

# Group project: Spotify's buzz analysis

Start Presentation

Big Data Based Marketing Analytics



## Group Project



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Spotify is a digital music, podcast, and video service that gives you access to millions of songs and other content from creators all over the world.

Basic functions such as playing music are totally free, but you can also choose to upgrade to Spotify Premium.

Whether customers have Premium or not, they can:

Get recommendations based on their taste  
Build collections of music and podcasts  
And more!





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Seif Yacoub   Tarek Mestrah   Amal Yakubov



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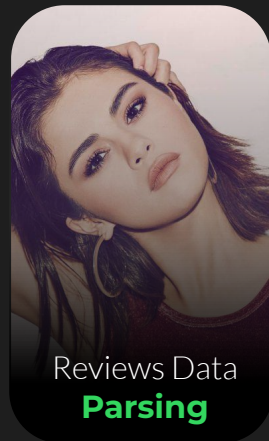
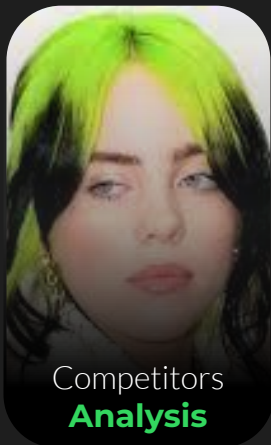


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# Competitors Analysis

## Spotify Competitors in Russia

- Yandex Music
- Apple Music
- VK Music
- Zvuk Music

Platform	Service Name	Price/Month
Spotify	Spotify Premium	169 RUB
VK Music	VK Combo	159 RUB
Yandex Music		299 RUB
Apple Music	Individual	169 RUB
Zvuk		169 RUB



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# Spotify Competitive Advantages

A. Spotify has a larger library of music tracks than its direct competitors.

B. All services do an excellent job of music recommendations and user preferences, but Spotify is somewhat better because it also has a larger library.

C. The search for foreign music is much faster and clearer in Spotify, but the Russian-speaking segment of the music world is better and easier to search in Yandex Music and other Russian platforms.

D. High quality and user-friendly interface.

E. Spotify can gather more user's data, so the user data at Spotify is a valuable resource that allows Spotify to use machine learning and artificial intelligence to give users a personalized listening experience





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# Data: scraping and preprocessing

1. Data retrieved from google play store ([link](#))
2. Data was retrieved with a Python library google-play-scraper
3. Data was splitted into 5 columns: time\_submitted, review, rating, author\_account\_name, reply ([link](#))
4. We set the review filter to English for a clearer analysis



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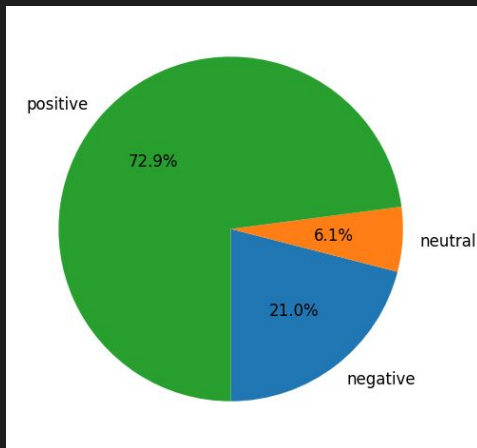
Topic Modeling



Conclusions

# Sentiment Analysis & NPS For Spotify

- **Sentiment analysis** helps us study and analyse the impact and influence of the services we provide.



We used the dataset with thousands of reviews to analyze the user's ratings.

72.9% of the analyzed reviews are positive while 21% were negative.

