

# **Increasing Engagement on YouTube**

**Business Module Project**

Abidemi Adeboje, December 2021

# Introduction

- **QUESTION:** How can **YouTube** increase user engagement?
- **OBJECTIVE:** Can we examine video features (i.e. duration, likes, dislikes) of successful videos in order to **increase likes**?



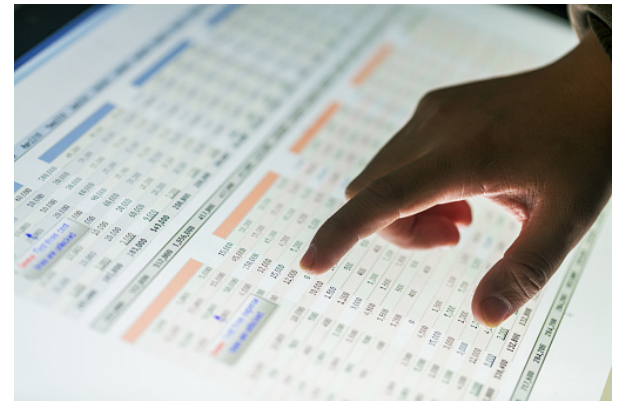
# Methodology

- The **YouTube API** was used to scrape video features from over **1000 videos** from 26 popular channels in 8 genres.



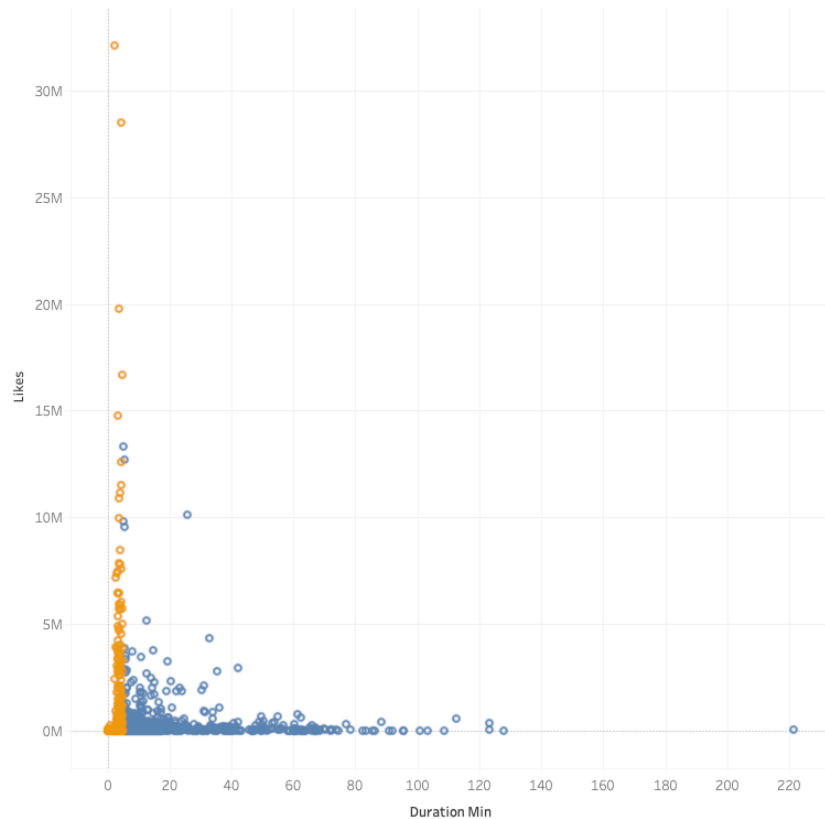
# Methodology

- Using **Google Sheets**, the YouTube data was cleaned and formatted.
- **Tableau** was used to create an interactive **dashboard** to visualize the data.



# Results

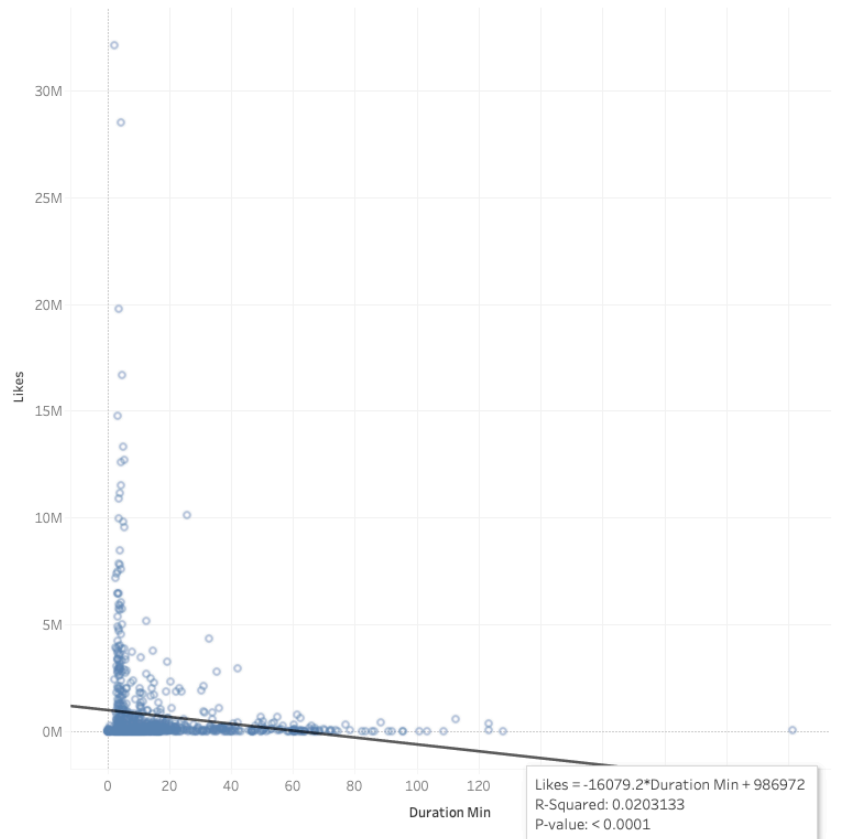
Most Videos with over 10 Million Likes under 5 Minutes



