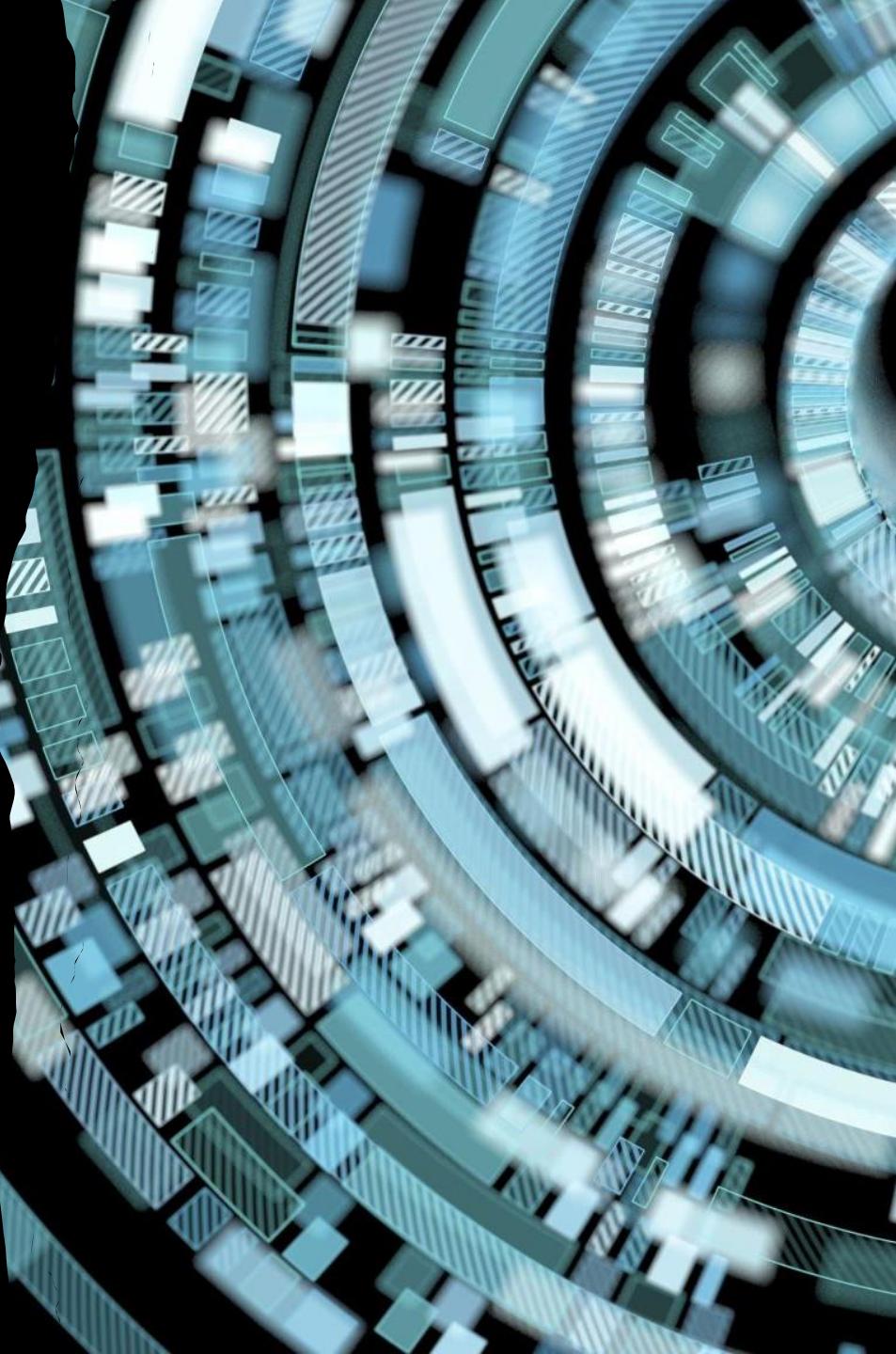


# Surface & iPad Reddit Analysis

Tanupong Rattanasawatesun



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# Introduction

# What is Microsoft Surface?

- ❖ A touchscreen-based laptop
- ❖ Well suited for tasks like writing, editing large spreadsheets and databases, and programming
- ❖ Small range of app is designed for Window's tablet.



