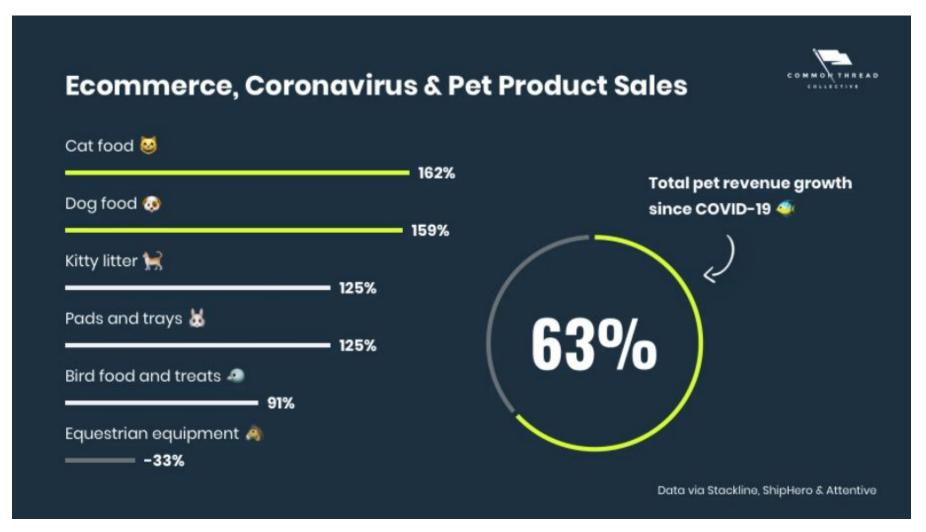
# Innovation Booster

Machine Learning Case Study: Launching a Pet Product in the US

1/19/2022





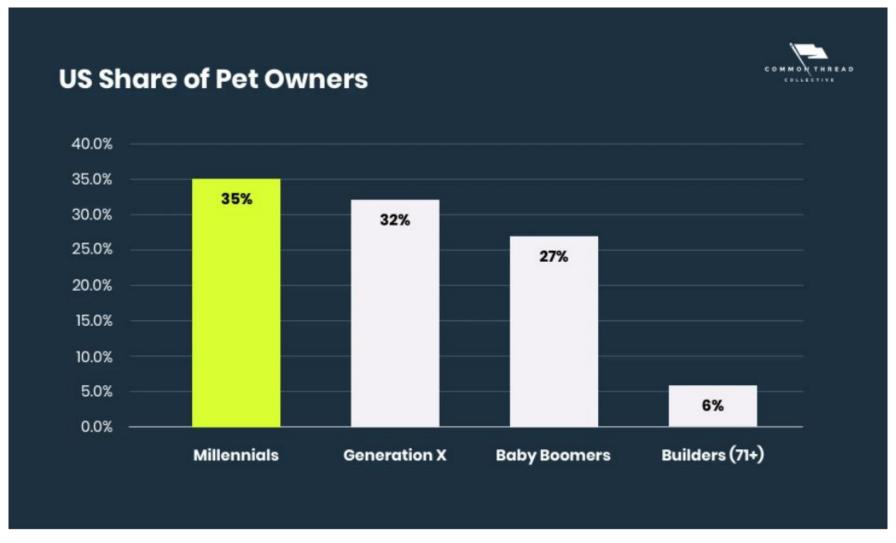














#### **Case Study Specifications**

Data Source: Amazon Pet Product Reviews Classification (Kaggle).

**Programming Language:** Python

Project Link: <a href="https://github.com/NayibGS07/NLP-CaseStudy">https://github.com/NayibGS07/NLP-CaseStudy</a>