- The most successful videos had over **10 million likes**.
- The majority of those videos were **under 5 minutes**.

# Results

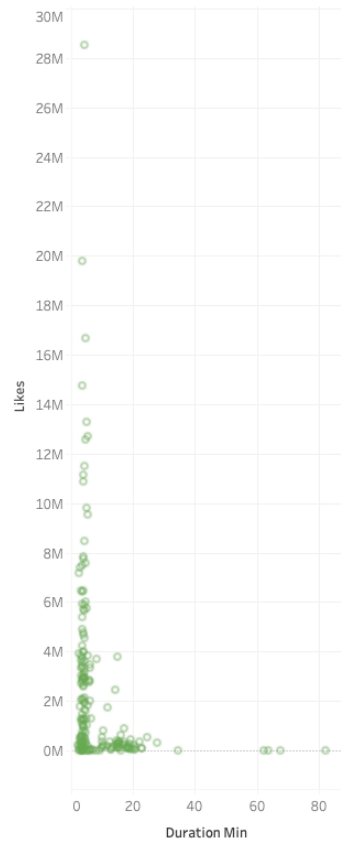
Most Videos with over 10 Million Likes under 5 Minutes



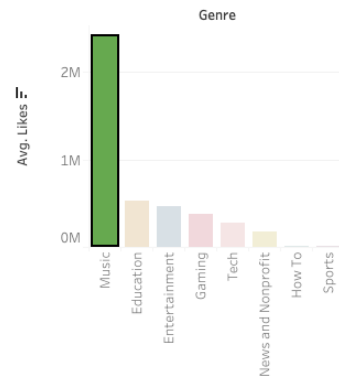
- **Linear model** predicts a loss of over **16,000 likes** per additional minute added to video.

# Results

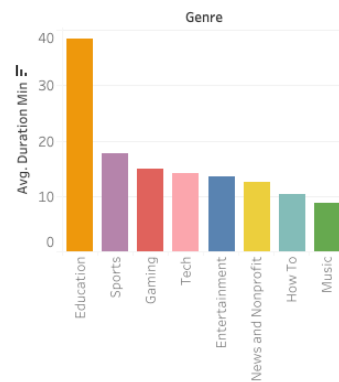
Most Videos with over 10 Million Likes under 5 Minutes



Music Genre Has Most Average Likes Per Video



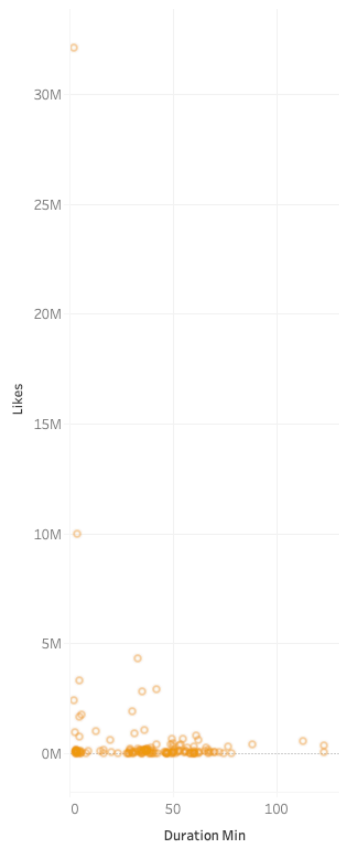
Average Music Video is under 10 Minutes



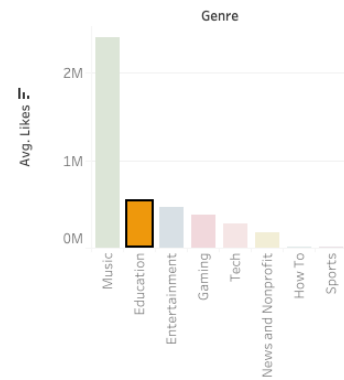
- **Music** genre
  - Highest average **likes**
  - Shortest average **duration**

# Results

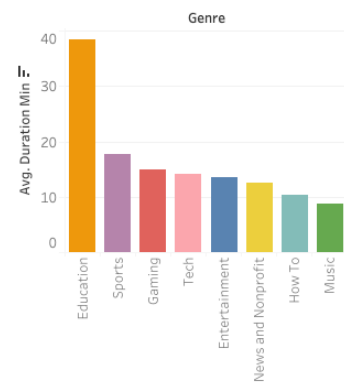
Most Videos with over 10 Million Likes under 5 Minutes



Music Genre Has Most Average Likes Per Video



Average Music Video is under 10 Minutes



- **Education** genre
  - Highest average **dislikes**
  - Longest average **duration**



# Conclusions

- There is an opportunity to increase user engagement in the **Education** genre by encouraging YouTubers to create shorter videos.



