

29 August 2023

VISUAL TRENDS IN US YOUTUBE VIDEOS: EXPLORING CATEGORIES, TAGS, AND ENGAGEMENT

UDACITY PROJECT

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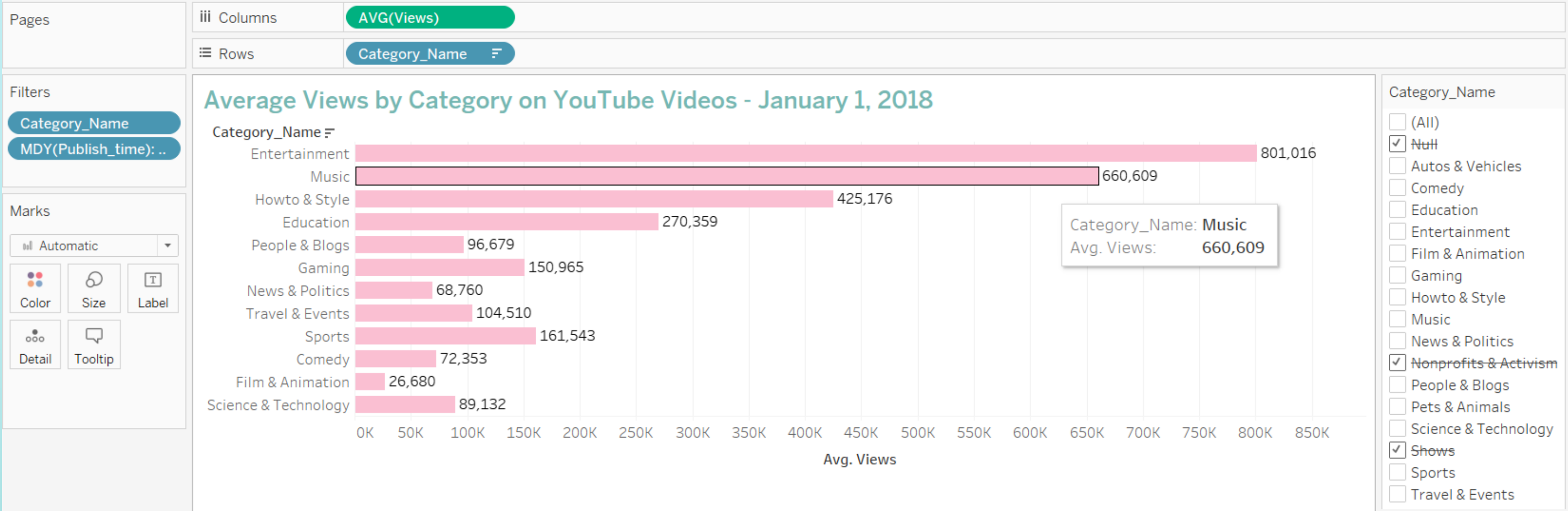
A sample of the dataset