# What is iPad?



- ❖ Apple's well-known tablet.
- ❖ Comparing to Surface lineup, iPad is the better tablet, and it's ideal for creative tasks.
- ❖ With magic keyboard, iPad march into laptop territory and start gaining share.

# What is reddit?

- Social new website and forum.
- Composed of hundreds of subcommunities, known as subreddits.
- There are more than 430 million monthly active Reddit users worldwide (Reddit, 2019).



 Microsoft Surface [Join](#)

r/Surface

[Posts](#) [Filter](#) [Highlights](#) [Megathreads](#) [Support](#) [Tools](#)

 Create Post  

 Hot  New  Top ...

 PINNED BY MODERATORS

1 Posted by u/AutoModerator 2 days ago

✓ Purchase Advice Thread (March 15)

26 Comments  Share  Save ...

1 Posted by u/shcanthinkofusername 14 hours ago

345 [LAPTOP3] my new sticker for my surface pro 3



**About Community**

A subreddit for the Microsoft Surface family of products. Anything but ordinary.

**139k** Members **802** Online

Created May 23, 2012 [Create Post](#)

**COMMUNITY OPTIONS**

**Filter by flair**

[LAPTOP3] [BOOK3] [DUO]  
[DOCK] [LAPTOPGO] [X]  
[HEADPHONES] [PRO7] [APP]

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[Posts](#) [What should I buy?](#) [Tech-Support](#)

 Create Post  

 Hot  New  Top ...

 PINNED BY MODERATORS

4 Posted by u/AutoModerator 1 day ago

✓ Weekly Discussion and Tech-Support Thread [Discussion](#)

20 Comments  Share  Save ...

4 Posted by u/AutoModerator 1 day ago

✓ Weekly 'What should I buy?' Thread [Discussion](#)

76 Comments  Share  Save ...

314 Posted by u/lucelleent 9 hours ago

✓ New iPad Pros with M1-caliber chips (A14X), better cameras, Thunderbolt port, and updated screen on 12.9 inch version coming next month [News](#)

bloomberg.com/news/a... 

84 Comments  Share  Save ...

58 PROMOTED · Posted by u/UL\_Benchmarks 6 months ago 

✓ Test and compare the performance of your gaming PC with 3DMark benchmark. Get in-depth insights into the performance and stability of your PC hardware with in-depth results and hardware monitoring

**About Community**

For all things iPad & iPad Pro. Information, discussion, news, iPadOS, hardware, and more about the company out of Cupertino and its great tablet.

**246k** Members **1.0k** Online

Created Jan 27, 2010 [Create Post](#)

**COMMUNITY OPTIONS**

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Discussion News Review  
Question Magic Keyboard  
Accessories My Setup Media

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<https://www.reddit.com/r/Surface/>

<https://www.reddit.com/r/iPad/>

## Problem statement

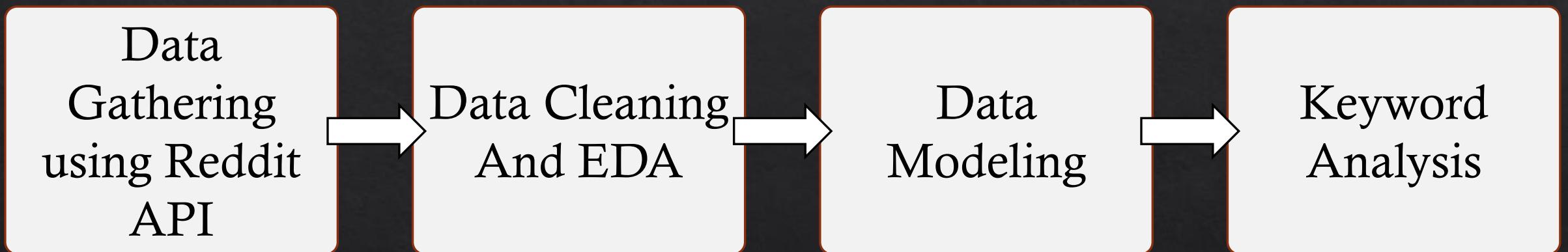
What is the keyword most appear in surface and iPad subreddit post?

