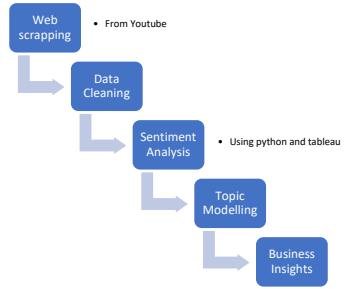


Name	Tathagata Chakraborty
Roll	DM251081
Topic	NLP Implementation on customer reviews upon Redmi Note 6 Pro Launch



REDMI NOTE 6 PRO

Workflow

Executive Summary :

I have conducted an **NLP-based analysis** of **Redmi Note 6 Pro reviews** to understand customer feedback. My project focuses on **sentiment analysis, topic modeling & EDA**.

Using machine learning models and NLP techniques, I have classified sentiments into positive, neutral, and negative and identified key topics like battery life, camera, performance, and software updates. I have also used word clouds and sentiment trends to make the insights clearer.

My findings show that most reviews are positive, but some users have complained about MIUI updates and heating issues. These insights can help Xiaomi improve its user experience. In the future, I plan to explore advanced deep learning models for better accuracy.

Data Collection:

I extracted YouTube comments on Redmi Note 6 Pro reviews from famous reviewers of YouTube using YouTube API Key obtaining authorization

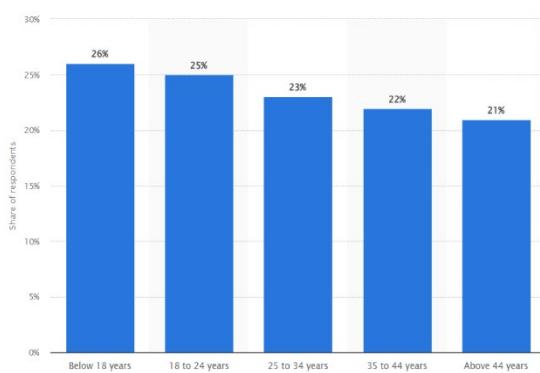
Credentials from Google Developers console through application, since it has a limit I couldn't extract more than 359 comments.



The word cloud Analysis of Redmi Note 6 Pro reviews reveals that users are highly satisfied with the camera quality, as words like "good," "camera," "quality," and "nice" dominate the cloud. The battery performance and display quality are also key highlights. However, some users have raised concerns about performance issues, as words like "issue," "problem," and "low" are present.

Additionally, pricing and value for money are significant factors, with words like "price," "budget," and "Amazon" indicating affordability and online purchase trends. The mention of "Realme" suggests that users are comparing it with competitor brands.

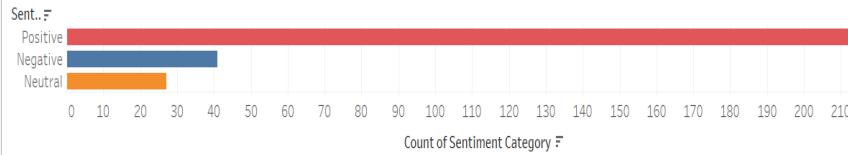
Overall, the feedback is mostly positive, with a focus on camera performance and quality, but with occasional complaints about performance and other minor issues.



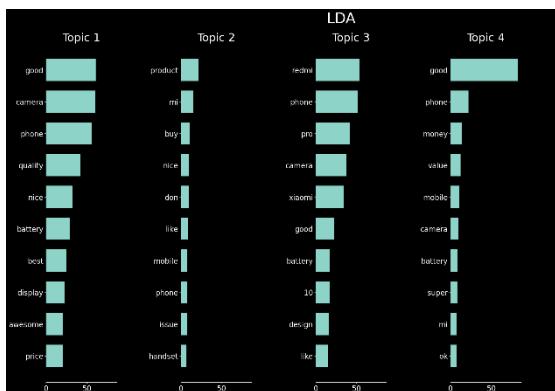
Inferences:

1. **Youth Appeal:** Xiaomi is most popular among **below 18 (26%)** and **18-24 (25%)** age groups.
 2. **Declining Trend:** Ownership decreases with age, with **21%** in the above **44 age group**.
 3. **Market Strategy:** Focus on **youth-centric features** while enhancing **premium offerings** for older users.

Sentiment Scoring



The sentiment analysis shows that **most reviews are positive**, with some negative feedback and few neutral reviews, indicating **high user satisfaction with minor issues**.



... WARNING:gensim.models.ldamodel:too few updates, training might not converge; consider increasing the number of passes or iterations to improve accuracy
 Topic #0: 0.171*"camera" + 0.057*"product" + 0.059*"money"
 Topic #1: 0.161*"camera" + 0.118*"notch" + 0.053*"light"
 Topic #2: 0.160*"battery" + 0.093*"please" + 0.069*"camera"
 Topic #3: 0.134*"quality" + 0.077*"display" + 0.076*"amazon"

The LDA (Latent Dirichlet Allocation) topic modeling results reveal the following insights:

1. Topic 1: Focusing on Quality and Camera Performance

Keywords like "good," "camera," "quality," "battery," and "display" suggest that this topic revolves around user satisfaction with camera quality, battery life, and display performance.

2. Topic 2: Purchase and User Experience

Words like "product," "buy," "nice," "mobile," and "issue" indicate user feedback on the buying experience, product satisfaction, and occasional issues.

3. Topic 3: Brand and Performance

Keywords like "Redmi," "Xiaomi," "pro," "good," "camera," and "battery" highlight brand recognition, performance evaluation, and camera performance.

4. Topic 4: Value for Money

Words like "good," "money," "value," "mobile," "camera," and "super" suggest a focus on affordability, quality, and overall user satisfaction with the product's value for money.

My Business Strategy for the Redmi Note 7 Launch

1. I will target the youth-centric market, as the majority of Xiaomi users fall within the below 18 and 18-24 age groups. I'll focus on enhanced camera features, powerful battery life, and a sleek design to capture their interest.
2. I will enhance the strengths that users loved, like the camera quality, battery performance, and display experience. I'll introduce AI camera enhancements, a 5000mAh battery, and a high-refresh-rate display to deliver a top-notch experience.
3. I will address the negative feedback, such as heating issues and design flaws. I'll work on better processor optimization, regular software updates, and improved build quality to enhance customer satisfaction.
4. I will set an affordable pricing strategy, between ₹10,000-₹15,000, to attract value-seeking Indian consumers who appreciate quality at a reasonable price.
5. I will run targeted marketing campaigns, especially on social media, to connect with younger audiences. I'll also offer exchange programs and EMI options to appeal to older users and expand in Tier-2 and Tier-3 cities.
6. I will strengthen after-sales support, ensuring a robust service network to handle customer complaints and build long-term trust.