

The Effect of “Above and Beyond” Descriptions of Amenities on Airbnb Ratings

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What is “Above and Beyond” ?



Community Center

Search the community

Going above and beyond for guests

05-02-2018 04:20 PM

...



Resource Center

Try "create a great listing"

Resource Center > Your space > Setup & amenities > The amenities guests want

The amenities guests want

Help your listing stand out with these popular features and amenities.

By Airbnb on Nov 19, 2020 · 2 min read

Updated Nov 21, 2023



r/AirBnB · 2 yr. ago
snarfdarb

Guests: What are some of your "above and beyond" experiences from hosts?


Whether it was leaving thoughtful amenities or treats, or accomodating a particularly special request, I'm interested to hear about your most positive interactions with your hosts.


16


24


Share


How Are Hosts Describing Their Amenities?


 Guest favorite


 5.0
★★★★★

 31
Reviews

 **Hosted by Holly**
Superhost · 11 months hosting

 **Self check-in**
Check yourself in with the smartlock.

 **Holly is a Superhost**
Superhosts are experienced, highly rated Hosts.

 **Great location**
95% of recent guests gave the location a 5-star rating.

Some info has been automatically translated.
[Show original](#)

\$353 ~~\$286~~ night

CHECK-IN
12/1/2023

CHECKOUT
12/6/2023

GUESTS
1 guest

▼

Reserve

You won't be charged yet

\$286 x 5 nights

\$1,430

[Cleaning fee](#)











\$210

Airbnb service fee

\$232

Total before taxes \$1,872

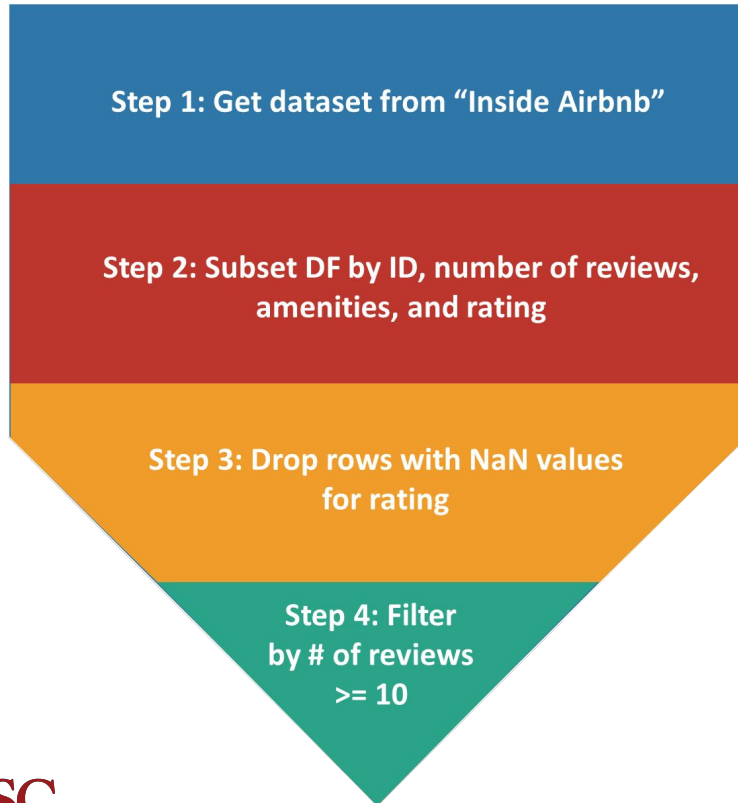
What this place offers

-  Mountain view
-  Kitchen
-  **Dedicated workspace**
-  Private hot tub - available all year, open 24 hours
-  Free washer – In unit
-  Ocean view
-  Wifi
-  **Free driveway parking on premises – 6 spaces**
-  **70" HDTV with Amazon Prime Video, Disney+, HBO Max, Hulu, Netflix, Roku**
-  Free dryer – In unit

