

University of Trento
Department of Sociology and Social Research
Computational Social Science

Streaming Platforms in Italy: Genre Preferences, Sentiment Analysis, and the Evolving Role of Netflix in Television Consumption

Introduction

This study aims to analyze the most popular genres on streaming platforms, with a specific focus on Netflix, the leading platform in Italy, and compare it to its main competitor, Amazon Prime. Additionally, it performs sentiment analysis on movie summaries from Netflix and Amazon Prime Video in Italy to determine the prevailing positive or negative sentiment in these movies. The research highlights the significance of understanding user preferences and behavior to enhance content offerings and improve user satisfaction. The findings of this study can be valuable for content creators and streaming platforms.

Furthermore, this research examines the television viewing habits in Italy since the introduction of streaming services in 2016, with a particular emphasis on Netflix's impact. By analyzing datasets that depict the age groups of TV viewers from 2017 to 2022, we explore changes in viewer numbers. These results can be useful for policymakers in the Italian film industry to address the challenges posed by streaming services and support the local industry. However, due to limited data availability, especially regarding Netflix's subscriber count, local Pay Tv and OTT services data, caution should be taken due to potential data inaccuracies and incomplete information. Future research directions may involve investigating user demographics, conducting comparisons across different countries, and examining the impact of local content.

Previous studies

Previous studies (5,6) on the correlation between TV users and streaming services, as well as the reasons behind Netflix's (or other streaming services) popularity, are limited. Research in different countries, such as Brazil and South Korea, has explored the impact of streaming services on the TV industry. For instance, in South Korea, global OTT platforms like YouTube and Netflix have both positively influenced video content distribution but negatively affected video content production. This suggests the need for governmental measures and regulations to address hindrances to domestic industry growth and discriminatory problems caused by global OTT platforms.

Similarly, in Brazil, the findings indicate that video-on-demand (VOD) platforms like Netflix and cable TV operators compete in the same relevant market. This has implications for sectoral public policies, regulatory activities, and competition policies. Since cable TV operators contribute to a fund supporting the national audiovisual industry, the competitive shock caused by Netflix could potentially reduce tax collection and create unintended financial restrictions for the Brazilian audiovisual industry. Regulatory policies should be designed to balance the rivalry between the cable TV industry and VOD platforms while avoiding fiscal imbalances.

Overall, these previous studies highlight the need for appropriate regulations and policies to address the challenges and opportunities arising from the relationship between traditional TV and streaming services.

Research questions

- What are the most popular genres on streaming platforms in Italy, specifically focusing on Netflix and comparing it to its main competitor, Amazon Prime?

- What is the prevailing sentiment, positive or negative, in movie summaries from Netflix and Amazon Prime Video in Italy
- How have the number of television viewers in Italy evolved over time, and what role has Netflix played in these changes?
- How can policymakers mitigate the threats and support the Italian film industry?

Methodology

The methodology used in this research paper combined correlation analysis, clustering analysis, and sentiment analysis to gain insights into TV viewership trends, genre preferences, and sentiments on Netflix and Amazon Prime platforms.

The increasing popularity of streaming services has led to a highly competitive market among different companies. To make better decisions regarding future content creation, we decided to take Netflix, which has emerged as the dominant player in the streaming market, surpassing its competitors (as shown in Figure 1), to analyze. Netflix entered Italian market in 2016, preceding Amazon Prime's launch in 2017. To support this analysis, we will rely on a comprehensive report by Statista (1) that provides insights into user preferences, including preferred genres and age groups for both Netflix and Amazon. Additionally, we will use an online survey conducted by Statista to enhance the credibility and reliability of our findings in this research paper.