Are they the negative or positive words?

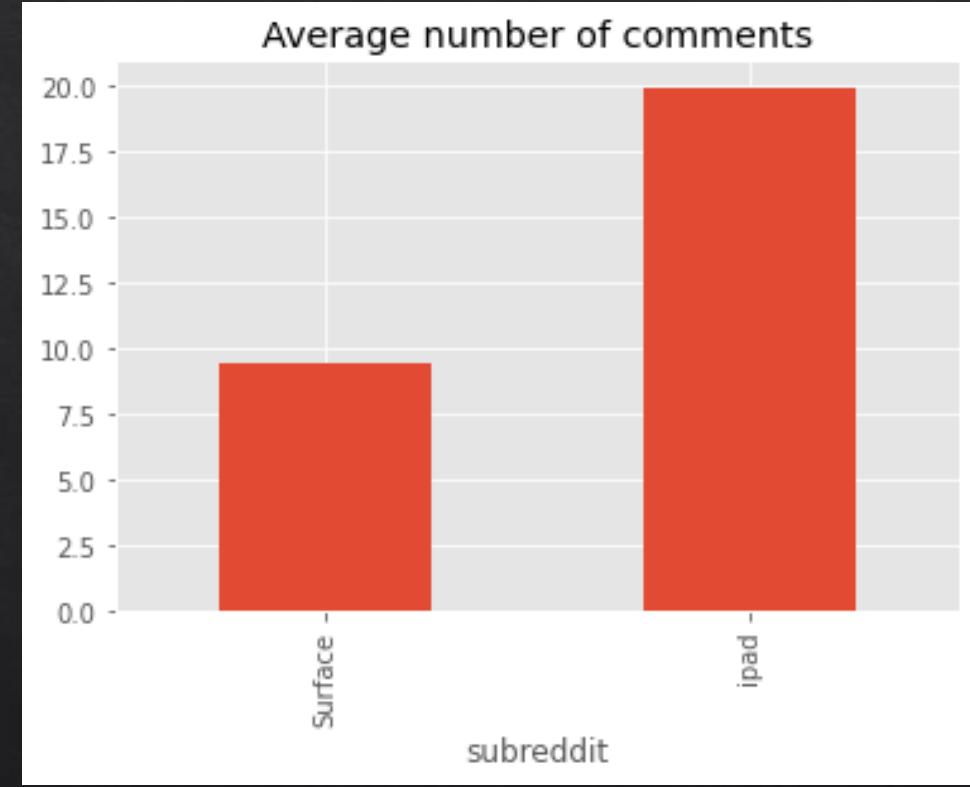
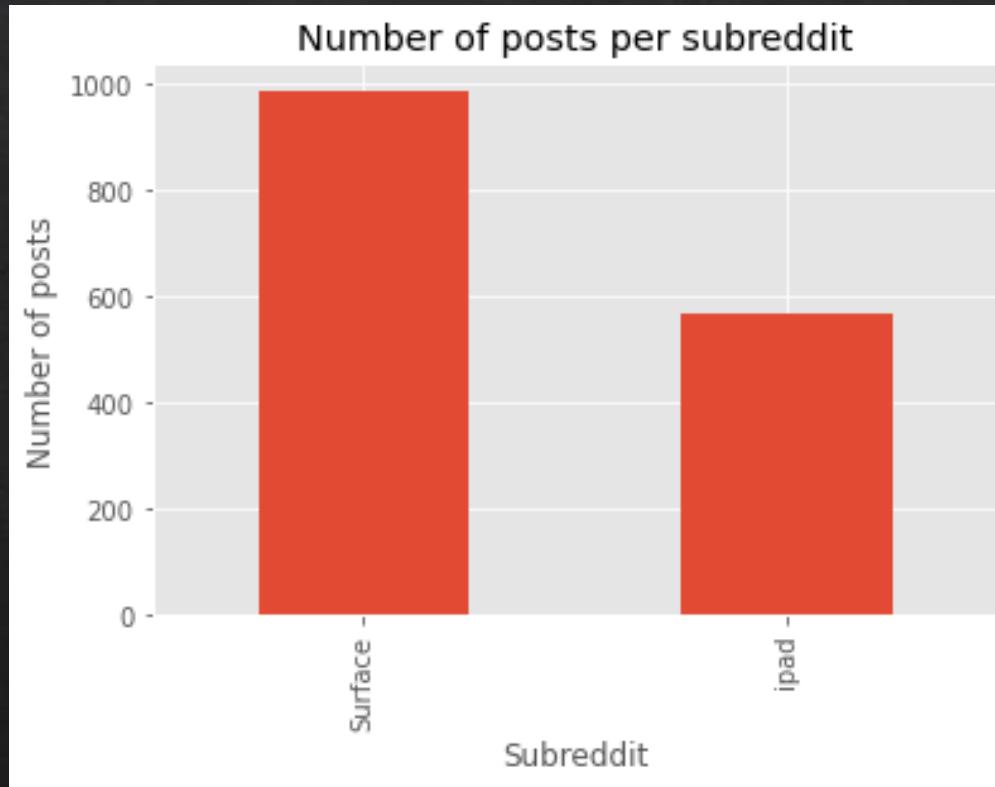
And how to make a development of surface series based on Surface's weakness  
or iPad's strength?

