



# **Netflix vs. Hulu: Analyzing Streaming Service Content**

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# Netflix vs. Hulu: Analyzing Streaming Service Content

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## Background or Abstract

Streaming services have surpassed traditional cable media in demand and popularity. Both Netflix and Hulu being platforms revolutionizing this media consumption.

This research will explore content library differences between Netflix and Hulu. The research will also examine several reasons consumers prefer Netflix over Hulu.



Figure 1: Netflix Logo.

## Research Questions

- 1) How do content types differ amongst Netflix and Hulu's catalog?
- 2) How does the release year of a movie and show differ between Netflix and Hulu?

## Related Research

Examining Netflix and Hulu's different content strategy approaches will reveal users' preference and how Netflix has more users than Hulu. This study contributes to science by providing analysis of consumer trends and behavior.

## Data

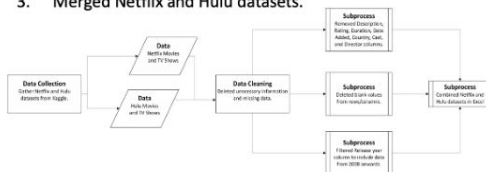
Both of my datasets are from Shivam Bansal on Kaggle and are structure datasets. The structured data come in a zip file with an excel and csv spreadsheet. The first dataset is titled "Netflix Movies and TV Shows" and is 3.4 MB as it contains 8,807 rows and 9 columns.

My Second dataset is titled "Hulu Movies and TV Shows" and is 1.1 MB with 3,045 rows and 9 columns. Both datasets consist of the same column names. The columns are movie name, tv show name, director, cast, where the content was recorded, release date, when Netflix/Hulu released the content, rating, and duration.

## Preprocessing

These are the key steps taken to process the data for analysis and visualization using Excel.

1. Removed blank values and columns that were unnecessary.
2. Filtered the year column for Netflix and Hulu dataset from 2008 onwards.
3. Merged Netflix and Hulu datasets.



Workflow Diagram: The processes I performed throughout this Research Project.

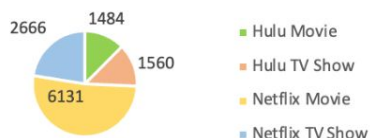
## Methods or Analysis

To help answer our research question, descriptive analysis is an approach that will be firstly used to reveal the content count difference between Netflix and Hulu. Next, we will group release years to compare if the platforms tend to upload newer or older content. In other words, we will make distributions to examine release years.

## Results

Visualizations below depict findings for the research topic:

### Content Type Distribution for Netflix and Hulu

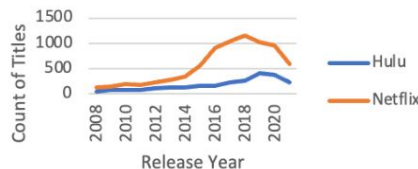


Pie Chart: Proportion of TV Shows and Movies on Netflix and Hulu.

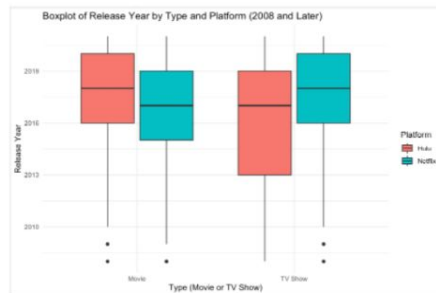
Count of title	Column Labels	
Row Labels	Hulu	Netflix
<2008	555	1045
2008-2012	395	901
2013-2017	809	3130
2018-2022	1285	3721

Table: Netflix offers a significantly larger collection of newer and older titles than Hulu.

### Title's Release Year Trend



Line Chart: Most of Netflix's titles came out after 2014 and Hulu's line gradually grows experiencing a surge around 2016.



Box Plot: Netflix's catalog is more diverse than Hulu's and Hulu tends to focus on uploading newer releases (especially movies).

## Discussion

This analysis revealed the content type difference between Netflix and Hulu. Netflix offers both a wider variety of tv shows and movies for their users to choose from than Hulu. Netflix has a higher proportion of movies than tv shows while Hulu has a higher proportion of tv shows than movies. Additionally, the line chart shows that Netflix emphasizes offering users a mixture of newer and older content while Hulu tends to focus on newer content. A limitation of this data is having a restrictive catalog that doesn't include every regions tv shows and movies due to licensing agreements.

