SATISFACTION AND SENTIMENT ANALYSIS BY CONSUMER REVIEWS OF AMAZON PRODUCTS

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DS DIBIMBING BATCH 29

LINK DASHBOARD

LINK GOOGLE COLAB

Data Understanding DataSet: Consumer Reviews of Amazon Products

| Column | Non-Null Count | Dtype | Missing Value |
|----------------------|----------------|---------|---------------|
| id | 34660 non-null | object | 0 |
| name | 27900 non-null | object | 6760 |
| asins | 34658 non-null | object | 2 |
| brand | 34660 non-null | object | 0 |
| categories | 34660 non-null | object | 0 |
| keys | 34660 non-null | object | 0 |
| manufacturer | 34660 non-null | object | 0 |
| reviews.date | 34621 non-null | object | 39 |
| reviews.dateAdded | 24039 non-null | object | 10621 |
| reviews.dateSeen | 34660 non-null | object | 0 |
| reviews.didPurchase | l non-null | object | 34659 |
| reviews.doRecommend | 34066 non-null | object | 594 |
| reviews.id | l non-null | float64 | 34659 |
| reviews.numHelpful | 34131 non-null | float65 | 592 |
| reviews.rating | 34627 non-null | float66 | 33 |
| reviews.sourceURLs | 34660 non-null | object | 0 |
| reviews.text | 34659 non-null | object | 1 |
| reviews.title | 34654 non-null | object | 6 |
| reviews.userCity | 0 non-null | float64 | 34660 |
| reviews.userProvince | 0 non-null | float64 | 34660 |
| reviews.username | 34653 non-null | object | 7 |

DATA UNDERSTANDING

•Columns:

- •product details:
 - id, name, asins, brand, categories, and manufacturer.
- •Review :
 - •reviews.date, reviews.dateAdded, reviews.dateSeen, reviews.rating, reviews.text, reviews.title, and reviews.username.
- Some user-related columns:
 - reviews.userCity and reviews.userProvince (both entirely empty).
- Additional fields:
 - •reviews.numHelpful, reviews.doRecommend, and reviews.didPurchase.

•Missing Values:

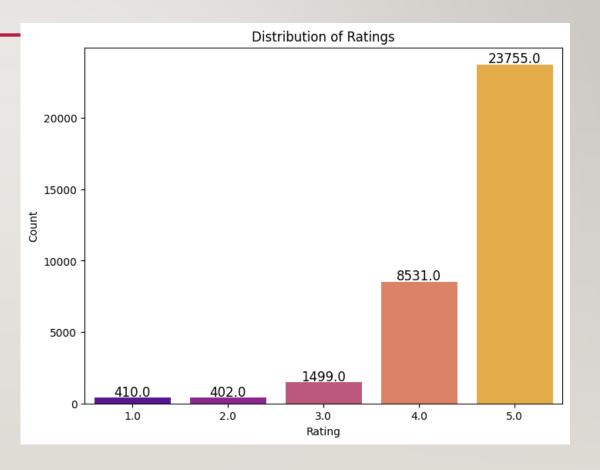
- name and asins
- •reviews.didPurchase, reviews.userCity, and reviews.userProvince Sebagian besar kosong
- reviews.dateAdded banyak data yang hialng

METRIK & GOAL

- Metrik:
 - NPS Score
 - CSAT Score
 - Rating Distribution
- Goal
 - Menidentifikasi kepuasan pelanggan
 - Mengidentifikasi sentiment pelanggan.

