

REPORT

## Customer Reviews

# ECHO ALEXA SPEAKERS SERIES

- ◆ Sentiment Analyst
- ◆ Customer Satisfaction Score (CSAT)
- ◆ Net Promoter Score (NPS)



## TABLE CONTENT

### ◆ Context

- The 'Echo Alexa Speakers Series' has been available for an extended period.
- Collect buyers reviews from the Amazon platform to conduct a sentiment analysis to understand customer needs and satisfaction with the product

### ◆ Tools Used

- Python: Data cleaning, transform and exploration  
Charts perform  
Calculate CSAT/NPS
- PowerPoint: Report performing, Charts re-design

### ◆ Objective

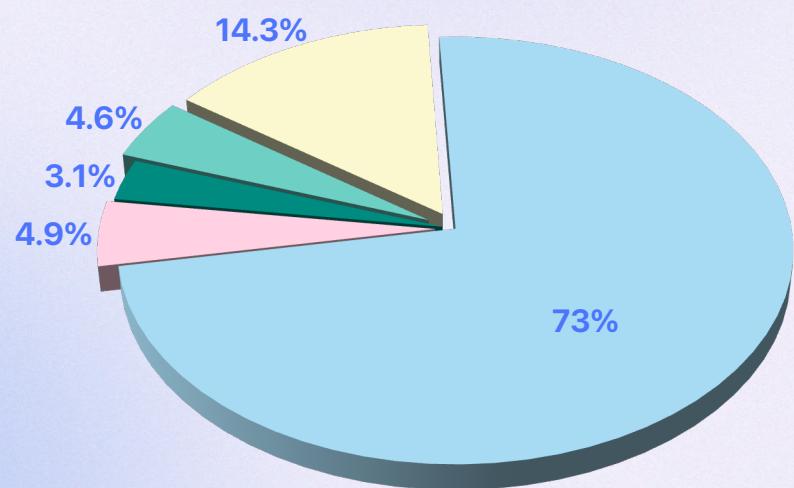
- Perform a comprehensive sentiment analysis on product reviews to gain insights into user needs and product performance.

### ◆ Dataset

- This dataset consists of a nearly 3000 customer reviews (input text) of technology device Echo Speaker, star ratings, date, variant, feedback and NPS score

## Rating Distribution

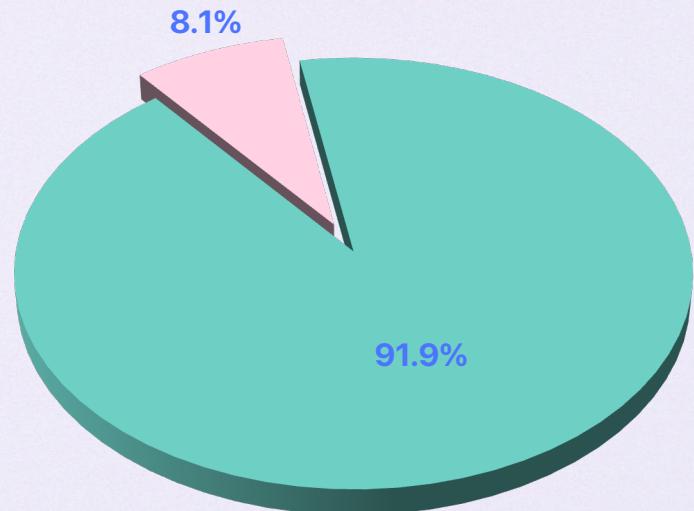
■ 1★ ■ 2★ ■ 3★ ■ 4★ ■ 5★



- The majority of the reviews are **highly positive**, with 2113 ratings of 5 stars dominate 73%
- Suggests that most customers are highly satisfied with the device