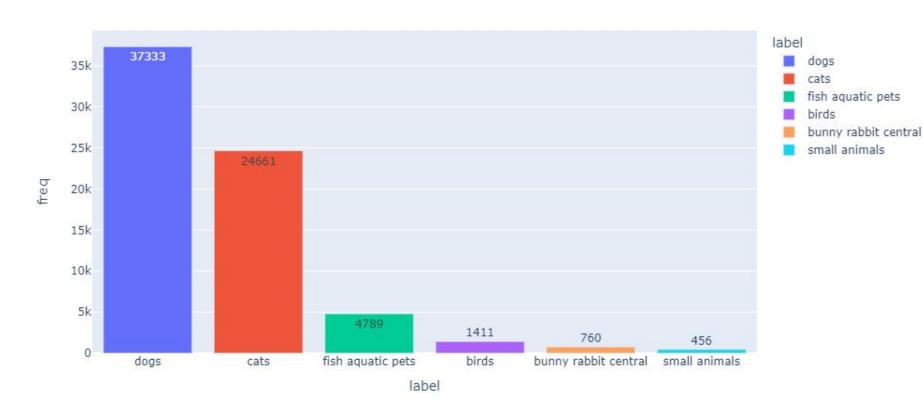




## **Data Exploration**

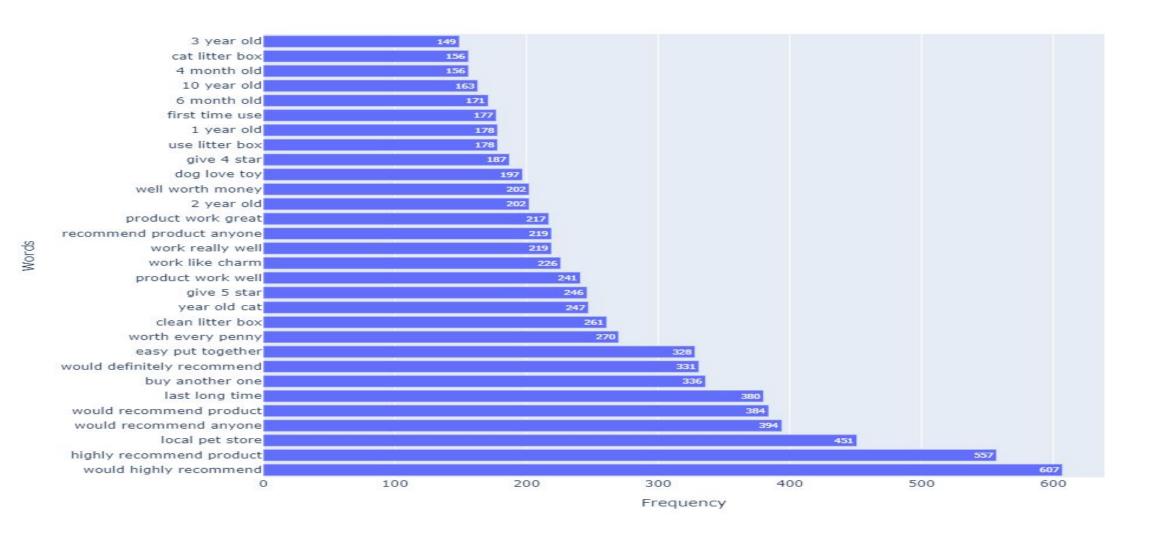
Total of comments: 69.410





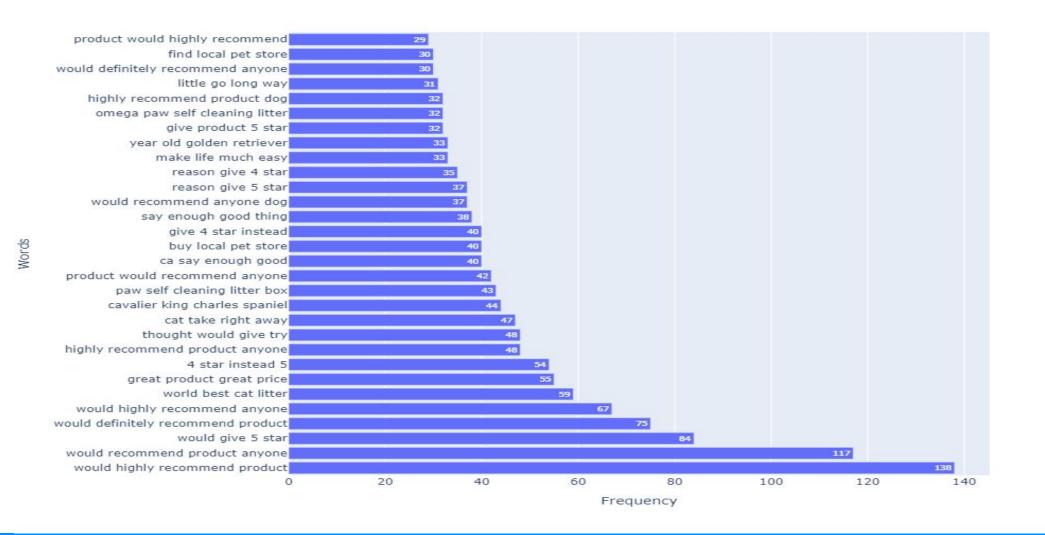


#### **Global Word Analysis**





#### **Global Word Analysis**



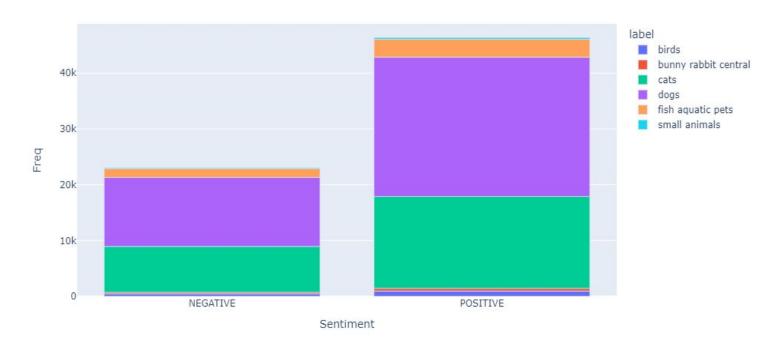


#### **Sentiment Analysis**

Model: Flair

