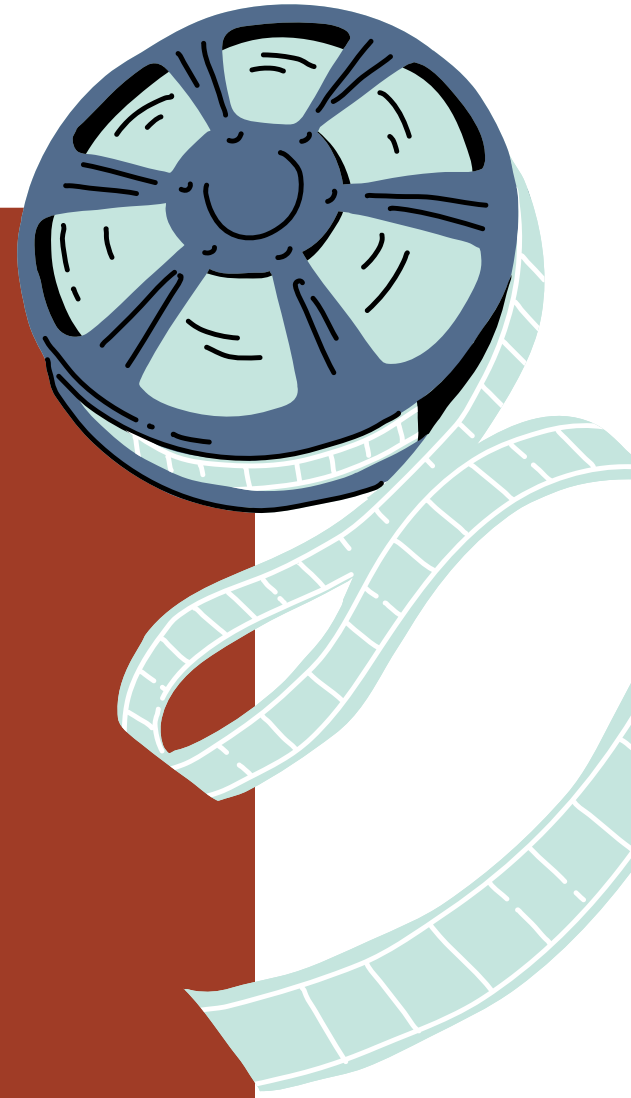
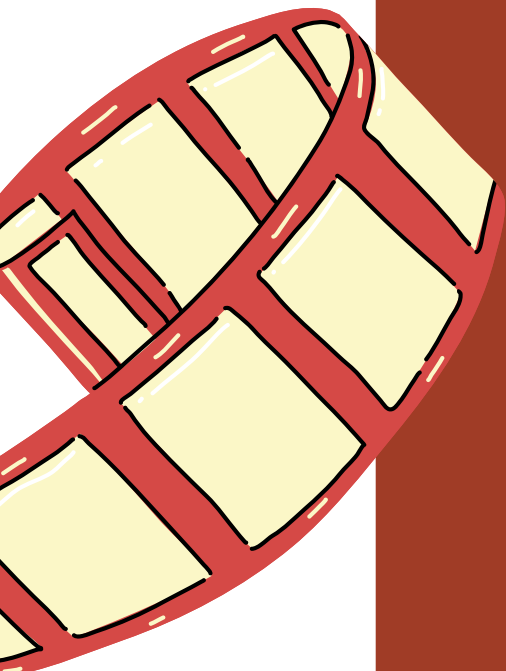


Analyzing Movie Ratings and Trends Using EDA

A project presented by Shashikumar.D, submitted towards MCA - 2nd Semester, Data Visualization Project (DAT203) for the academic year 2024-2025.