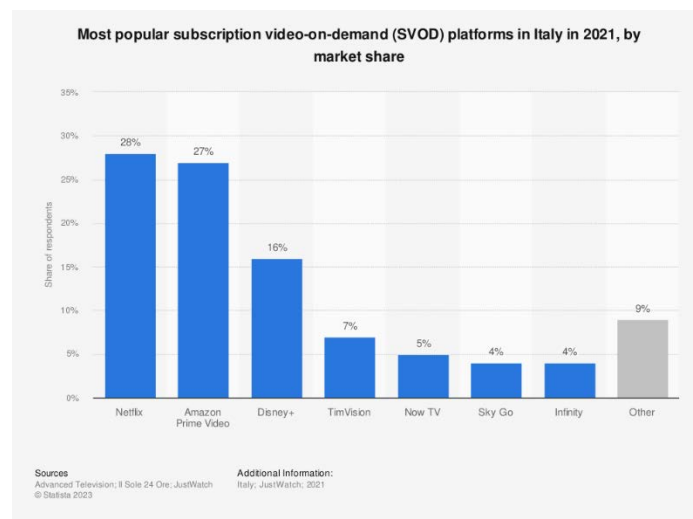


Figure 1. (2)

Clustering.

We began our research by conducting a clustering analysis (all codes are available in GitHub) on the movie datasets of Netflix and Amazon Prime. Our main goal was to examine the patterns of grouping within each platform and gather valuable information about the genres and top movies associated with each cluster. This analysis aimed to provide a deeper understanding of the different genres available on each streaming platform. Our dataset (from Kaggle, available in GitHub) included various details for each entry, such as the title, genre, type (movie or TV series), director, actors, IMDb score, release date, release date, and a summary.

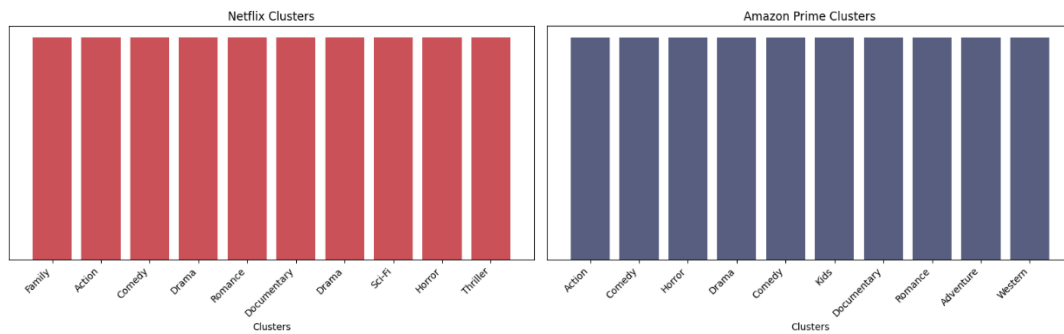


Figure 2.



Figure 3.



Figure 4.

Using clustering, we categorized the Netflix and Amazon movies into distinct genre clusters. The Netflix clustering resulted in the identification of various genres, such as Family, Action, Comedy, Drama, Romance, Documentary, Sci-Fi, Horror, and Thriller. Similarly, Amazon Prime Video movies were

clustered into genres like Action, Comedy, Horror, Drama, Kids, Documentary, Romance, Adventure, and Western.

The comparison of genre clusters between Netflix and Amazon Prime Video revealed that both platforms offered a diverse range of genres. However, certain genres were more prominent on one platform compared to the other. For example, Netflix had a stronger emphasis on Family and Sci-Fi genres, while Amazon Prime Video showcased a greater variety of Adventure and Western genres.

To collect user genre preference data, we obtained information from Netflix and Amazon Prime Video user surveys conducted in Italy (2). The collected data included users' top movie genres preferences. We also performed genre clustering using an algorithmic approach to categorize movies into distinct genres based on content features.

Netflix User Genre Preferences:

The analysis revealed that the top 10 favorite genres of Netflix users in Italy were dominated by comedies (64%), thriller/mystery/crime (63%), science fiction and fantasy (55%), documentaries (53%), and animations (50%). Other popular genres included sports (47%), dramas (44%), horror (40%), music videos & shows (40%), and news (36%).

