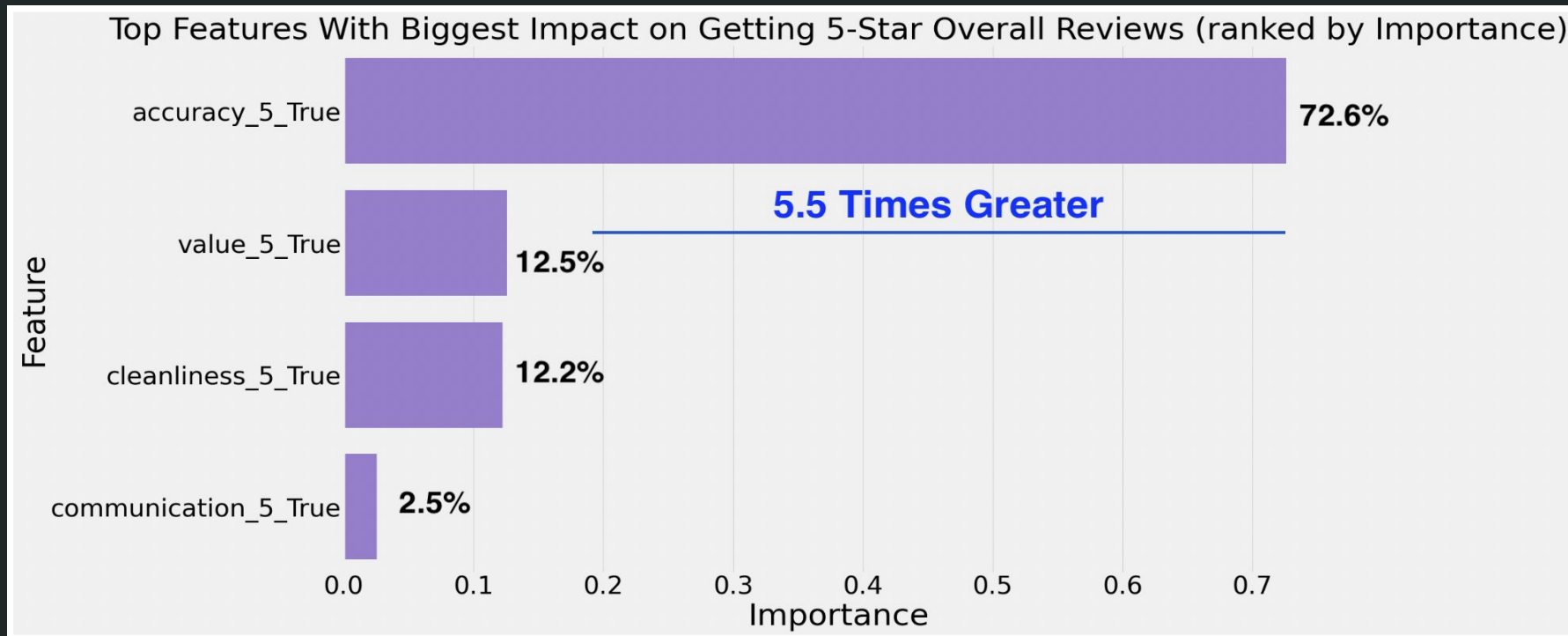These are the **Top Performers** who almost **always get 5 Star Reviews.**

Final Model Confusion Matrix

My Model: Can it Predict 5-Star Units?

- Correctly Identified **83%** of Actual "Elite Units".

- True Positive vs. False Positive Rate show solid reliability.

