TV-GUIDE ANALYSIS

Presentation of the final project

Visual Analytics 2022/2023

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INTRODUCTION

We developed an interactive visualization tool for analyzing the Italian TV movies scheduling.

In particular, we use:

- **Stacked Bubble chart**:
- **Scatterplot**
- **Bubble plot**
- **Chord**
- **Calendar Heatmap**

DATASET

The final datasets are composed by multiple data coming from different sources:

- TV data from an **Italian TV guide**
- Movie information from **Kaggle**
- Sharing data from **Auditel** (Italian company for TV audience information).

DATASET

Sharing Dataset:

channel, month, number_movies, sharing

Italia 1, august, 9, 4.66%

Movies Dataset (5718 tuples with 1171 movies):

day, day_number, month, daytime, title, duration, duration with advertising, advertising, channel, year, genres, rating

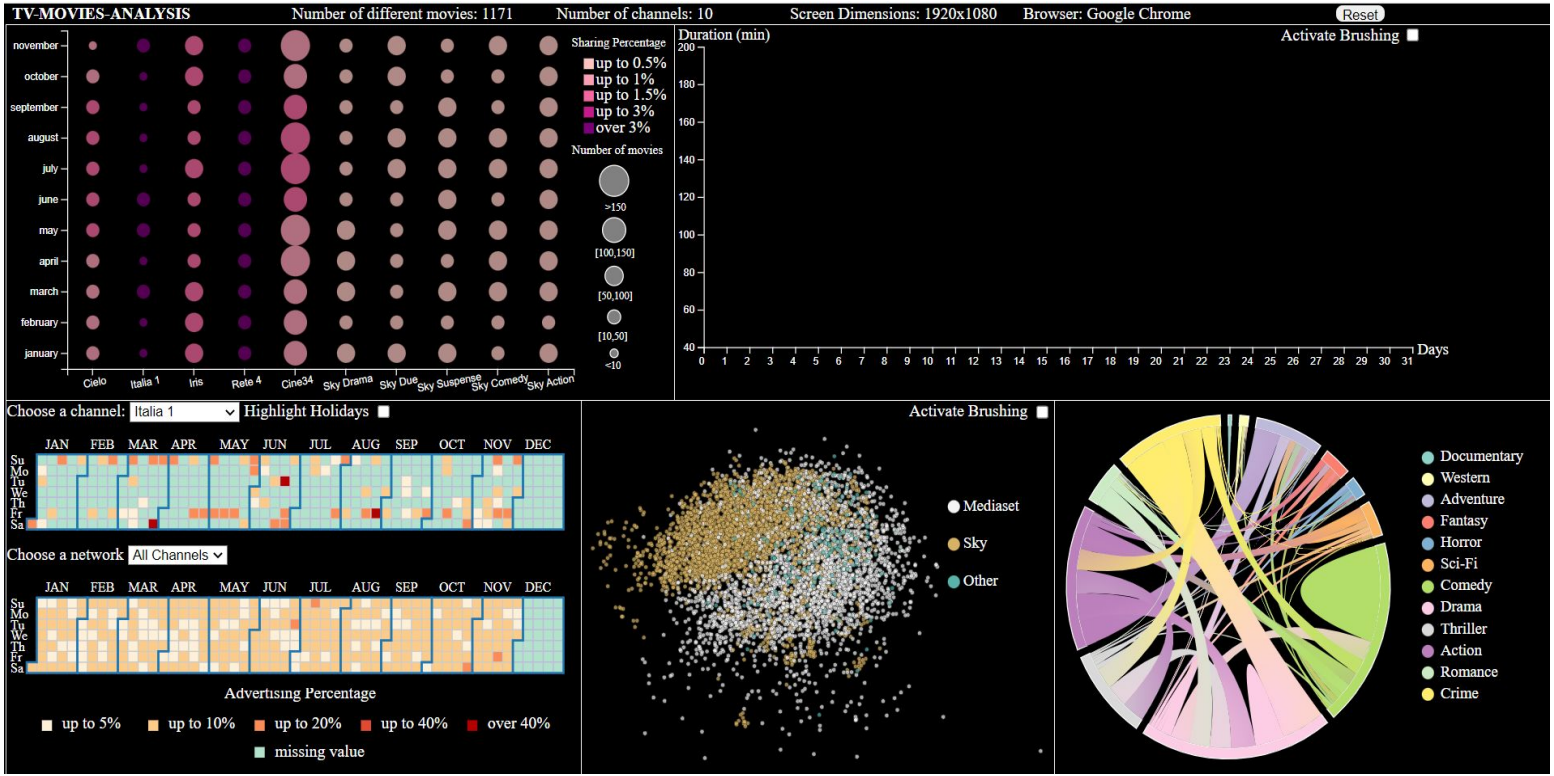
Tuesday, 25, january, night, match point, 124, 125, 1, Sky Due, 2005, “Romance,Thriller,Drama”, 7.6,