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	CITY	STATE	COUNTRY	trending_date	title	Channel_title	Category_Name	Publish_time	Tags	Views	Likes	Dislikes	Comment_Count	thumbnail_link	Comments_Dis
2	Covington	KY	USA	18.25.02	p Thrills - Sia / Tina Boo Choreogr	1MILLION Dance Studio	Entertainment	19/02/18 15:00	r" "?????" "	601159	27962	336	444	https://i.ytimg.com/	FALSE
3	Covington	KY	USA	18.26.02	p Thrills - Sia / Tina Boo Choreogr	1MILLION Dance Studio	Entertainment	19/02/18 15:00	r" "?????" "	627933	28580	340	444	https://i.ytimg.com/	FALSE
4	Covington	KY	USA	18.01.03	shmello & Anne-Marie / Tina Boo	1MILLION Dance Studio	Entertainment	28/02/18 12:00	r" "?????" "	384249	26271	238	540	https://i.ytimg.com/	FALSE
5	Covington	KY	USA	18.02.03	shmello & Anne-Marie / Tina Boo	1MILLION Dance Studio	Entertainment	28/02/18 12:00	r" "?????" "	513455	31505	279	623	https://i.ytimg.com/	FALSE
6	Covington	KY	USA	18.03.03	shmello & Anne-Marie / Tina Boo	1MILLION Dance Studio	Entertainment	28/02/18 12:00	r" "?????" "	607740	35180	314	672	https://i.ytimg.com/	FALSE
7	Covington	KY	USA	18.04.03	shmello & Anne-Marie / Tina Boo	1MILLION Dance Studio	Entertainment	28/02/18 12:00	r" "?????" "	705015	38833	346	724	https://i.ytimg.com/	FALSE
8	Covington	KY	USA	18.05.03	shmello & Anne-Marie / Tina Boo	1MILLION Dance Studio	Entertainment	28/02/18 12:00	r" "?????" "	817753	42960	396	776	https://i.ytimg.com/	FALSE
9	Covington	KY	USA	18.06.03	shmello & Anne-Marie / Tina Boo	1MILLION Dance Studio	Entertainment	28/02/18 12:00	r" "?????" "	896401	45386	419	821	https://i.ytimg.com/	FALSE
10	Covington	KY	USA	18.07.03	shmello & Anne-Marie / Tina Boo	1MILLION Dance Studio	Entertainment	28/02/18 12:00	r" "?????" "	992294	48246	453	854	https://i.ytimg.com/	FALSE
11	Covington	KY	USA	18.08.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	210802	17499	134	644	https://i.ytimg.com/	FALSE
12	Covington	KY	USA	18.09.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	307249	21782	214	762	https://i.ytimg.com/	FALSE
13	Covington	KY	USA	18.10.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	352080	23638	240	850	https://i.ytimg.com/	FALSE
14	Covington	KY	USA	18.11.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	383303	25171	254	857	https://i.ytimg.com/	FALSE
15	Covington	KY	USA	18.12.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	412464	26520	259	882	https://i.ytimg.com/	FALSE
16	Covington	KY	USA	18.13.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	435235	27525	267	894	https://i.ytimg.com/	FALSE
17	Covington	KY	USA	18.14.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	460474	28351	267	905	https://i.ytimg.com/	FALSE
18	Covington	KY	USA	18.15.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	479904	29124	276	920	https://i.ytimg.com/	FALSE
19	Covington	KY	USA	18.16.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	502910	29945	283	919	https://i.ytimg.com/	FALSE
20	Covington	KY	USA	18.17.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	524875	30756	284	919	https://i.ytimg.com/	FALSE
21	Covington	KY	USA	18.18.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	547743	31489	288	919	https://i.ytimg.com/	FALSE
22	Covington	KY	USA	18.19.03	e Greatest Showman OST / Jun Liu	1MILLION Dance Studio	Entertainment	07/03/18 15:00	r" "?????" "	564951	32030	292	928	https://i.ytimg.com/	FALSE
23	Orlando	FL	USA	17.14.11	owman Official Trailer 2 [HD] 2	20th Century Fox	Film & Animation	13/11/17 17:00	rouge" "hig	826059	3543	119	340	https://i.ytimg.com/	FALSE
24	Orlando	FL	USA	17.15.11	owman Official Trailer 2 [HD] 2	20th Century Fox	Film & Animation	13/11/17 17:00	rouge" "hig	2671756	12699	505	1010	https://i.ytimg.com/	FALSE
25	Orlando	FL	USA	17.16.11	Deadpool's "Wet on Wet" Teaser	20th Century Fox	Film & Animation	15/11/17 17:01	sical Artist)	3979891	151850	2378	8079	https://i.ytimg.com/	FALSE
26	Orlando	FI	USA	17.17.11	Deadpool's "Wet on Wet" Teaser	20th Century Fox	Film & Animation	15/11/17 17:01	sical Artist)	6659676	223821	4515	11792	https://i.ytimg.com/	FAI SE

Note: I have substituted the "Category_ID" column with the corresponding Category names. Additionally, I have applied a filter to all my charts, limiting the data displayed to the year 2018.



Which YouTube video categories attained the highest average views on January 1, 2018?