- **Limitation:** Model only works if Host has existing Airbnb ratings

Which Features are the Most Important for Getting 5-Star Reviews?
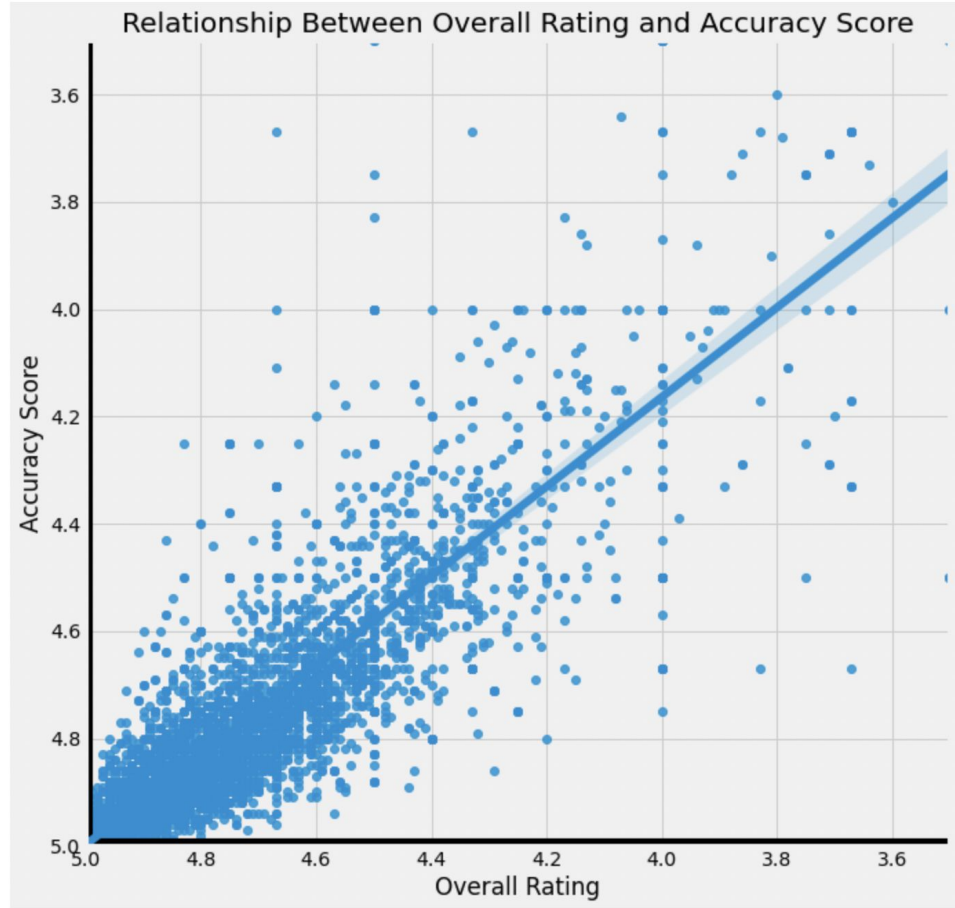

Top Features With Biggest Impact on Getting 5-Star Overall Reviews (ranked by Importance)

