

Lab 8 WDA - Sentiment Analysis

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For our ten companies, we chose for each two videos : the video with the most views on the channel and a video posted 7 days ago (or more if the most recent video is more than 7 days old) relative to the date of the analysis (07.04.2025). This will hopefully get us a wider variety of comments and a more interesting sentiment analysis. The links to the videos are the following :

1. **Apple** (<https://www.youtube.com/@Apple>)

Unfortunately, we have to exclude Apple from our analysis, since the channel moderators have decided to disable comments on all of their Youtube videos.

2. **Samsung** (www.youtube.com/@Samsung)

1. <https://youtu.be/-kfb1th4tW0?si=Y9x56-2T14p1kv0I>
2. <https://youtu.be/55p0nryjKQA?si=Wavccrd5ogqmdOxi>

3. **Huawei** (www.youtube.com/@huawei)

1. https://youtu.be/1dnt7FP7qaw?si=Cp_MojLYbG9VTTdG
2. <https://youtu.be/v6LqCTpq73s?si=zCCJx-WNScpVKWyW>

4. **Xiaomi** (www.youtube.com/@xiaomi)

1. <https://youtu.be/NhSgcel4icM?si=zvDy8LTJ8Vu1OLfc>
2. <https://youtu.be/ixajHBaPXUk?si=WkeZQEDRYEZ7p86O>

5. **Google (Pixel)** (www.youtube.com/@madebygoogle)

1. <https://youtu.be/ZSbrP-ckTfU?si=SHJwD0OZ02xWsVGv>
2. <https://youtu.be/k2Bz3uHiyhQ?si=r5jgmQy2zL9942jv>

6. **OnePlus** (www.youtube.com/@OnePlusTech)

1. https://youtu.be/bWq_NYu9tSU?si=OFkJIN_ITreNvieC
2. <https://youtu.be/GcXUi1Xj9i8?si=w7935t5MJSrElgOV>

7. **Sony (Xperia)** (www.youtube.com/@Sony)

1. <https://youtu.be/iJUab499PVA?si=6S2RO0JF7lgERwW9>
2. <https://youtu.be/4QMtiyciyYI?si=jEqAmVuNaOt8-lGa>

8. **Nokia** (www.youtube.com/@Nokia)

1. https://www.youtube.com/watch?v=H5VeQ9d_Q88
2. <https://www.youtube.com/watch?v=A3M0CrXOF90>

Nokia posts a lot of short videos with very small amount of views and comments. Also, they decided to remove comments on their most popular videos. We decided to pick the two videos with the most views possible that have comments enabled.

9. **Motorola** (www.youtube.com/@Moto)

1. <https://youtu.be/9ntdGWhRCpU?si=xxuOZ8KEQYde4CSh>
2. https://youtu.be/7RnOPr_olXQ?si=kN1IAV6Kfc0xA18h

10. **OpPO** (www.youtube.com/@OPPOglobal)

1. https://youtu.be/CtF1sdPwESI?si=pZ_3dfplPU-eQOpG
2. https://youtu.be/E-ZerOMeDuE?si=ZoU7uruCk4_xPj-

To extract those comments, we used the tool Youtube Multi Video Downloader, created by user ashleve, available on GitHub

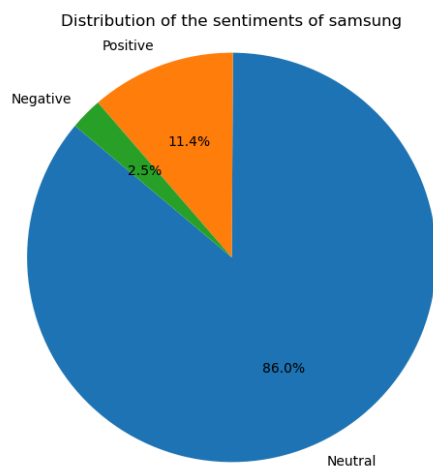
(https://github.com/ashleve/youtube_multi_video_comment_downloader)

Then, we used a little script to clean the comments obtained to be left only with the text of the comment, and then we performed the sentiment analysis with a simple python script using the TextBlob library. Finally, we wrote another script which created the plots in the next section. We are attaching these scripts on the tarea.