- Link to Colab:  
<https://colab.research.google.com/drive/1i-mzt8p1hD7lBjeEkQ9KoSI-L3nIW-lo?usp=sharing#scrollTo=qmMRhoIJ9nCq>





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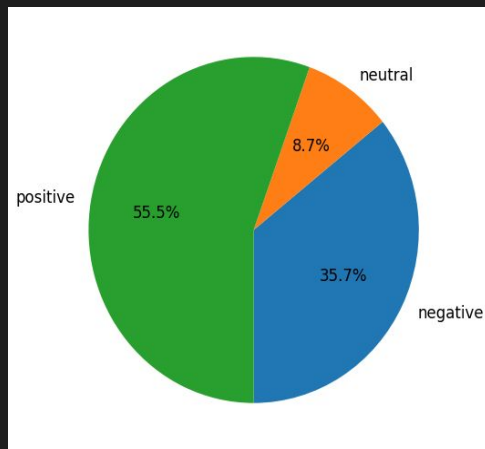


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# Sentiment Analysis & NPS For VK music



We used the dataset with thousands of reviews to analyze the user's ratings.

55.5% of the analyzed reviews are positive while 35.7% were negative.

- Link to Colab:  
[https://colab.research.google.com/drive/1Zlv\\_TbbZiNiAYCIE-PJdrkOduwNraPhk?hl=en#scrollTo=i9qESS3f8ID5](https://colab.research.google.com/drive/1Zlv_TbbZiNiAYCIE-PJdrkOduwNraPhk?hl=en#scrollTo=i9qESS3f8ID5)



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## Competitors Analysis



## Reviews Data & Semantic Analysis



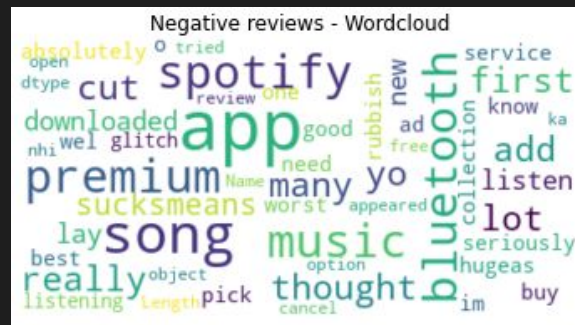
# Topic Modeling



## Conclusions

# Semantic Analysis & NPS

- As seen below, the top words used in the reviews were analyzed and split into 2, the most used in positive reviews and the top used in negative reviews.



- For Spotify, The Net Promoter Score(NPS) was calculated in the code, the result is 51.93%
- For VKmusic, the NPS is 19.75%



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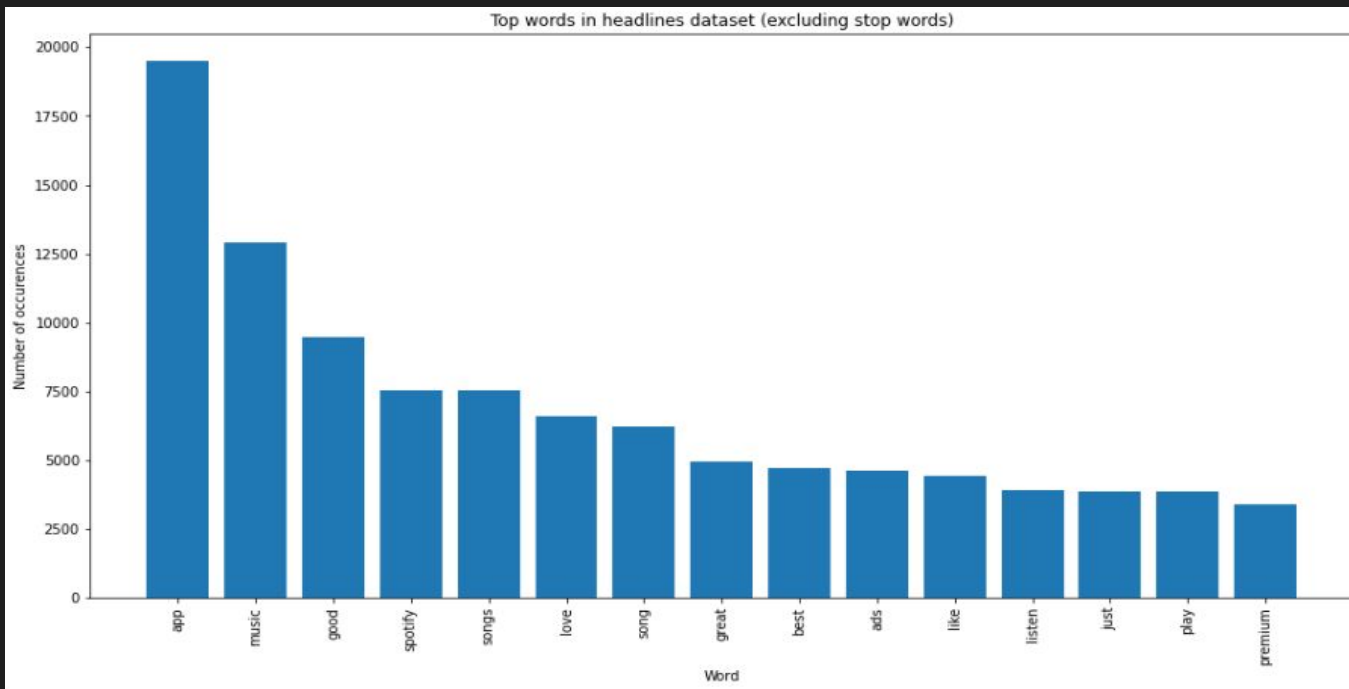