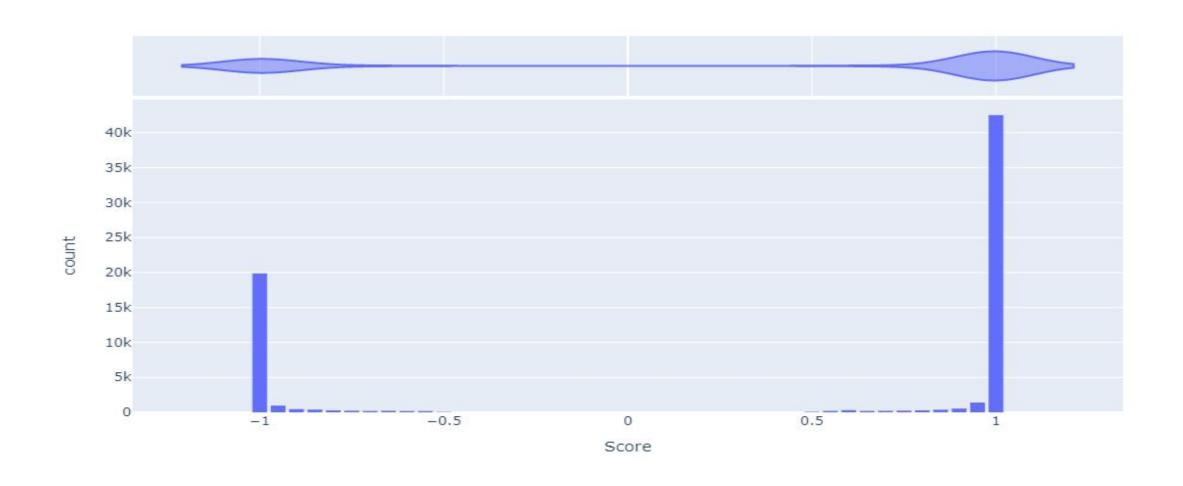
Sentiment	label	Freq
NEGATIVE	birds	453
NEGATIVE	bunny rabbit central	272
NEGATIVE	cats	8219
NEGATIVE	dogs	12365
NEGATIVE	fish aquatic pets	1581
NEGATIVE	small animals	152
POSITIVE	birds	958
POSITIVE	bunny rabbit central	488
POSITIVE	cats	16442
POSITIVE	dogs	24968
POSITIVE	fish aquatic pets	3208
POSITIVE	small animals	304