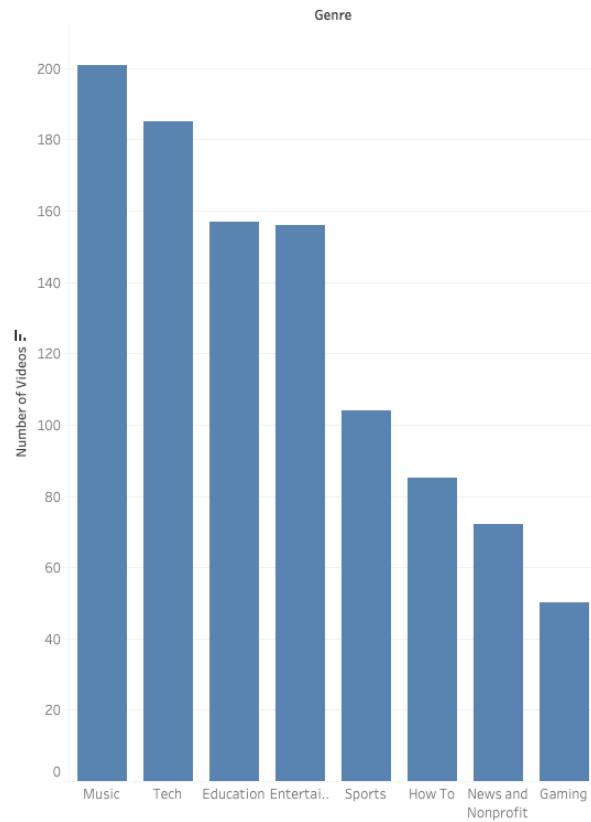
# Future Work

- Select a specific and popular **Entertainment** genre channel
- Examine the trend of **duration** of videos in the channel over **time**



# Appendix

Number of Videos Per Genre

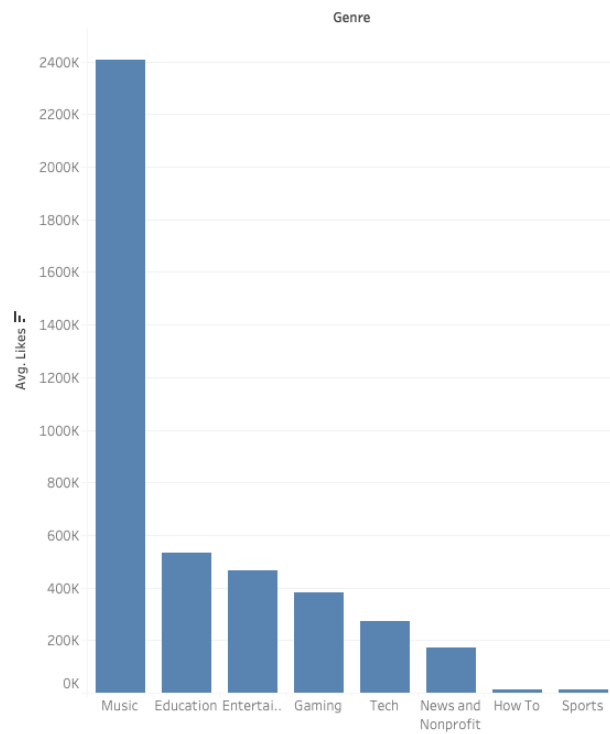


	A	B	
1	YouTube Channels	Genre	
2	Cocomelon - Nursery Rhymes	Education	
3	WWE	Sports	
4	MrBeast	Entertainment	
5	5-Minute Crafts	How To	
6	Justin Bieber	Music	
7	Pinkfong Baby Shark - Kids' Songs	Education	
8	ChuChu TV Nursery Rhymes & Kids So...	Education	
9	Ed Sheeran	Music	
10	Ariana Grande	Music	
11	Taylor Swift	Music	
12	TEDx Talks	News and Nonprofit	
13	Super Simple Songs - Kids Songs	Education	
14	Ryan's World	Entertainment	
15	The Tonight Show Starring Jimmy Fallon's	Entertainment	
16	Talking Tom	Gaming	
17	Mark Rober	Tech	
18	Marques Brownlee	Tech	
19	iJustine	Tech	
20	Tool_Tips	How To	
21	NBA	Sports	
22	WNBA	Sports	
23	Unbox Therapy	Tech	
24	Ninja	Gaming	
25	Liza Koshy	Entertainment	
26	BBC News	News and Nonprofit	
27	NPR Music	Music	