accuracy_5_True — 72.6%

5.5 Times Greater

value_5_True — 12.5%

cleanliness_5_True — 12.2%

communication_5_True — 2.5%

Feature / Importance

Most Important Feature: Accuracy
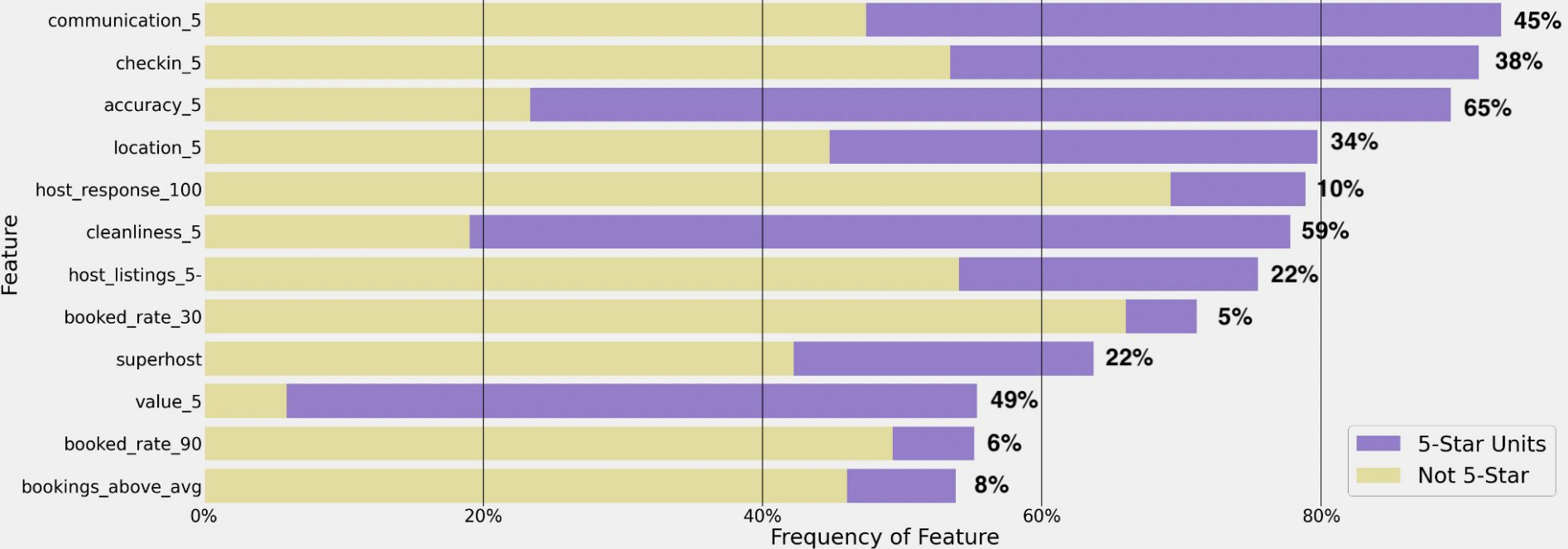
Nearly **1 to 1 relationship** with Overall Rating.

While "Overall" is a nebulous target, **Accuracy is something that you can help Hosts with!**

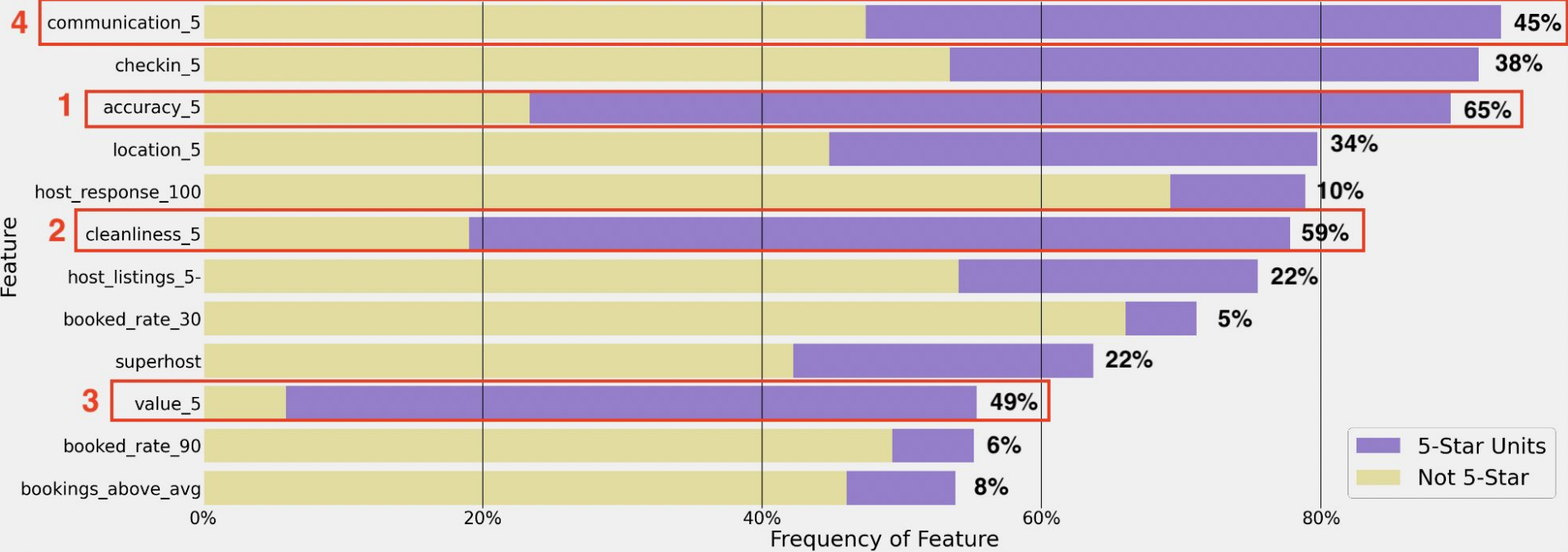It's also a **big problem** for many Hosts!

