



# Hotel Review Analysis

Presented by: Hotelholics

# Research Objectives

Our research analyzed hotel reviews and ratings based on regions of the United States

## Questions Include:

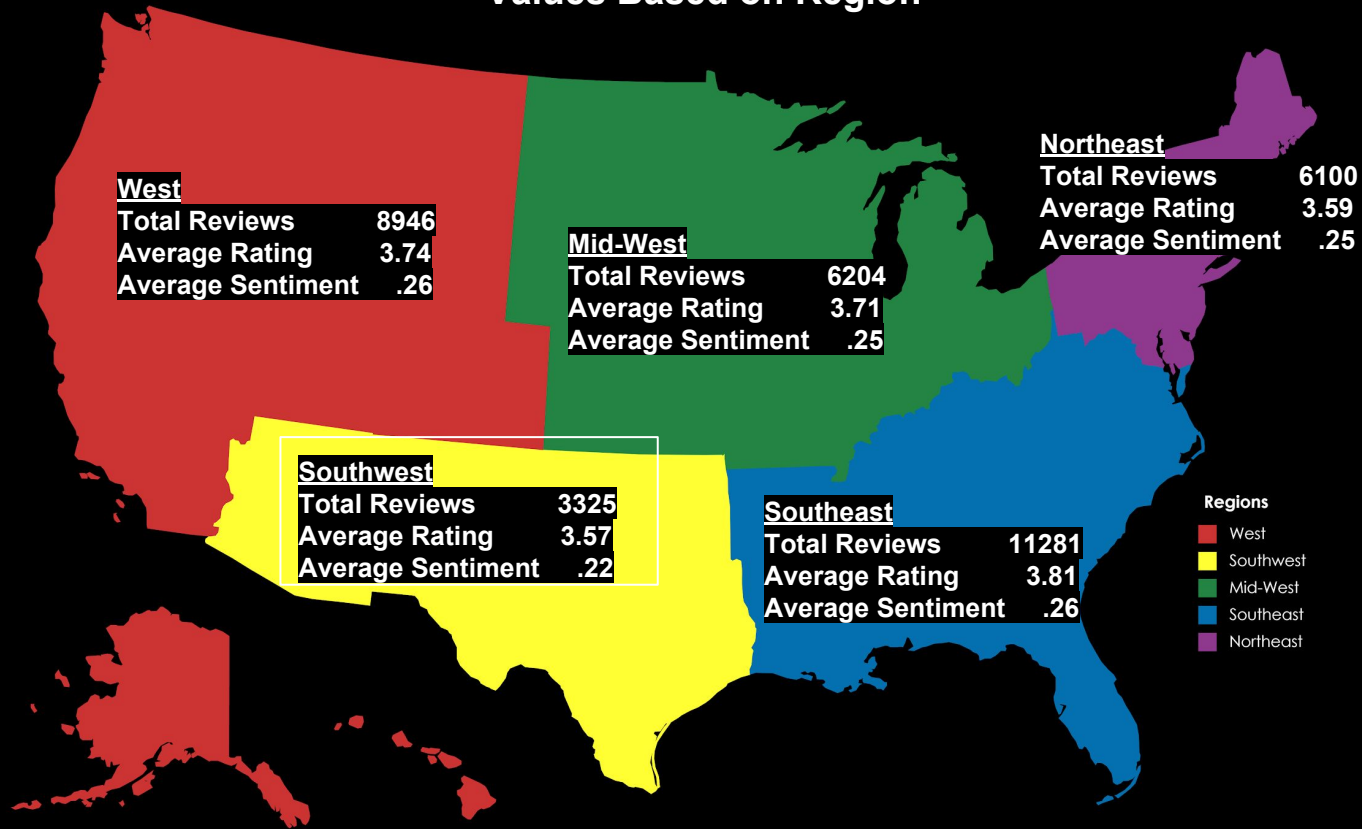
- 1) What is the average rating and average sentiment for each region?
- 2) What is the average rating and average sentiment for each region during each season?
- 3) Which Hotels are the best and worst for each region?

