Data Appendix

Original Dataset

The unit of observation in this dataset is Amazon reviewers. Each row represents information about the reviewer as well as information about their review of a product.

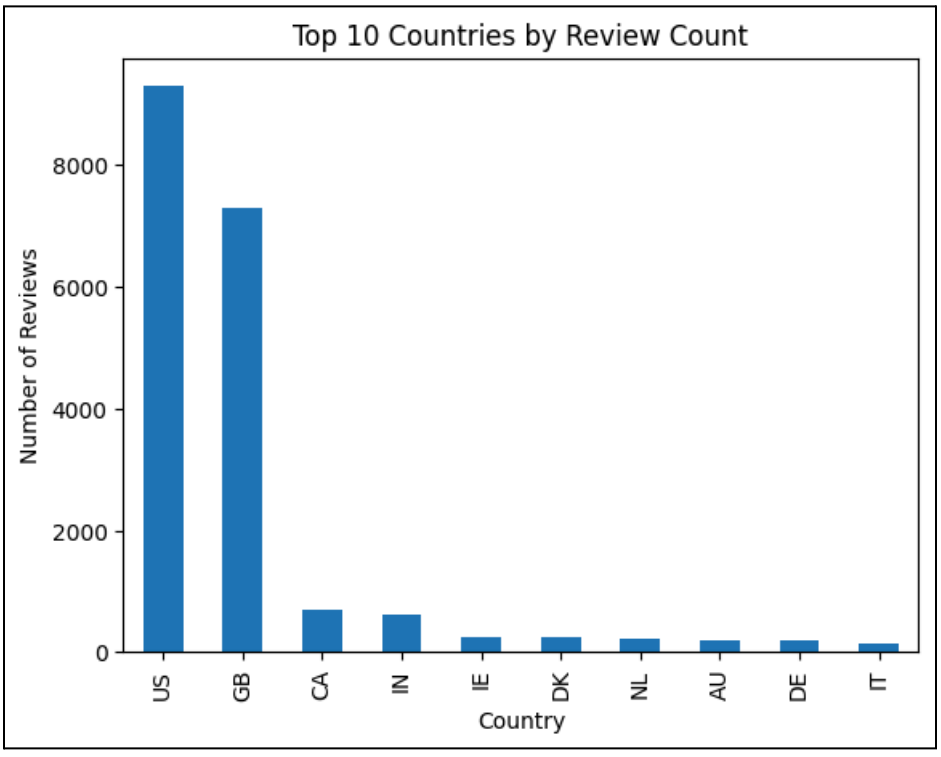
Reviewer Name

- The name or pseudonym of the reviewer
- No other variables were used to construct this variable
- 13914(0)

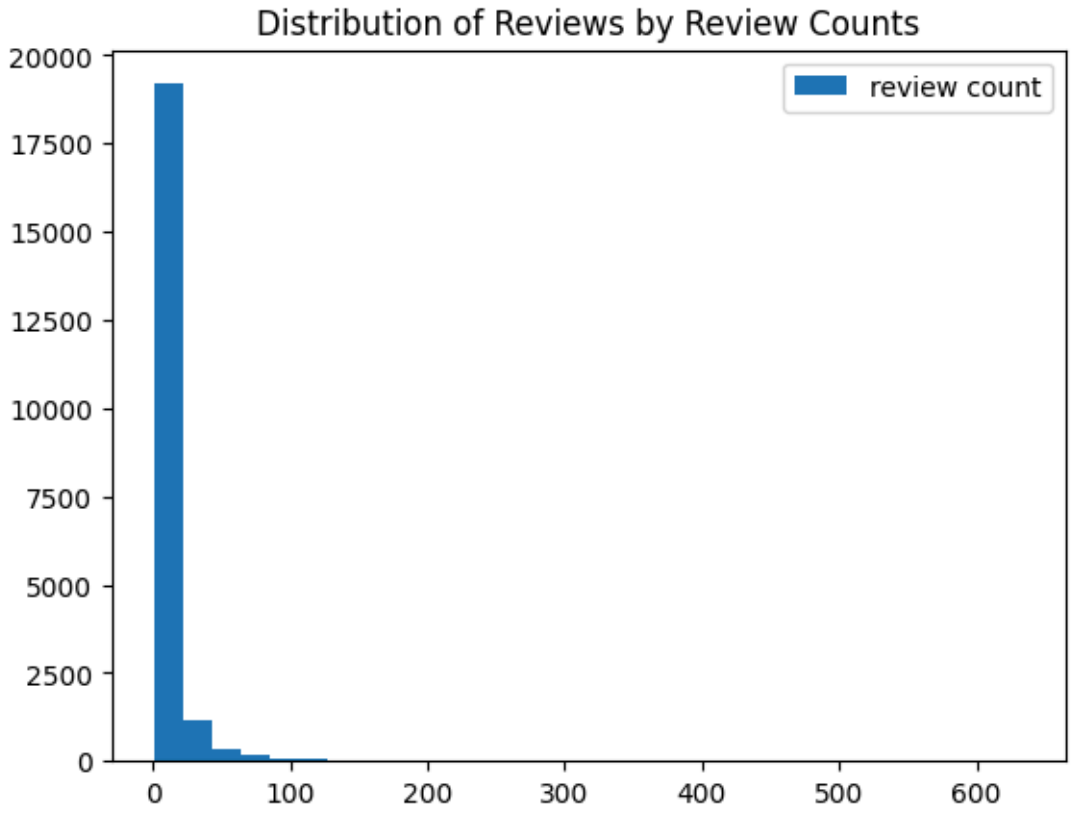
Profile Link

- A text link to the reviewer's Amazon profile for additional insights
- No other variables were used to construct this variable
- 13914(51)

Country

- The country of the reviewer's location, in text (e.g., "US")
- No other variables were used to construct this variable
- 13914(160)
- 