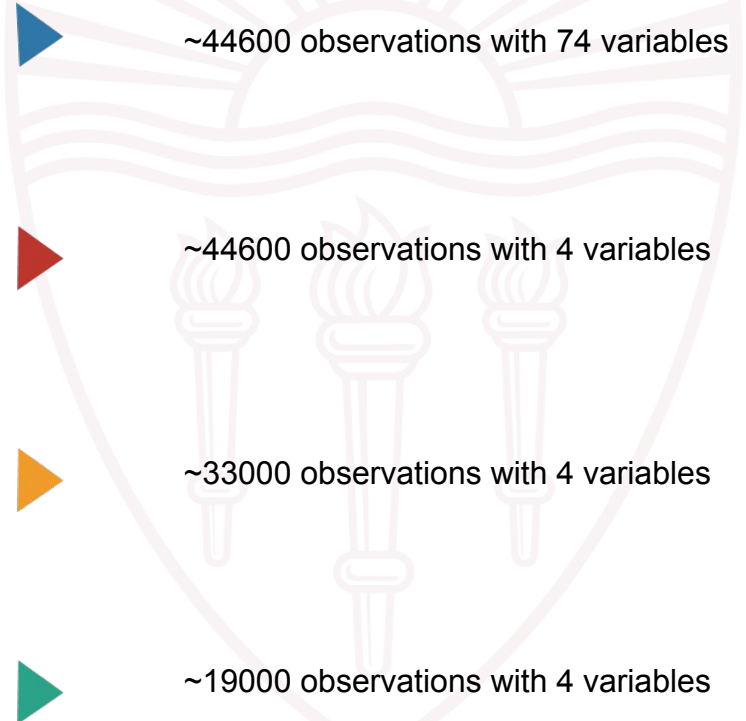
[Show all 71 amenities](#)

id	amenities	number_of_reviews	review_scores_rating
15239926	["40," HDTV with Amazon Prime Video, Disney+, HBO Max, Hulu, Netflix, standard cable", "Carbon monoxide alarm", "Valley view", "Iron", "Dining table", "105	4.99	
624940096190408000	["Carbon monoxide alarm", "Iron", "Freezer", "Limited but enough get you started conditioner", "Dining table", "Central heating", "Free carport on pre 12	4.92	
25772359	["Stove", "Carbon monoxide alarm", "Iron", "Microwave", "Lockbox", "Bed linens", "Smoke alarm", "Dedicated workspace", "Essentials", "Refrigerator", "S43	4.95	
52992116	["Carbon monoxide alarm", "Iron", "Dining table", "Central heating", "Mini fridge", "Aesop shampoo", "Microwave", "Luggage dropoff allowed", "Books 29	5	
9632711	["Free parking on premises", "Smoke alarm", "Iron", "Fire extinguisher", "Kitchen", "Hangers", "Washer", "Essentials", "Shampoo", "Air conditioning", "TV + 12	4.58	
548694126263063000	["Carbon monoxide alarm", "Iron", "Freezer", "City skyline view", "Dining table", "Toaster", "Microwave", "Luggage dropoff allowed", "Bathtub", "Lockbox 67	4.84	
13642174	["Stove", "Carbon monoxide alarm", "Iron", "Gym", "Air conditioning", "Pool", "Microwave", "Smoke alarm", "First aid kit", "Breakfast", "Essentials", "Refrig 13	4.67	
16238845	["Stove", "Carbon monoxide alarm", "Air conditioning", "Microwave", "Bed linens", "Smoke alarm", "Essentials", "Refrigerator", "TV with standard cable", "83	4.94	
871133768888314000	["Free parking on premises", "Smoke alarm", "Carbon monoxide alarm", "First aid kit", "Dedicated workspace", "BBQ grill", "Wifi", "Washer", "TV", "Air co 13	4.92	
781074906072616000	["Carbon monoxide alarm", "Freezer", "Dining table", "Central heating", "Mini fridge", "Microwave", "Bed linens", "Smoke alarm", "Board games", "First ai 32	4.88	
33264944	["Stove", "Carbon monoxide alarm", "Iron", "Lock on bedroom door", "Microwave", "Smoke alarm", "Dedicated workspace", "First aid kit", "Private pati 29	4.97	
21324464	["Free parking on premises", "Smoke alarm", "Dishes and silverware", "Coffee maker", "Fire extinguisher", "Keypad", "Hangers", "Essentials", "TV", "Air coi 21	4.85	
19036744	["Iron", "Host greets you", "Central heating", "Mini fridge", "Toaster", "Microwave", "Luggage dropoff allowed", "Books and reading material", "Cleaning 45	4.82	
19951592	["Stove", "Iron", "Gym", "Air conditioning", "Pool", "Microwave", "Smoke alarm", "Essentials", "Refrigerator", "Hot tub", "Dryer", "Oven", "Washer", "Kitcher 20	4.95	
26541854	["Stove", "Carbon monoxide alarm", "Iron", "Air conditioning", "Microwave", "Smoke alarm", "First aid kit", "Breakfast", "Essentials", "Refrigerator", "Hot w 28	4.46	