## Regions Considered



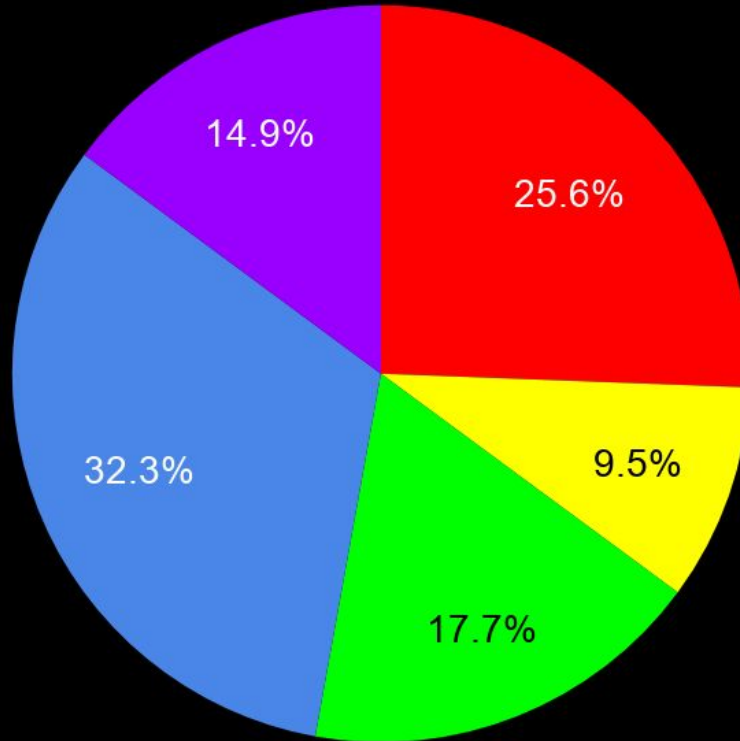
## Average Rating and Sentiment for Each Region

