STCTW Data Analysis

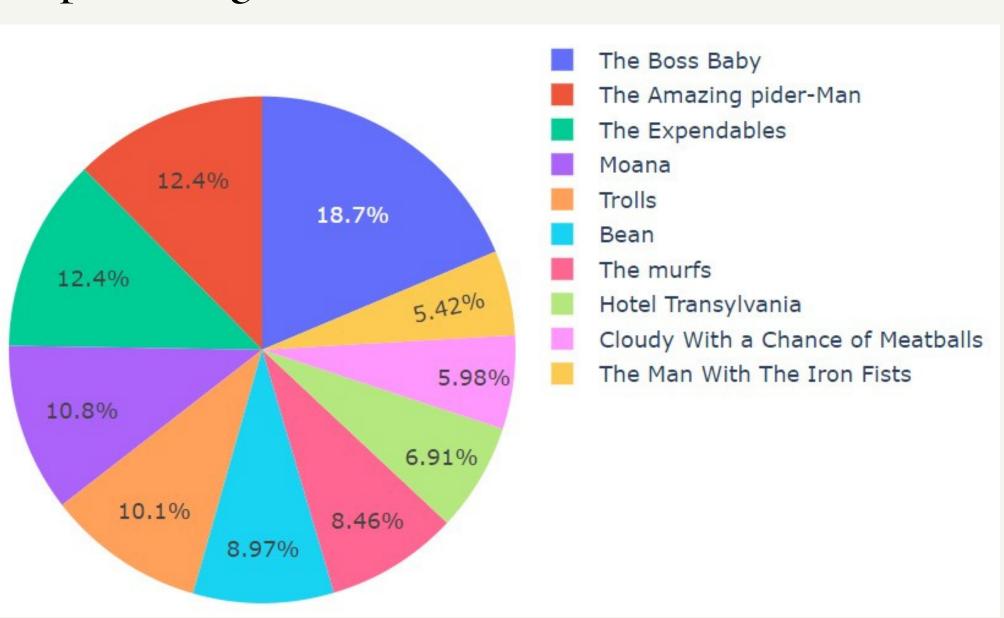
By: Lujain Alkhelb



User Behavior Analysis

- The most watched program during 2017/3
 2018/4 in term of total watch time hours is "The Boss Baby", a popular animated movie.
- Most of the top 10 watched programs are either Animation or Action.

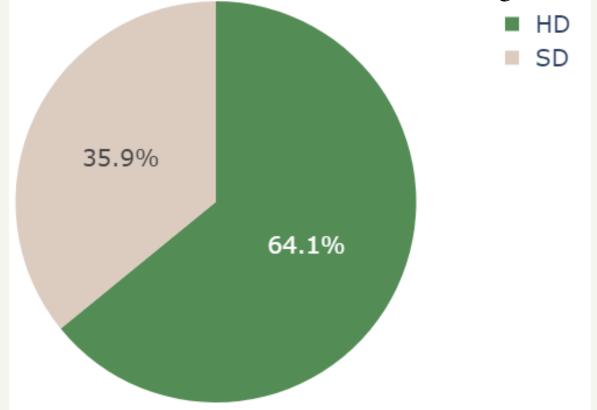
Top 10 Programs in Total Watch Time in Hours



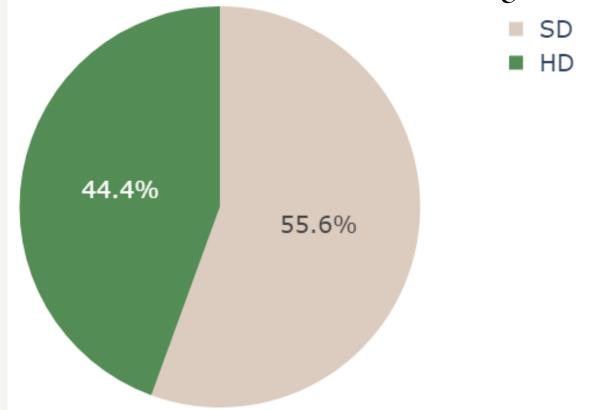
User Behavior Analysis

- The data reveals a clear preference for HD
 quality among MOVIE viewers, with a
 higher percentage opting for HD
 compared to SERIES/EPISODES viewers.
- This indicates the importance of offering content in different quality options to cater to varying audience preferences.