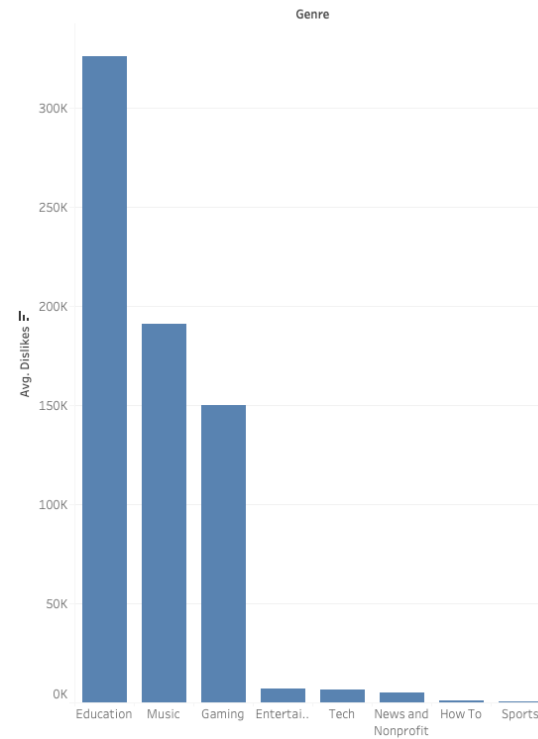
- Composition of dataset

# Appendix

Music Genre Has Most Average Likes Per Video



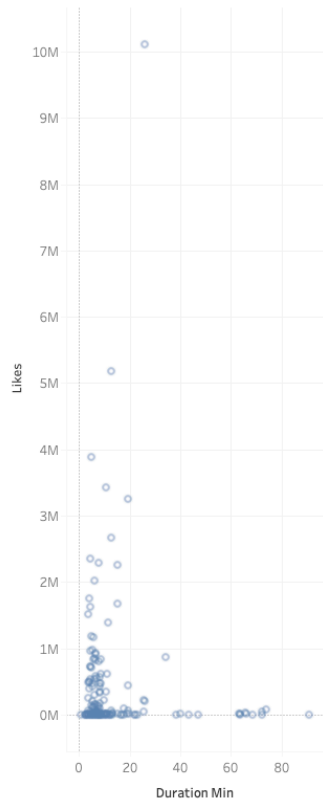
Education Genre has Most Average Dislikes Per Video



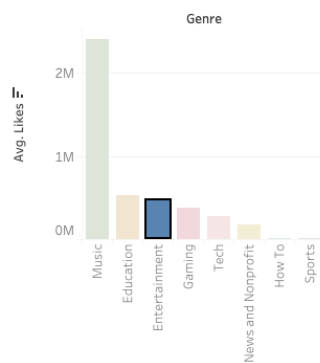
- Genre
  - Likes
  - Dislikes

# Appendix

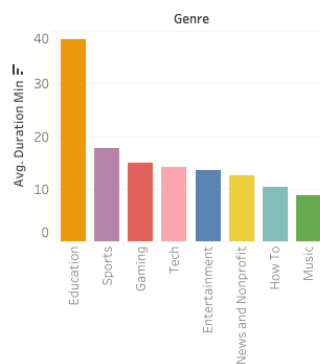
Most Videos with over 10 Million Likes under 5 Minutes



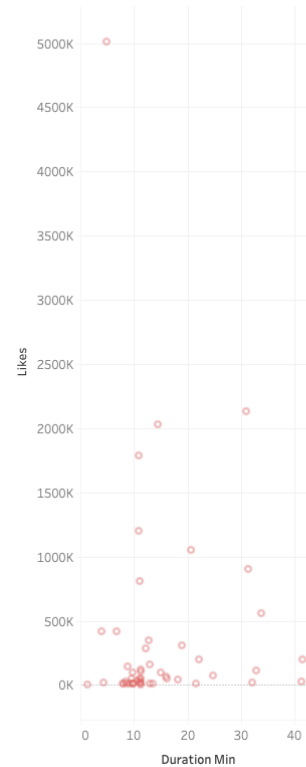
Music Genre Has Most Average Likes Per Video



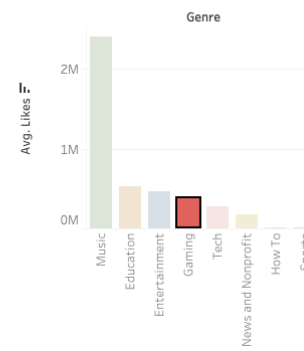
Average Music Video is under 10 Minutes



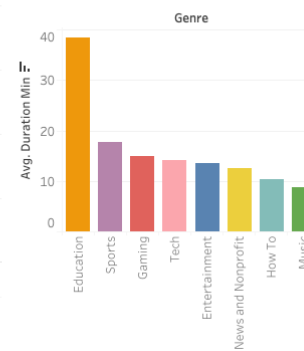
Most Videos with over 10 Million Likes under 5 Minutes



Music Genre Has Most Average Likes Per Video



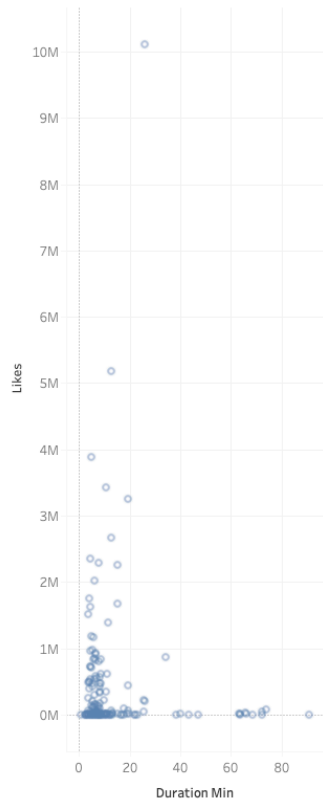
Average Music Video is under 10 Minutes



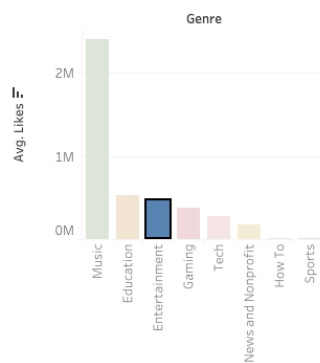
- Dashboard
  - Entertainment
  - Gaming