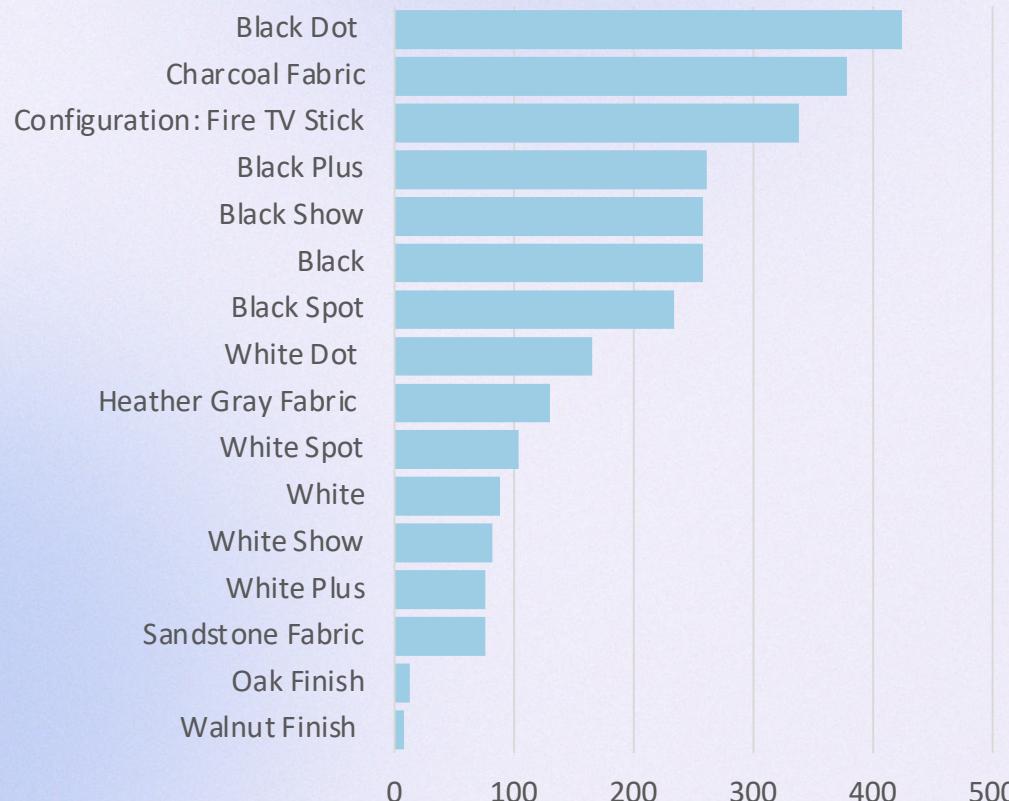
## Feedback Distribution

■ Positive (3+4+5) ■ Negative (1+2)



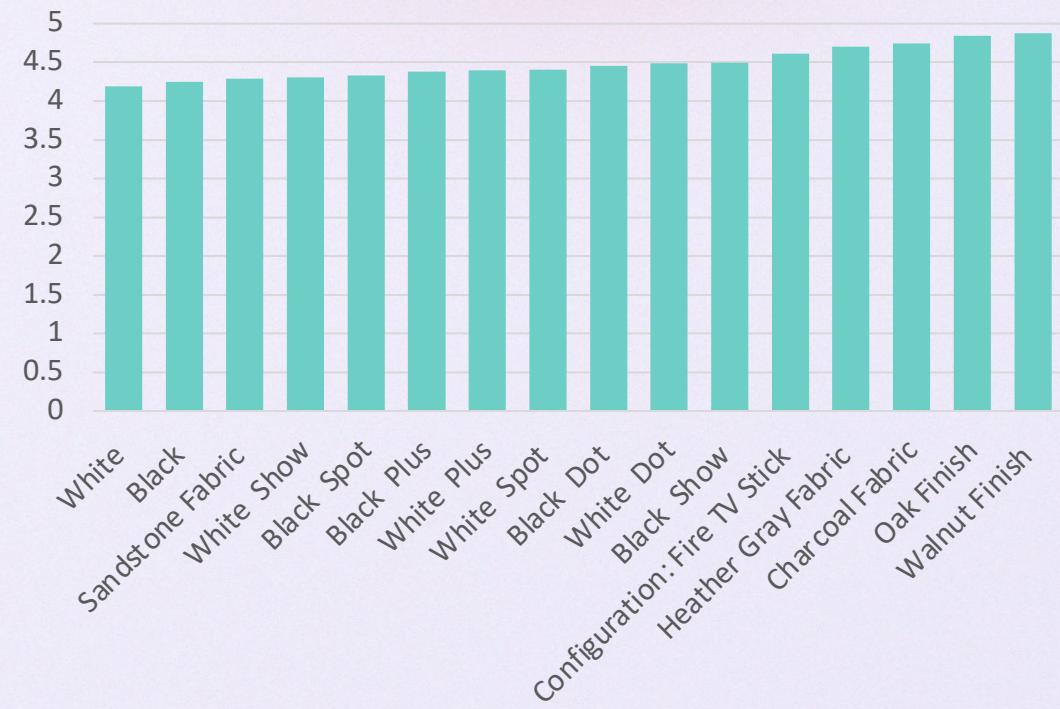
- With **91.9% of the responses being favorable** and only 8.1% being negative.
- This indicates a **high level of customer satisfaction**