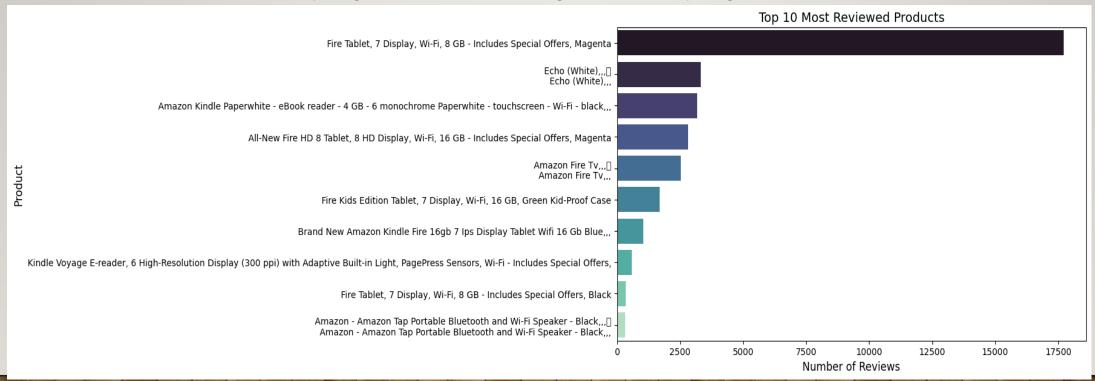
RATING DISTRIBUTION

Distribusi Rating pelanggan dengan range I-5, rating terbanyak ada pada rating 5. Dimana rating 5 menunjukan rating pelanggan terhadap produk yang dibeli itu baik. Dan rating rendah (I-3) menandakan masih adanya ketidakpuasan pelanggan terhadap pembelian produk.



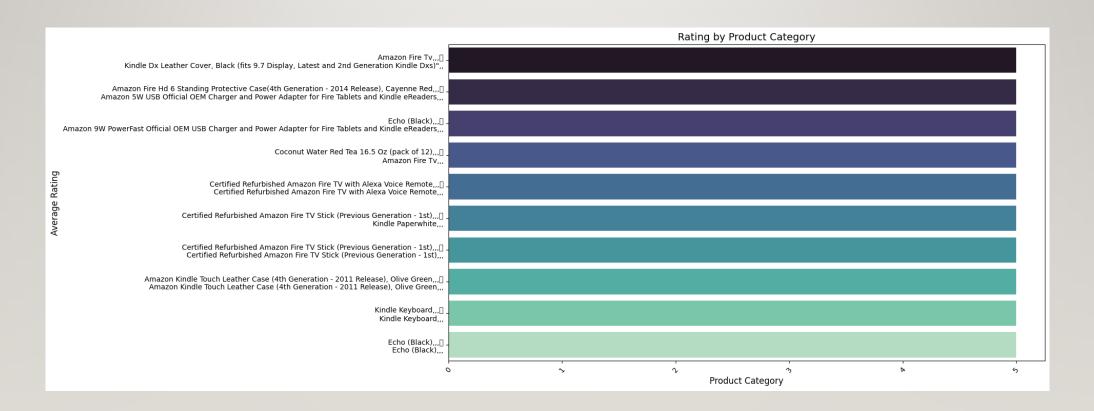
PRODUK PALING BANYAK DI REVIEW

- Product "All-New Fire HD 8 Tablet" review terbanyak
- •Amazon mendominasi list, yang mana sesuai dengan dataset yang berfokus pada Amazone product.