# Appendix

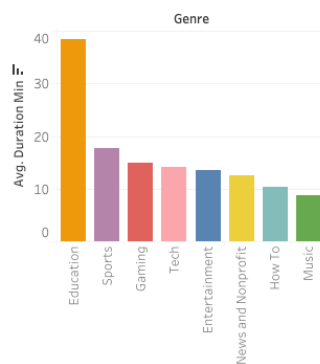
Most Videos with over 10 Million Likes under 5 Minutes



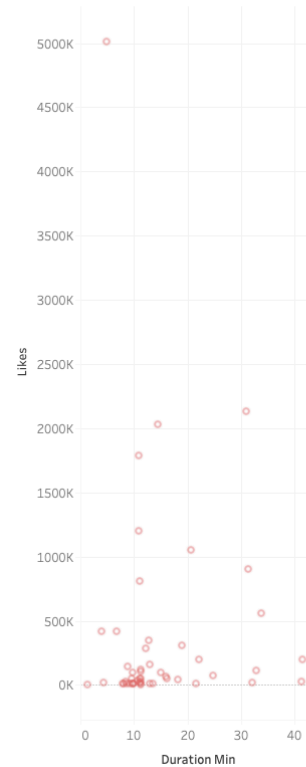
Music Genre Has Most Average Likes Per Video



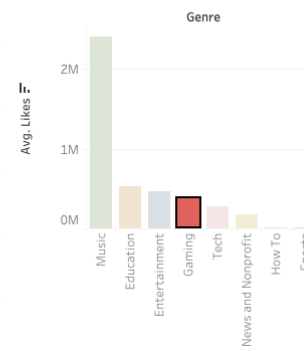
Average Music Video is under 10 Minutes



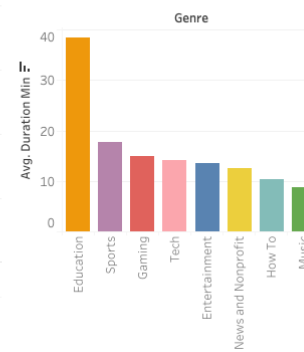
Most Videos with over 10 Million Likes under 5 Minutes



Music Genre Has Most Average Likes Per Video



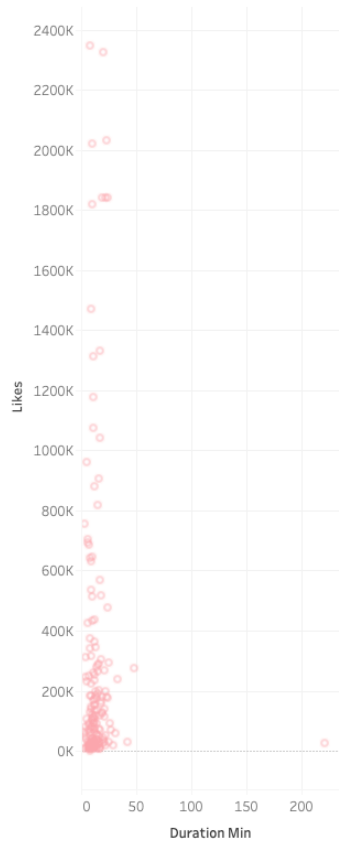
Average Music Video is under 10 Minutes



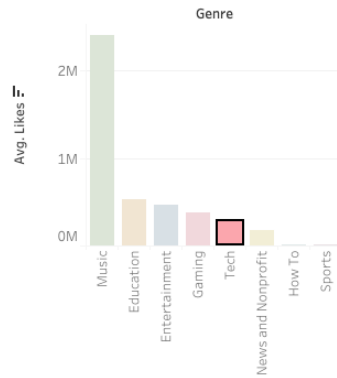
- Dashboard
  - Entertainment
  - Gaming

# Appendix

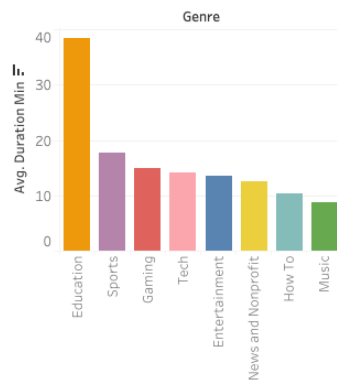
Most Videos with over 10 Million Likes under 5 Minutes



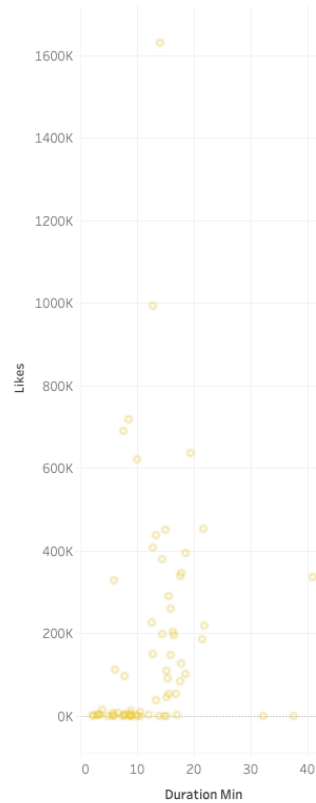
Music Genre Has Most Average Likes Per Video