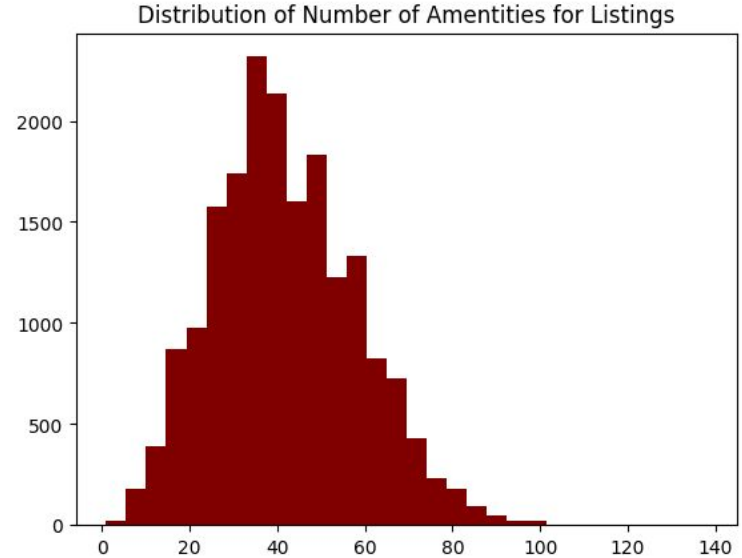
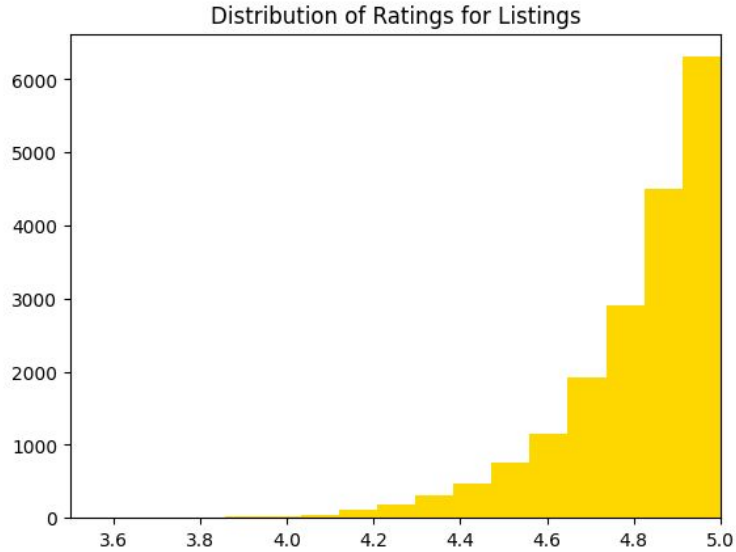
Data Cleaning process



Data Source:
<http://insideairbnb.com/get-the-data>

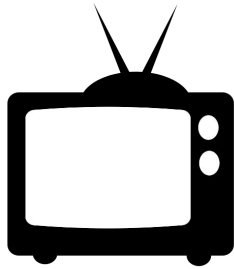


Preliminary Analysis



The correlation coefficient between number of amenities and rating is 0.268

Technical Breakdown of Methodology - Pt. 1



“TV”



“42” TV with Netflix”
“48” HDTV”
“43” HDTV with Fire TV”
“65” TV with Roku”
“50” TV with standard cable”
“32” TV with Amazon Prime Video”



“Wifi”



“Fast Wifi”
“Fast wifi \u2013 474 Mbps”
“Fast wifi \u2013 215 Mbps”

Technical Breakdown of Methodology - Pt. 2

Combine the control(500) and experimental groups(500) as our final sample dataset

	id	review_scores_rating	amenities	number_of_reviews	num_of_amenities	adjective
0	15239926	4.99	[40" HDTV with Amazon Prime Video, Disney+, H...	105	67	1
1	42331295	4.76	[Stove, Carbon monoxide alarm, Iron, Freezer, ...	51	67	1
2	45814091	4.96	[Valley view, Iron, Freezer, Bay view, City sk...	206	57	1
3	24595809	4.94	[Courtyard view, Carbon monoxide alarm, Iron, ...	262	68	1
4	918903710844911868	5.00	[Carbon monoxide alarm, Mini fridge, Coffee ma...	13	23	1
...
2504	38025943	4.33	[Fast wifi \u2013 390 Mbps, Courtyard view, Ca...	12	53	1



Regression Model Result

Final Regression Model:

$$\text{Rating} = 4.64 + 0.19(\text{Adjective}) + 0.0032(\# \text{ of Amenities}) - 0.0026(\text{Adjective} * \# \text{ of Amenities})$$