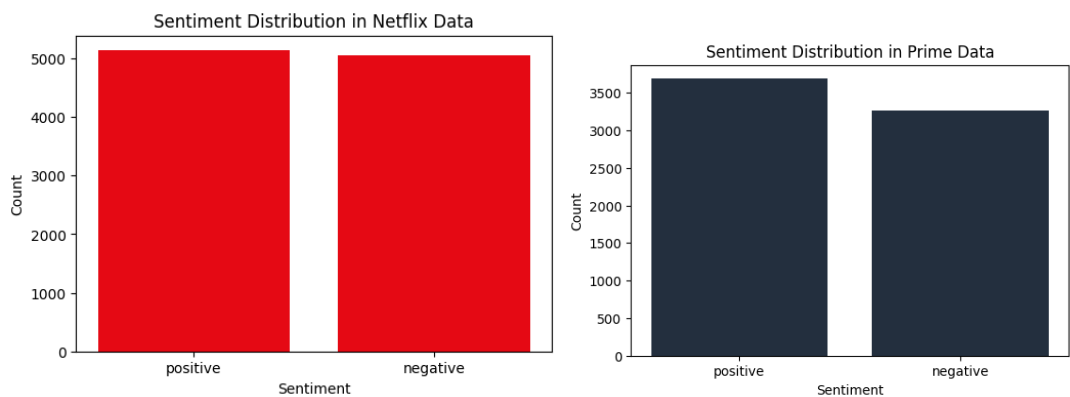
Amazon User Genre Preferences:

Comparing the user preferences on Amazon Prime Video, we found similar patterns, with comedies (63%), thriller/mystery/crime (60%), science fiction and fantasy (53%), documentaries (53%), and animations (50%) ranking among the top genres. Additionally, sports (50%), dramas (41%), music videos & shows (39%), horror (37%), and news (36%) were favored by the users.

Based on the analysis, streaming platforms can leverage the popularity of genres like comedies, thrillers, and dramas to curate their content libraries and enhance user engagement. Additionally, personalized recommendations and targeted marketing campaigns can be tailored to specific user preferences within each platform.

Sentiment analysis.

Next, we conducted sentiment analysis to assess the emotional tone of the movie summaries. Figure 5 and 6



Our findings indicate that Netflix exhibits a relatively balanced distribution of positive and negative sentiments, implying a diverse range of movie genres on the platform. On the other hand, the Prime dataset shows a slightly higher proportion of positive sentiment, suggesting that users on that platform may prefer movies with a more positive or uplifting tone.

This discrepancy in sentiment distribution may have implications for user attraction and engagement. For example, individuals who enjoy positive or uplifting movie genres may be more inclined to choose Prime due to the higher prevalence of positive sentiment in its movie summaries. Conversely, Netflix's more balanced sentiment distribution may appeal to users seeking a wider variety of movie genres, including those with a negative or dramatic tone.

Correlation analysis.

We incorporate additional datasets, including Netflix's subscriber (Figure 7) data and daily TV viewership in Italy from 2017 to 2022(Figure 8), the data is also available on GitHub) By conducting correlation analysis, we aim to examine potential relationships among these variables. This analysis will provide insights into the impact of streaming services, specifically Netflix, on the number of TV viewers.