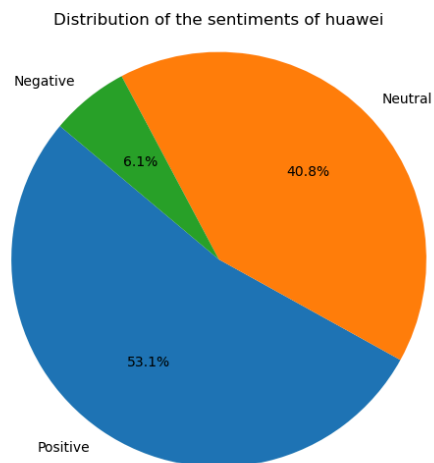
Here are the result of the analysis for the 10 companies :

Apple - nothing (comment disabled)

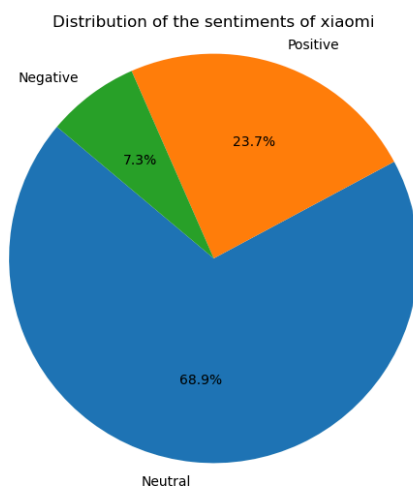
Samsung



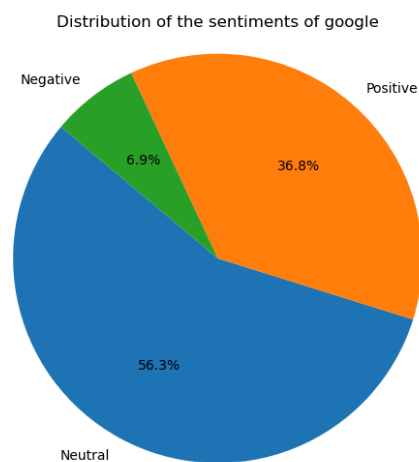
Huawei



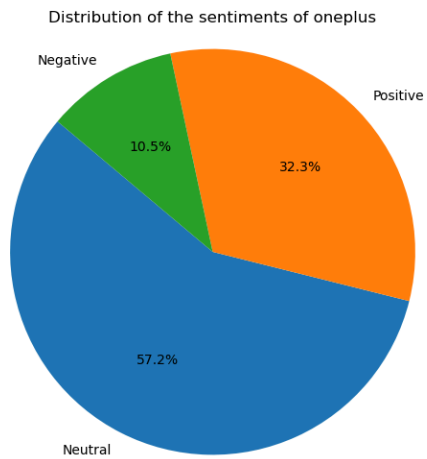
Xiaomi



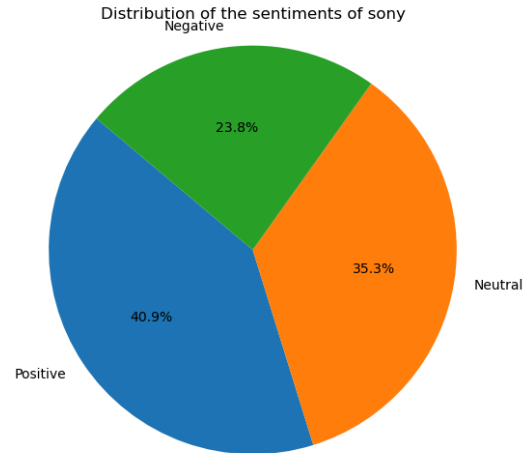
Google Pixel



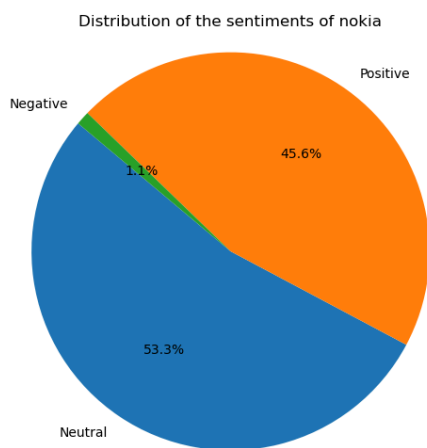
OnePlus



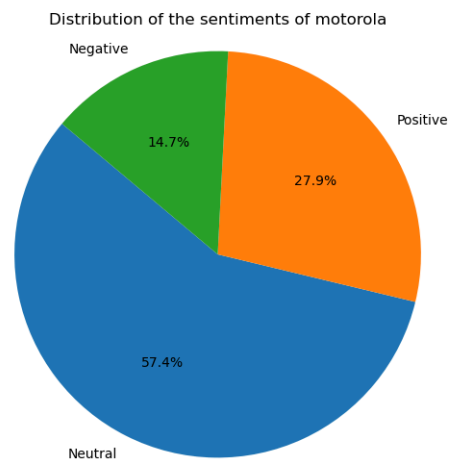
Sony (Xperia)



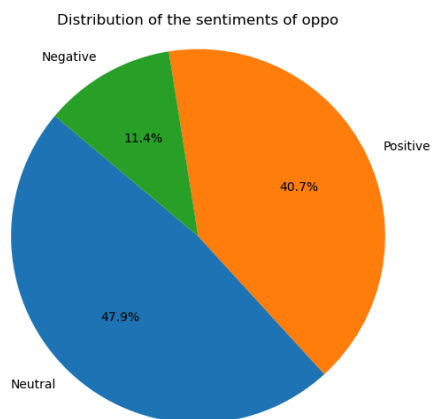
Nokia



Motorola



Oppo



Detailed sentiment analysis by company :

Google (Pixel) enjoys a robust positive sentiment, indicating a strong appreciation for its products. The significant neutral sentiment suggests general contentment or a lack of strong feelings, while the relatively low negative percentage shows few substantial issues with the brand.

Huawei displays a very high positive sentiment, reflecting excellent consumer satisfaction and potentially effective marketing strategies. The neutrality could suggest a cautious optimism, possibly influenced by external business conditions or geopolitical issues.

Motorola's sentiment profile indicates a majority neutral perception, with a significant negative sentiment that could be concerning, pointing to potential dissatisfaction among a subset of consumers. The positive sentiment, while decent, suggests room for improvement.

Nokia shows strong positive sentiment and an overwhelming neutral response, coupled with an exceptionally low negative sentiment. This indicates a high level of consumer trust and satisfaction.

OnePlus has a healthy positive sentiment but a noticeable level of negativity, suggesting areas where consumer expectations may not be fully met. The substantial neutral sentiment indicates a significant portion of the audience is reserved in their judgment, possibly waiting to see how the brand evolves.

Oppo enjoys a strong positive response, indicative of successful market penetration and consumer satisfaction, particularly in competitive markets. The negative sentiment, while not negligible, suggests specific areas that could be improved.