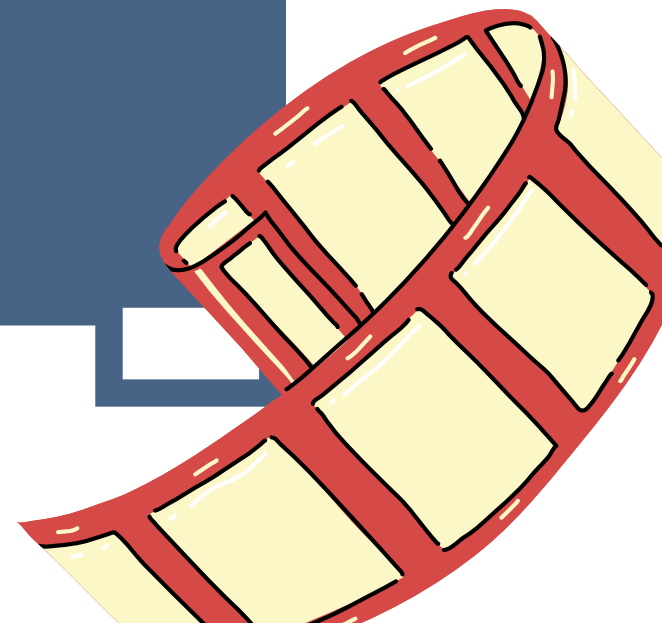
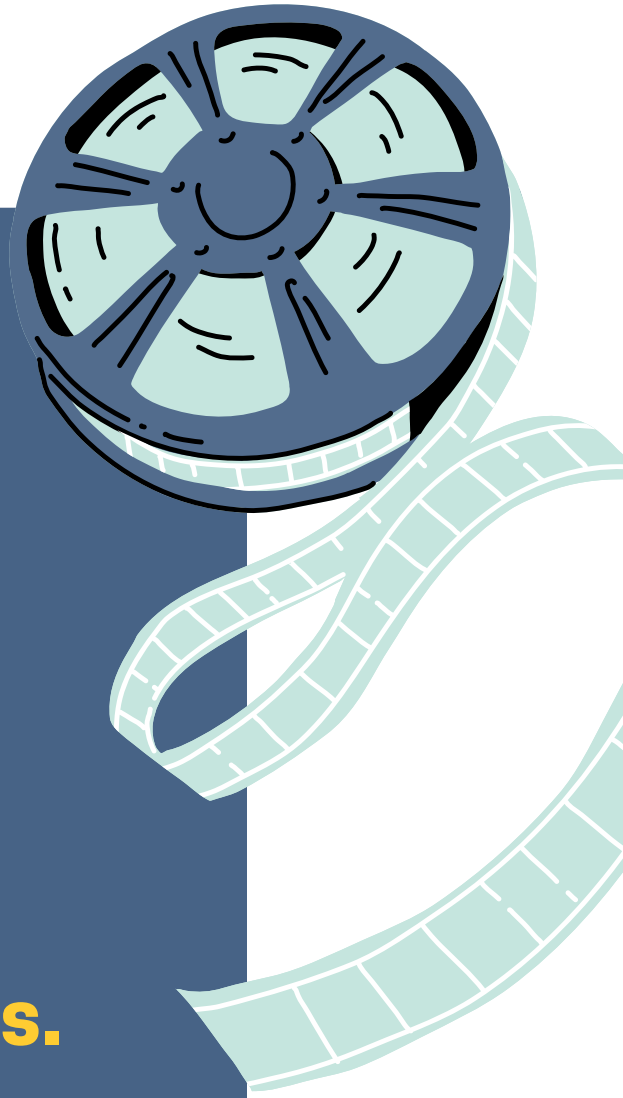
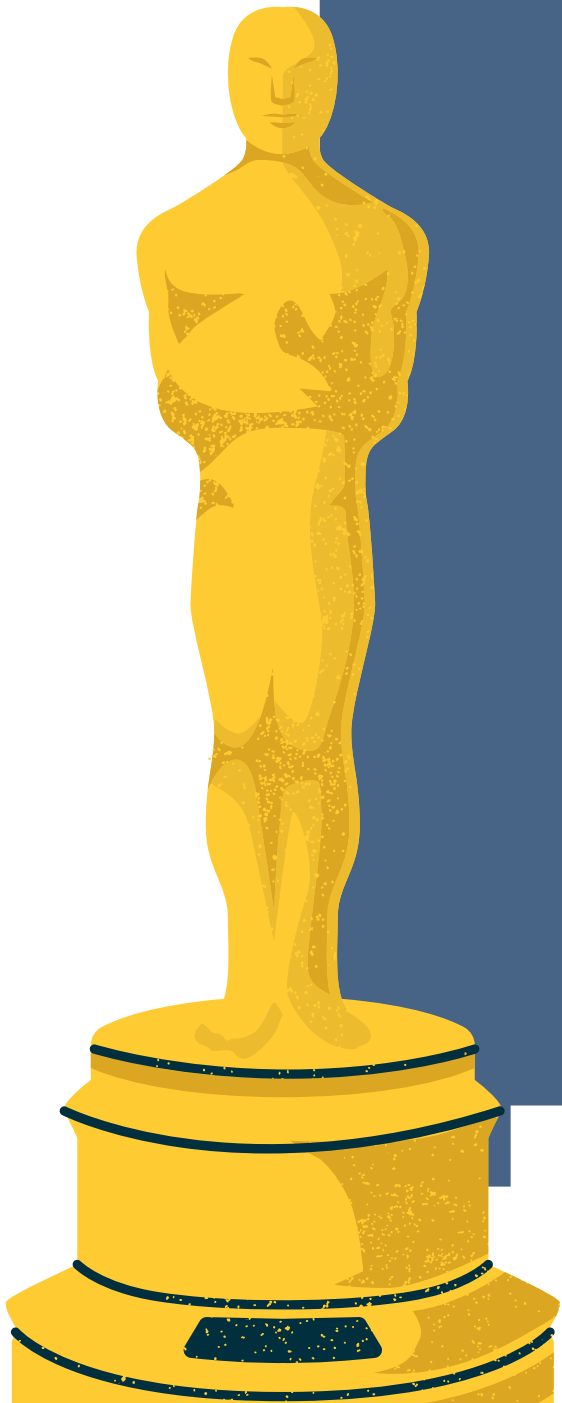
Introduction