DIMENSIONALITY REDUCTION

MDS for dimensionality reduction, based on the following distances:

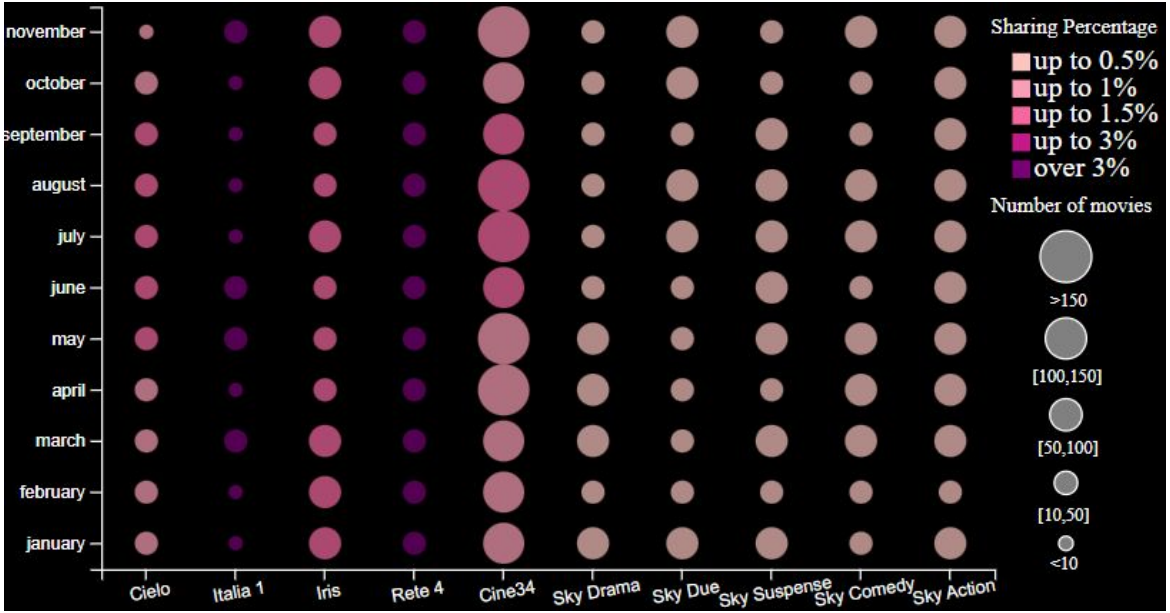
- **Euclidean** distance: Numerical attributes
- **Day** distance
- **Month** distance
- **Daytime** distance
- **Title** distance (= **Edit** distance)
- **Genres** distance (= **Jaccard** distance)

VISUALIZATION AND INTERACTIONS

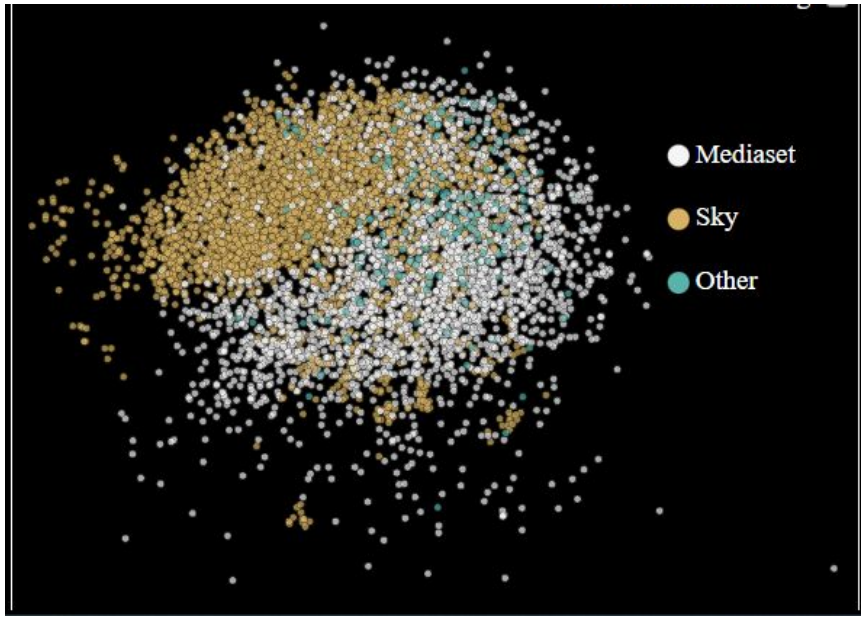


STACKED BUBBLE CHART

It is used to visualize the **sharing** obtained and the **number of movies** broadcast for each specific channel during the year.



