



YouTube Advertisement Putting

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Content



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01 Introduction: Business Objective

Objective:


Analyze YouTube video clicks to determine which videos to advertise for, thereby increasing potential users and sales, and increasing revenue



01 Introduction: Two Main Questions

Q1: When should we put the advertisement?

Q2: What kind of video(s) should we put the advertisement?



02 EDA: About Data

About Data:

- This csv dataset includes data for 16 types of YouTube videos in the United States region
- The json file includes category title corresponding to category ID

Data Types:

csv file: 16 columns of data in total

02 EDA: *About Data*

Video ID

Trending Date

Title

Channel Title

Category ID

Publish Time

Tags

Views

Likes

Dislikes

Comment Count

Thumbnail Link

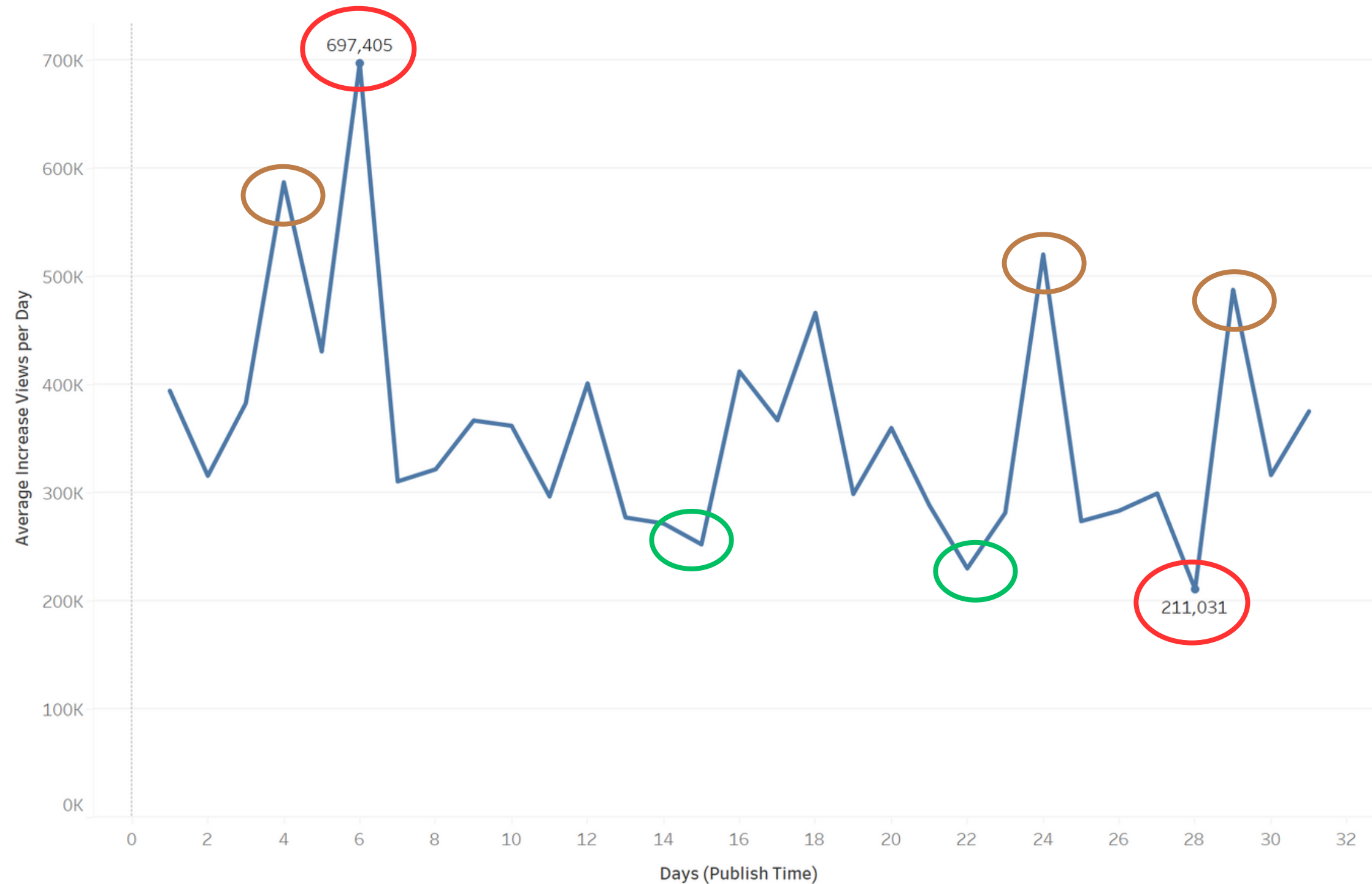
Comments Disabled

Rating Disabled

**Video Error or
Removed**

Description

02 EDA: Line chart on average daily growth views



Suitable time:

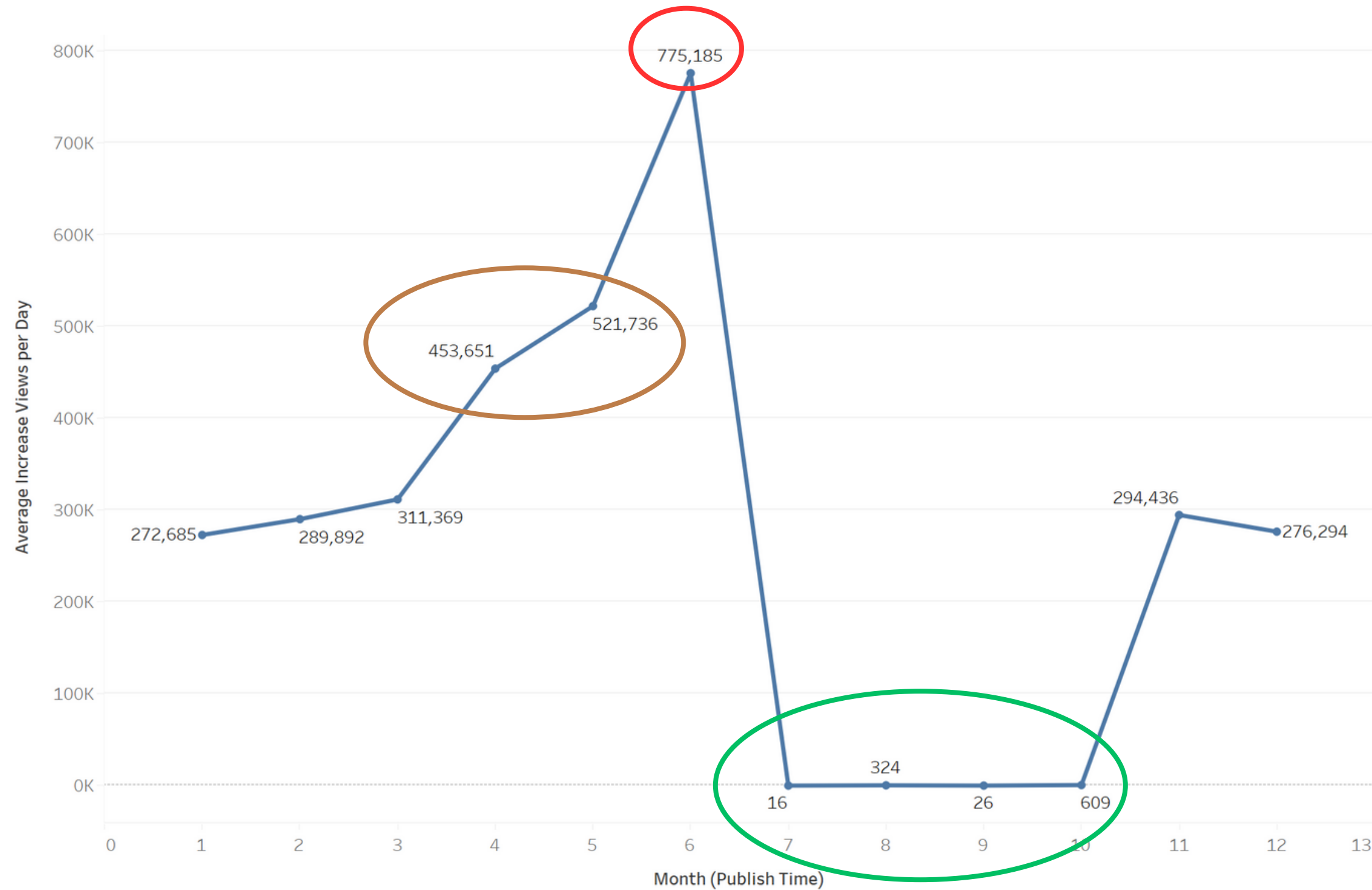
4th, **6th**, 22th, 29th

Not Suitable time:

15th, 22nd, **28th**

The trend of average of Increase/Days for Publish Time Day.