1. Video streaming platforms are transforming media consumption.
2. Amazon Prime Video offers over 9,600 titles worldwide.
3. Metadata includes title, director, genre, rating, etc.
4. Analyzing metadata reveals content patterns and trends.
5. Objective: Use EDA to uncover insights and support strategy.



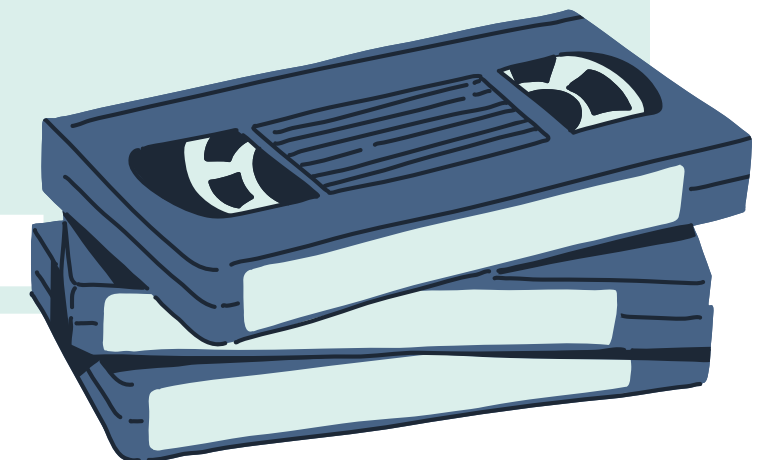
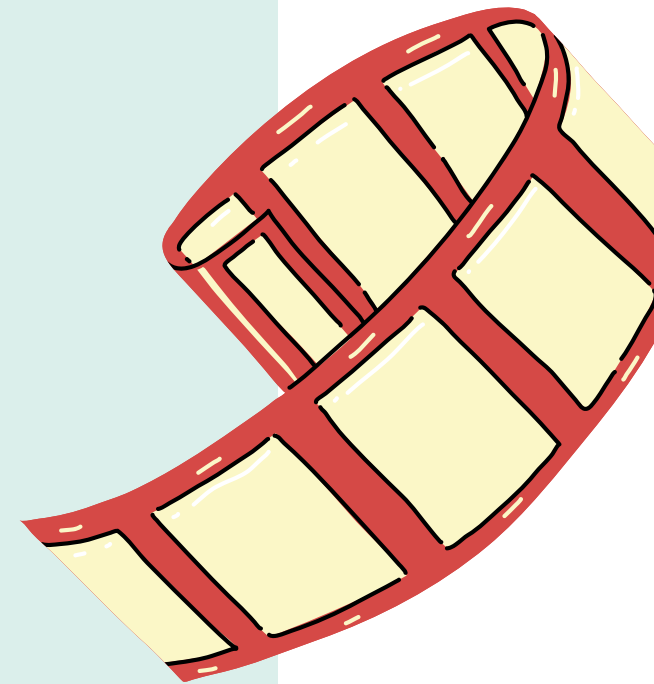
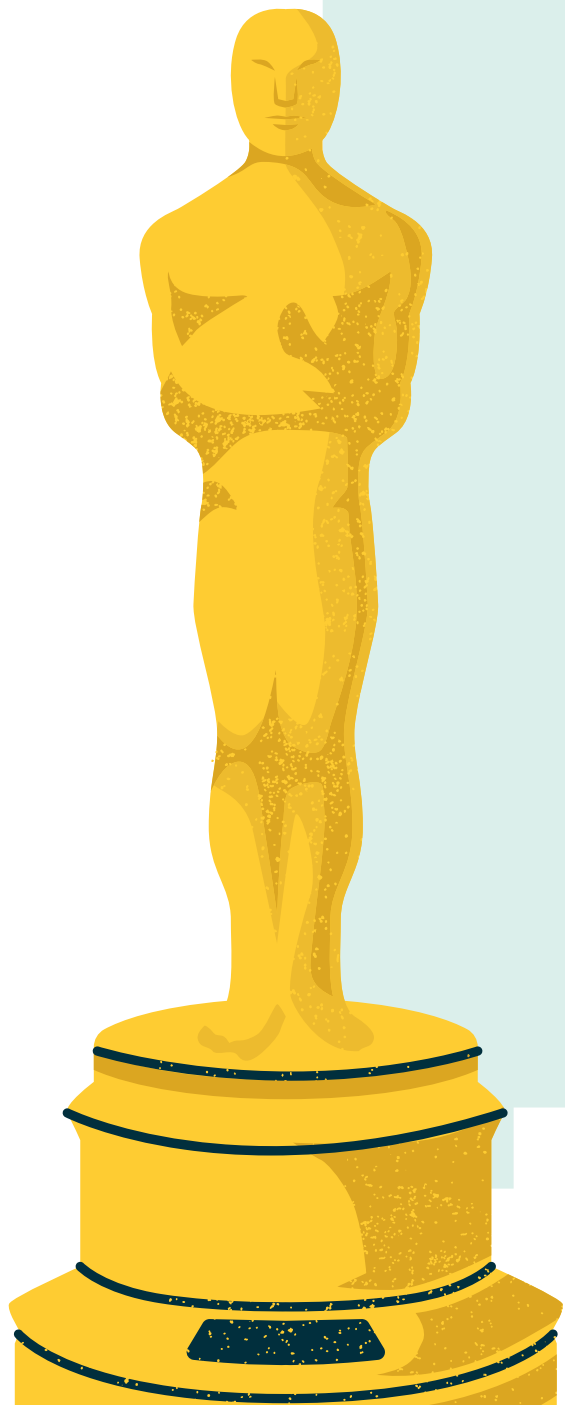
About the Dataset