Review Count

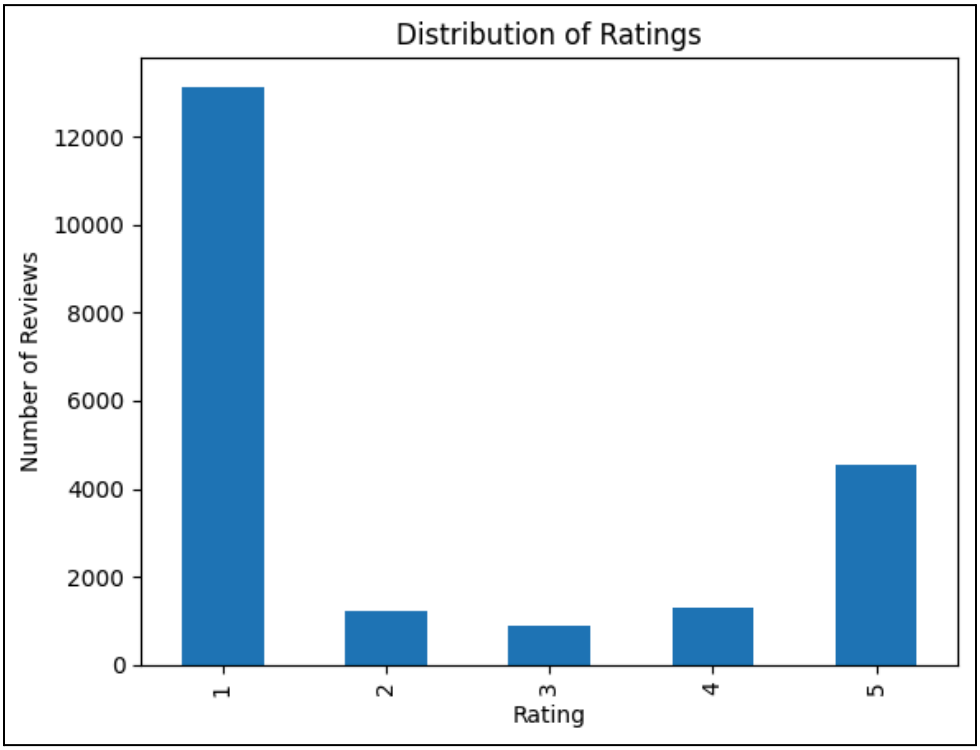
- Number of reviews by the same user, written as solely a number
- This variable was derived from the original “review count” variable in the dataset, with the text removed
- 13914(159)
- Summary statistics:
    - Mean: 9.33
    - Standard deviation: 19.44
    - Minimum: 1
    - 25 percentile: 1
    - 50 percentile: 3
    - 75 percentile: 9
    - Max: 633
- 

Review Date

- Date (year/month/day) and time of when the review was posted
- No other variables were used to construct this variable
- 13914(159)

Rating

- A numerical measure of satisfaction with the product or service, on a scale of 1 to 5
- No other variables were used to construct this variable

- 13914(159)
- Summary statistics:
    - Mean: 1.6
    - Standard deviation: 1.29
    - Minimum: 1
    - 25 percentile: 1
    - 50 percentile: 1
    - 75 percentile: 1
    - Max: 5
- 

Review Title

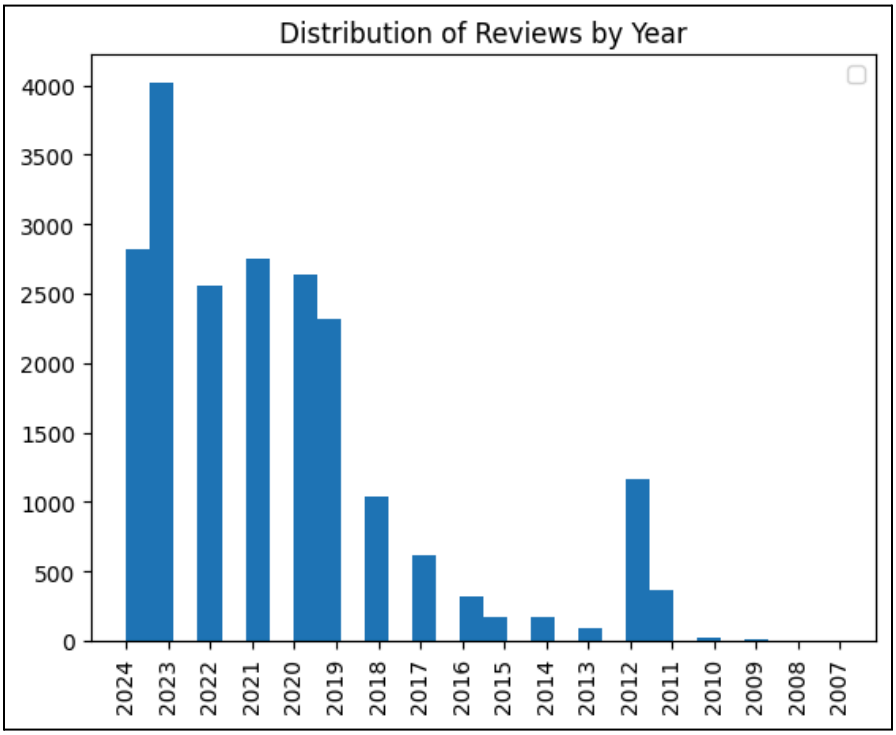
- Text that aims to summarize the review sentiment
- No other variables were used to construct this variable
- 13914(159)

Review Text

- Detailed customer feedback of the product or service
- No other variables were used to construct this variable
- 13914(159)

Date of Experience

- Date of when the product or service was experienced, as text (e.g., “September 14th, 2024”)
- No other variables were used to construct this variable
- 13914(267)