#### Sentiment



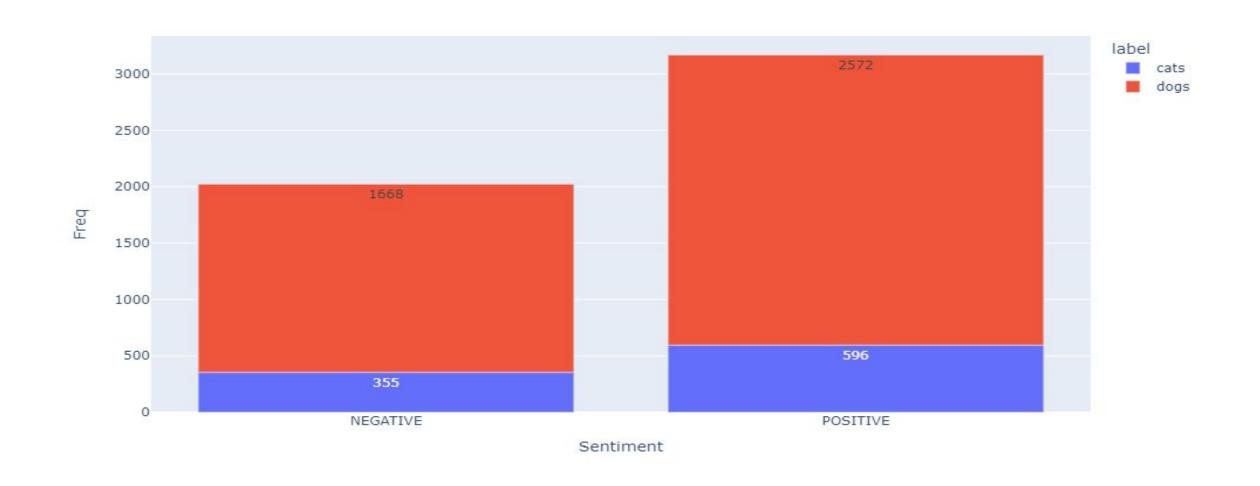


## **Sentiment Analysis**



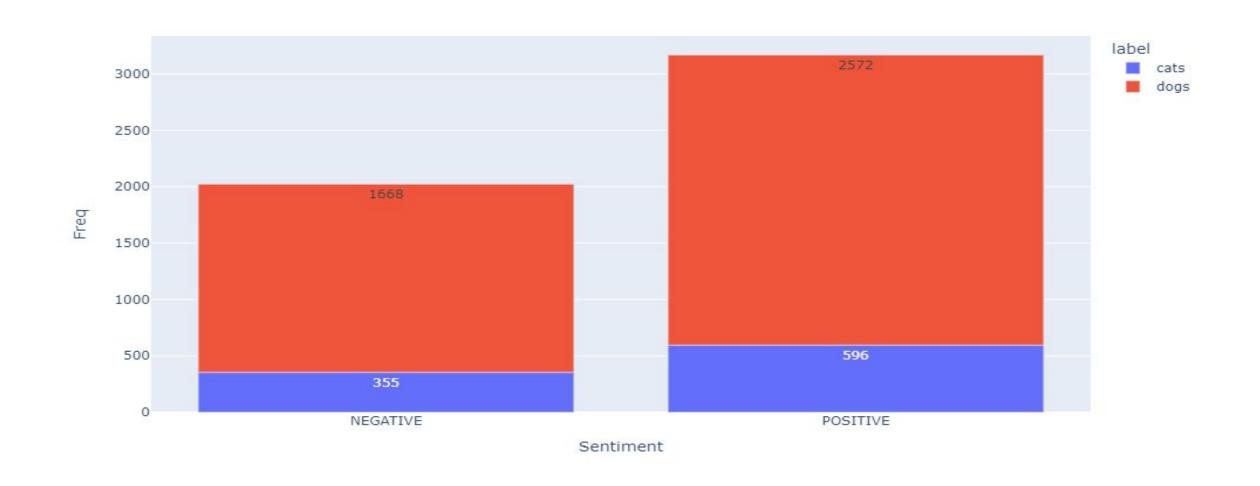


## **Product Analysis**



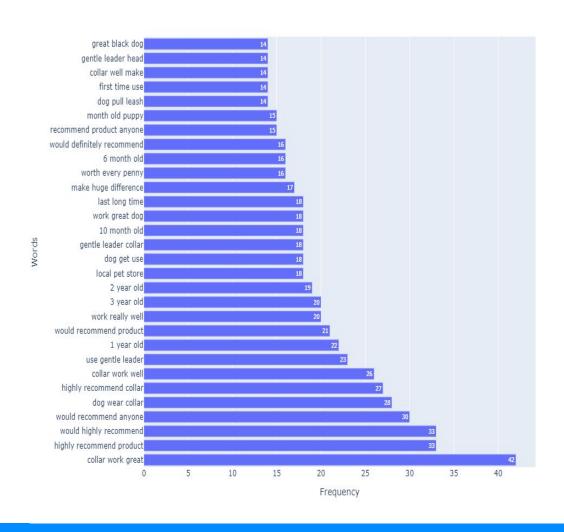


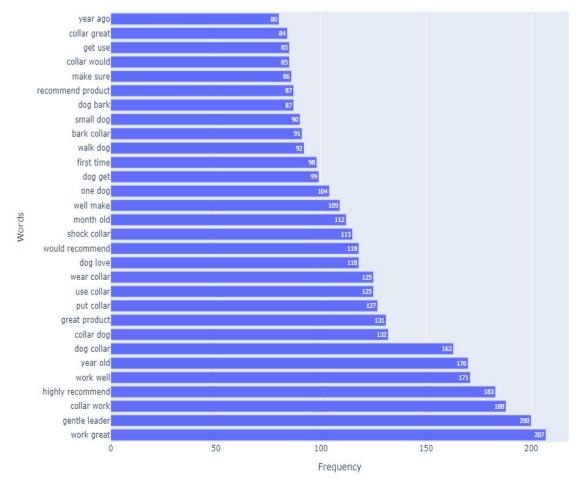
## **Product Analysis**





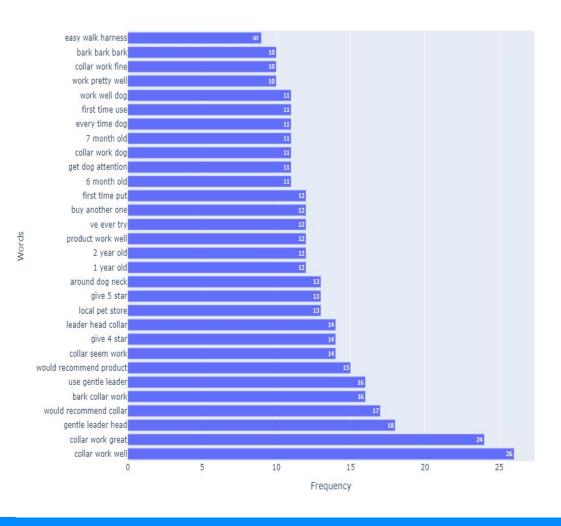
#### **Product Analysis: Positive Comments**

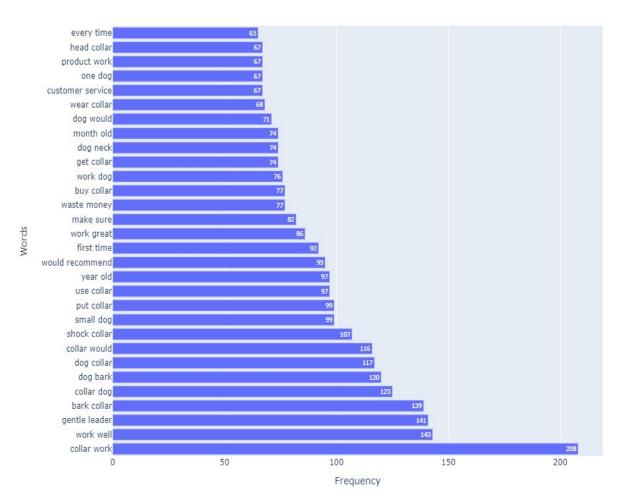






## **Product Analysis: Negative Comments**







#### **Future Steps**

- · Other models.
- Seasonal Analysis.
- Association Rules.
- Recommendation Systems.
- Dashboards.