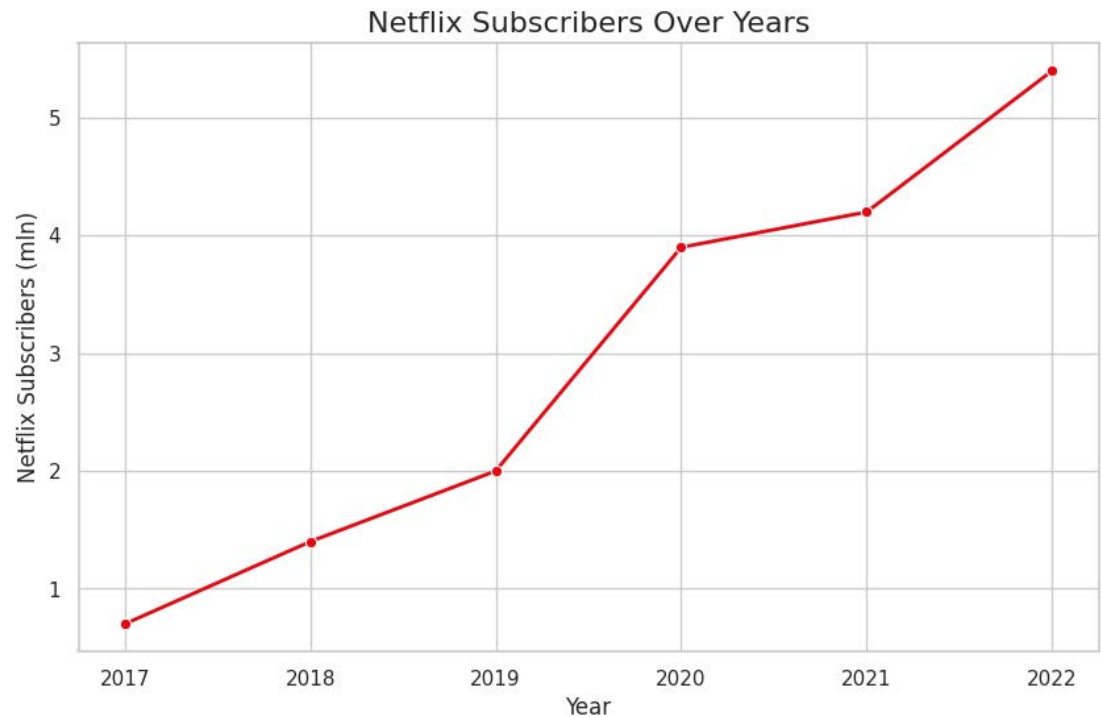


Figure 7.

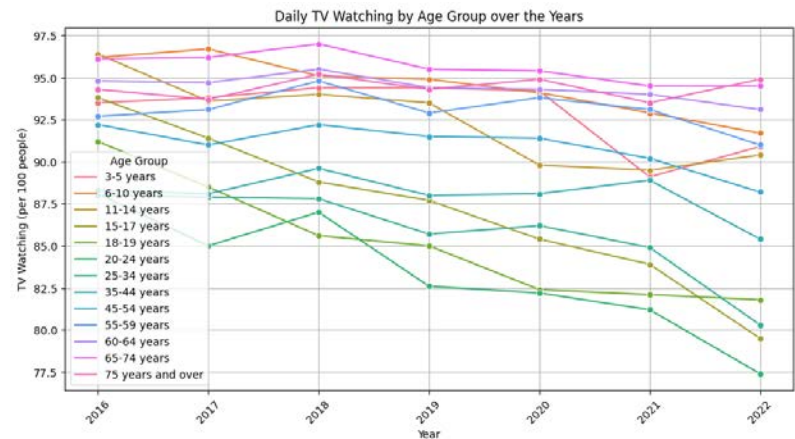


Figure 8.

We analyzed the correlation between TV viewership and the number of Netflix subscribers using SciPy. Stats library in python. Our findings (Figure 9) revealed strong negative correlations between the number of Netflix subscribers and TV viewership across different age groups (Code is available in GitHub).

```
Correlation coefficient for 3-5 years: -0.9478484690868378
Correlation coefficient for 6-10 years: -0.7347104590938868
Correlation coefficient for 11-14 years: -0.9129616359781187
Correlation coefficient for 15-17 years: -0.9359186498906249
Correlation coefficient for 18-19 years: -0.7779464625462325
Correlation coefficient for 20-24 years: -0.8816219778932152
Correlation coefficient for 25-34 years: -0.8831634851448391
Correlation coefficient for 35-44 years: -0.7688582019877661
Correlation coefficient for 45-54 years: -0.7080198168200367
Correlation coefficient for 55-59 years: -0.6929300419471925
Correlation coefficient for 60-64 years: -0.7166850935654481
Correlation coefficient for 65-74 years: -0.7931147023177474
Correlation coefficient for 75 years and over: -0.5041902559928758
```

Figure 9.