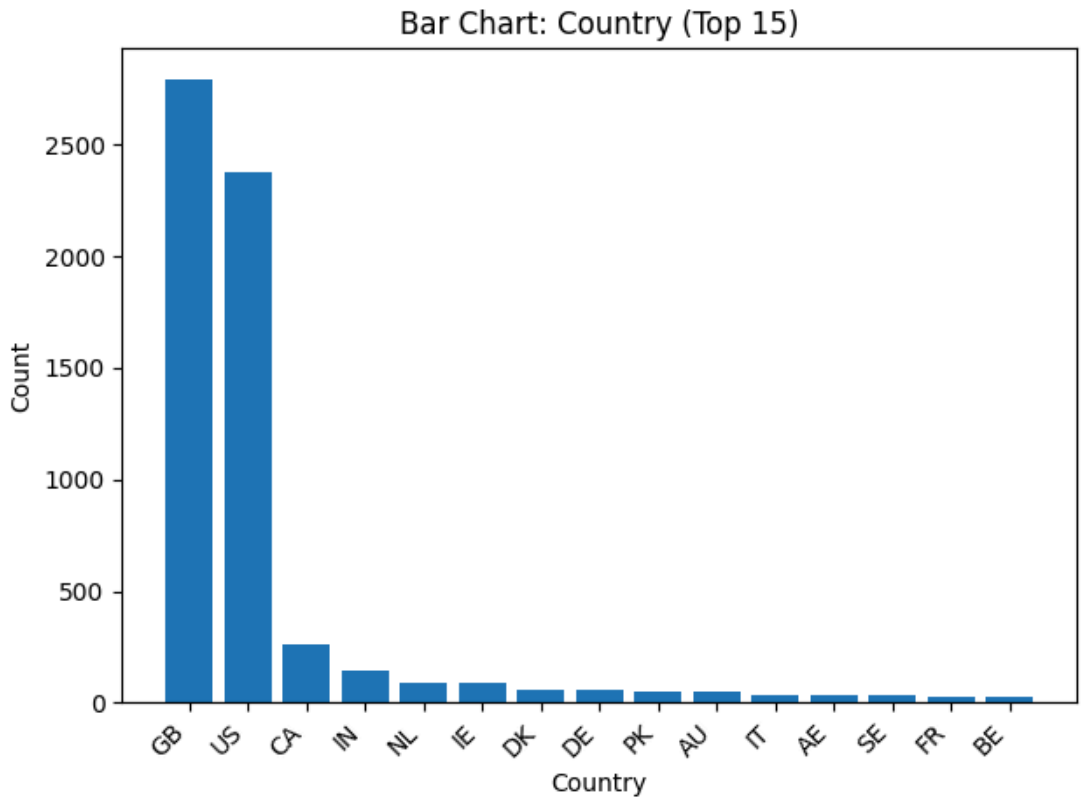


Cleaned Dataset

The unit of observation in this dataset is Amazon reviewers. Each row represents information about the reviewer as well as information about their review of a product.

Country

- The country of the reviewer's location
- No other variables were used in the creation of this variable, but this variable was filtered to only include countries in reviews from 2023 and 2024
- 6574(0)



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Review Title

- Text that aims to summarize the review sentiment
- No other variables were used to construct this variable, but this variable was filtered to only include reviews from 2023 and 2024
- 6574(0)