# Exploratory Data Analysis

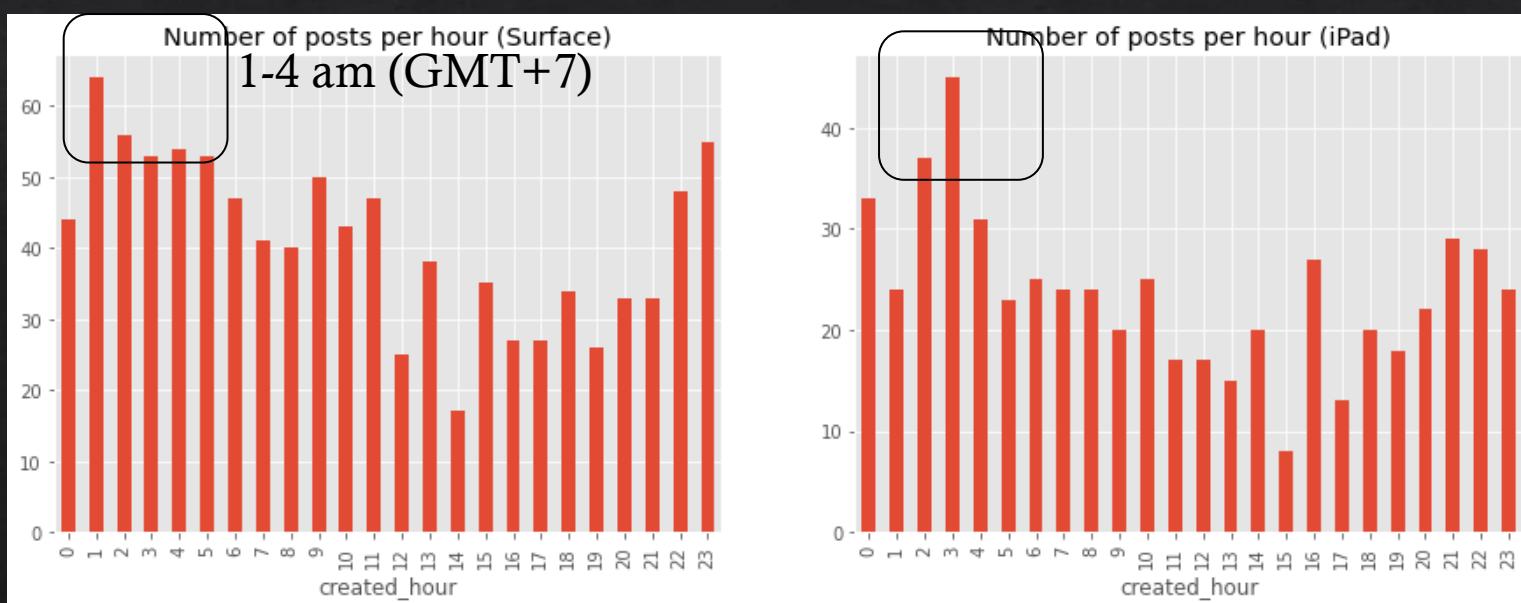
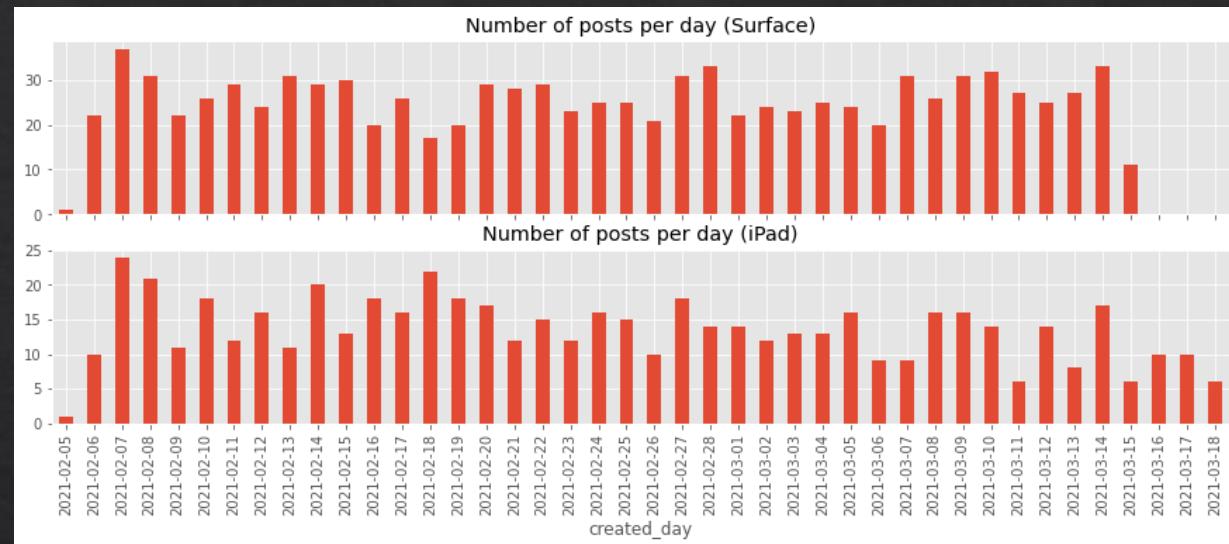
# Methodology