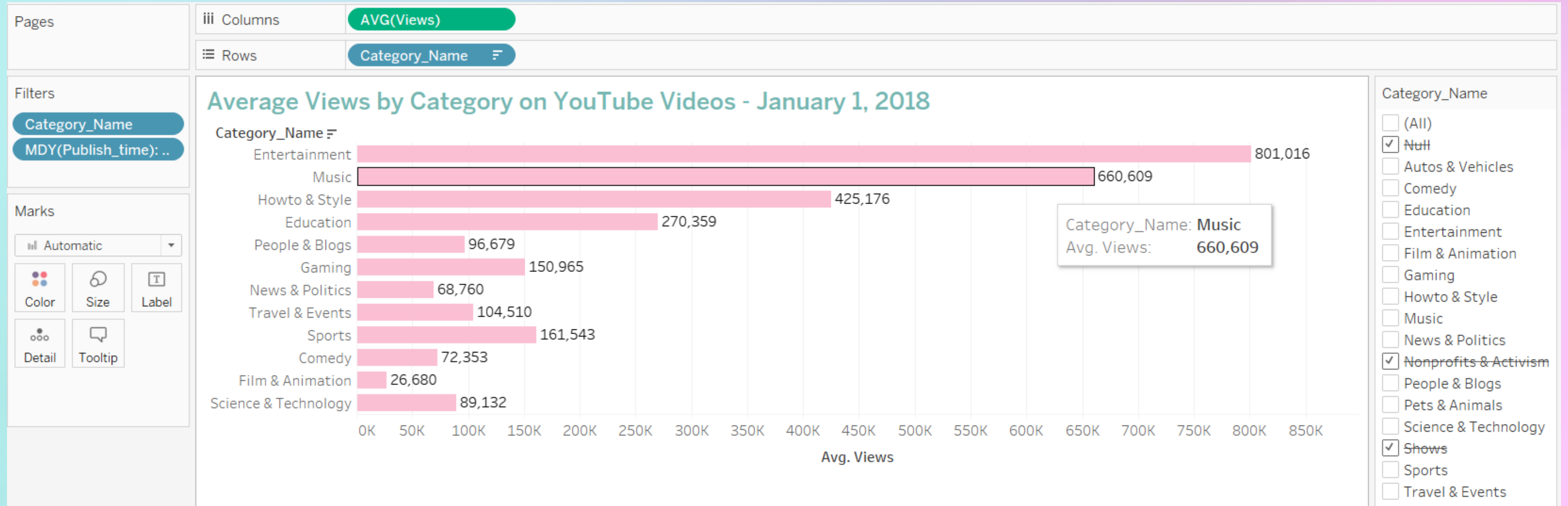


Based on the horizontal bar chart illustrating the average views of each category in YouTube videos on January 1, 2018, it becomes apparent that the "Entertainment" category secured the highest average number of views compared to all other categories. The "Music" category closely followed with an average of 660,609 views, potentially driven by the festive spirit of the new year. This inclination towards entertainment and music aligns with the desire for content that enhances celebratory moments.

Design Choices: In selecting the horizontal bar chart for representation, the intention was to effectively visualize the average views attributed to each category on the first day of 2018. As categorical data, the horizontal bar chart offers a clear and concise portrayal of this information. Additionally, a pink color palette was deliberately chosen for its reader-friendly and visually harmonious qualities, enhancing the overall presentation.