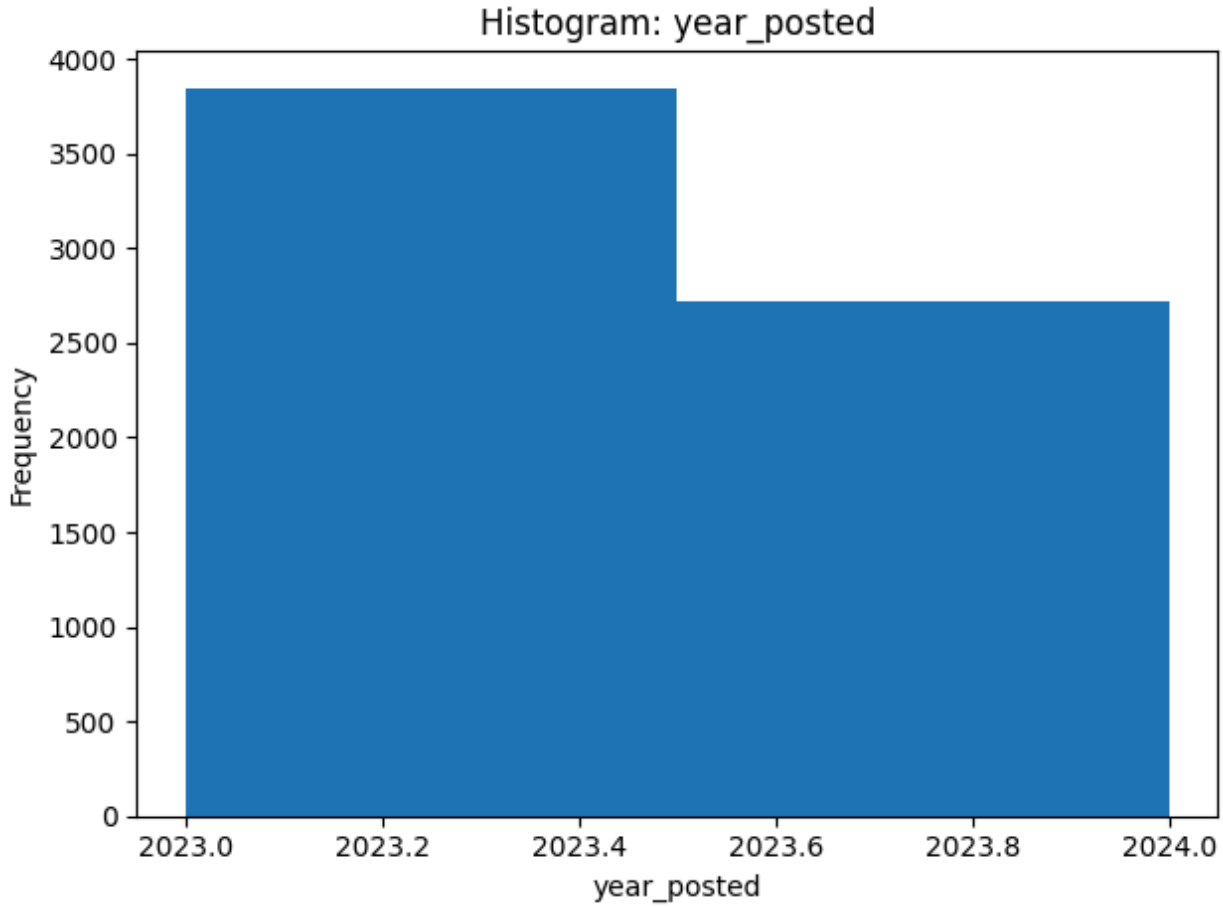
Review Text

- Detailed customer feedback of the product or service
- No other variables were used to construct this variable, but this variable was filtered to only include reviews from 2023 and 2024.
- 6574(0)

Year_posted

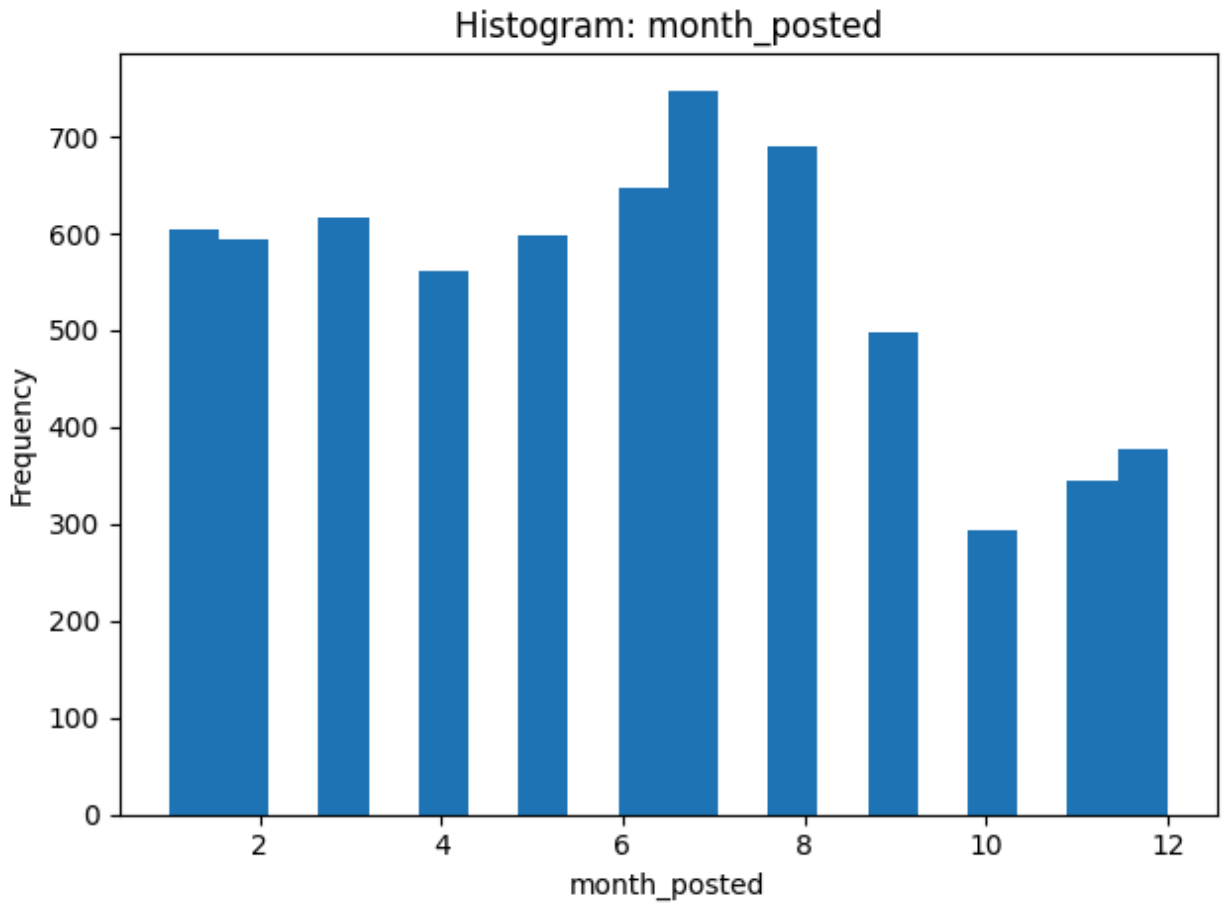
- The year that the review was posted on Amazon
- This variable was extracted from the “Review Date” variable, and filtered to only include 2023 and 2024
- 6574(0)
- Summary statistics:
    - Mean: 2023.41
    - Std: 0.49
    - Min: 2023
    - 25 percentile: 2023

    - 50 percentile: 2023
    - 75 percentile: 2024
    - Max: 2024



Month_posted

- The month that the review was posted on Amazon
- This variable was extracted from the “Review Date” variable, and filtered to only include 2023 and 2024
- 6574(0)
- Summary statistics:
    - Mean: 5.97
    - Std: 3.21
    - Min: 1
    - 25 percentile: 3
    - 50 percentile: 6
    - 75 percentile: 8
    - Max: 12