# EDA (1): Posts and Comments

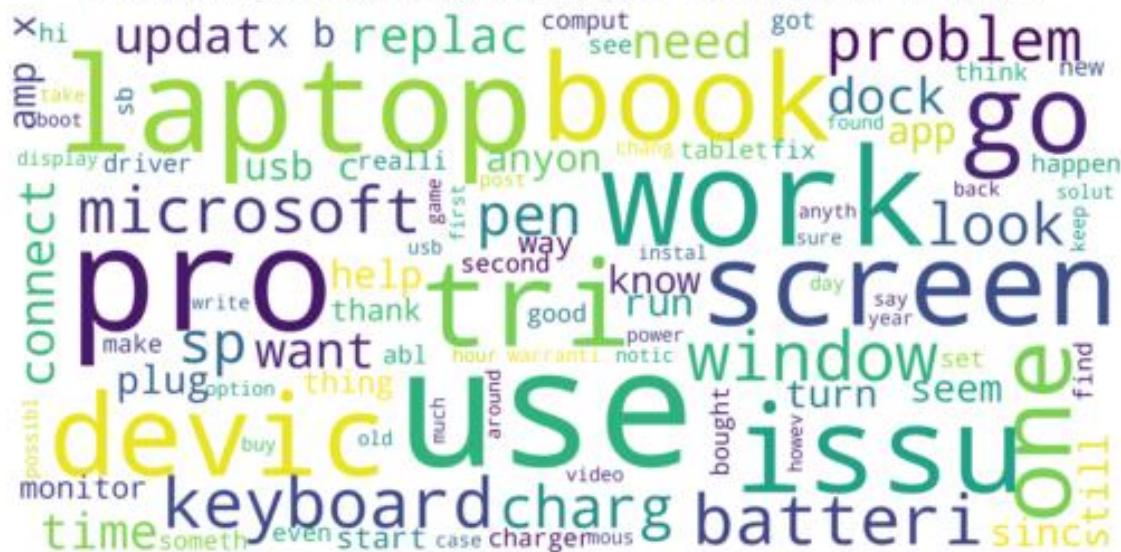


# EDA(2): Movement



# Most common word

## Surface's subreddit most common words

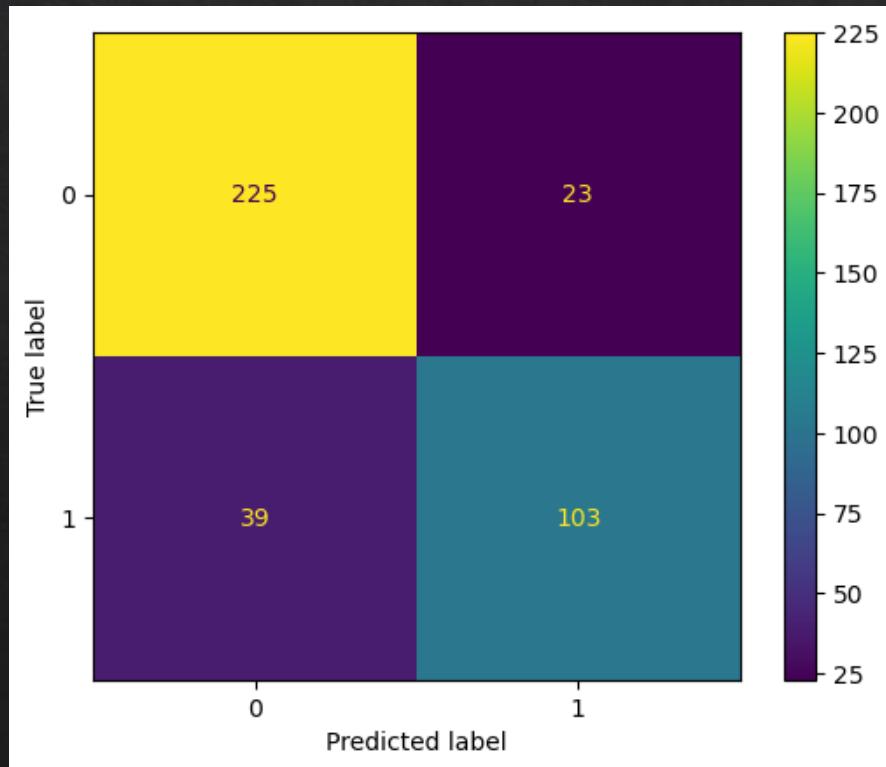


