



# STC TV CUSTOMER BEHAVIOR

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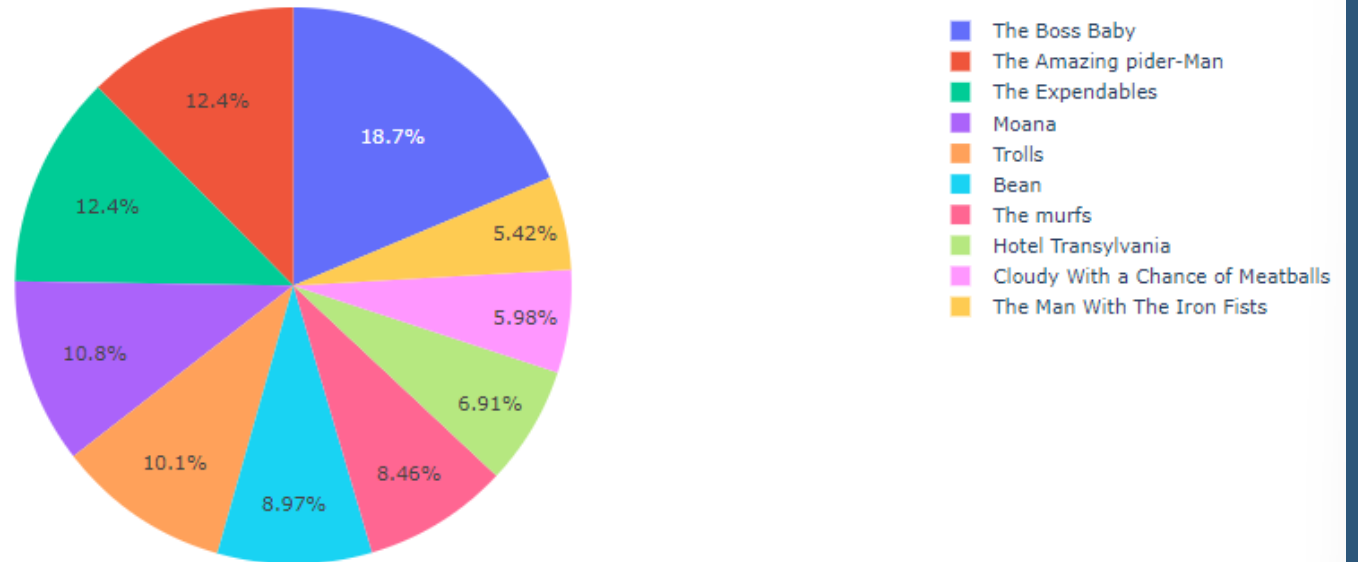


# CHART

## THE TOP 10 PROGRAM

top 10 programs in total watch time in heures

"Boss Baby" leads with 18.7% of total viewers, highlighting its strong popularity. In contrast, the second program has 12.4%, showing a notable 6.3% drop in viewer engagement compared to "Boss Baby."