## Conclusion

This research is important because it shows Netflix and Hulu catalog strategy when deciding what content to offer their users. Since the streaming space is rapidly evolving, analyzing this data reveals how Netflix and Hulu differentiate from one another.

## Future Work

- I. Analyze Other Streaming platforms such as Disney+, HBO Max, Amazon Prime, Paramount+, Apple TV, and Peacock.
- II. Perform descriptive analysis and even possibly correlation analysis on the other datasets
- III. Compare other streaming platforms results to Netflix and Hulu

## References

1. Bansal, S. (n.d.-a). *Hulu Movies and TV Shows*. Kaggle. <https://www.kaggle.com/datasets/shivamb/hulu-movies-and-tv-shows>
2. Bansal, S. (n.d.-b). *Netflix Movies and TV Shows*. Kaggle. <https://www.kaggle.com/datasets/shivamb/netflix-shows>



# Why this topic?

Streaming services have overtaken traditional cable media in popularity with Netflix and Hulu being platforms that have revolutionized the streaming space. Since Netflix and Hulu launched their streaming services months apart, indicators such as content library differences can be used to decipher the reasoning Netflix has more users than Hulu; as well as how Netflix has differentiated itself from Hulu.





# Related Research

Examining Netflix and Hulu's content libraries will help identify their content strategy approaches. This study contributes to science by providing analysis of consumer trends and behavior.

## Research Questions

**RQ1:**

How do content types differ amongst Netflix and Hulu's catalog?

**RQ2:**

How does the release year of a movie and show differ between Netflix and Hulu?





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## **Visualizations**

**Slides 9-13:** Data visualizations used to communicate findings.





# 1

# Data

What datasets were used? How were the datasets cleaned, sorted, and analyzed?



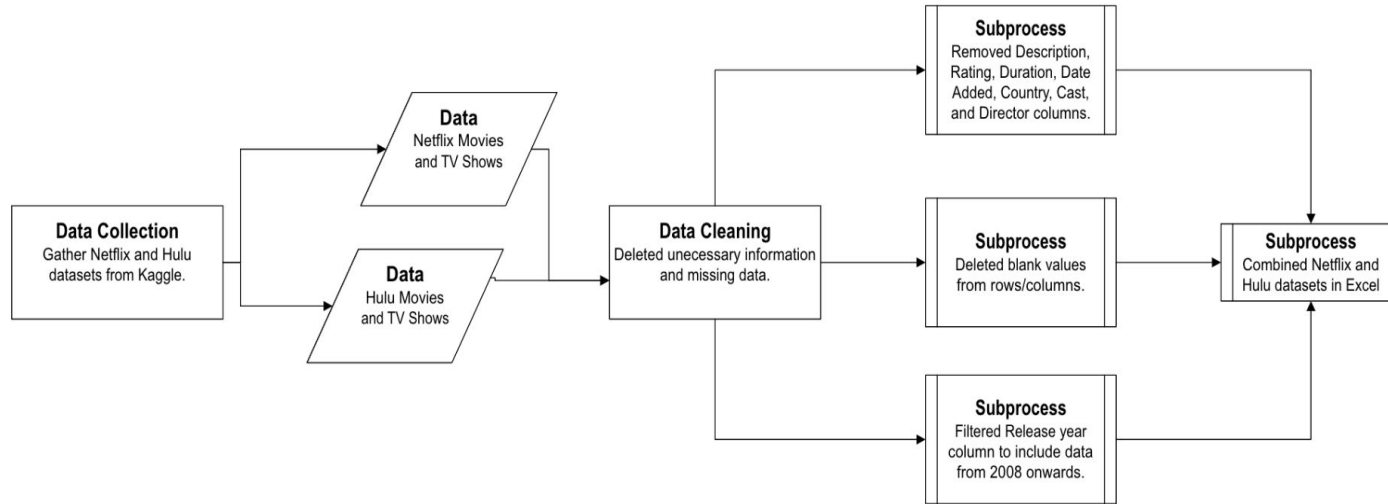
# Data Processing

- Both of my datasets are from Kaggle and are structured datasets that came in a zip file with an excel and csv spreadsheet. The first dataset is titled “Netflix Movies and TV Shows” and it contains 8,807 rows and 9 columns. My second dataset is titled “Hulu Movies and TV Shows” and has 3,045 rows and 9 columns. Both datasets consist of the same column names. The column titles are movie name, tv show name, director, cast, where the content was recorded, release date, when Netflix/Hulu released the content, rating, and duration.
- Softwares such as Excel were used to clean, sort, and analyze the data. Additionally, R-Studio was also used to analyze the data.
- Data processing workflow diagram made in Microsoft Visio.