## iPad's subreddit most common words



# Results and Discussion

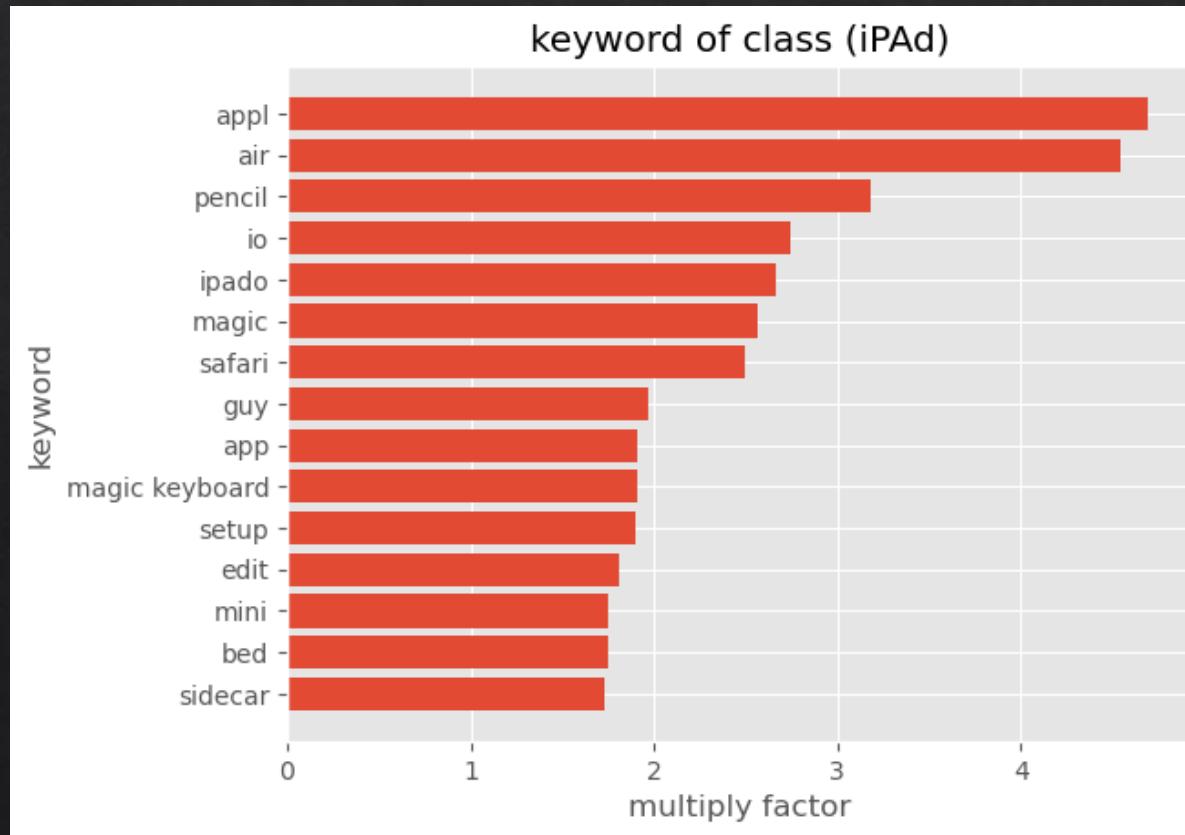
# Model: CountVectorizer + LogisticRegression