## Values Based on Region



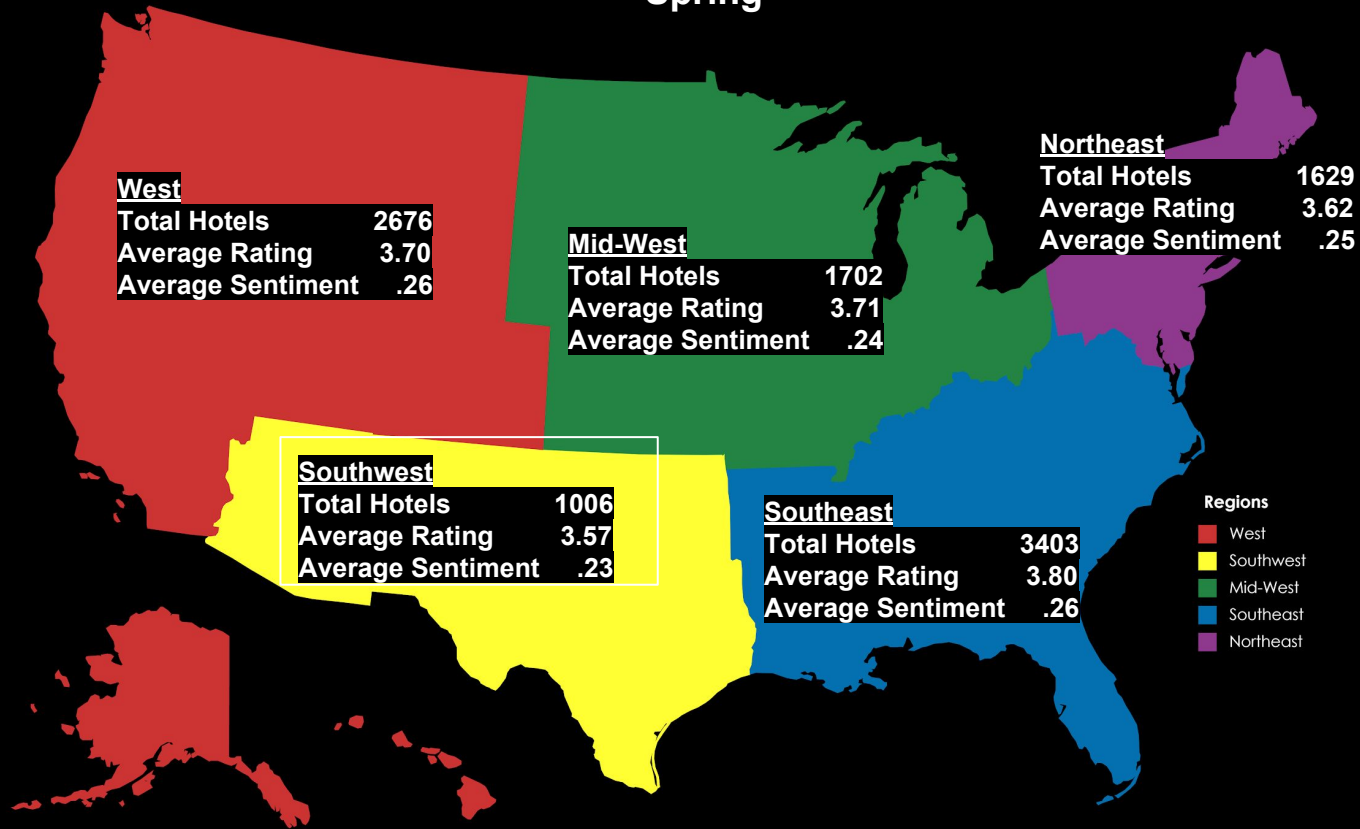
## Reviews in each Region

● West ● Southwest ● Midwest ● Southeast ● Northeast



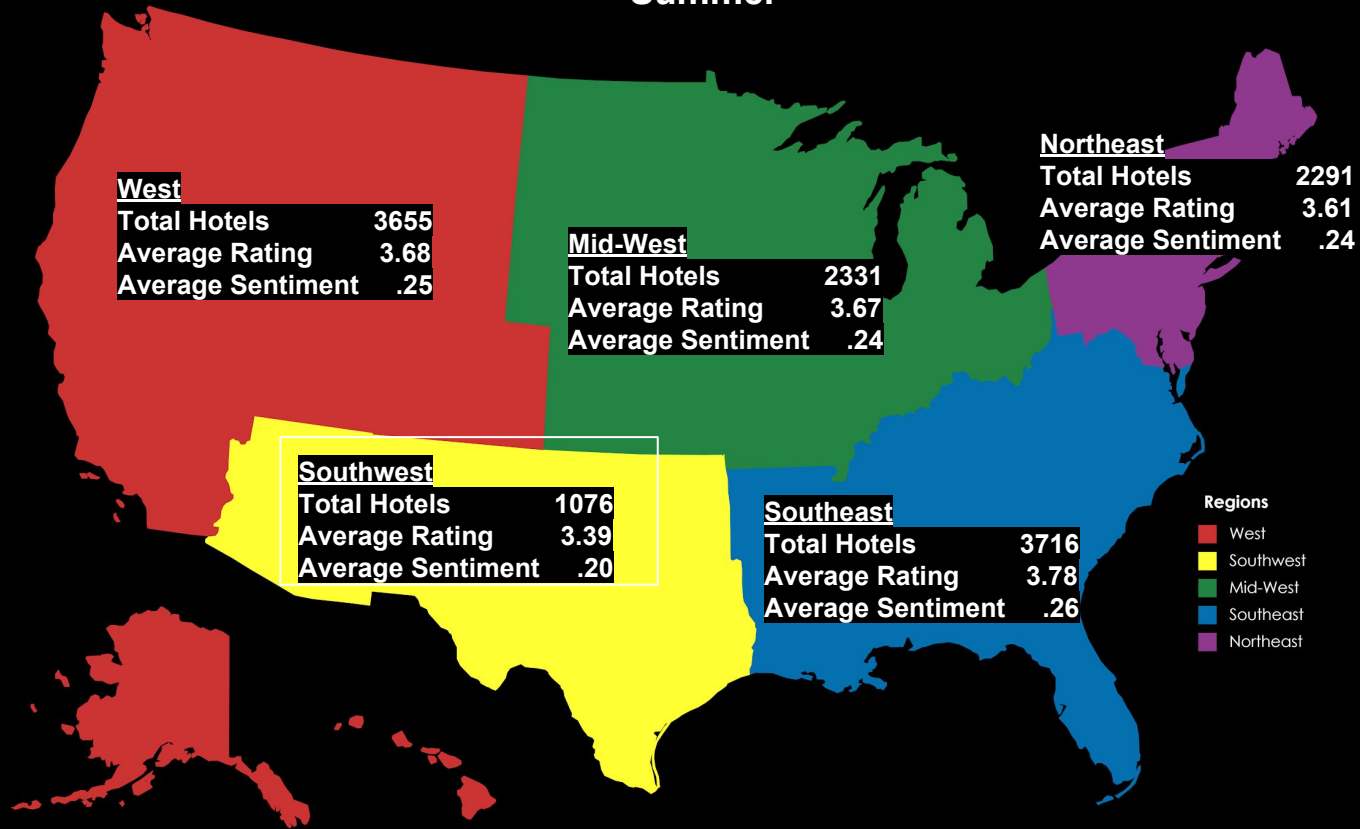
Average Rating and Sentiment for Each Region  
During Each Season