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# Topic Modeling Spotify



In the topic modeling ([link](#)) we can see the top words



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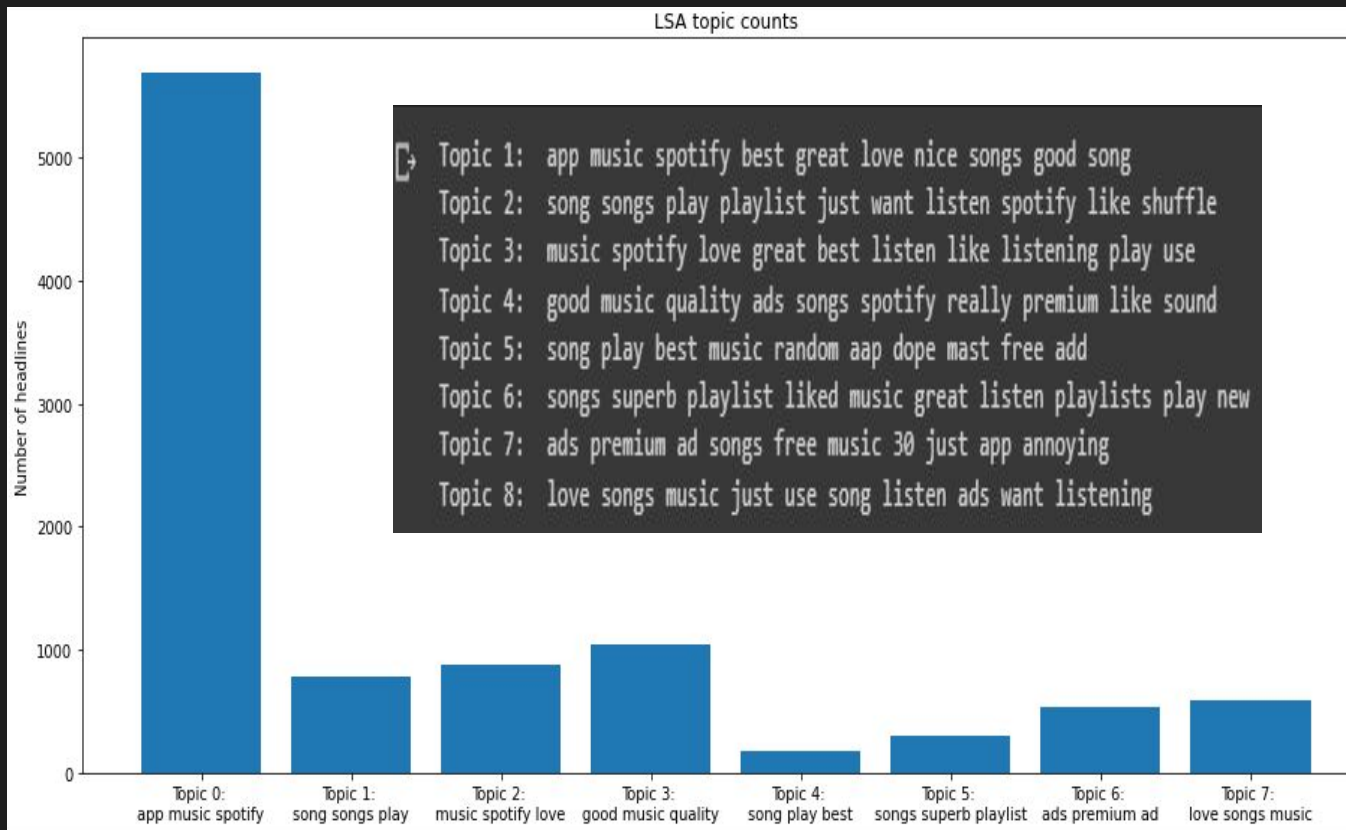