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Month_ex

- Month that the product or service was experienced, as text
- Derived from the “Date of Experience” variable and filtered to only include months from reviews posted in 2023 and 2024
- 6574(0)
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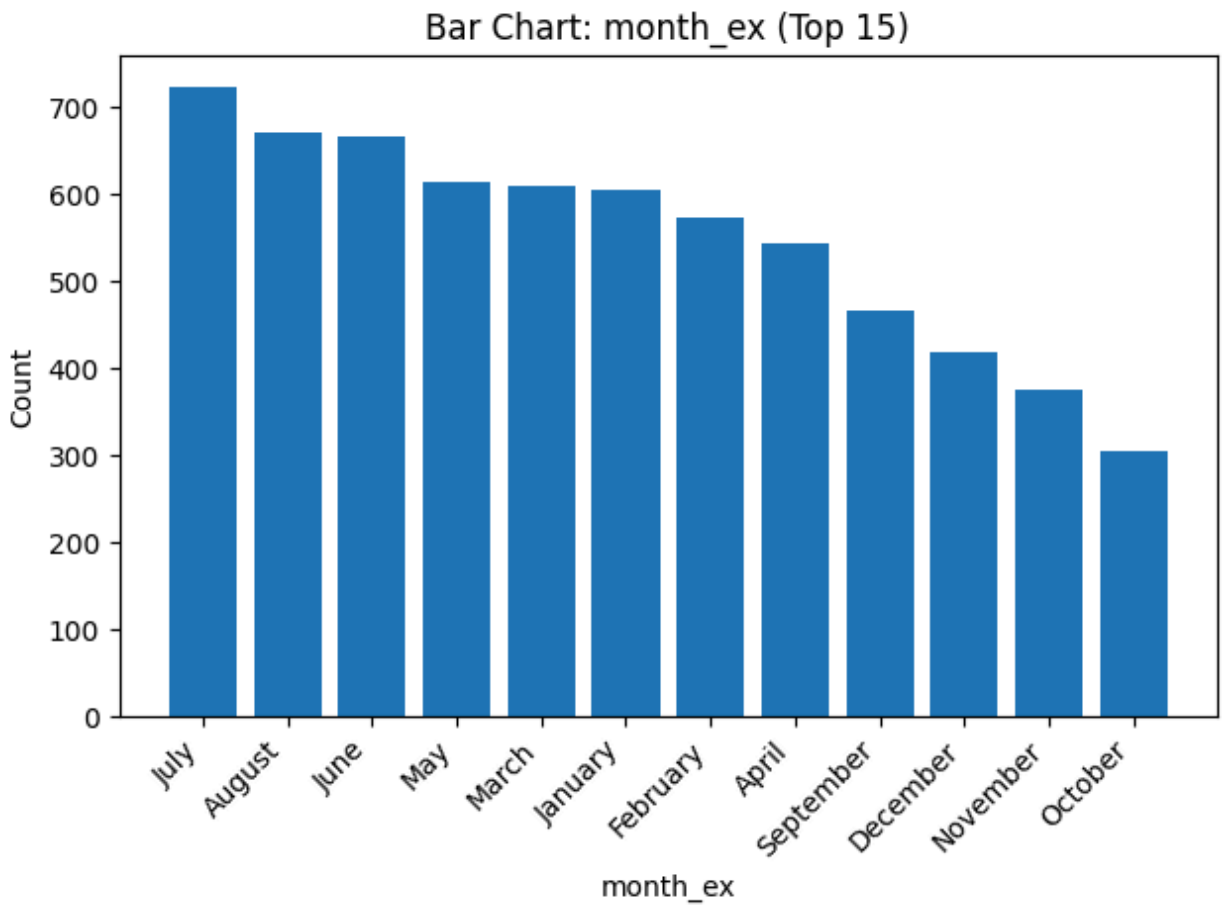

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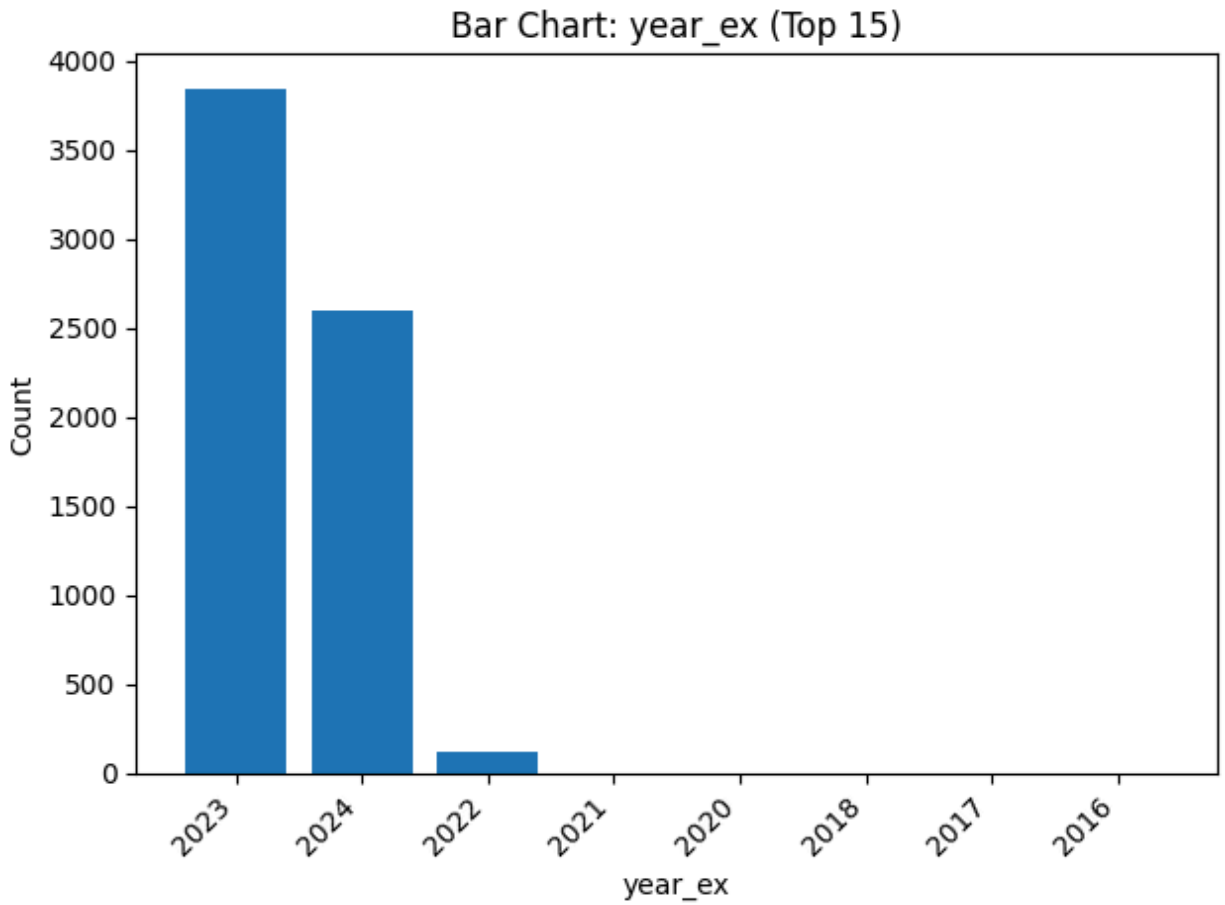
Year_ex