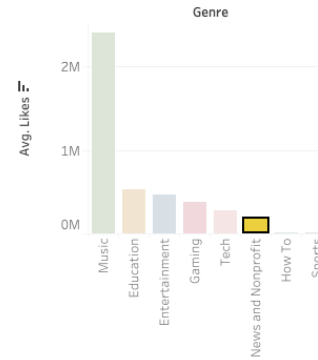
Average Music Video is under 10 Minutes



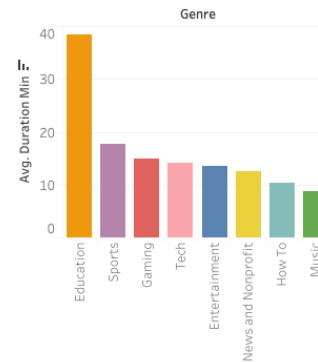
Most Videos with over 10 Million Likes under 5 Minutes



Music Genre Has Most Average Likes Per Video



Average Music Video is under 10 Minutes

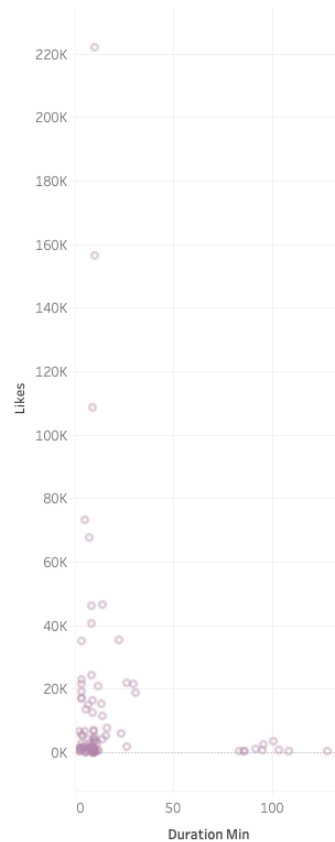


## • Dashboard

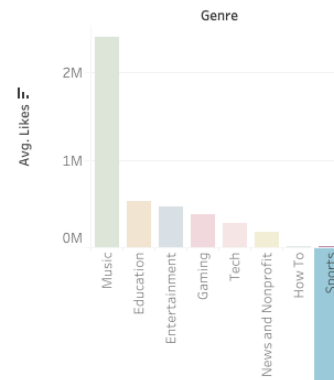
- Tech
- Non Profit

# Appendix

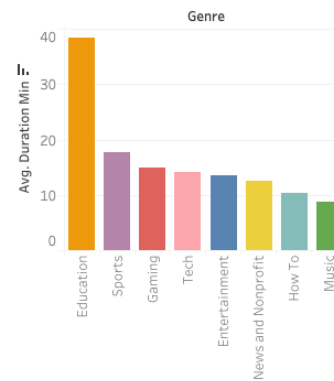
Most Videos with over 10 Million Likes under 5 Minutes