Relationship Between Overall Rating and Accuracy Score

Analysis of Elite Units

Frequency of Features in 5 Star Units

Feature	5-Star Units	Not 5-Star
communication_5	45%	
checkin_5	38%	
accuracy_5	65%	
location_5	34%	
host_response_100	10%	
cleanliness_5	59%	
host_listings_5-	22%	
booked_rate_30	5%	
superhost	22%	
value_5	49%	
booked_rate_90	6%	
bookings_above_avg	8%	

Frequency of Feature

Analysis of Elite Units

Frequency of Features in 5 Star Units

Your Consulting Service

Your Focus: Helping Hosts Improve and Maintain Accuracy.

Become Experts in making sure that all are **Listed Accurately**.

Provide Resources to Help Hosts Manage Multiple Rentals.

Train hosts on what they can do to set expectations properly, and then exceed them with service (AirBnb's goal)
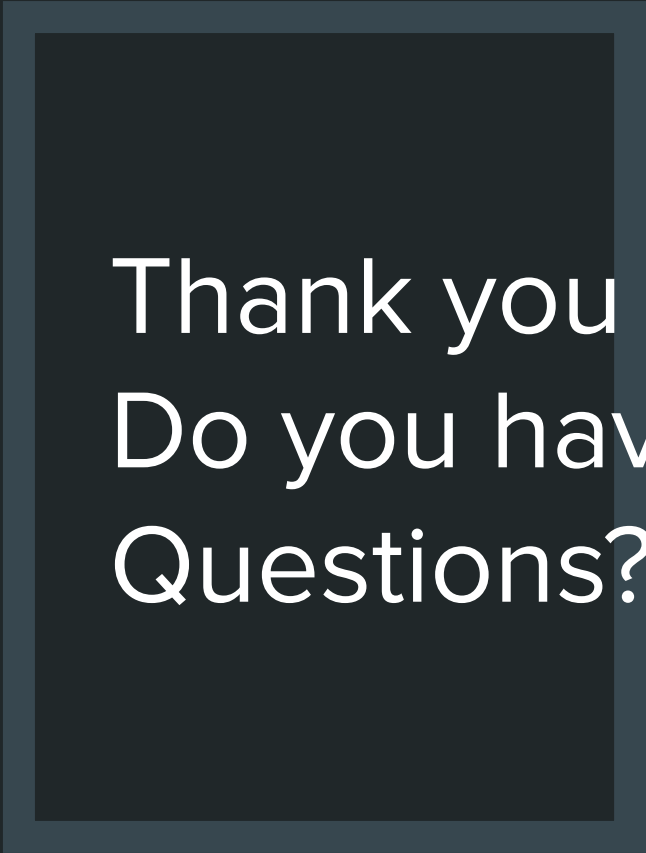
In Conclusion

You can Help Airbnb hosts get more 5-Star Reviews!

Help Hosts set Guest Expectations and Then Exceed them.

Help them better manage their properties, and possibly handle more more than they could on their own.

Help them become SuperHosts to get increased presence on Airbnb's platform

Thank you for your time.
Do you have any
Questions?