

Q 6 How do the popular music charts in general compare to the popular Spotify music charts?

Introduction:

For understanding, Billboard is a US online magazine about the music industry. They publish global charts showing the popularity of songs and albums. On the other hand, Spotify, a popular music streaming platform, creates its own charts using data only from its platform to track song popularity. This project aims to explore the differences between these two chart systems: one created by a magazine using different data sources, and the other by a streaming service using only its own data.

Text for images songs6 and artist6

When comparing popular music charts like Billboard to Spotify's charts, there are both similarities and differences. The pie chart shows that almost half (48.6%) of the artists are on both charts, meaning they are popular on both platforms. However, 27.1% of the artists are only on Billboard, and 24.3% are only on Spotify. This shows that each platform ranks music differently. Comparing the overlap of songs between Spotify and Billboard, there are more differences than similarities. The songs that appear on only one chart make up the same percentage of 39.2% each, while the songs that appear on both charts account for 21.6%. This shows that although some songs are popular on both platforms, many are unique to either Spotify or Billboard. Furthermore, 35.5% of the songs that appear on both charts hold the same rank on each platform, with an average placement difference of 30.41. This shows that although some songs are popular on both platforms, many are unique to either Spotify or Billboard.

Text for image: Correlation between Spotify and Billboard rank

The Billboard and Spotify charts show important details about each song, such as its current rank, how many weeks it has been on the chart, its highest rank, and the previous rank. These four aspects help track how a song performs over time.

By comparing these aspects, we can see how similar the two charts are. The correlation for the current ranking is 0.70, meaning that songs often have similar positions on both charts. The strongest correlation is for weeks on the chart (0.89), showing that songs with a long chart presence on one platform usually have a similar presence on the other. The correlation for the previous rank is 0.62, while the peak position correlation is 0.68. These values suggest that while there is a clear connection between the charts, differences still exist due to factors like different methods and tracking periods (deviation between 1-2 days).

Q3 text for both image (global_region3 and key_region_user_growth_18-24_3) and the dynamic one:

Spotify is most popular in Europe and North America, as these regions have the highest number of active users. However, North America's user engagement has been slowly decreasing, while Europe remains strong.

The growth rate chart shows that Latin America and the Rest of the World (RoW) have had ups and downs, with RoW (which includes Asia, Africa, and other regions) seeing the biggest spikes in growth. This suggests that Spotify is growing fast in places like Asia and Africa. At the same time, North America's growth has been negative, meaning fewer new users or some leaving the platform.

Overall, Europe and North America have the most users, but Asia, Africa, and Latin America are becoming more important as Spotify expands.