Music Genre Has Most Average Likes Per Video



Average Music Video is under 10 Minutes

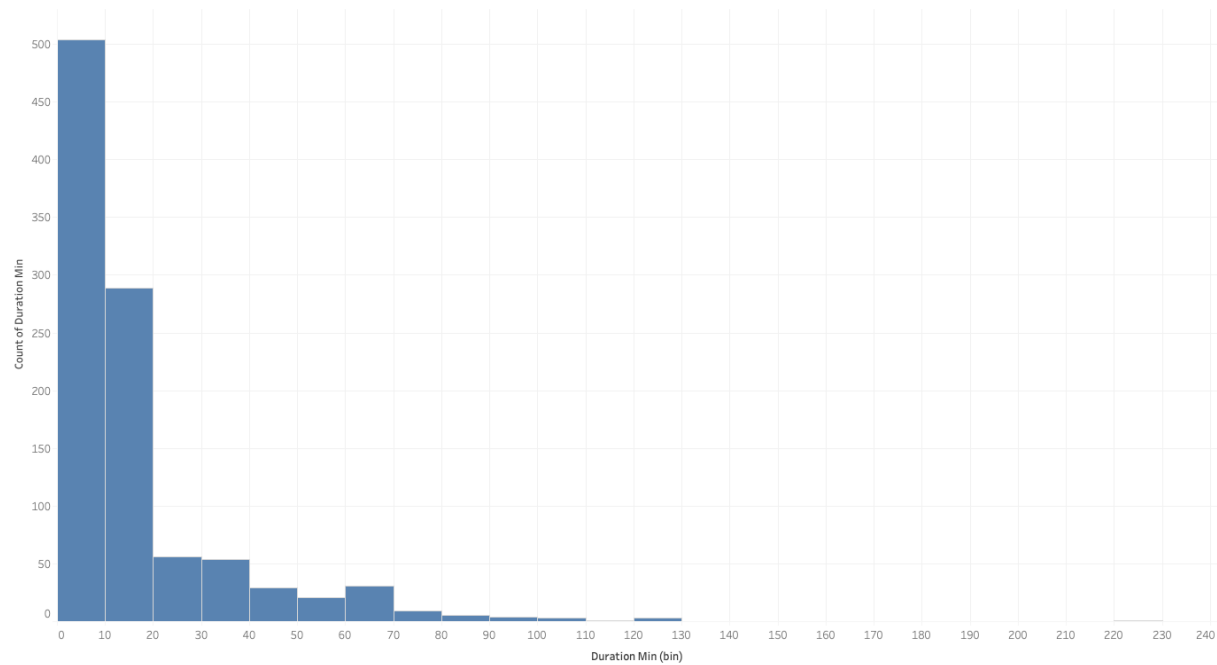


- Dashboard
  - Sports



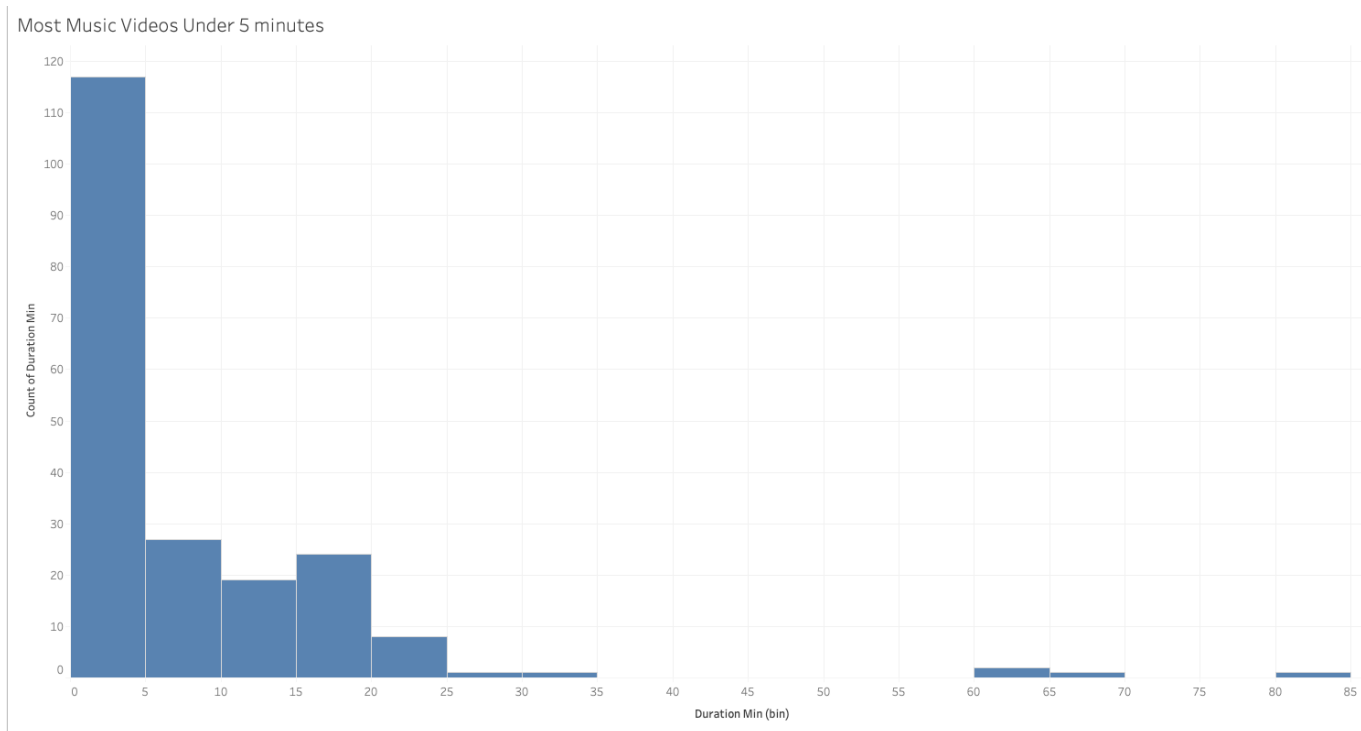
# Appendix

Almost Half of Videos are Under 10 mins



- Histogram
  - All Videos

