

Project 1: Data visualization

What makes a good review?

Robert Castellano

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

I. Overview of the Data

Data

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

- Over 500,000 Amazon “fine food” reviews.

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

Data

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Over 500,000 Amazon “fine food” reviews.

**Number of
people who
found the
review helpful**

**Number of people
who indicated
whether or not the
review was helpful**

129 of 134 people found the following review helpful



What a great TV. When the decision came down to either ...

By [Cimmerian](#) on November 20, 2014

What a great TV. When the decision came down to either sending my kids to college or buying this set, the choice was easy. Now my kids can watch this set when they come home from their McJobs and be happy like me.

[1 Comment](#)

Was this review helpful to you?

Rating

-Product ID

-Reviewer User ID

Summary

Review

Initial questions

Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Amazon reviews are often the most publicly visible reviews of consumer products.

Initial questions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Amazon reviews are often the most publicly visible reviews of consumer products.
- How helpful are reviews?

Initial questions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Amazon reviews are often the most publicly visible reviews of consumer products.
- How helpful are reviews?
- What factors affect a review's helpfulness?

Ratings

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Data
visualization
What makes a
good review?

Robert
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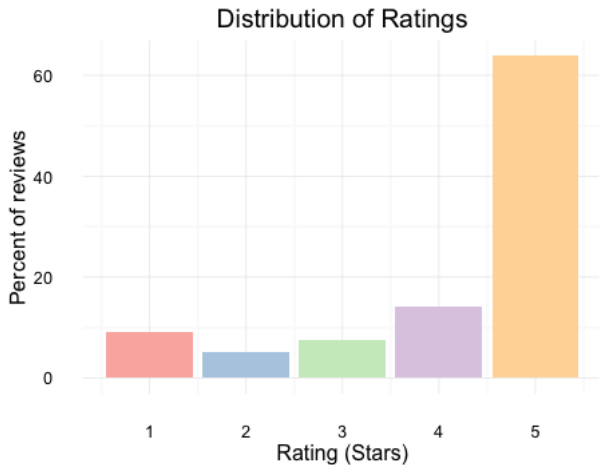
I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions



Commonly used words in reviews

Project 1:
Data
visualization
What makes a
good review?

I. Overview of the Data



Positive reviews



Negative reviews

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

II. Helpfulness of Reviews

How many reviews are helpful?

Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

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Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

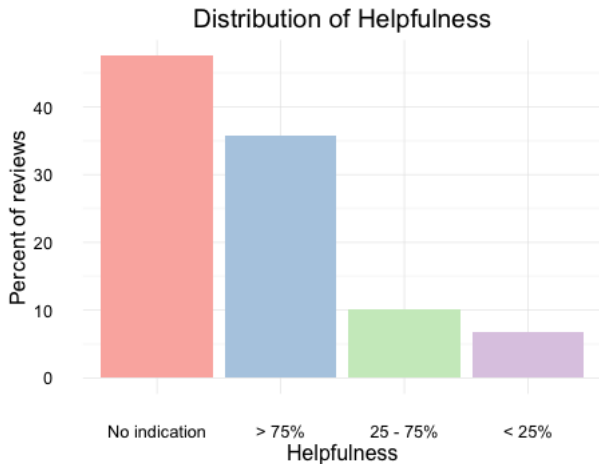
I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions



How do ratings affect helpfulness?

Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

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Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

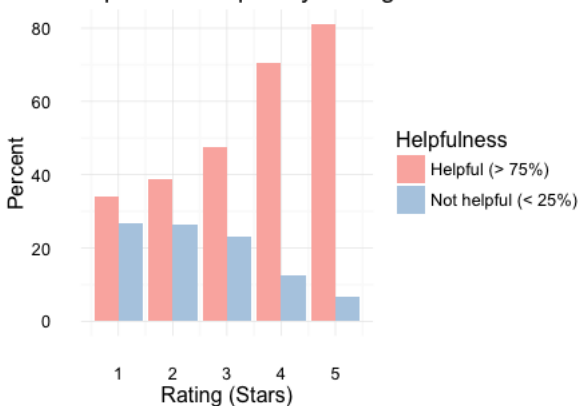
II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

Percent of Reviews Found
Helpful/Not Helpful by Rating



Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

III. Word count

How do word counts vary by rating?

Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

**III. Word
count**

IV. Frequency

V. Conclusions

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Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions



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Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

**III. Word
count**

IV. Frequency

V. Conclusions

How do word counts affect helpfulness?

Project 1:
Data
visualization
What makes a
good review?