# Data Processing

Workflow diagram of the processes performed on my datasets.





# 2

## Visualizations

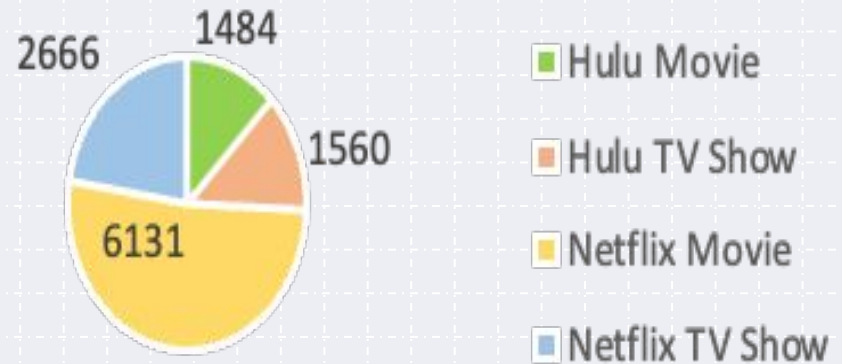
What charts, tables and plots were used?



# Pie Chart

- The distribution shows the proportion of movies and tv shows Netflix and Hulu offer on their platforms.
- Netflix offers 4,647 more movies and 1,106 more tv shows than Hulu. Additionally, Netflix has a higher proportion of movies than tv shows while Hulu has a higher proportion of tv shows than movies.