RATING PADA PRODUCT

10 CATEGORY PRODUCT DENGAN RATA-RATA RATING TERTINGGI



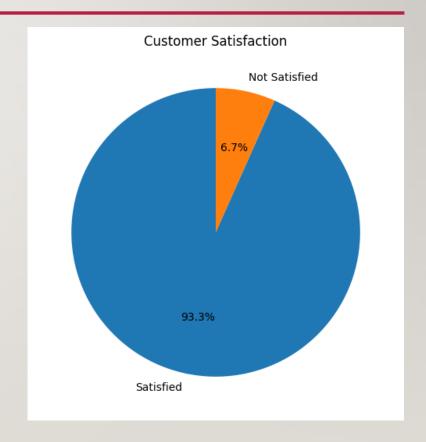
RATING PADA PRODUCT

• 10 Category product dengan rata-rata rating terendah

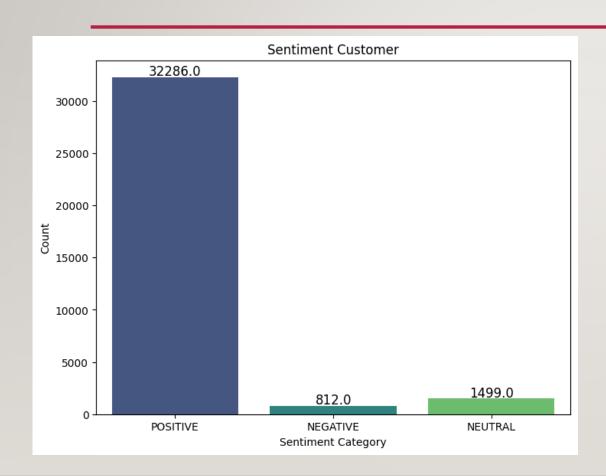


SATISFACTION CUSTOMER

- Dari review dataset didapatkan 93,3% pelanggan yang merasa puas, berdasarkan rating yang diberikan (4-5
- dan 6,7% masih belum puas(Rating I-3)



SENTIMENT



Dari data sentiment pelanggan yang mendominsai adalah sentiment positif. Sentimen yang didasari rating yang diberikan pelanggan, dimana positif adalah rating tinggi range 4-5 (statisfied), Neutral dengan rating 3 dan Negatif denga rating 1-2.

COMMENT ON POSITIF REVIEW

| id | name | glean_text | sentiment |
|--------------------------|---|--|-----------|
| AV1YE_muvKc47QAVgp wE | Fire Tablet, 7 Display, Wi-Fi, 8 GB - Includes Special Offers, Magenta | You'll never need cable again!! All you have to have is the Internet and depending out what kind of build you put on your fire TV that's all you'll ever need! | POSITIVE |
| AVphgVaX1cnluZ0- DR74 | Fire Tablet, 7 Display, Wi-Fi, 8 GB - Includes Special Offers, Magenta | You won't find a better value. Especially if you are a Prime member, this device is a fantastic basic tablet. Worth every penny. | POSITIVE |
| AVphgVaX1cnluZ0- DR74 | Fire Tablet, 7 Display, Wi-Fi, 8 GB - Includes Special Offers, Magenta | You won't find a better tablet for the price. Tried multiple different tablets in the same price range and the amazon fire outperformes them all in every category. If you want a good tablet and on a budget, this is your tablet! | POSITIVE |
| AVpfl8cLLJeJML43AE3S | Fire Tablet, 7 Display, Wi-Fi, 8 GB - Includes Special Offers, Magenta | You will very quickly learn how to talk to her in a way that she will understand and it's not unlike speaking to a small frustrating toddler. Alexa, when was George Washington born? George Washington was bornblah blah Alexa stop. There were rumors his teeth were wood but these turned out to be false, ALEXA stop speaking! There will be many times she will not understand what you're saying which can be both frustrating and hilarious. Alexa, put tomatoes on my shopping list. I've put potatoes onto your shopping listWell, guess I'm eatin potatoes. That said, now that I've learned how to speak to the Echo it usually does exactly what I want it to do. I think the echo is well worth the price | POSITIVE |
| AV1YnRtngIJLPUi8IJmV | Amazon Kindle Paperwhite - eBook reader - 4 | You will not regret this purchase! The kindle holds a charge for more than a week, is super light weight, easy on the | POSITIVE |

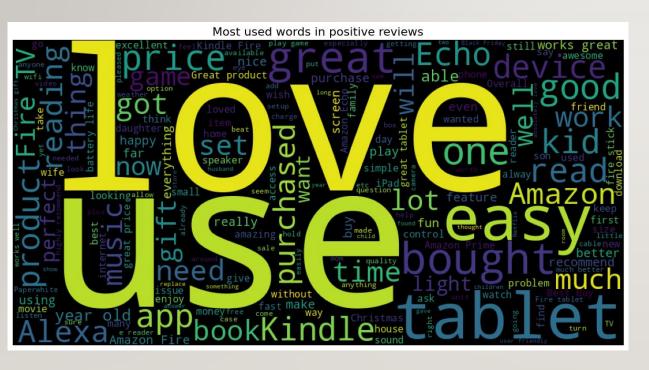
Komentar dengan sentiment positif rata-rata berkomentar tentang harga produk dan qualitas produk