# Spring

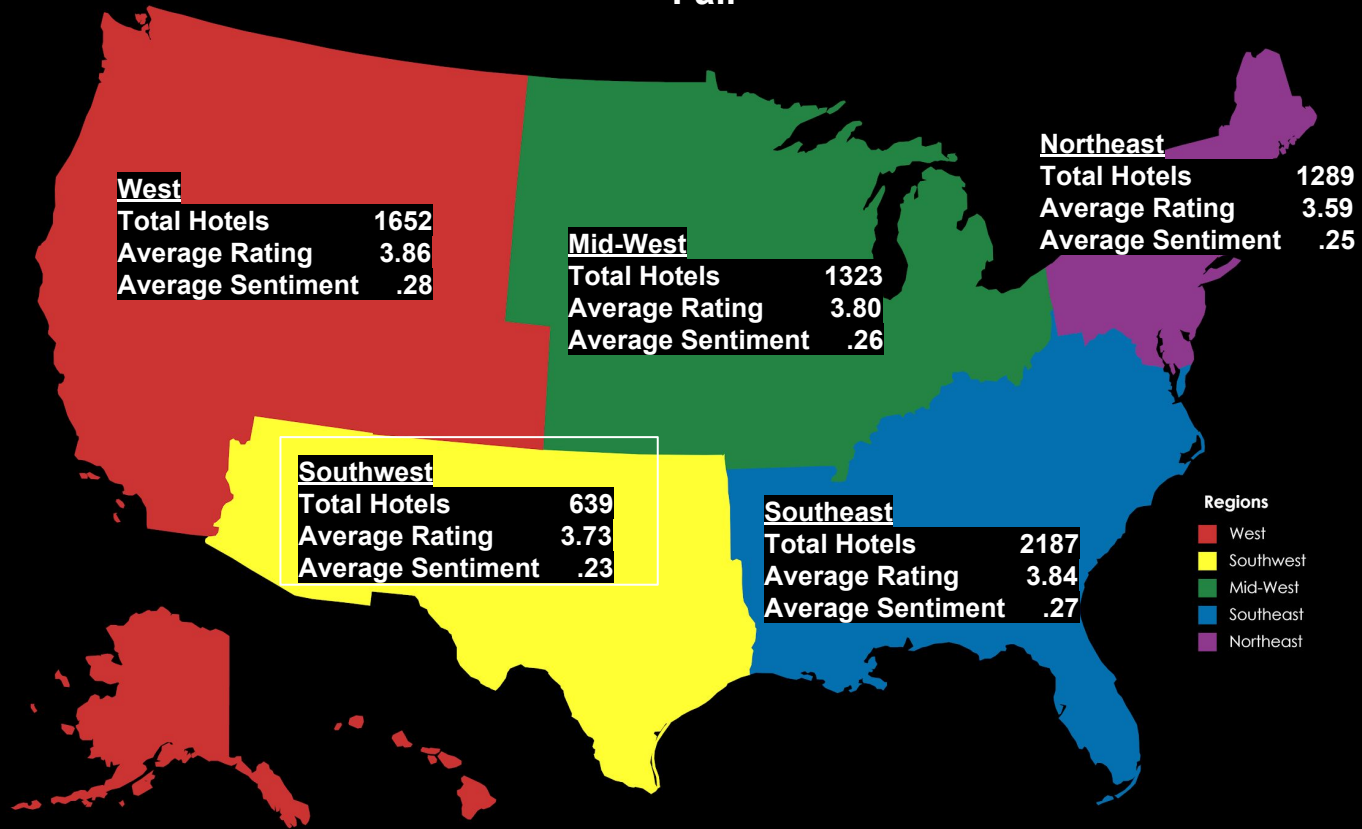




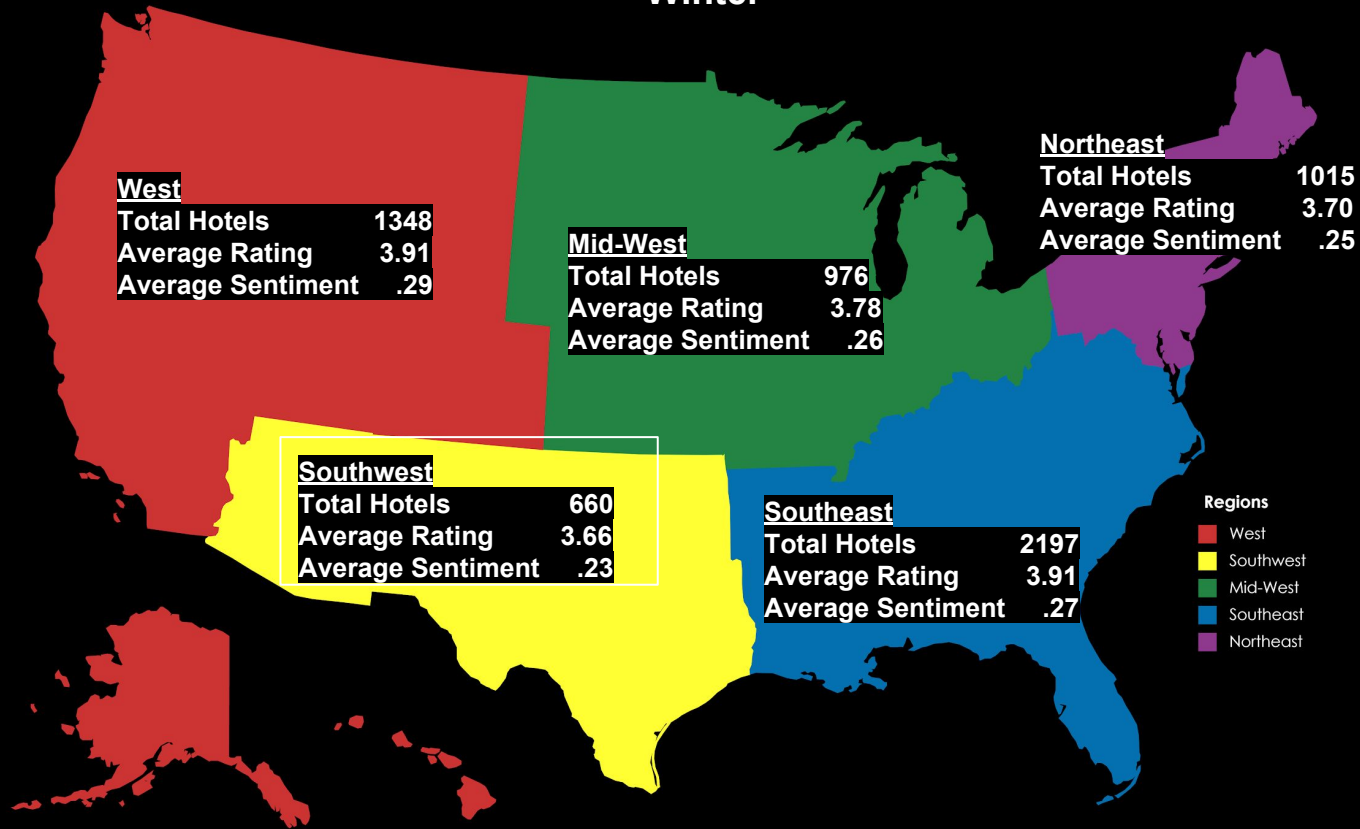
# Summer



# Fall



# Winter



# Best and Worst Hotels for Each Region

# How we determined Best and Worst Hotels

- Only hotels that had  $\geq 100$  reviews were considered
- Best and Worst hotel were based on average of:
  - a. The Probability a hotel will receive a 5 Star Rating
  - b. The Probability a hotel will receive a Sentiment Rating between 0.50 and 1.00
- Norm.cdf function was used to achieve probability ratings