- Year that the product or service was experienced
- Derived from the “Date of Experience” variable and filtered to only include years from reviews posted in 2023 and 2024
- 6574(0)



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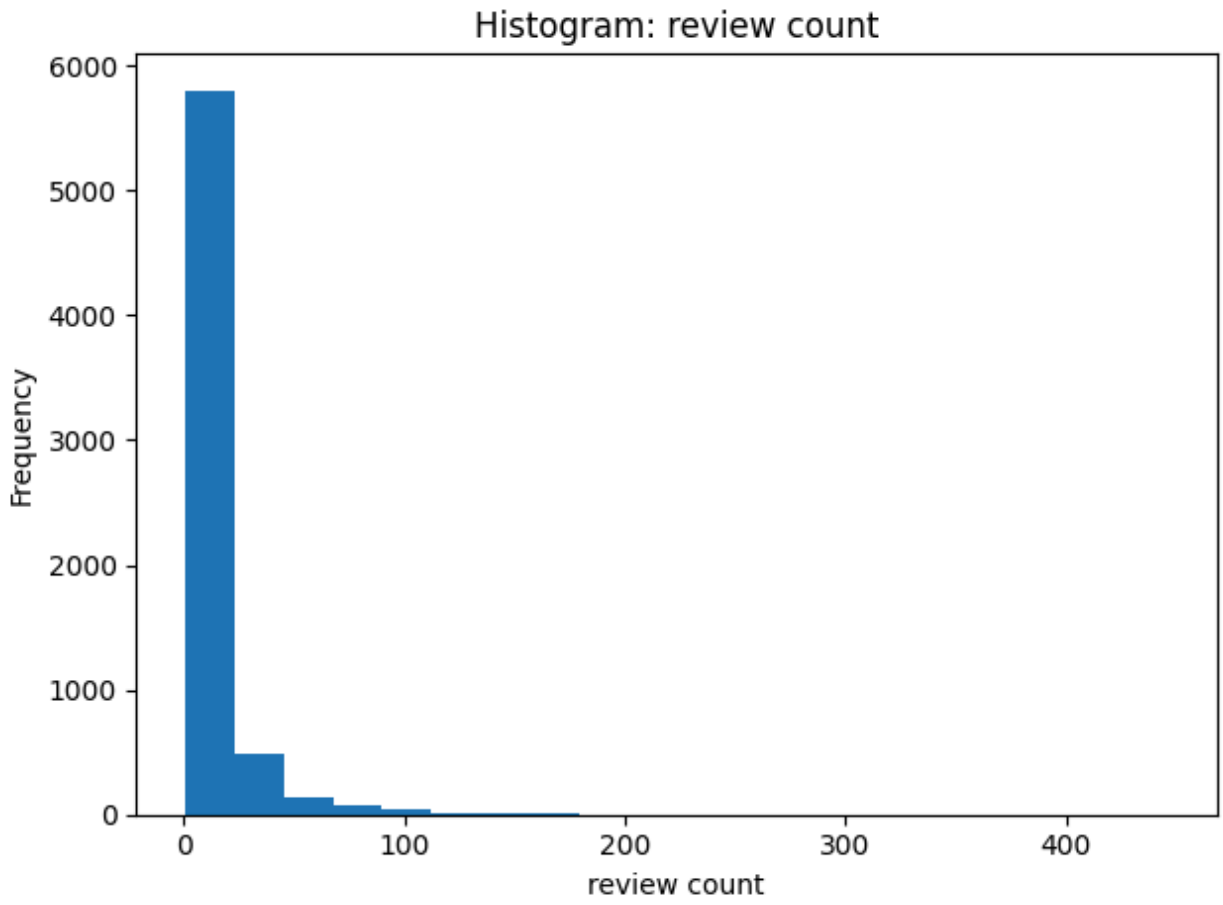
Review count

- Number of reviews by the same user, written as solely a number
- This variable was derived from the original “review count” variable in the dataset, with the text removed. Filtered to only include reviews posted in 2023 and 2024
- 6574(0)
- Summary statistics:
    - Mean: 10.6
    - Standard deviation: 20.9
    - Min: 1
    - 25 percentile: 2
    - 50 percentile: 4
    - 75 percentile: 11
    - Max: 446