No. of Users who Watched MOVIE vs Program Quality

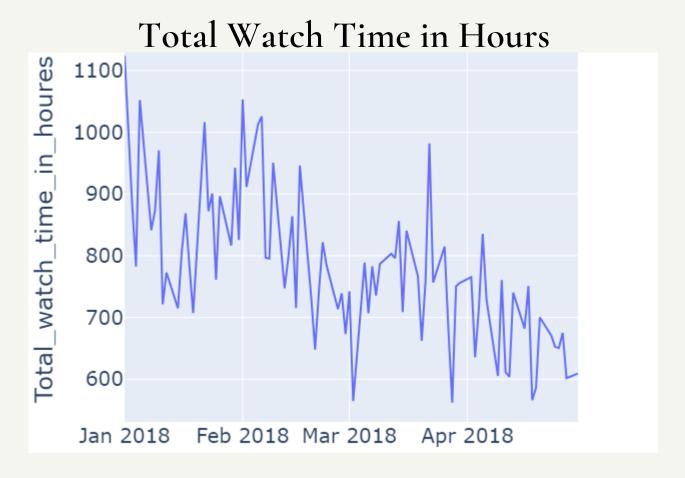


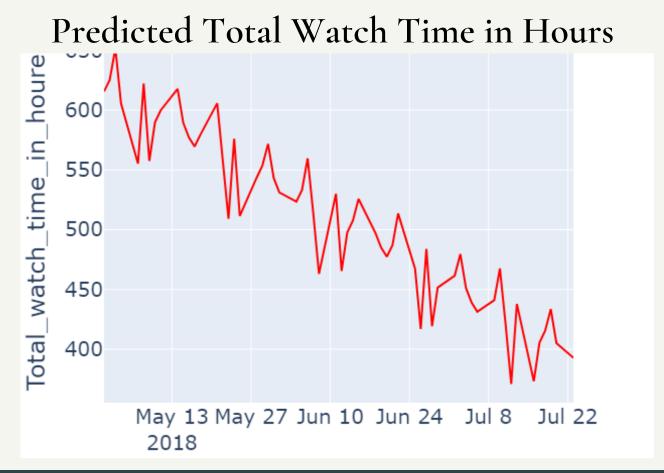
No. of Users who Watched SERIES vs Program Quality



Prediction Model

- We can observe that the total watch time in hours is **decreasing** for the next two months.
- This could be attributed to several factors including:
 - a. Seasonal trends.
 - b. Market competition with other companies.
 - c. Low quality.
 - d. Availability of new content.





Top 5 Recommendations Using Machine Learning

- A recommender system was built using machine learning to show the top 5 recommendations for a specific program based on preferences and behavior of similar users. Which gives a personalized experience using STC TV.
- On the right are the top 5 recommendations of "MOANA" movie using our recommender system.



Top 5 Recommendations of "MOANA" Movie

	Title	Distance
0	Trolls	0.427642
1	Surf's Up : WaveMania	0.470576
2	The Mermaid Princess	0.506638
3	The Boss Baby	0.551443
4	The Jetsons & WWE: Robo-WrestleMania!	0.561058

Future Work



Larger Dataset

Train the model on a larger dataset will significantly improve the recommendations results, which can help increase the overall watch time hours.



Hybrid System

Build the recommender system based on both user behavior and content based. This will give better personalized experience.



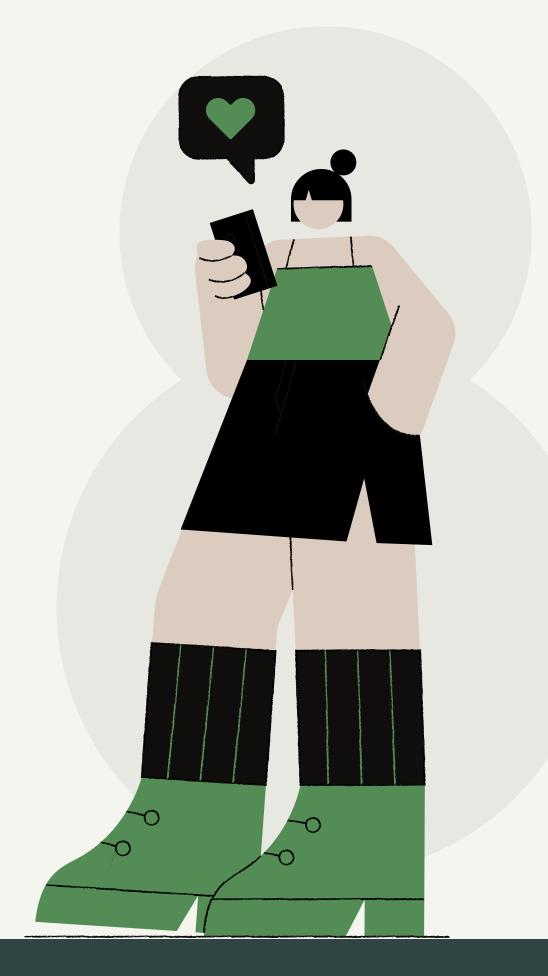
Improving Quality Option

Provide a range of video quality options to cater to different viewer preferences, such as: FHD, 4K, etc...

Contact us

Feel free to contact for any questions or comments:

- https://www.linkedin.com/in/lujainalkhelb/
- https://github.com/LujainAK/STC_TV_Tasks



THANKYOU FOR YOUR TIME