- 1. Amazon Prime Titles Dataset includes Movies & TV Shows.**
- 2. Key columns: title, type, cast, country, release_year, rating.**
- 3. Structured data enables temporal, categorical, and text-based analysis.**
- 4. Challenges: missing data, unstructured text fields.**
- 5. Used for EDA, NLP, recommendation systems, and more.**



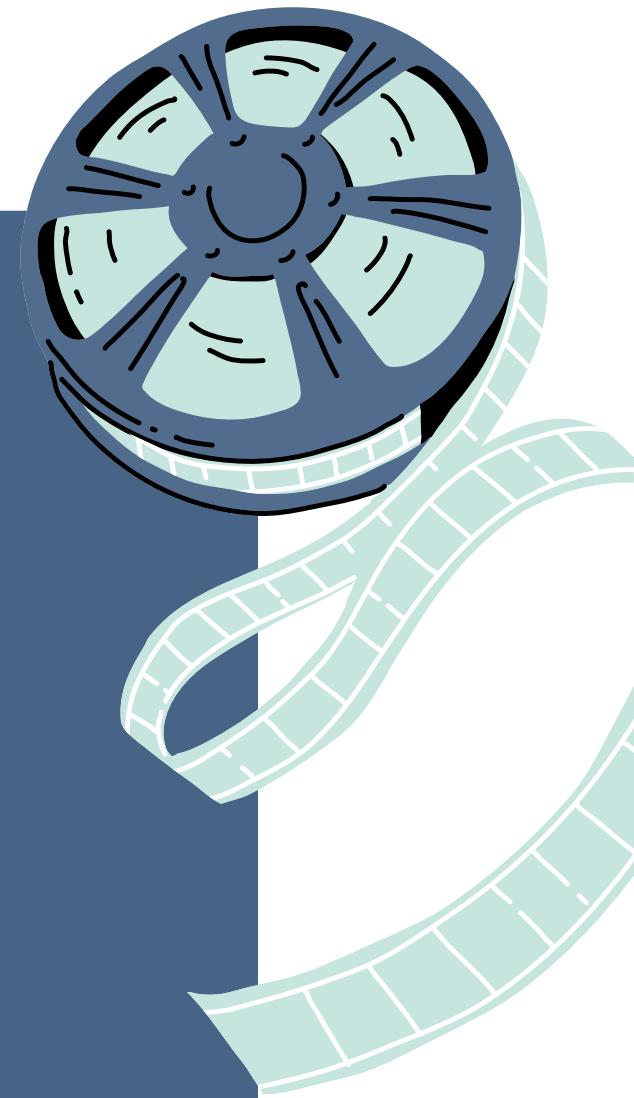
Problem Statement

- 1. Users struggle to find content matching preferences.**
- 2. Unstructured fields and missing values hinder analysis.**
- 3. No user interaction data; rely solely on metadata.**
- 4. Key questions: content trends, genre dominance, country insights.**
- 5. Goal: Extract patterns to guide recommendations and decisions.**