The correlation analysis shows a clear negative link between the number of Netflix subscribers and the daily TV viewership of different age groups. However, it's important to remember that correlation doesn't mean causation, and there could be other factors involved in this relationship. Factors like the popularity of specific TV shows and movies aired on television, the presence of local pay TV channels, and other variables might also influence these findings. Therefore, we should be cautious when interpreting this result as it may not accurately account for all the contributing factors.

While it is important to acknowledge that the correlation analysis may not be entirely accurate due to the exclusion of other variables, initial findings suggest a noticeable negative association between the number of Netflix subscribers and the daily TV viewership of different age groups. These findings align with previous research conducted in various countries, which has also indicated that streaming services pose a potential threat to the local television industry.

Additionally, supporting evidence from a study by Statista (Figure 10) demonstrates that Netflix holds a significant share of users within the 18-29 age range, surpassing the total online population. When considering our dataset of TV watchers in Italy (Figure 8), we observe a downward trend in daily TV viewership among these age groups. These observations further support the notion that the rise in popularity of streaming services, such as Netflix, may contribute to the decrease in traditional TV viewership, especially among younger audiences.

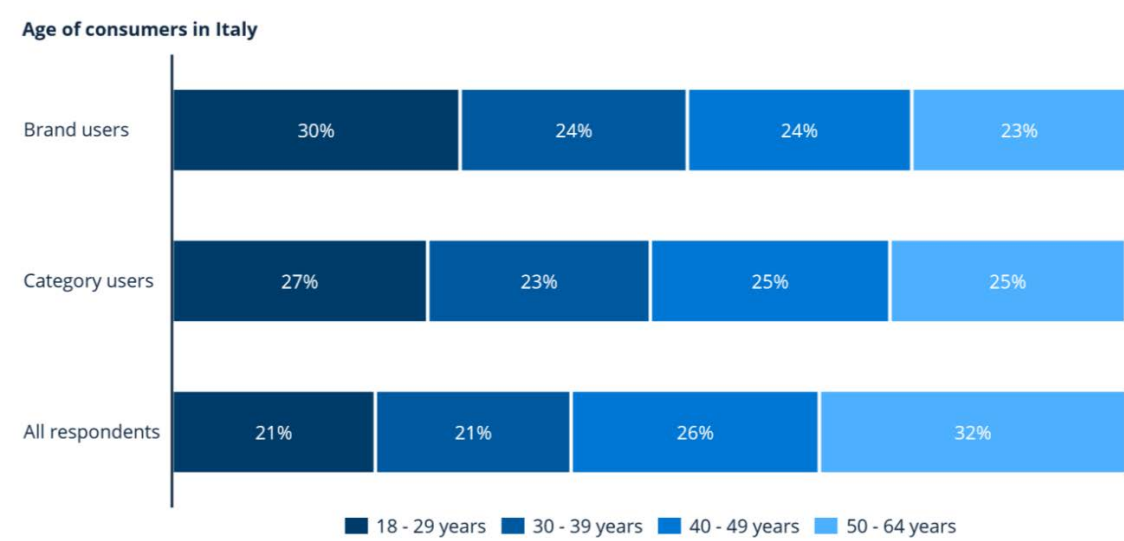


Figure 10.

How can policymakers mitigate the threats and support the Italian film industry?

According to our research, there are regulations already to protect cinemas and the local industry. Specifically, in Italy, the Minister of Culture has implemented measures (3) to slow down the release of movies on online streaming platforms. This means that Netflix's approximately 1 million Italian subscribers will have to wait longer than before to access newly released films online. The law prohibits streaming services, including Netflix, from offering major movies until at least 15 weeks after their initial screening in Italy's extensive network of around 4,000 cinemas.