SCATTERPLOT



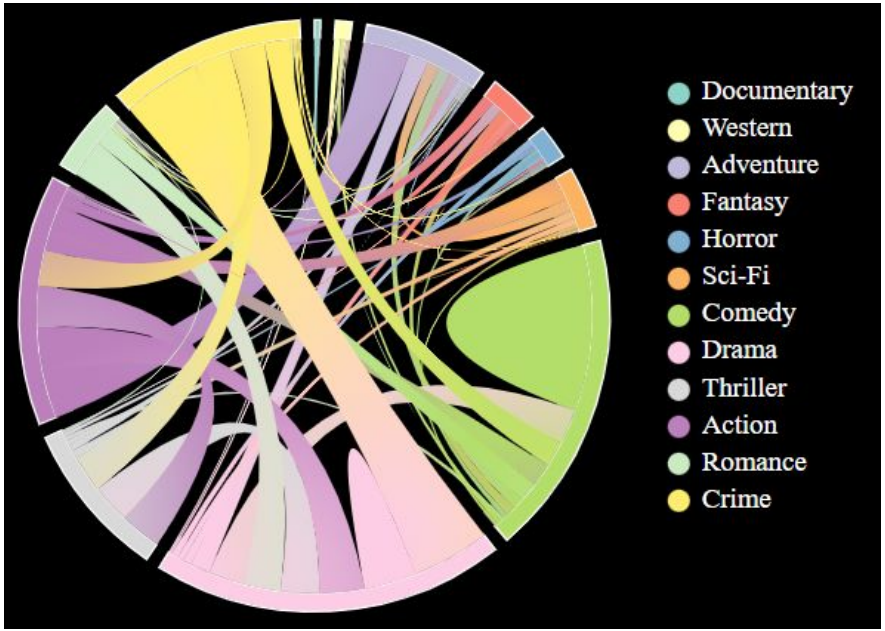
It is possible to visualize in it the results of Dimensionality Reduction applied on our dataset throughout the Multidimensionality Scaling technique (**MDS**).

BUBBLEPLOT

The usual X and Y dimensions represent, respectively, the **day** in which the movie has been broadcast and its **duration**.

The third dimension is the radius of the bubble which represents the **rating** of the movie according to the IMDB votes.

CHORD



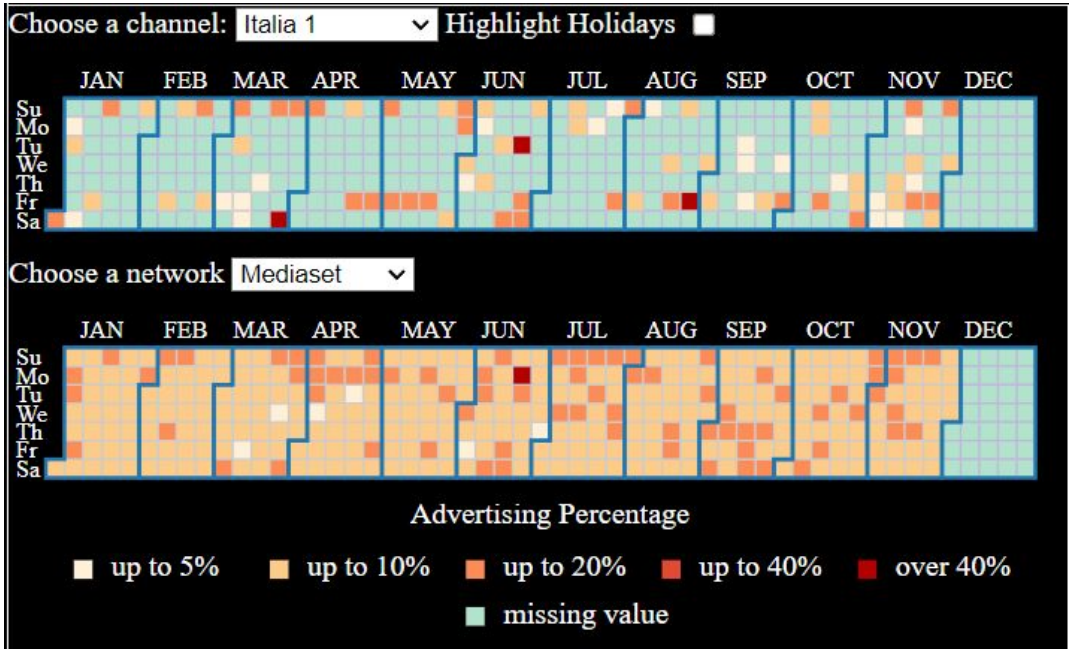
It displays the movies' **genres** and their **connections** and can be interacted with **clicking** on a path or on a genre on the legend.