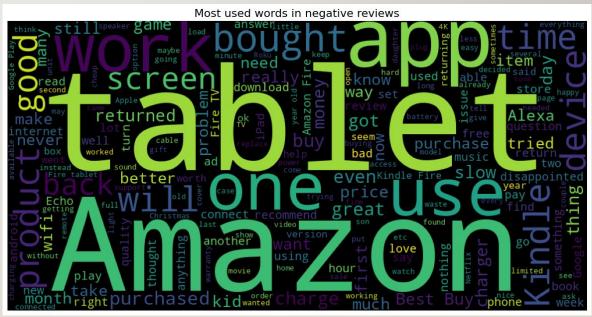
COMMENT ON NEGATIVE REVIEW

| id | clean_text | Sum of reviews rating | sentiment |
|----------------------|--|-----------------------|-----------|
| AV1YE_muvKc47QAVgpwE | After about two weeks I ended up returning this item. It constantly froze and when it was working it was no faster than my fire stick. The voice search was a joke. I'm pretty tied in to the Amazon ecosystem, I love my Echo, but I was disappointed with this device. And for a hundred dollars? No thanks. | 2 | NEGATIVE |
| AV1YE_muvKc47QAVgpwE | After setting up the Amazon Fire it froze on me and I had to return it! | 1 | NEGATIVE |
| AV1YE_muvKc47QAVgpwE | Amazon is at the forefront of 4K content, offering several shows in HDR. Then why isn't their very own streaming player capable of displaying it? And at only 30 fps to boot. This was obviously built to a price but if you've already shelled out the money for a 4K TV wouldn't you want it to be able to display all that it's capable of? The Roku is, at present, the far superior product. | 1 | NEGATIVE |
| AV1YE_muvKc47QAVgpwE | At first, the fire box was great. After two months the remote stopped working. I'd say save some money and just get the fire sticks. I have two of them and no problem. The fire tv box has been nothing but issues. | 1 | NEGATIVE |
| AV1YE_muvKc47QAVgpwE | Barely 4k content and it lags a lot. Not worth it. Returned! | 1 | NEGATIVE |
| AV1YE_muvKc47QAVgpwE | Basically has almost the same content as a Roku 3 would provide, but in a much more clunkier menu. I can get a better Amazon menu layout via the Amazon app on the Roku 3. Also for those that were hoping to pick up some extra football via FOX sports network (FS1), that is not happening. You can add the channel free, but in order to watch any content you will still need a cable or satellite subscription which defeats the whole purpose of adding the app for us cord cutters. There is NO way I am signing back up for cable or satellite. I wish FS1 would get with the program and offer a separate subscription such as HBO and Showtime do. It's a thumbs down for me. | 1 | NEGATIVE |
| AV1YE_muvKc47QAVgpwE | Bought the fire TV excited about the 4K support. The first night it refused to load video content. I could only stream music. Now it refuses to load at all. It has completely stopped responding to the remote. Remote feels cheap. | 1 | NEGATIVE |
| Total | | 122064 | |

Komentar dengan sentiment negative dan rating rendah, rata-rata komentar atau complain tentang performa produk yang kurang baik.

WORDCLOUD





REKOMENDASI

- Beberapa rekomendasi yang dapat dilakukan untuk meningkatkan kepuasan pelanggan
- I. untuk rating yang rendah, insvestigasi isu /permasalahn yang spesifik, jika dilihat juga dari komentar product quality, usability, harus ditingkatkan
- 2. Fokus pada peningkatan kepuasan pelanggan rating redah atau meniru kesuksesan dari produk yang berating tinggi, jika dilihat dari text review rating tinggi dengan sentiment positif sebaian besar m
- 3. berikan Reward pada loyal customers (discounts, penawaran khusus) dan mengoreksi permasalahan yang dikritik pelanggan.

TERIMA KASIH