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# Topic Modeling Spotify





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# Topic Modeling Yandex

Topic 0:

good music great best nice like playlist song really service

Topic 1:

great music best like nice playlist ever yandex listening service

Topic 2:

great good overall search experience opportunity single подборка selection star

Topic 3:

приложение очень музыки отличное есть музыку только яндекс треков если

Topic 4:

nice cool really work song thanks like application love stuff

Topic 5:

cool really stuff like perfect country application app free version

Topic 6:

like music available playlist really country yandex awesome love song

Topic 7:

приложение отличное удобное хорошее like классное лучшее всем прослушивания really

Topic 8:

perfect love music yandex song excellent playlist listening developer listen

Topic 9:

perfect like best developer nice much playlist quality ever great



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# Topic Modeling VK

Topic 0:

приложение отличное очень хорошее музыку удобное супер крутое музыка музыки

Topic 1:

супер спасибо просто класс отлично пока нравится очень приложения было

Topic 2:

отличное приложение супер предложение звезд нашёл лучшее цена никаких месяца

Topic 3:

норм отлично отличное музыка подписку музыку работает пока слушать музыки

Topic 4:

норм круто очень нравится класс приложение крутое удобное хорошее классно

Topic 5:

отлично нравится класс очень приложение работает удобное хорошее пока крутое

Topic 6:

круто отличное отлично музыка музыку слушать подписку приложения могу было

Topic 7:

отличное нравится класс очень удобно хорошо музыка пока норм музыку

Topic 8:

класс круто приложение подписку просто оформить могу большое спасибо почти

Topic 9:

подписку оформить могу нравится отменить получается купить оплатить продлить очень



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# Topic Modeling Sber

Topic 0:

приложение очень музыки музыку только просто есть треков треки слушать

Topic 1:

приложение норм классное супер отличное хорошее платное прикольное хорошее ужасное

Topic 2:

норм есть интерфейс можно треки если песни интернета пока подписку

Topic 3:

супер норм спасибо звук приложения очень есть хорошо качество нравится

Topic 4:

очень хорошо круто спасибо музыки нравится хорошее качество звука треков

Topic 5:

хорошо интернета работает спасибо рекламе бесплатно было музыку очень написано

Topic 6:

круто очень интернета работает рекламе нравится сильно написано музыка слушать

Topic 7:

круто подписку хорошо отключить подписки бесплатно сбер могу музыку можно

Topic 8:

очень спасибо бесплатно нравится можно слушать музыку реклама подписки нельзя

Topic 9:

подписку спасибо отключить работает могу очень большое отменить интернета меня





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In conclusion from the sentiment analysis we see most of the reviews are positive, that's why **Spotify** is growing fast. Also, **Spotify** has more competitive advantages than its competitors for various reasons. One of them is the number of users and the number of libraries which makes it better in processing the data and creating recommendation systems better than the competitors. On the other hand, this study shows that **Spotify** for Russian music listeners and navigators might not be as effective as for the other foreign languages. Therefore, Yandex music takes a huge partition of the Russian market and now after the sanctions almost all Russians are not able to use **Spotify**.



**Group Project**  
**Thanks**