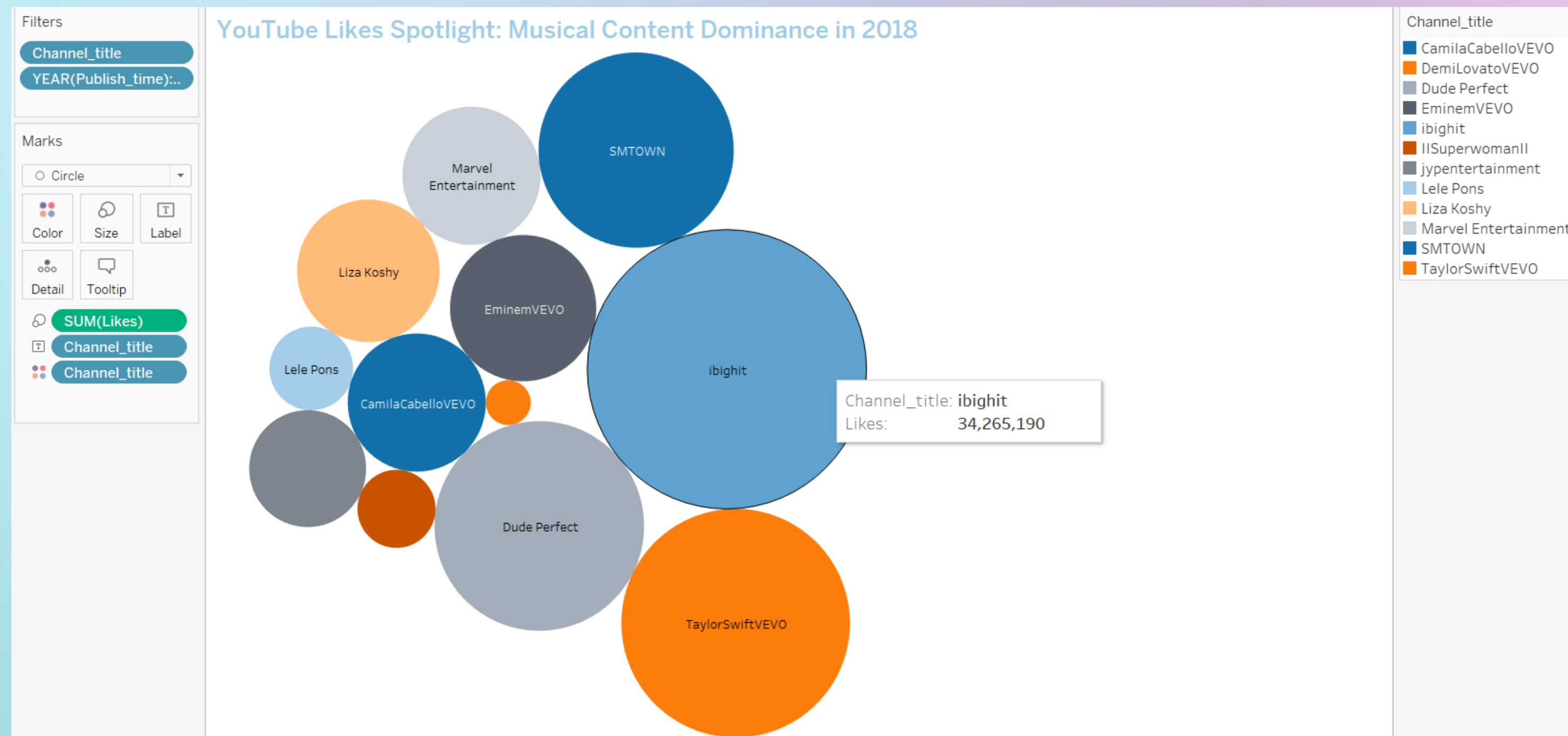
After the filter has been applied



I have applied a filter to the first visualization, resulting in the exclusion of the "Shows" and "Nonprofits & Activism" categories from the chart.



Which YouTube Channel has the highest number of likes in 2018?

