

Discovery™



Fordham University
MS in Marketing Intelligence
July 23rd, 2019
New York

Team 1

- Roberta Manco: Co-managing Director
- Xinyu Chen (Kyle): Co-managing Director & Project Manager
- Junjian liu (Clyde): Research Director
- Yuanjun Jin (Eric): Business Management
- Jiayang Zheng (Young): Client Contact, Data Analyst
- Xu Yan: Data Analyst
- Huiqi Luo (Nicole): Market Researcher

Discovery

Team 2

- Yazmin Hernandez: Co-managing Director
- Ziyi Jiang: Co-managing Director
- Leye (Lenny) Chen: Research Director
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- Jiahui (Jeremy) Lu: Data Analyst
- Shengxue (Tony) Li: Data Analyst

CURIOSITY

AGENDA

Discovery

FACEBOOK ANALYSIS

Discovery

GENRE EVALUATION

Discovery

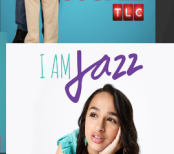
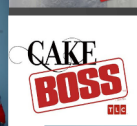
RECOMMENDATIONS

DISCOVERY

Discovery Channel

Animal Planet

TLC



FACEBOOK ANALYSIS

 **Discovery**

TLCTM

 **Discovery**

DATASET OVERVIEW

The Discovery logo, featuring a white globe icon to the left of the word "Discovery" in a bold, white, sans-serif font.

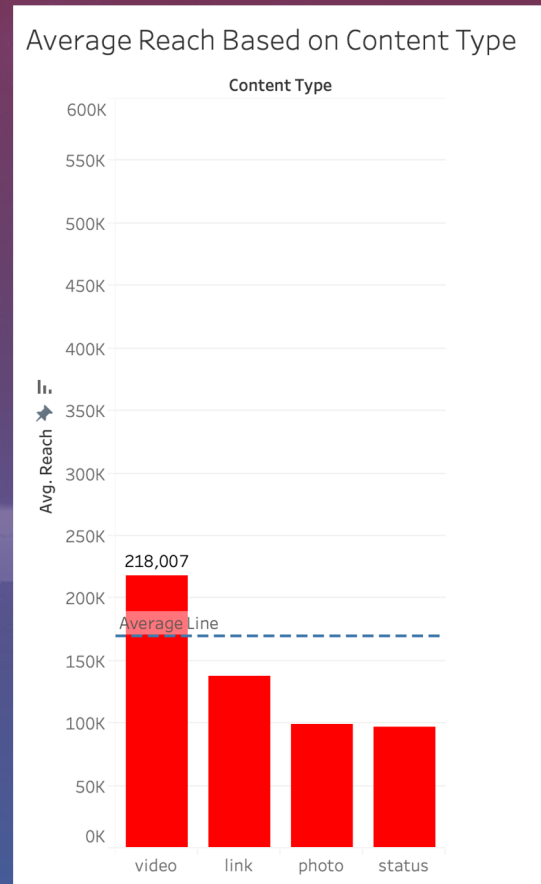
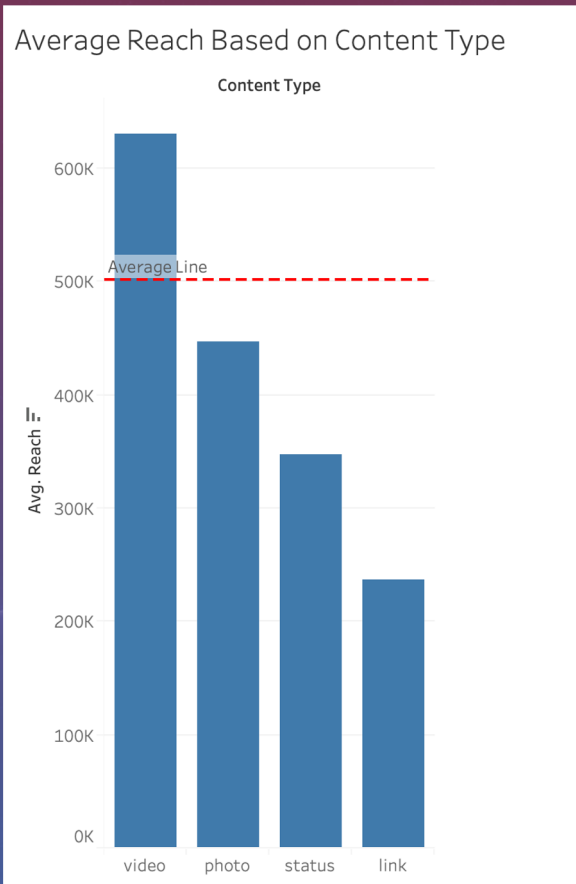
- Approximately **9,000** posts
- **12** programs
- **18 months** (Jan. 2018–May 2019)
- **7,762** posts data after cleaning

The TLC logo, consisting of three red squares arranged horizontally, each containing a white letter: 'T', 'L', and 'C'.