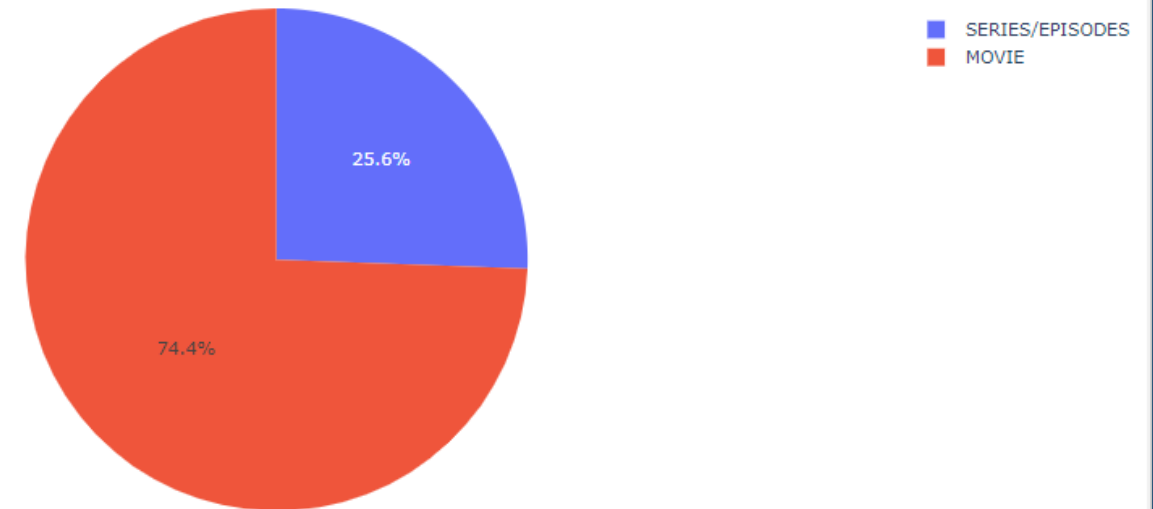


# CHART

## DURATION OF PROGRAM CLASS

Audiences spend 71.1% of their viewing time on series, while movies only account for 28.9%. This highlights a strong preference for series over movies.

Tot Total Users watching by program\_class

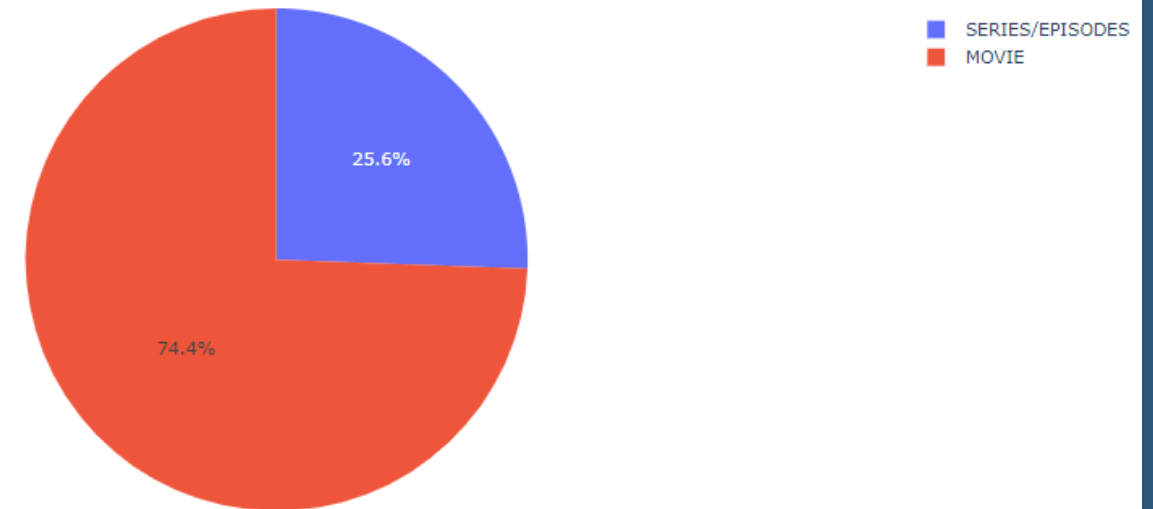


# CHART

## USERS WATCHING BY PROGRAM

- Viewers are highly engaged with movies, which account for 74.4% of total viewing time. This strong preference highlights that films remain a dominant form of entertainment, even with the rise of other formats.