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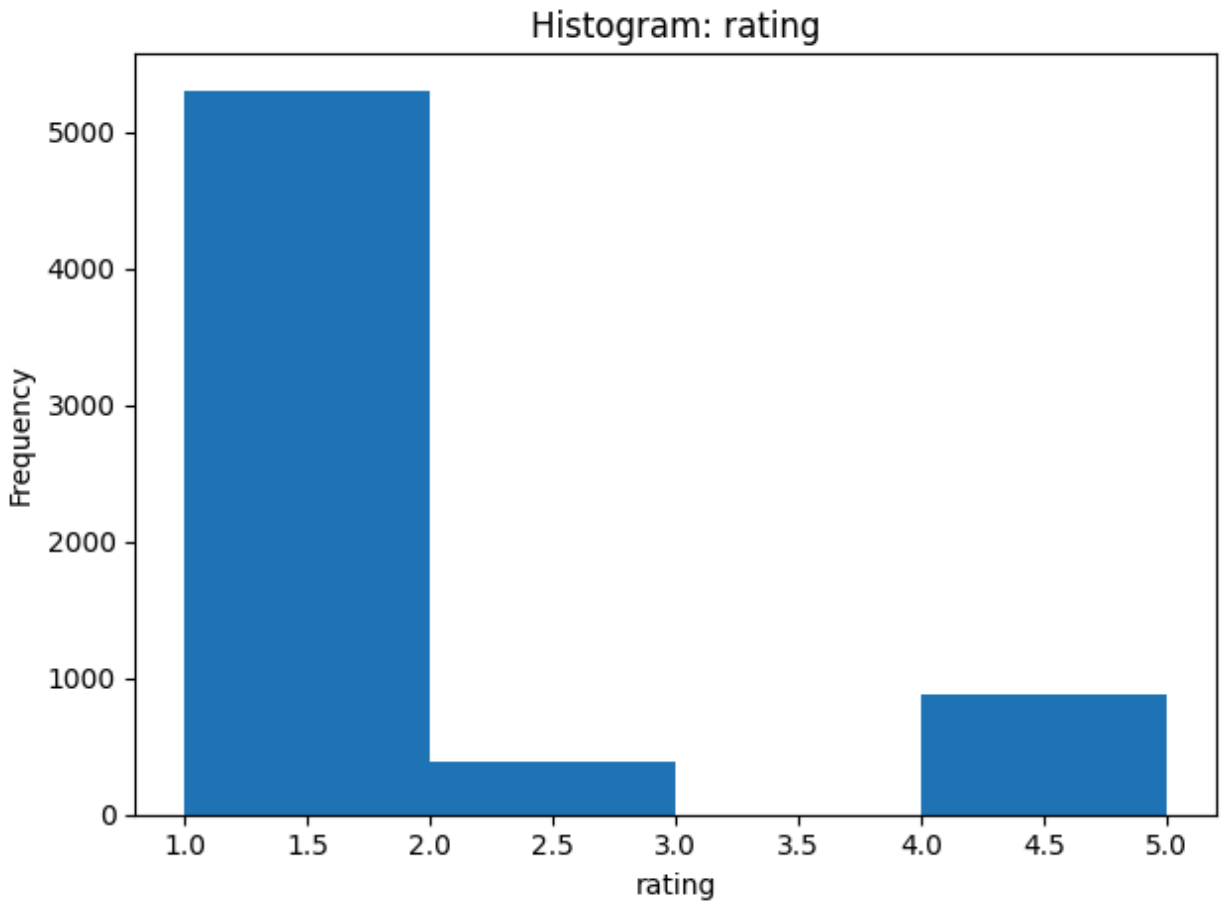
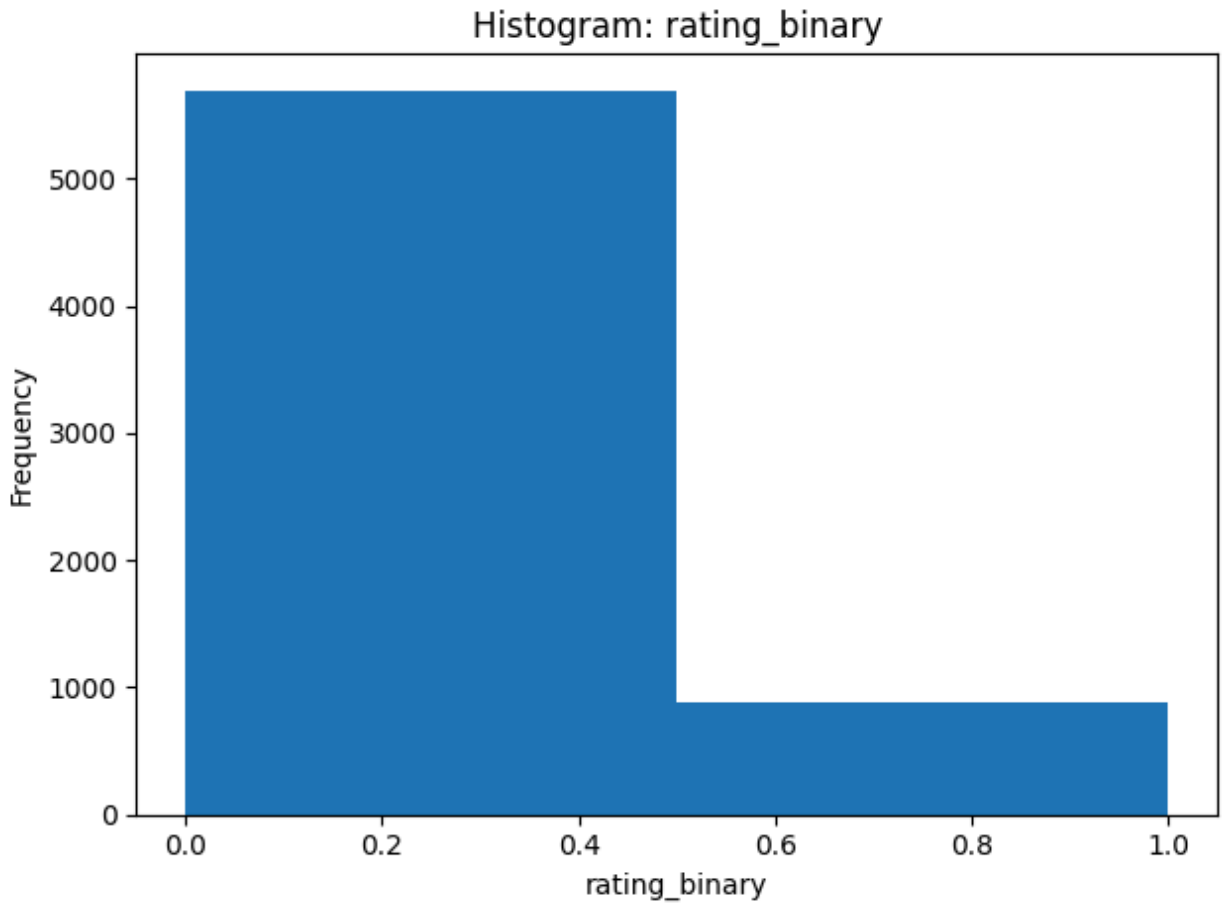
Rating