CALENDAR HEATMAP

Advertising Trend

Top: Specific Channel

Bottom: Network



RELATED WORKS

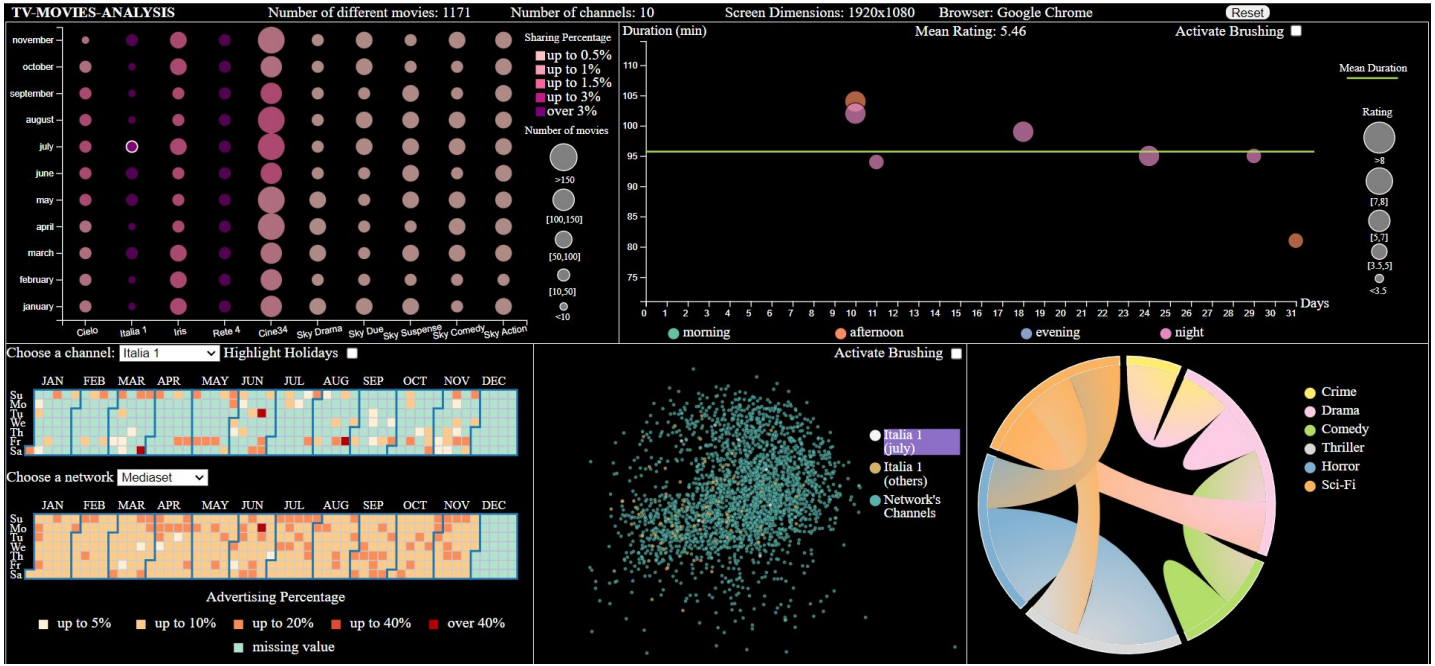
[1] M.Gambaro (2004), The Relationship between Different Distribution Channels for Movies: Some Lessons from the Case of Free Television

[2] J.Candeloro, M.Cucco (2008), Italian Feature Films on National Public and Private Broadcasting Networks

[3] M.Gasparini, D.Imparato (2007), Forecasting TV audience: a consulting project with the Italian public television