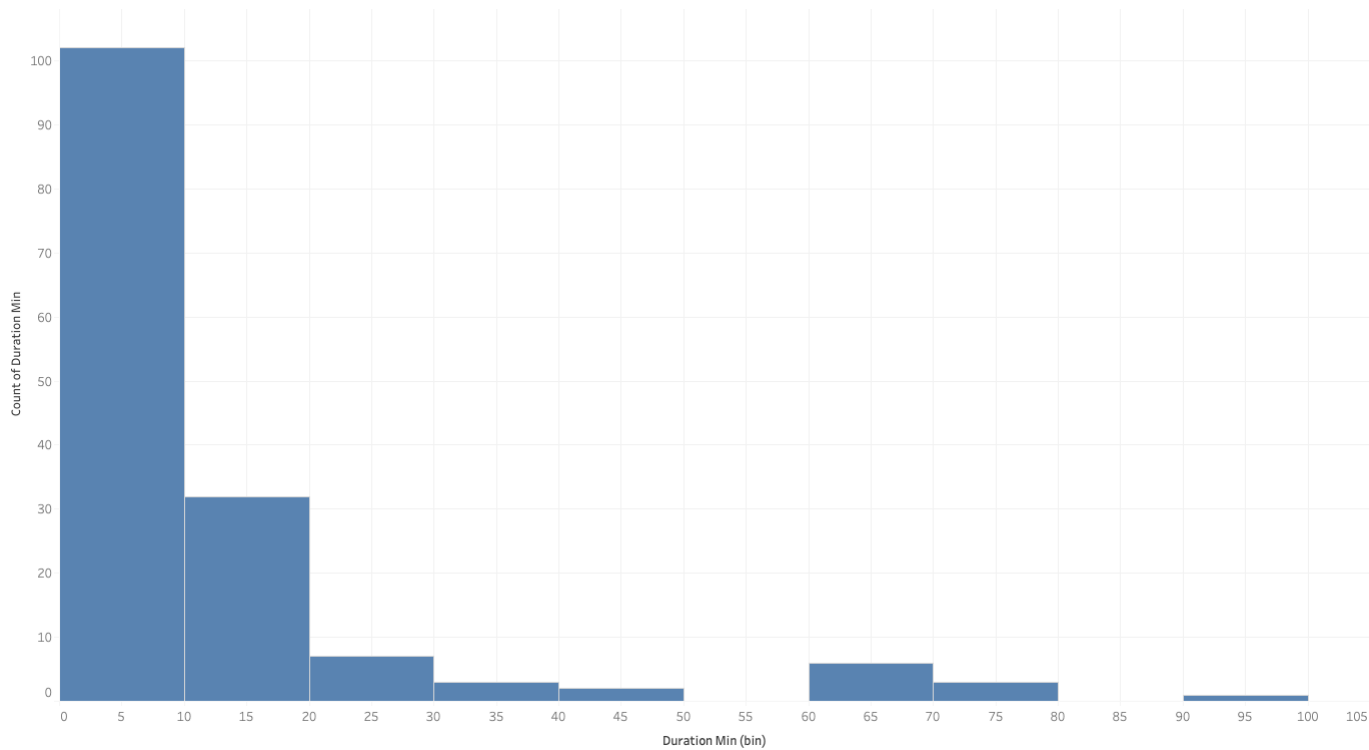
# Appendix



- Histogram
- Music

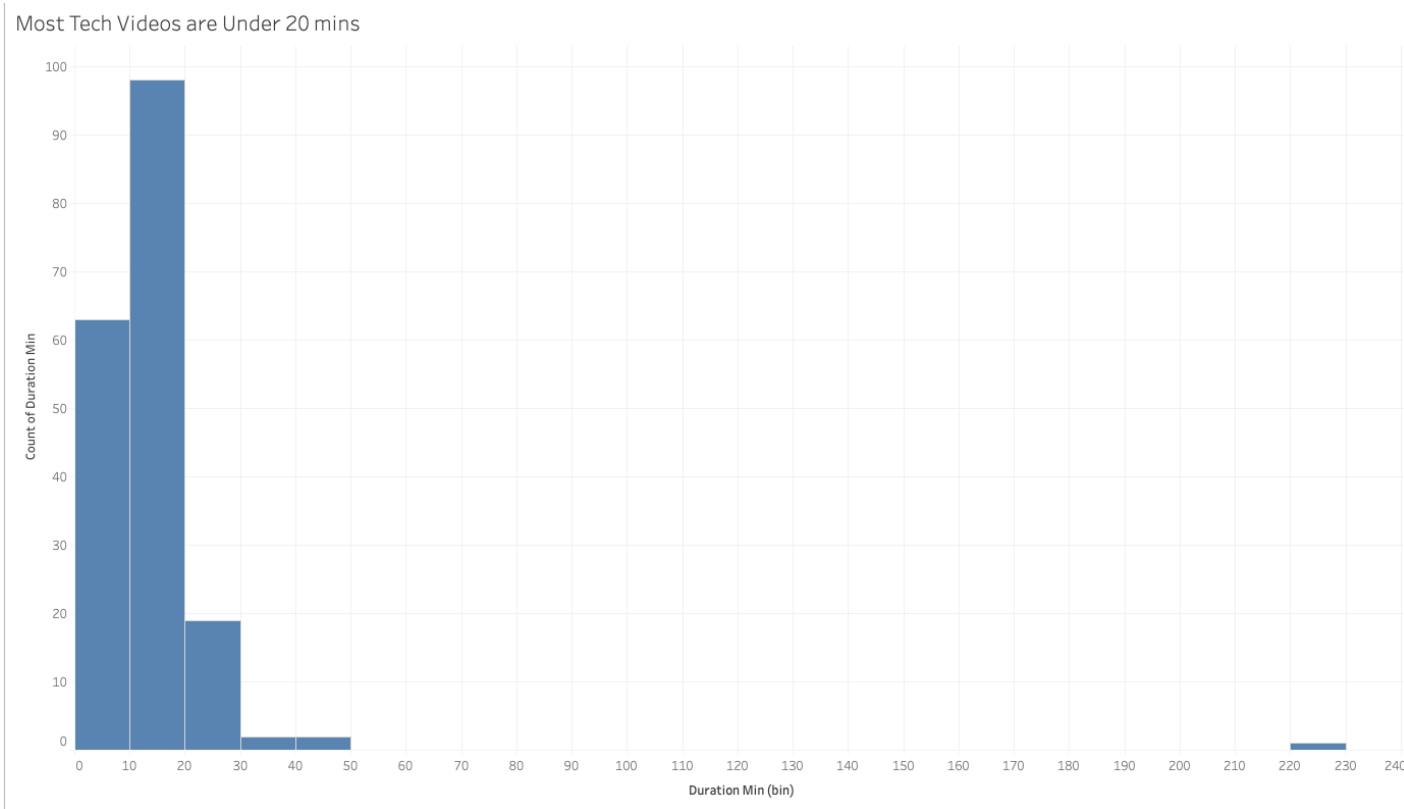
# Appendix

Majority of Entertainment Videos are Under 10 mins



- Histogram
  - Entertainment

# Appendix



- Histogram
- Tech

# Appendix

- Slideshow pictures from <https://unsplash.com>