In a statement, Bonisoli, the Minister of Culture, mentioned that these rules may lead some films to bypass cinemas altogether, while enabling cinemas to focus on high-revenue productions. The intention behind this approach is to ensure that cinemas can remain operational by screening popular films that generate income. It's not just about protecting cinemas and the people they employ, but also recognizing the cultural significance of cinemas as integral parts of their local communities. Cinemas support nearby establishments like restaurants and bars, and they serve as important cultural touchstones, as emphasized by Barberio.

Suggestions.

It is an undeniable fact that movies have a significant impact on societies, and in order to preserve cultural traditions and local industry, the government can allocate more funds towards producing local films for both the domestic and international markets.

Another research study, specifically focusing on Cross-border Access to Online Content(4), reveals that among all European countries, Italy has the lowest inclination to consume content in English (as shown in Figure 11). This presents an opportunity to invest in the local industry and create high-quality Italian-language movies that can attract a larger audience.

To put it simply, we recommend increasing financial support to the film industry as a means of safeguarding local film culture and taking advantage of the potential demand for Italian-language movies, as indicated by the research findings.

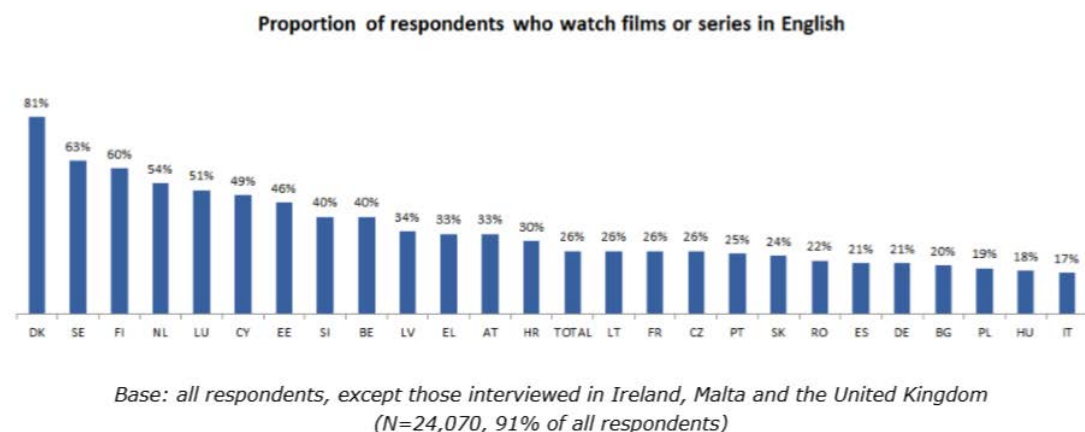


Figure 11.

Conclusion

This study analyzed the most popular genres on streaming platforms, specifically Netflix and Amazon Prime, in Italy. It also performed sentiment analysis on movie summaries and examined the impact of Netflix on television viewership. The findings revealed that comedies, thrillers, and dramas are highly favored genres on both platforms. Netflix showcased a balanced distribution of positive and negative sentiments, while Amazon Prime had a slightly higher proportion of positive sentiment. The study also

identified a negative correlation between the number of Netflix subscribers and TV viewership across various age groups, indicating the influence of streaming services on traditional television. Understanding user preferences and behavior is crucial for content creators to enhance their offerings, improve user satisfaction. It is beneficial for businesses.

On the other hand, to support the Italian film industry and mitigate the challenges posed by streaming services, policymakers have implemented regulations to protect cinemas and control the release of movies on online platforms. Allocating more funds towards producing local films can be an opportunity to attract a larger audience. Policymakers can strike a balance between the streaming industry and traditional cinema, ensuring the continued growth and success of the Italian film industry.

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Code

<https://github.com/SaidaKarimova9/CSS-Project>