Total Users watching by program\_class

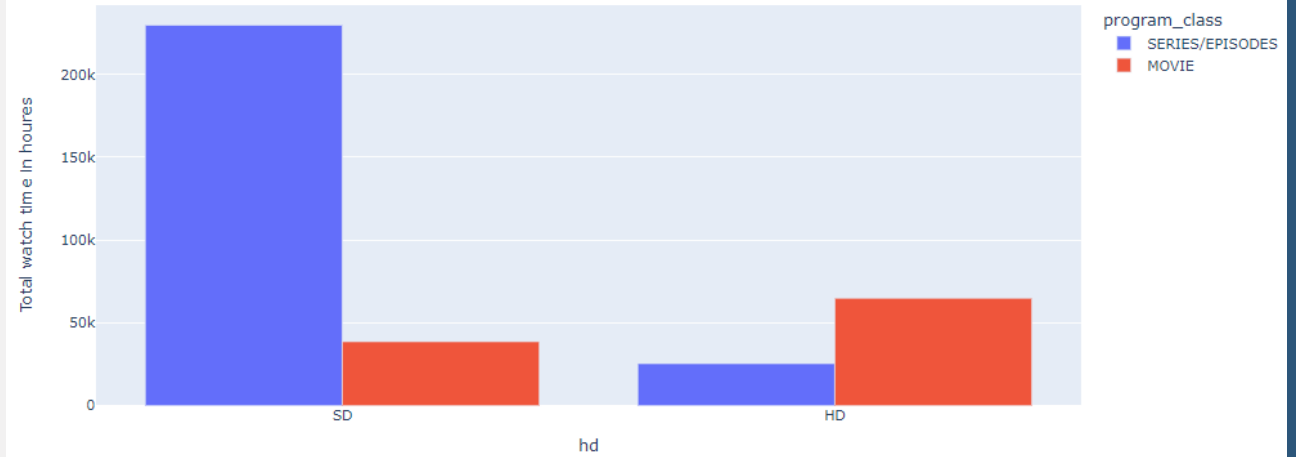


# CHART

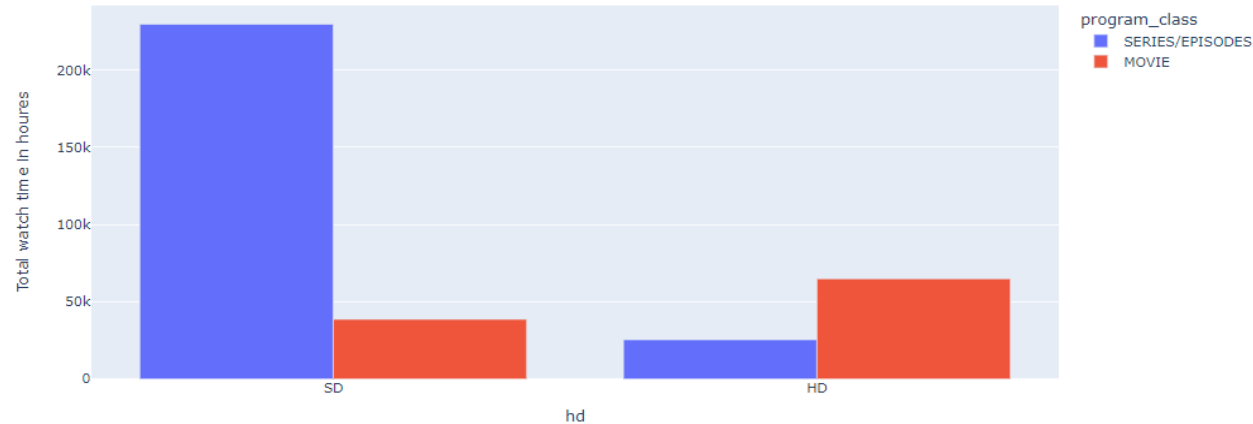
## TIME WATCH BY HD AND USER WATCH BY HD

Data shows viewers spend more time watching series in standard definition (SD), reflecting a trend toward binge-watching. In contrast, audiences prefer high definition (HD) for movies, indicating a stronger value placed on the cinematic experience. The same pattern is observed in user preferences.