02 EDA: Line chart on average monthly growth views



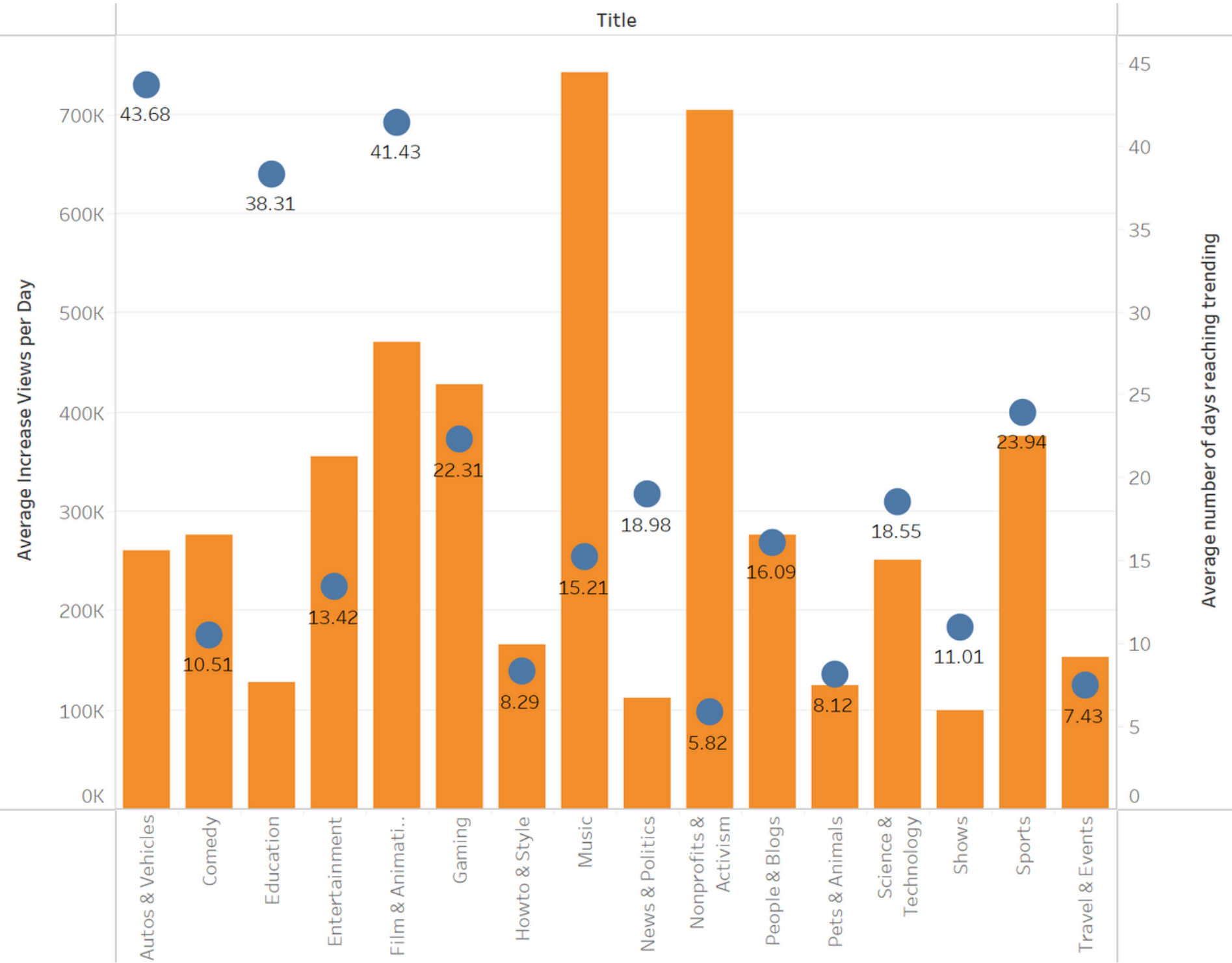
Suitable time:
April, May, **June**

Not Suitable time:
July, August, September, October

The trend of average of Increase/Days for Publish Time Month.

Q1

02 EDA: Bar charts and tables for video classification



Avg. Increase/Days and Avg. Increase Day Diff for each Title. Color shows details about Avg. Increase/Days and Avg. Increase Day Diff.

	category_id	views	title
0	1	7284156721	Film & Animation
1	2	520690717	Autos & Vehicles
2	10	40132892190	Music
3	15	764651989	Pets & Animals
4	17	4404456673	Sports
5	19	343557084	Travel & Events
6	20	2141218625	Gaming
7	22	4917191726	People & Blogs
8	23	5117426208	Comedy
9	24	20604388195	Entertainment
10	25	1473765704	News & Politics
11	26	4078545064	Howto & Style
12	27	1180629990	Education
13	28	3487756816	Science & Technology
14	29	168941392	Nonprofits & Activism
15	43	51501058	Shows

02 EDA: Strategy

Travel & Events need to be included because:

- Related to our product -> Travel App
- Total views not too high -> Cost may not high
- Not too low average daily traffic growth
- Fast trending speed of videos

In addition, we can also advertise other video categories.....

02 EDA: Strategy

A Music + Nonprofit & Activism

Pros:

- Average daily viewing volume of increased significantly
- Average number of days a video reaches trending is relatively low

Cons:

- The total viewing of music videos is the highest, the cost may be higher
- The total viewing of nonprofit videos is relatively low, may have an impact on the advertising effect

02 EDA: Strategy

B Gaming + Comedy / Entertainment + People & Blogs

Pros:

- Not low total views, but not too high, so costs can be controlled
- The average daily traffic growth and average trending duration are both in the upper middle range

Cons:

- People who watching gaming and entertainment may not necessarily have a strong interest in tourism