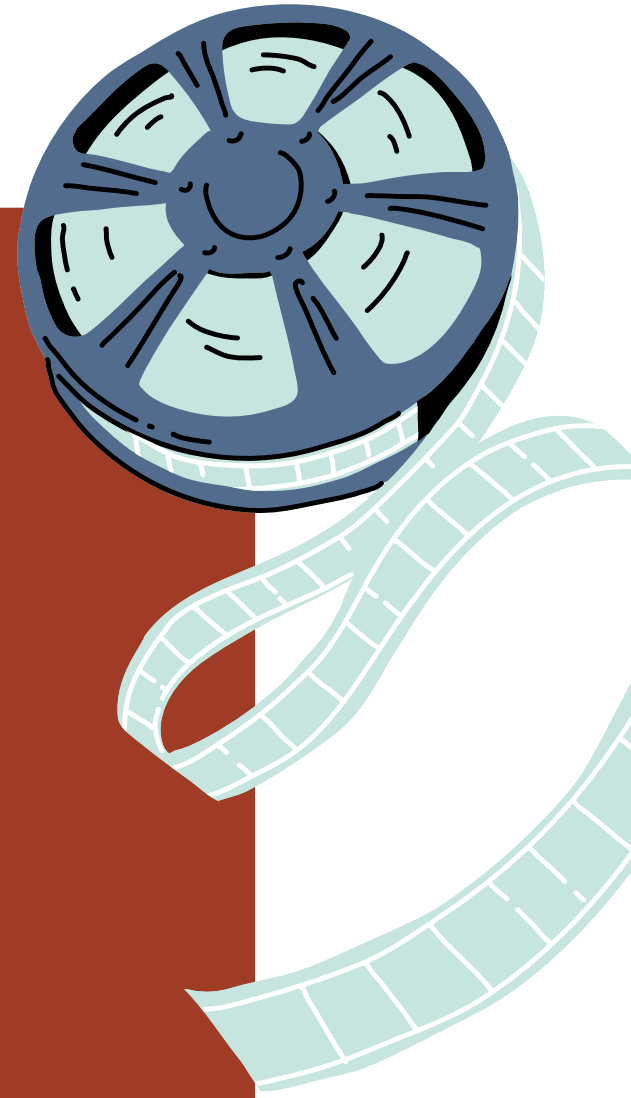
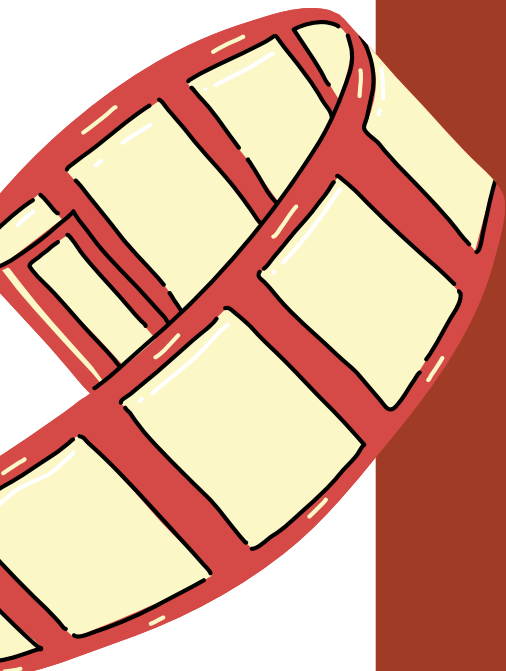
Methodology - Data Cleaning

1. Handled missing values in director, country, cast, etc.
2. Converted dates and standardized fields.
3. Extracted new features: title length, word count.
4. Grouped ratings into Kids vs Adult for segmentation.
5. Prepared data for visual analysis and insights.