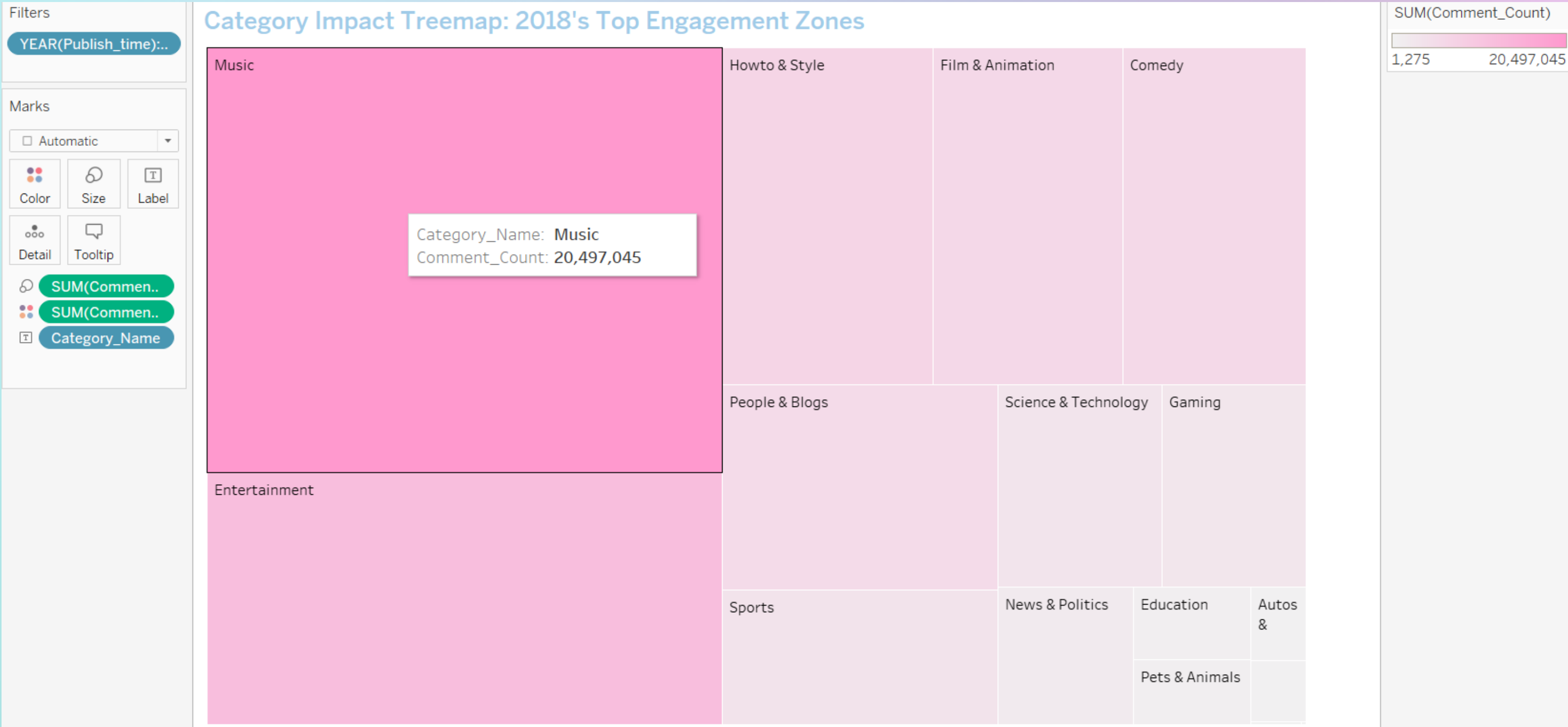


In the packed bubble chart, 2018 witnessed a significant increase in likes for the Ibighit channel, recognized for its music content, displaying an impressive 34,265,190 likes when hovering over its bubble. Another prominent music channel, TaylorSwiftVEVO, closely follows with high likes. This emphasizes the dominance of the "Music" category on YouTube, highlighting viewers' strong preference for musical content.

Regarding the design, I chose the packed bubble chart due to its appropriateness for categorical data. Larger bubbles indicate higher like counts. I selected the "Color blind" palette to provide a warm and user-friendly visual experience, suitable for individuals with colorblindness



Which category had the highest number of comments in 2018?



Illustrated within the treemap, the year 2018 witnessed the highest comment counts in three prominent categories: Music, Entertainment, and How to Style. When hovering over the "Music" category, it is evident that it garnered a substantial 20,497,045 views. This observation might

be attributed to the universal love for music, transcending geographical and cultural boundaries, among other potential factors.

Design Choice: I have opted for the treemap chart due to its perfect alignment with this type of data. In this chart, the size of the square and the intensity of color directly correlate with the comment count, creating an intuitive visual representation.



The dashboard