Samsung shows an overwhelmingly neutral sentiment, indicating a broad acknowledgment without strong feelings either way. The low positive and negative sentiments suggest a stable presence in the market but also highlight a potential lack of excitement or innovation perceived by the audience.

Sony exhibits a mixed sentiment with a high negative percentage, which is concerning and suggests dissatisfaction among a significant portion of its audience. The positive sentiment is robust, indicating a strong fan base, potentially loyal to Sony's legacy in quality electronics, but they need to address the cause of the large amount of negative sentiments.

Xiaomi's largely neutral sentiment suggests general satisfaction or non-contentious views among consumers, with a respectable positive sentiment indicating appreciation for its value-for-money proposition.

Comparative analysis across companies:

- **Most positive sentiments:** Huawei and Oppo show the highest positive sentiments, indicating strong customer satisfaction and brand approval. Other companies such as Nokia also exhibit very high positive sentiment.

- **Most concerning negative sentiments:** Sony stands out with the highest negative sentiment, suggesting specific areas requiring urgent attention to improve consumer perceptions.
- **Least negative sentiments :** Nokia has the least negative comments, with a remarkably low negative sentiment percentage of **1.1%**. This indicates an exceptionally favorable consumer perception with minimal dissatisfaction or complaints regarding their products or services. This could be reflective of successful quality control, customer service, or product satisfaction among Nokia's users.
- **Most neutral sentiment:** Samsung's high neutrality might indicate a mature market presence but could also suggest a need for reinvigorating brand engagement strategies to boost consumer enthusiasm.