- ❖ Accuracy : 0.8410
- ❖ Sensitivity: 0.7235
- ❖ Specificity: 0.9072

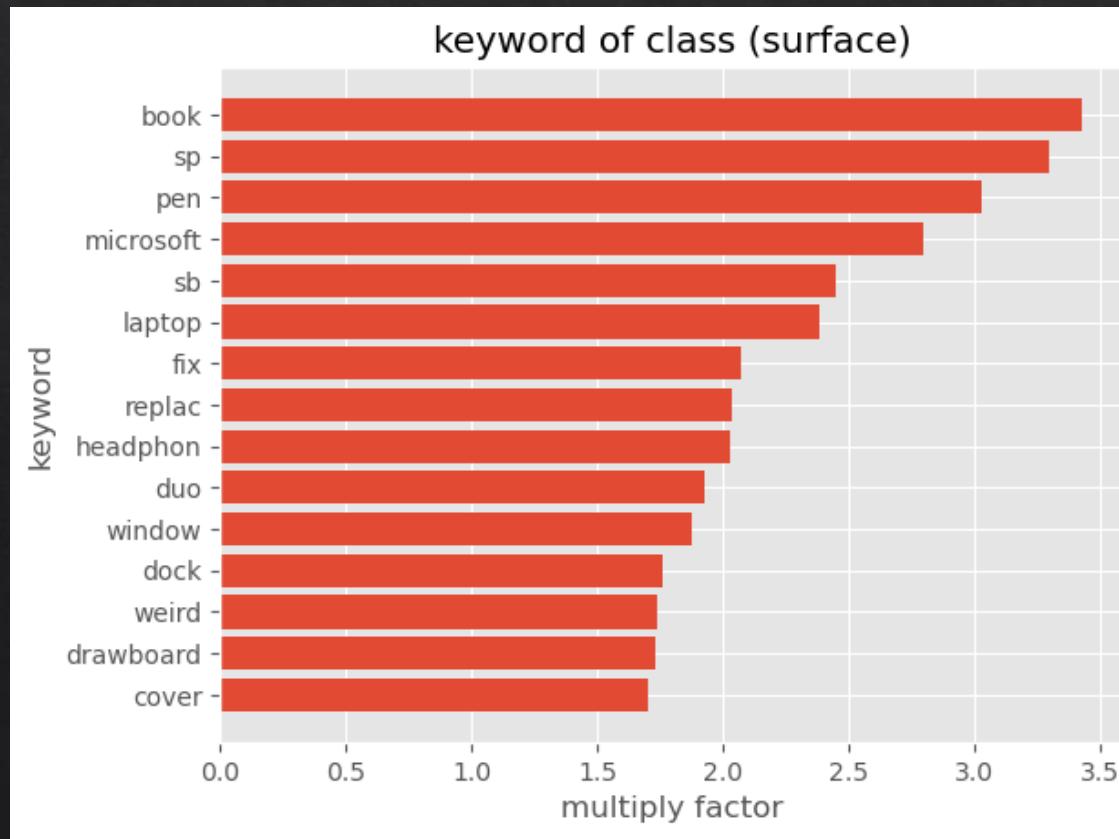
Due to **Unbalanced Class**

# Keyword of iPad subreddit



- ❖ Contain Apple's product or name such as
  - ❖ Apple
  - ❖ Air (model)
  - ❖ Pencil
  - ❖ io (iOS)
  - ❖ Magic keyboard
  - ❖ Safari
- ❖ Or features like ‘Sidecar’

# Keyword of Surface subreddit



- ❖ Also contain its model and Company/OS
  - ❖ Book, sp, sb (model)
  - ❖ Microsoft
- ❖ However, it showed some negative-word.
  - ❖ Fix
  - ❖ Replace
  - ❖ Weird

# Wrong prediction : surface

So since Office Lens stopped working in 2021 I need a new **app** for my Surface Pro. After a long google search I didn't find any useable alternative.

Features I need:

- \* OCR: can extract text and put in pdf
- \* In case I want the document raw it should be able to "correct" the picture:  
[this](<https://support.content.office.net/en-us/media/4e74f73e-e132-4d7e-93fa-d12b6d3895d7.png>) should be turned into  
[this](<https://support.content.office.net/en-us/media/6da07ed2-f8fc-44a5-bc15-dd2b77c9dab9.png>) (pictures are from office lens)
- \* installable app that works offline

Nice to have features:

- \* Can directly take pictures in the **app**
- \* Can directly edit pdfs if the **app** (in case the OCR made mistakes)

Normally, window users tend to use the word 'Program' instead of 'App'.

# Wrong prediction ipad

Contains 'book' which  
is 'surface' keyword.

As the title stated, every time I open a file of any type: books, videos, movies or audio on my iPad Pro 2020 on my hdd, that file is recognized as corrupted on my windows laptop. However my iPad can still read the files as they're pretty much intact there. Does anyone have a fix for this?

# Conclusion & Recommendation

# Conclusion

- ❖ Model can be used to classify texts into ‘surface’ / ‘iPad’ related topics with the accuracy of 84%
- ❖ Most of iPad keywords are Apple well-known products indicating **strong marketing-campaign**.
- ❖ Even though, Surface keyword showed the similar trend (Microsoft products), it also contains ‘fix’ and ‘replace’

# Recommendation

- ❖ To improve the model's accuracy, more posts of iPad should be incorporated in the model.
- ❖ Based on the keyword analysis,
  - ❖ Microsoft should consider improving **product endurance** to reduce number of warranty claim. This can increase customer satisfaction on product.
  - ❖ Microsoft should consider launching **aesthetic products/items** for surface line-ups. This can attract new customers who enjoy decorating their products.

THANK YOU FOR YOUR  
ATTENTION