## Variation Distribution



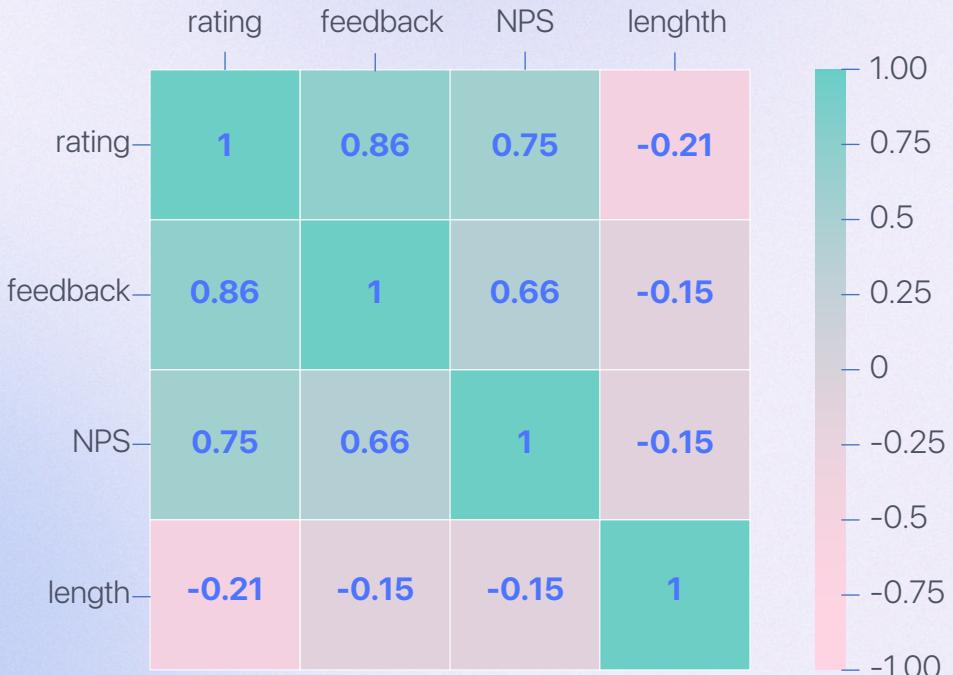
The most popular among users is **Black Dot**, which has the **highest number of reviews (424)**

## Mean rating according to variation



- **The white variation** appears to have the lowest mean rating, which could be due to specific preferences, maybe people don't like white color or not
- So people who take **Walnut Finish** variation are more happy

## Correlation Matrix Heatmap



## Mean Length of Reviews by Rating



- The length of reviews has a negative correlation with both **rating** (**correlation coefficient = -0.21**) and **feedback** (**correlation coefficient = -0.15**).
- We can assume that people tend to write more and longer when they are not happy

# Wordcloud of Positive Reviews



The most frequently occurring words include:

- HOẠT ĐỘNG
  - ALEXA
  - DỄ DÀNG
  - CHẤT LƯỢNG
  - ÂM THANH
  - YÊU THÍCH
  - TUYỆT VỜI
  - YÊU
  - PHẢI MUA
  - THÔNG MINH

**Positive reviews comprising 91.9% of all feedback, express a **strong love** for the product series and highlight its smart device capabilities.**

# Wordcloud of Negative Reviews



The most frequently occurring words include:

- KHÔNG HOẠT ĐỘNG
  - KHÔNG THỂ KẾT NỐI
  - CÓ VẤN ĐỀ
  - LỖI THIẾT BỊ
  - KHÔNG MUA

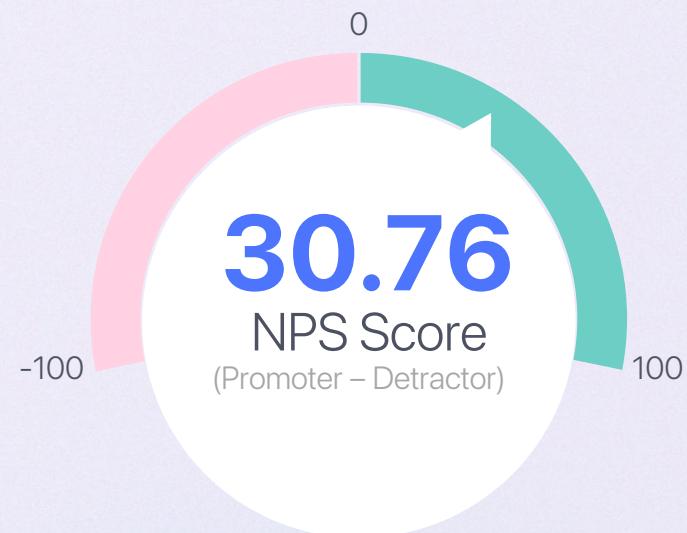
Negative reviews, **making up 8.1%** of all feedback, highlight technical issues experienced during use and seem they not going to recommend the product.

## CUSTOMERS NET PROMOTER SCORE (NPS)

- The **NPS score of 30.76** indicates that there is a **positive overall sentiment** among customers surveyed.

- NPS of 30.76 is slightly below the hypothetical industry benchmark range of 40 - 50, suggesting there may be areas for improvement in overall customer satisfaction

- We should focus on converting Passives into Promoters and addressing issues causing Detractors could further improve the NPS score and overall customer satisfaction.



## CUSTOMERS SATISFACTION SCORE (CSAT)



CSAT

**91.95%**

CDSAT

**8.05%**

- A CSAT score of 91.95% indicates most of customers are satisfied with the product.

- This high percentage is typically indicative of excellent performance and strong customer approval