## Content Type Distribution for Netflix and Hulu



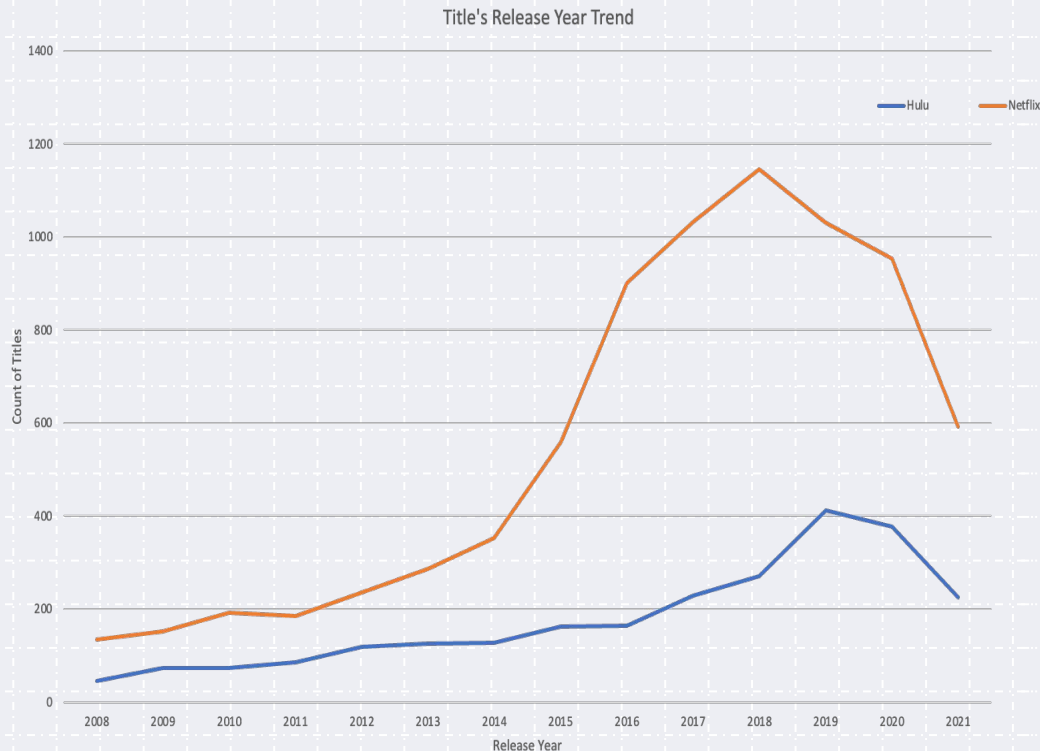
# Table

- The table shows throughout several time periods the proportion of tv shows and movies Netflix and Hulu offer their users.
- Netflix has significantly more newer and older titles than Hulu.
- Both Netflix and Hulu have the least amount of their titles from the time period 2008-2012 and prior to 2008.

Count of title			Column Labels	
Row Labels		Hulu	Netflix	
<2008		555	1045	
2008-2012		395	901	
2013-2017		809	3130	
2018-2022		1285	3721	

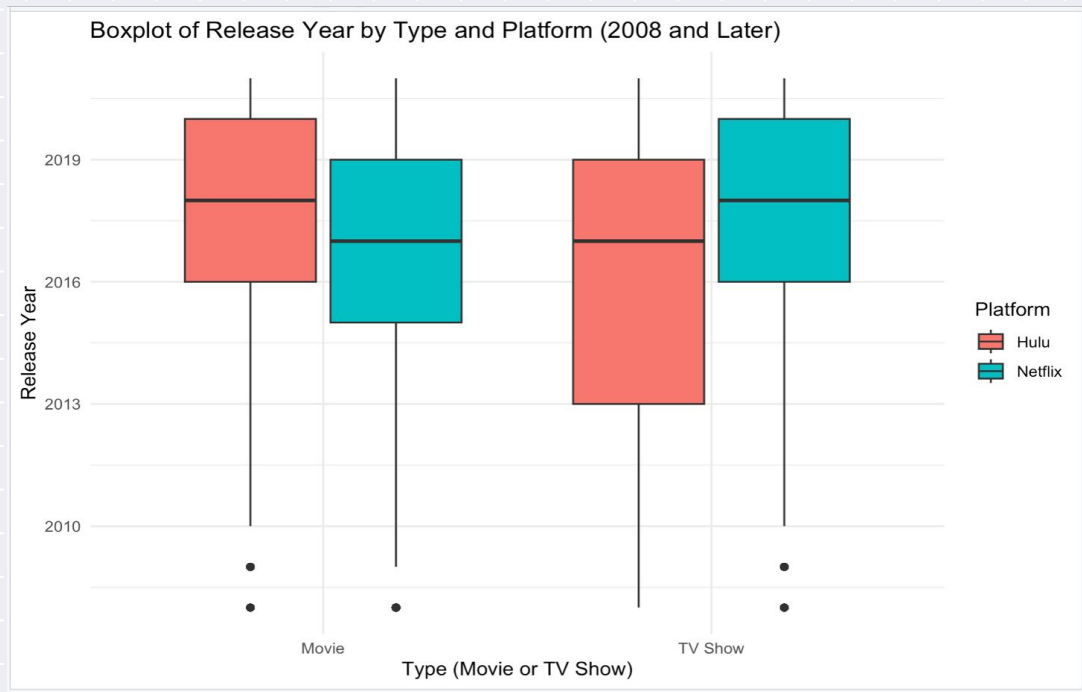
# Line Chart

- The line trend shows whether Netflix and Hulu prioritize newer or older content on their platforms.
- Majority of the content on Netflix came out after 2014 with content released in 2018 being Netflix's peak.
- Hulu experienced gradual improvement as content released in 2019 being Hulu's peak.



# Boxplot

- The distribution shows release year of tv shows and Movies by the streaming platform.
- Hulu is focused on uploading more recent content, especially movies.
- Netflix has a more diverse streaming catalog as it's boxplot has a wider range than Hulu's.





3

# Conclusion

What does this research communicate?



# Conclusion

The research shows that Netflix's extensive catalog, offering a higher proportion of movies than tv shows, and providing users with a mixture of newer and older content are content strategy approaches Netflix used to differentiate itself from Hulu. For this reason, Netflix is a more desired streaming platform to have than Hulu.



VS.