OLS Regression Results						
Dep. Variable:	review_scores_rating	R-squared:	0.122			
Model:	OLS	Adj. R-squared:	0.119			
Method:	Least Squares	F-statistic:	46.13			
Date:	Wed, 29 Nov 2023	Prob (F-statistic):	6.45e-28			
Time:	03:54:02	Log-Likelihood:	318.73			
No. Observations:	1000	AIC:	-629.5			
Df Residuals:	996	BIC:	-609.8			
Df Model:	3					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
Intercept	4.6362	0.022	210.469	0.000	4.593	4.679
adjective	0.1935	0.035	5.515	0.000	0.125	0.262
num_of_amenities	0.0032	0.001	5.680	0.000	0.002	0.004
adjective:num_of_amenities	-0.0026	0.001	-3.495	0.000	-0.004	-0.001
Omnibus:	314.766	Durbin-Watson:	2.026			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1002.546			
Skew:	-1.543	Prob(JB):	1.99e-218			
Kurtosis:	6.812	Cond. No.	425.			

Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

Two Sample Hypothesis Test Result

Null:

Hosts who go above and beyond actually don't have higher ratings on a population level

Alternative:

Hosts who go above and beyond have different ratings than regular hosts on a population level

```
pooled_se = round(np.sqrt((treatment_ratings_std/500) + (control_ratings_std/500)), 4)
t_stat = round((treatment_ratings_median - control_ratings_median) / pooled_se, 2)
t_stat
3.77
```

```
# Two-sided test
# Shows that treatment group median is DIFFERENT from control group median

p_value_TS = 2 * (1 - t.cdf(abs(t_stat), df=998))

p_value_TS
0.00017282988719724557
```

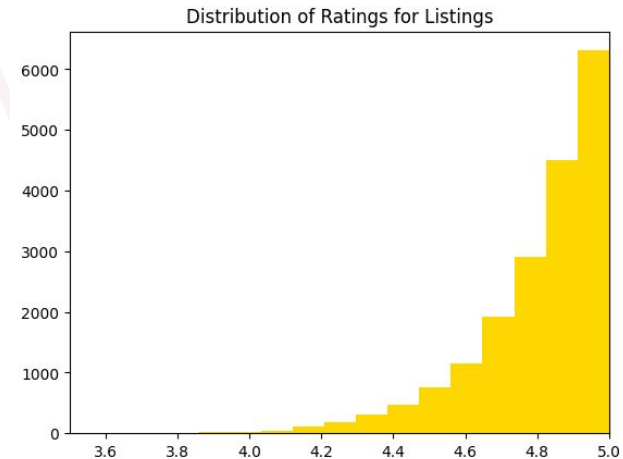
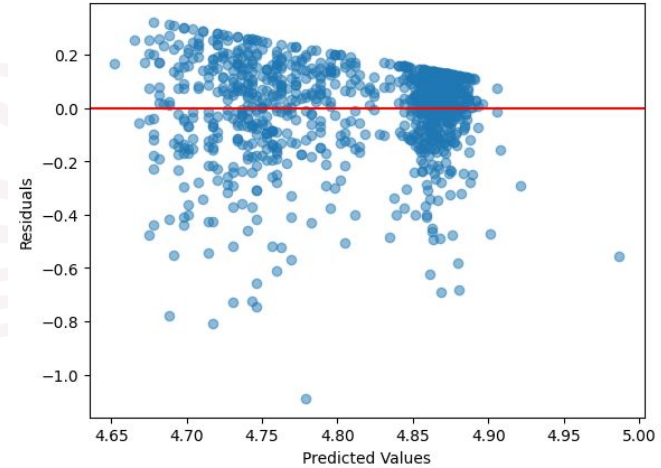
```
# One-sided test
# Shows that treatment group median is LARGER than control group median

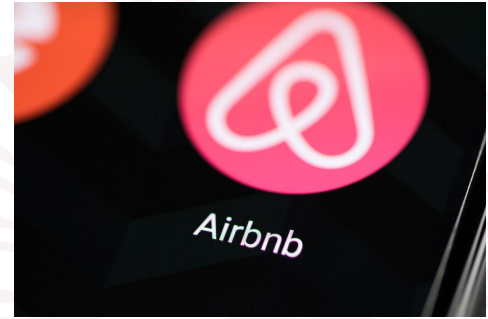
p_value_OS = 1 - t.cdf(t_stat, df=998)

p_value_OS
8.641494359862278e-05
```

Limitations

1. Skewness of the data: Extremely left skew data indicating a trend of giving high rating toward 5 stars
2. Heteroscedasticity: The residuals are clustered and fan out as predicted value increases
3. Non-linearity: The pattern of residuals may suggest the relationships are non-linear
4. Overestimating: Most of errors are below zero, suggesting our predictions may be higher than actual values.
5. Goodness of Fit: Adjusted R-Squared is 0.119





Thank you !