## Best in the West Region:

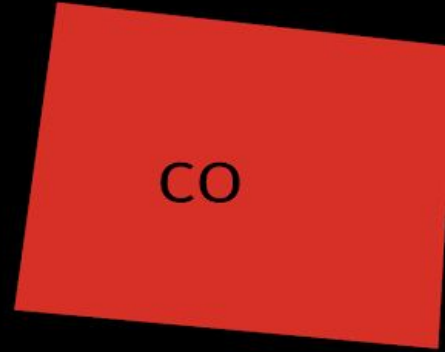
Simpson House Inn  
Santa Barbara, CA

|                              |        |
|------------------------------|--------|
| Total Review                 | 126    |
| Average Rating               | 4.75   |
| Average Sentiment            | .39    |
| <hr/>                        |        |
| Probability of 5 star rating | 36.52% |
| Probability of good review   | 31.54% |



# Worst in the West Region:

Day's Inn & Suite  
Castle Rock, CO



|                              |        |
|------------------------------|--------|
| Total Review                 | 102    |
| Average Rating               | 3.66   |
| Average Sentiment            | .28    |
| Probability of 5 star rating | 12.20% |
| Probability of good review   | 16.85% |



## Best in the Southwest Region:

Lakeway Resort  
Austin, TX

|                              |        |
|------------------------------|--------|
| Total Review                 | 122    |
| Average Rating               | 4.41   |
| Average Sentiment            | .39    |
| <hr/>                        |        |
| Probability of 5 star rating | 33.40% |
| Probability of good review   | 29.88% |





# **Worst in the Southwest Region:**

Fiesta Inn & Suites  
San Antonio, TX



|                              |       |
|------------------------------|-------|
| Total Review                 | 546   |
| Average Rating               | 1.45  |
| Average Sentiment            | -.11  |
| <hr/>                        |       |
| Probability of 5 star rating | 0.01% |
| Probability of good review   | 3.31% |



## Best in the Mid-West Region:

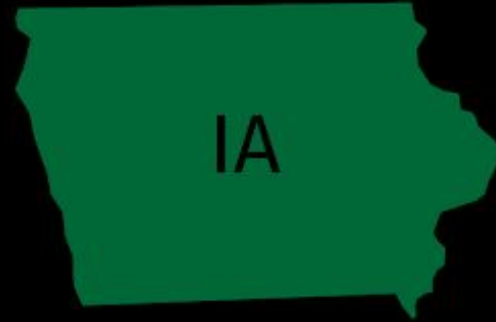
Four Seasons Hotel  
St. Louis, MO

|                              |        |
|------------------------------|--------|
| Total Review                 | 107    |
| Average Rating               | 4.70   |
| Average Sentiment            | .38    |
| Probability of 5 star rating | 34.85% |
| Probability of good review   | 27.22% |



# Worst in the Mid-West Region:

Red Roof Inn  
Cedar Rapids, IA



|                              |        |
|------------------------------|--------|
| Total Review                 | 107    |
| Average Rating               | 2.18   |
| Average Sentiment            | .11    |
| <hr/>                        |        |
| Probability of 5 star rating | 1.07%  |
| Probability of good review   | 12.03% |



## **Best in the Southeast Region:**

The Alexandrian  
Alexandria, VA

|                              |        |
|------------------------------|--------|
| Total Review                 | 1185   |
| Average Rating               | 4.48   |
| Average Sentiment            | .35    |
| <hr/>                        |        |
| Probability of 5 star rating | 26.12% |
| Probability of good review   | 27.18% |



# Worst in the Southeast Region:

Microtel Inn  
Knoxville, TN



|                              |       |
|------------------------------|-------|
| Total Review                 | 101   |
| Average Rating               | 2.84  |
| Average Sentiment            | .15   |
| <hr/>                        |       |
| Probability of 5 star rating | 4.17% |
| Probability of good review   | 9.98% |



## **Best in the Northeast Region:**

Bayside Resort Hotel  
West Yarmouth, MA

|                              |        |
|------------------------------|--------|
| Total Review                 | 152    |
| Average Rating               | 4.16   |
| Average Sentiment            | .33    |
| <hr/>                        |        |
| Probability of 5 star rating | 26.10% |
| Probability of good review   | 22.16% |



# Worst in the Northeast Region:

Days Inn & Suite  
Albany, NY



|                              |       |
|------------------------------|-------|
| Total Review                 | 111   |
| Average Rating               | 2.03  |
| Average Sentiment            | .01   |
| <hr/>                        |       |
| Probability of 5 star rating | 0.85% |
| Probability of good review   | 7.00% |

# Conclusion