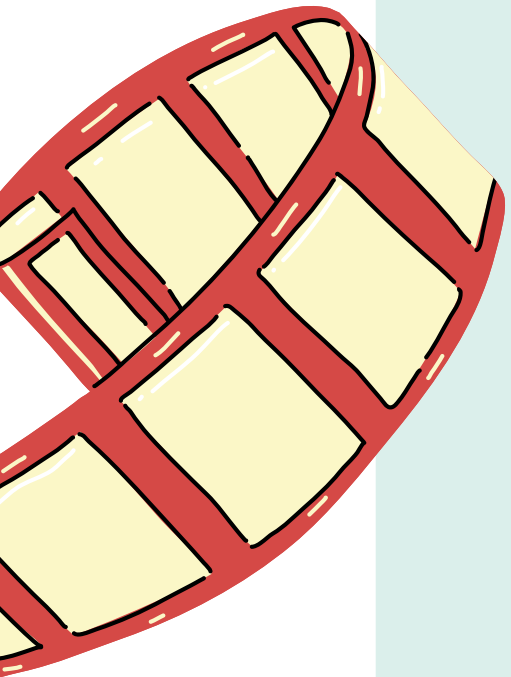
Methodology - Metrics & Visualization

1. Analyzed content type (movies vs TV shows).
2. Top 10 content ratings and genre distribution.
3. Release trends across years (2000–2023).
4. Country-wise production volume and duration types.
5. Visualized using bar charts, pie charts, histograms, heatmaps.



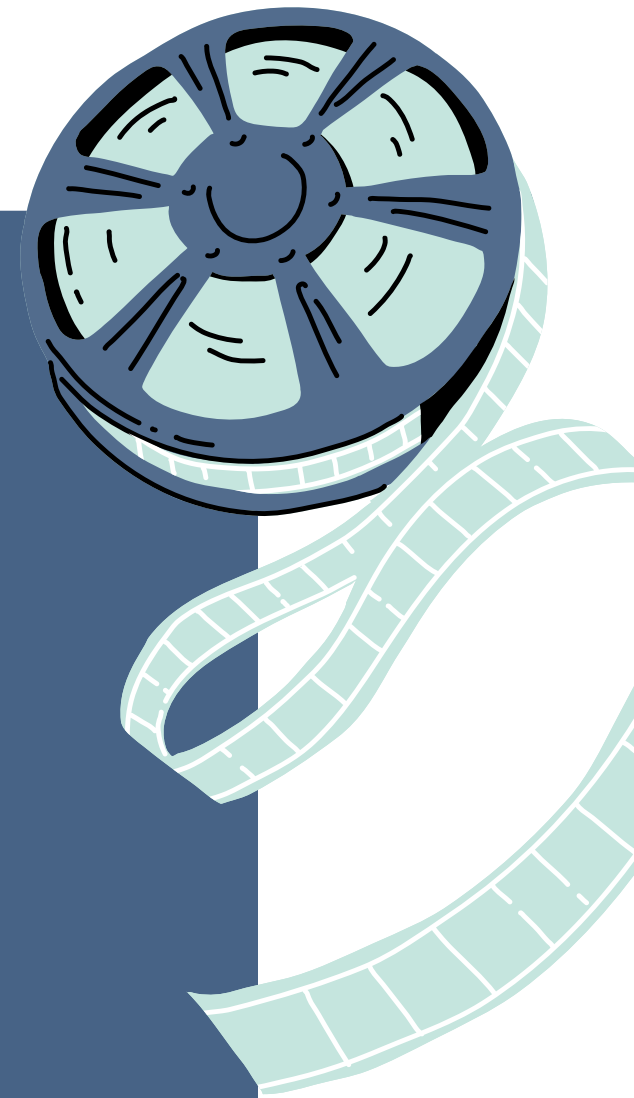
Insights - Content & Audience

- 1. Movies dominate over TV shows → focus on one-time viewership.**
- 2. Majority of content is for adult/general audience.**
- 3. TV-MA, R, and TV-14 are most frequent ratings.**
- 4. Need for more family-friendly and children's content.**
- 5. Title naming tends toward short, catchy words.**