- A numerical measure of satisfaction with the product or service, on a scale of 1 to 5
- No other variables were used to construct this variable. However, ratings of “3” were removed (for the binary classifier)
- 6574(0)
- Summary statistics:
    - Mean: 1.56
    - Standard deviation: 1.28
    - Min: 1
    - 25 percentile: 1
    - 50 percentile: 1
    - 75 percentile: 1
    - Max: 5



Rating_binary

- A binary classification of rating as “0”, meaning low (1-2) or “1”, meaning high (4-5).
- Derived from the “rating” variable. Ratings of “3” were removed
- 6574(0)



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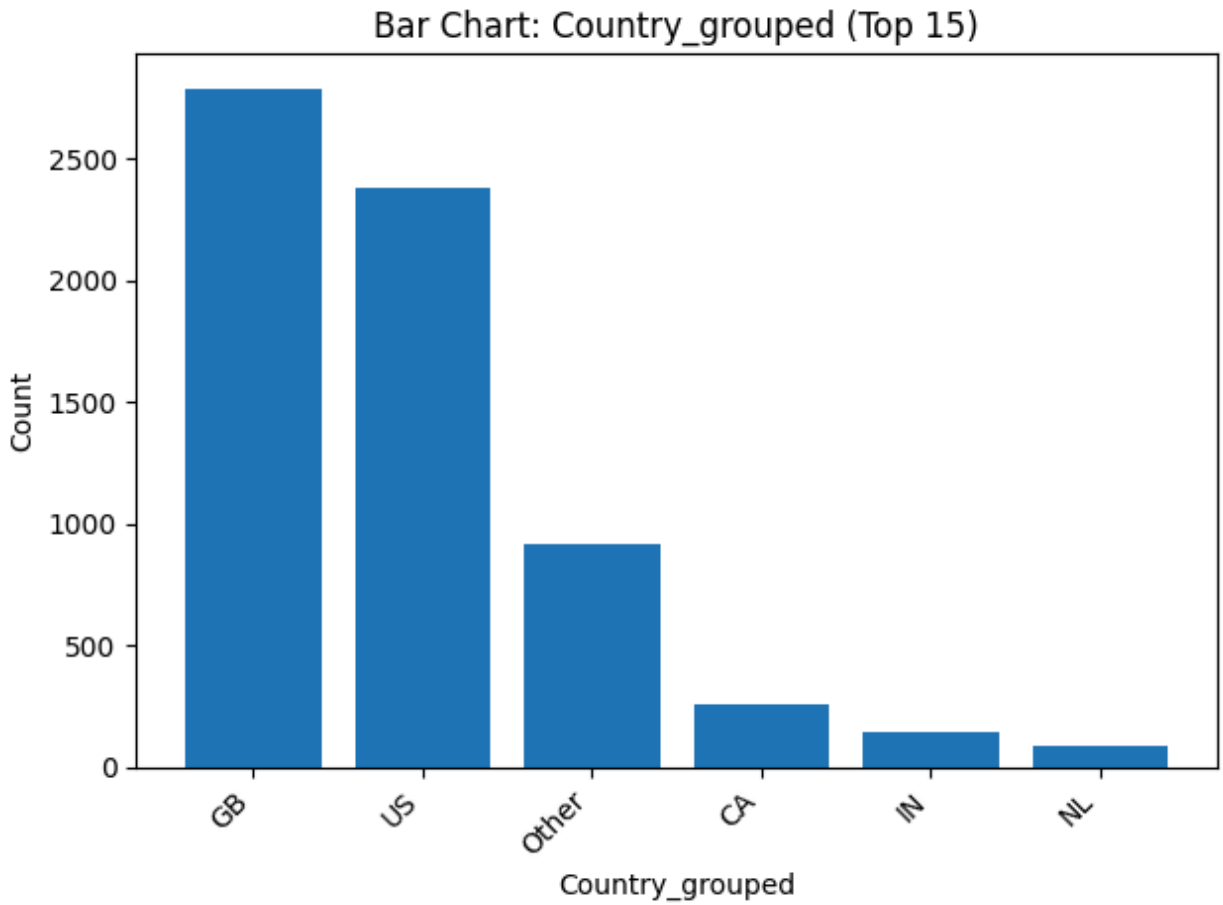
Country_grouped

- A classification of country as either the name of a country that has a top 5 most ratings in the dataset, or “other”
- This is derived from the country variable
- 6574(0)

- 
Bar Chart: Country_grouped (Top 15)
Count
2500
2000
1500
1000
500
0
GB
US
Other
CA
IN
NL
Country_grouped