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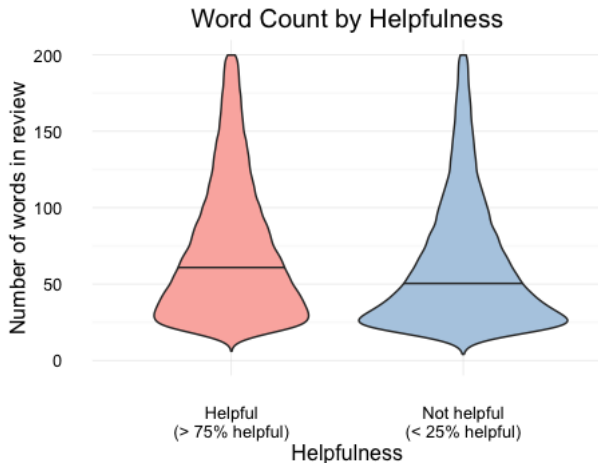
I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions



Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

IV. Frequency

Reviewer frequency

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Defining a frequent reviewer as one who has made over 50 reviews, frequent reviewers account for almost 10% of all reviews.

Reviewer frequency

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Defining a frequent reviewer as one who has made over 50 reviews, frequent reviewers account for almost 10% of all reviews.
- Does the behavior of frequent reviews differ from that of infrequent reviews?

Are frequent reviewers more discerning?

Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

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Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

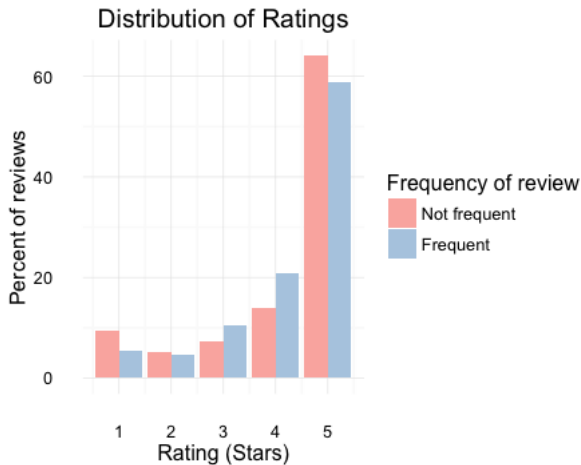
I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions



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Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

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Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

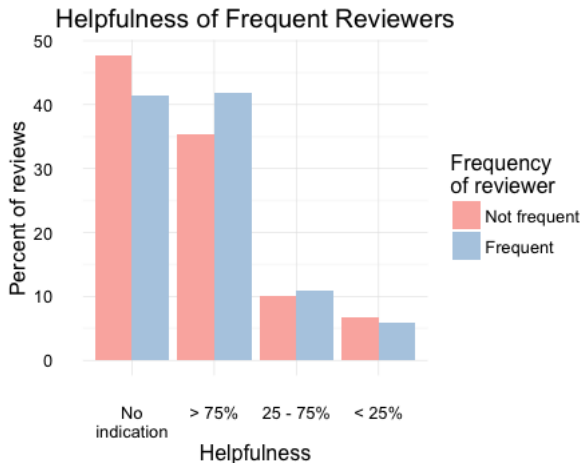
I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions



Are frequent reviews more verbose?

Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

Are frequent reviews more verbose?

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

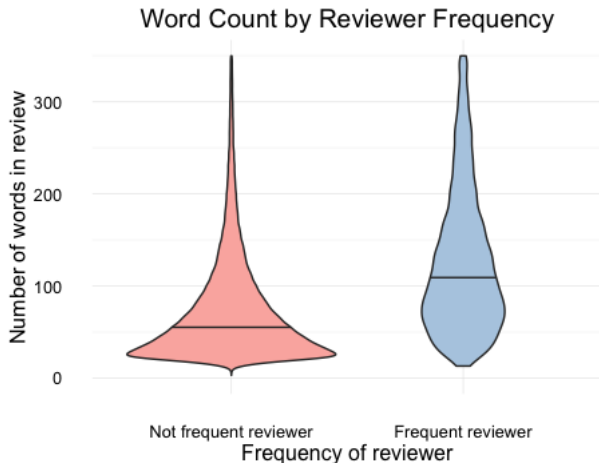
I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions



Project 1:
Data
visualization
What makes a
good review?

V. Conclusions

V. Conclusions

Conclusions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

- Positive reviews are very common.

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

Conclusions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

- Positive reviews are very common.
- Positive reviews are shorter.

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

Conclusions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Positive reviews are very common.
- Positive reviews are shorter.
- Longer reviews are more helpful.

Conclusions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Positive reviews are very common.
- Positive reviews are shorter.
- Longer reviews are more helpful.
- Despite being more common and shorter, positive reviews are found more helpful.

Conclusions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Positive reviews are very common.
- Positive reviews are shorter.
- Longer reviews are more helpful.
- Despite being more common and shorter, positive reviews are found more helpful.
- Frequent reviews are more discerning, write longer reviews, and are more helpful.

Further directions

Project 1:

Data

visualization

What makes a
good review?

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- Analyze categories of products.

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

Further directions

Project 1:

Data

visualization

What makes a
good review?

Robert

Castellano

- Analyze categories of products.
- Prediction model for the helpfulness of a review.

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

Further directions

Project 1:
Data
visualization
What makes a
good review?

Robert
Castellano

I. Overview of
the Data

II. Helpfulness
of Reviews

III. Word
count

IV. Frequency

V. Conclusions

- Analyze categories of products.
- Prediction model for the helpfulness of a review.
- Relationship between products and reviewers.