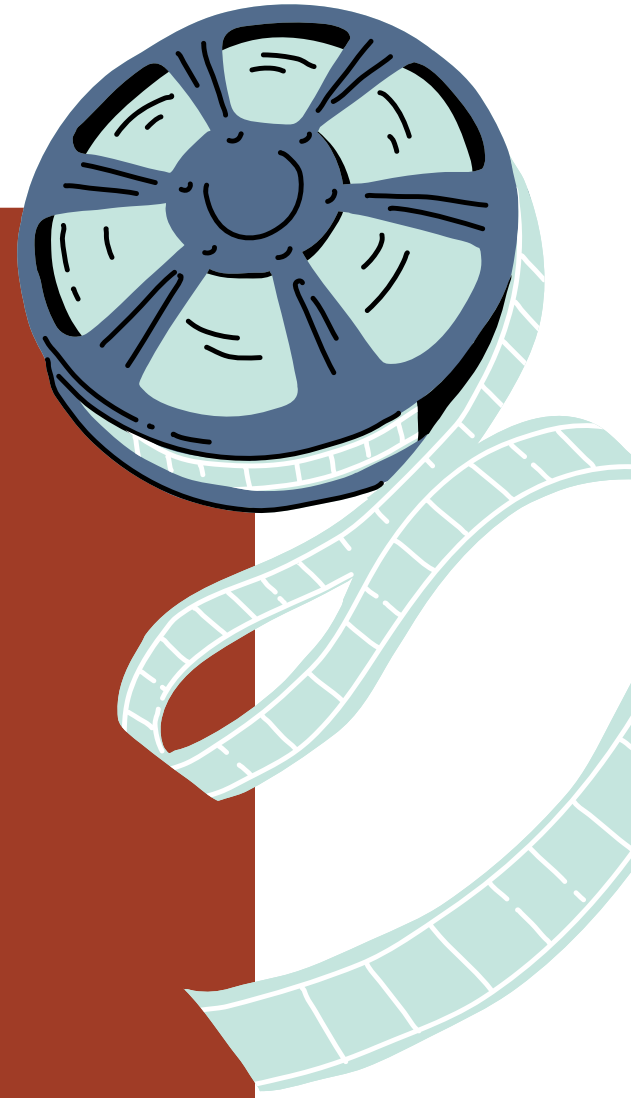
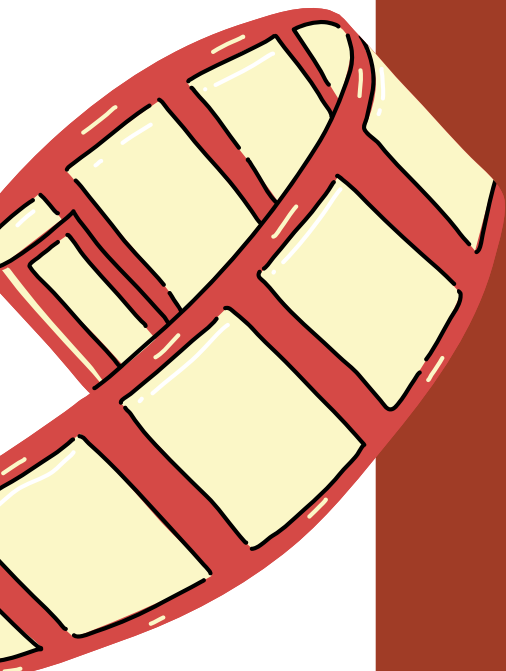
Insights - Genres and Countries

- 1. Drama, Comedy, and Documentary are top genres.**
- 2. Opportunities in niche content: Sci-Fi, Anime, Regional films.**
- 3. Most content originates from a few dominant countries.**
- 4. Potential to diversify international content offerings.**
- 5. Genre analysis helps target specific audience segments.**



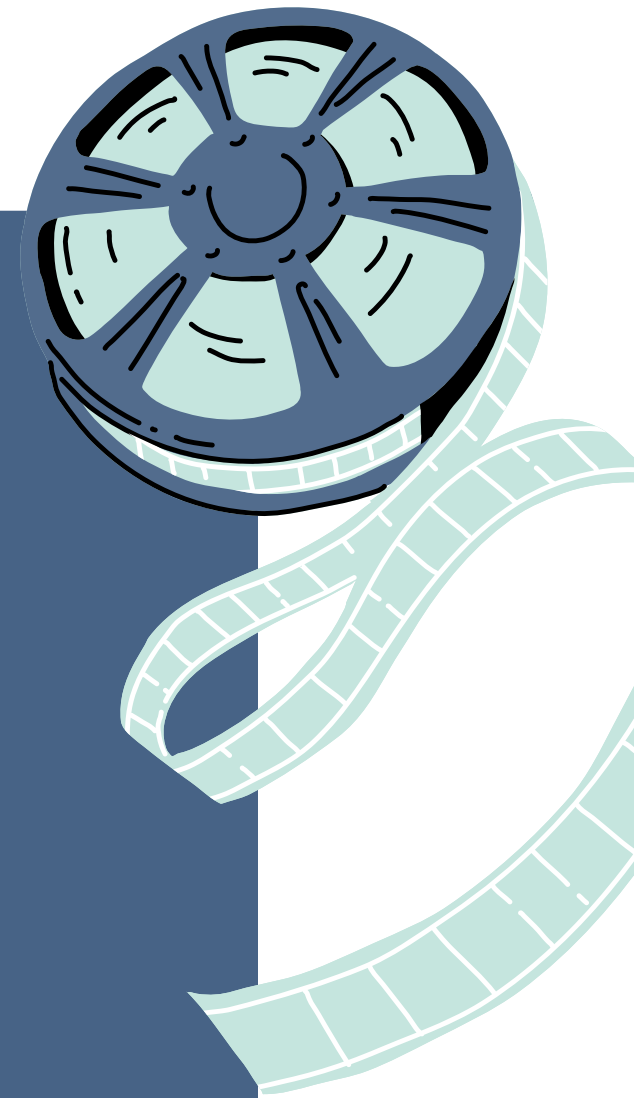
Insights - Trends Over Time

1. Content surged during 2016–2020, especially 2018–2020.
2. Aligns with Amazon's expansion in originals and global licensing.
3. Possible plateau or drop post-2021 due to market saturation.
4. Temporal trends aid in forecasting content planning.
5. Seasonal or year-based additions can be identified.