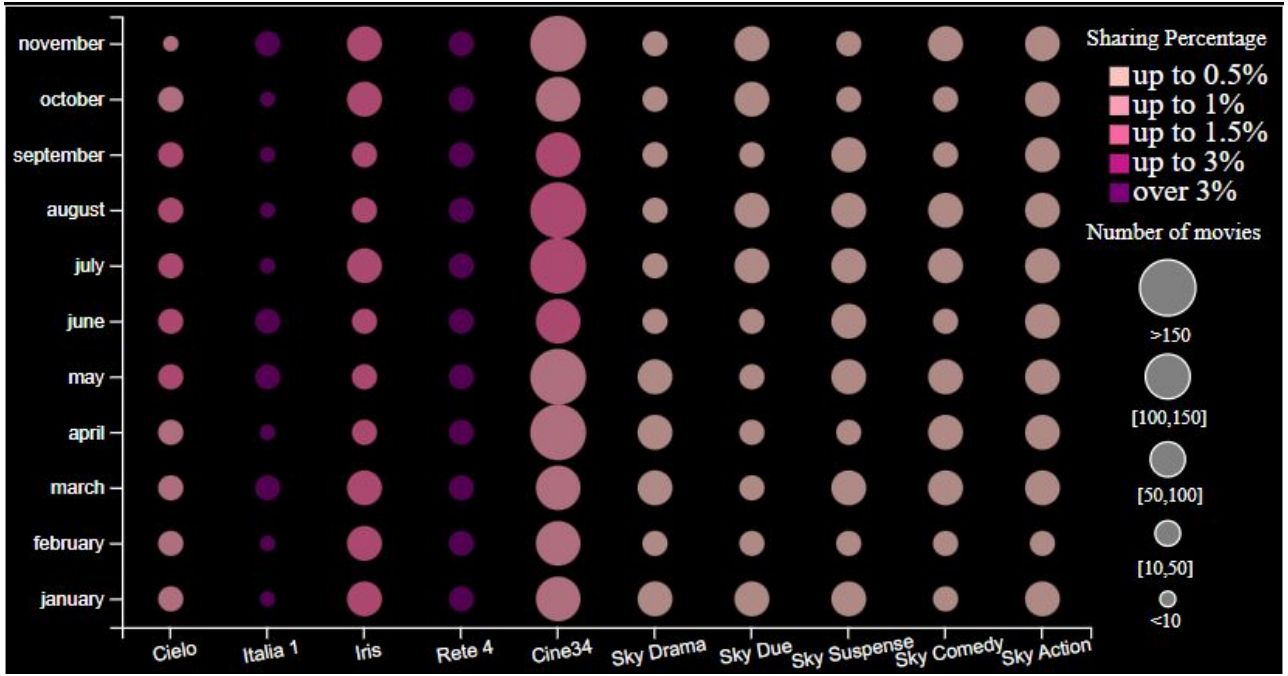
INSIGHTS

In [1], the authors conclude that "*[...] In particular movies that had a scanty success in cinemas reach high audience performance if broadcast on hi-share TV networks*".
This thesis can be visually confirmed through our tool.



INSIGHTS

In [2] the authors conclude that "*[...] The channel which pays most attention to Italian cinema is Rete4 (445 films/year), followed by Italia1 (237) and Rai3 (218).*" Even if this thesis was related to 2008, the same trend can be confirmed nowadays through our tool.



INSIGHTS

From [2] *"[…] Italia1, RAI1 and Rete4 are the channels with the most Italian feature films broadcast in the night time slot […]"*. Also this trend can be visually confirmed according to nowadays.

CONCLUSIONS AND FUTURE WORKS

This project can be extended given the lack (according to our research) of a similar system and of data:

- Complete dataset with more information
- Add other networks

REFERENCES

[1] M.Gambaro (2004), The Relationship between Different Distribution Channels for Movies: Some Lessons from the Case of Free Television

[2] J.Candeloro, M.Cucco (2008), Italian Feature Films on National Public and Private Broadcasting Networks

[3] M.Gasparini, D.Imparato (2007), Forecasting TV audience: a consulting project with the Italian public television

[4] M. Angelini, G. Santucci Material of Visual analytics course, 2022/2023

[5] https://github.com/d3/d3/wiki

[6] https://www.kaggle.com/datasets/komalkhetlani/imdb-dataset

[7] https://www.laguidatv.it/tutti-i-mesi

DEMO