Total watch time by hd flag



Total watch time by hd flag



# REGRESSION MODEL

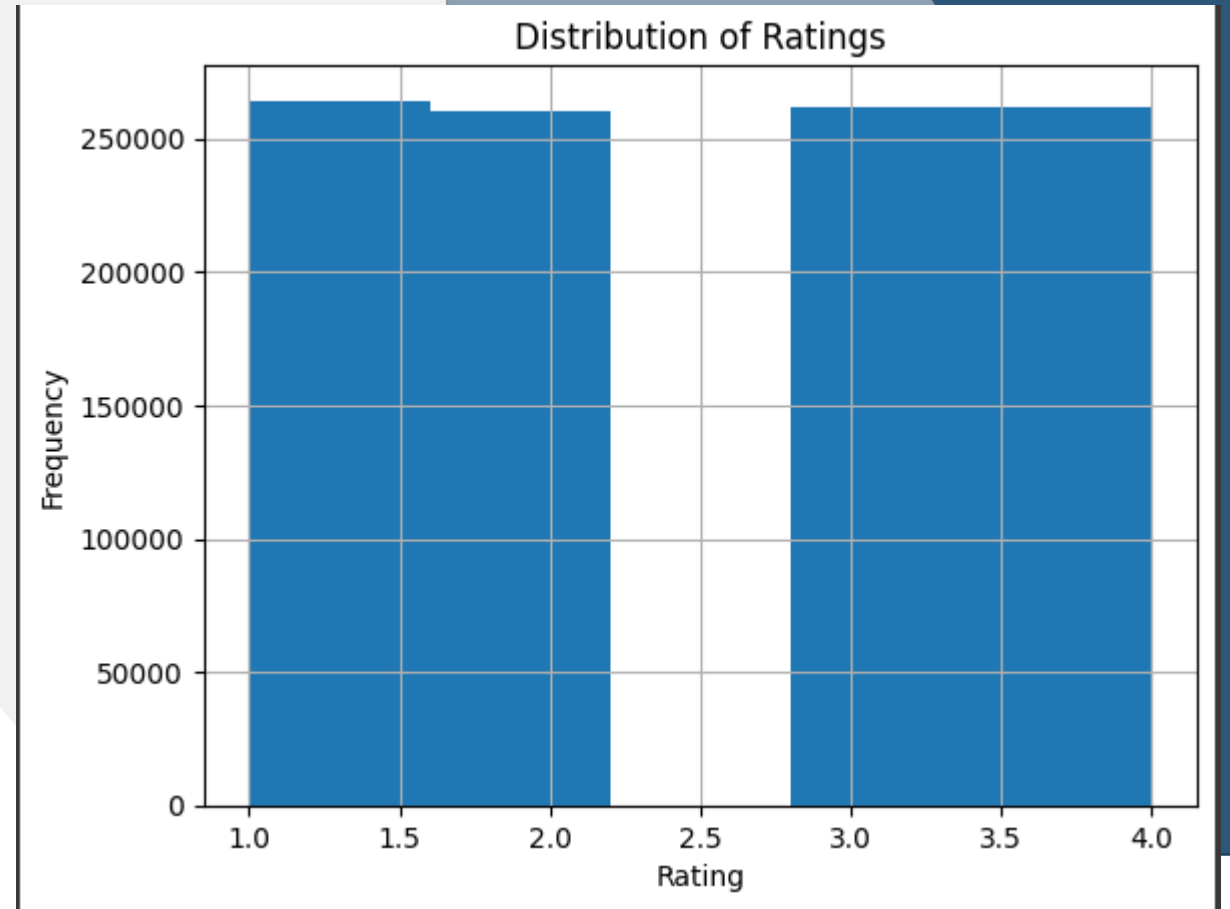
## THE RELATIONSHIP BETWEEN TOTAL WATCH TIME AND DATE

Our analysis of total watch time against date for STC TV shows a highly accurate regression model, with a mean squared error of  $(6.46 \times 10^{-27})$  and an  $R^2$  score of 1.0, indicating a perfect fit. This highlights consistent viewer engagement patterns over time. Seasonal trends and external factors significantly influence watch time, enabling STC TV to optimize scheduling and content strategies effectively.

```
mean_squared_error: 6.462348535570529e-27 r2_score: 1.0 mean_absolute_error: 3.157967714489334e-14
```

# RATING DISTRIBUTION

The histogram shows a bimodal distribution of ratings for STC TV content, with two distinct peaks around 2.0 and 3.0. This suggests that users tend to have strong opinions about the content, either liking or disliking it intensely. Most ratings fall within the lower range (1.0-2.0 and 3.0-4.0), with fewer ratings in the mid-range (2.5-2.75). This could indicate a lack of content that appeals to a broader audience.



# RECOMMENDER SYSTEM PROGRAMS THAT USERS INTERESTED IN

- Our evaluation of the SVD recommendation system for STC TV shows an RMSE of 0.9118, meaning our predictions are less than one rating point away from actual viewer ratings. This strong accuracy supports our ability to deliver personalized content that aligns with user preferences. By leveraging these insights, we can create targeted strategies to enhance audience engagement and drive long-term viewer loyalty.



RMSE: 0.9118  
0.9117845293286213



# RECOMMENDER SYSTEM

## MOANA HIGHEST 5 RECOMMENDATION

In our analysis of the recommendation system for "Moana," we identified five users with the highest predicted ratings, with User 28069 leading at 3.73. This targeted approach allows us to effectively market the program to those most likely to enjoy it, enhancing engagement and satisfaction. By personalizing recommendations, we strengthen our connection with viewers, boost retention, and create opportunities for upselling related content, ultimately driving growth and loyalty for STC TV.

```
recommend_program_5('Moana')  
  
[(28069, 3.731156084101265),  
 (5427, 3.561187345266146),  
 (9701, 3.528498559751493),  
 (30298, 3.43277610184417),  
 (27674, 3.3117116916022344)]
```



**THANK YOU**