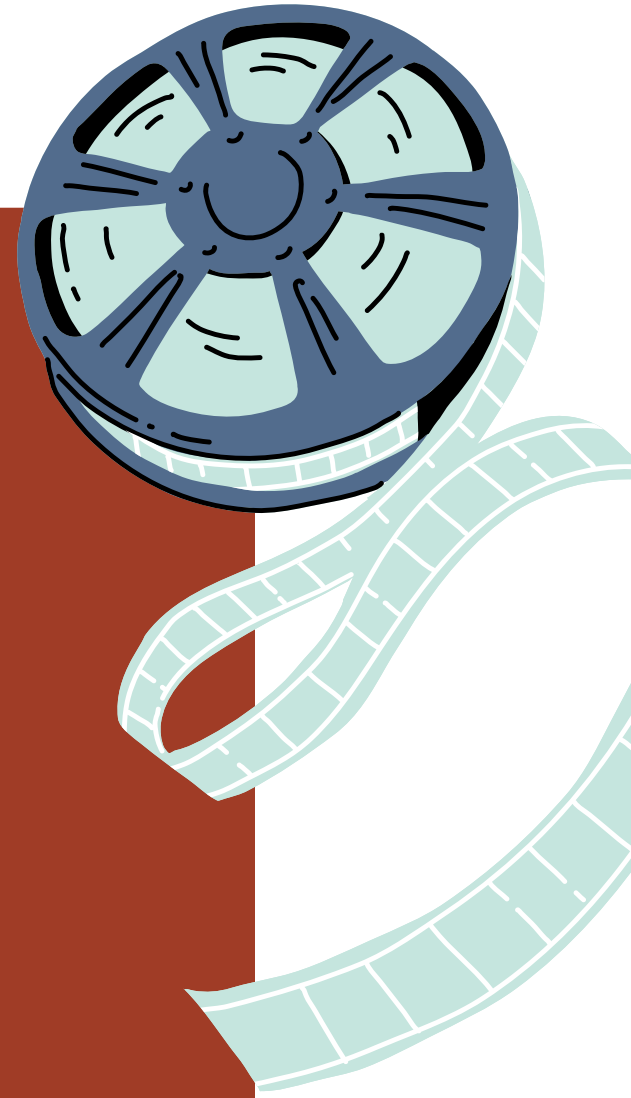
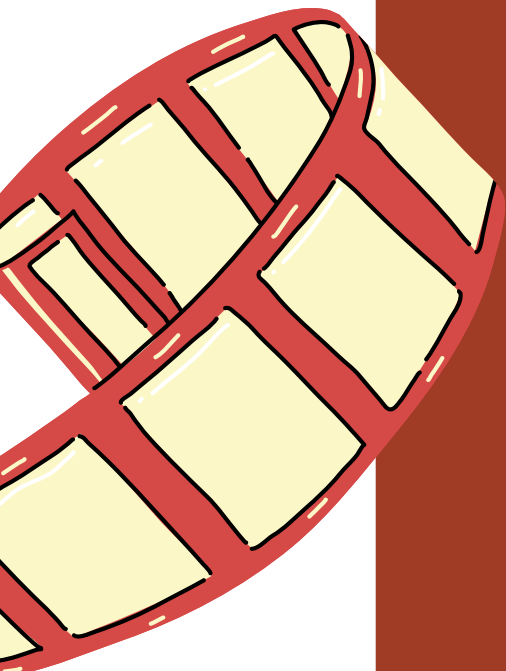
Business Implications

1. Invest in original TV shows to increase viewer retention.
2. Add kid-safe content to improve brand inclusivity.
3. Target regional and international markets with tailored content.
4. Use metadata-driven insights to guide acquisition and promotion.
5. Support ML applications like recommendation systems and segmentation.



Conclusion

- 1. Amazon Prime is movie-focused with adult-targeted content.**
- 2. Drama and Comedy dominate; scope for niche genre expansion.**
- 3. Content growth peaked around 2018–2020.**
- 4. Short titles and detailed descriptions reflect marketing strategy.**
- 5. Future focus: expand TV shows, kid-friendly content, global reach.**





THANK YOU!

Presented By :

Shashikumar.D

Shashi Kumar