- Approximately **7,000** posts
- **18** programs
- **18 months** (Jan. 2018–May 2019)
- **6,772** posts data after cleaning

Objective: To increase the **Reach** and **Engagement rate** for both Discovery and TLC Channels

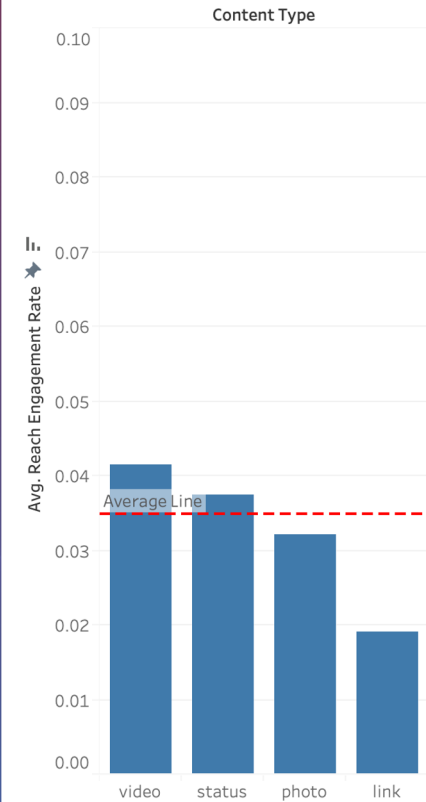
VIDEO IS THE BEST CONTENT TYPE TO REACH PEOPLE



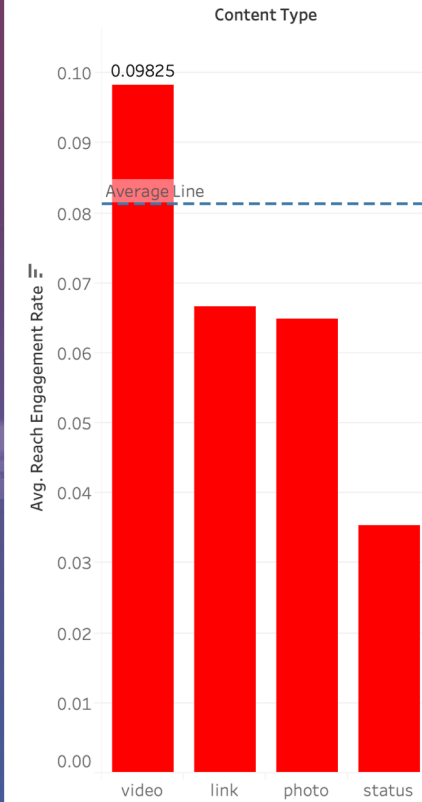
VIDEO IS THE BEST CONTENT TYPE TO ENGAGE PEOPLE



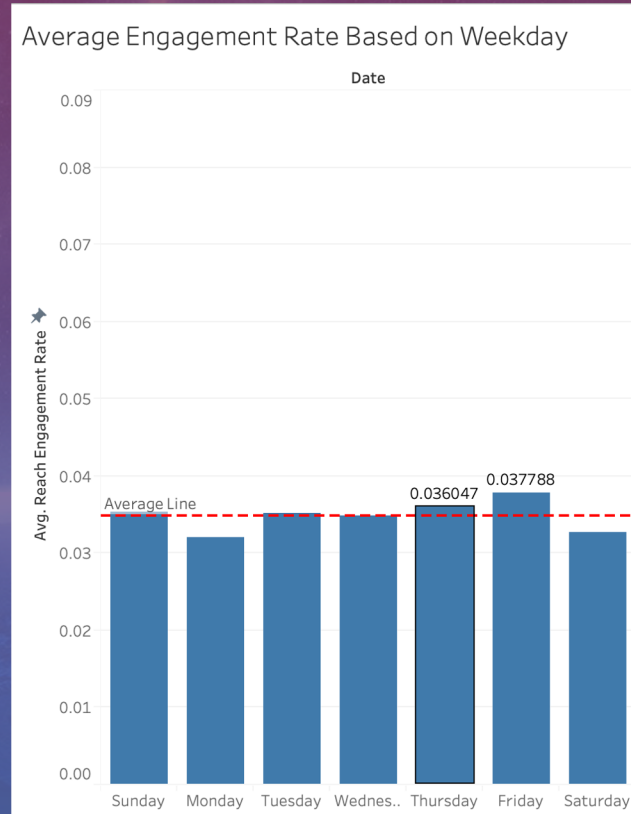
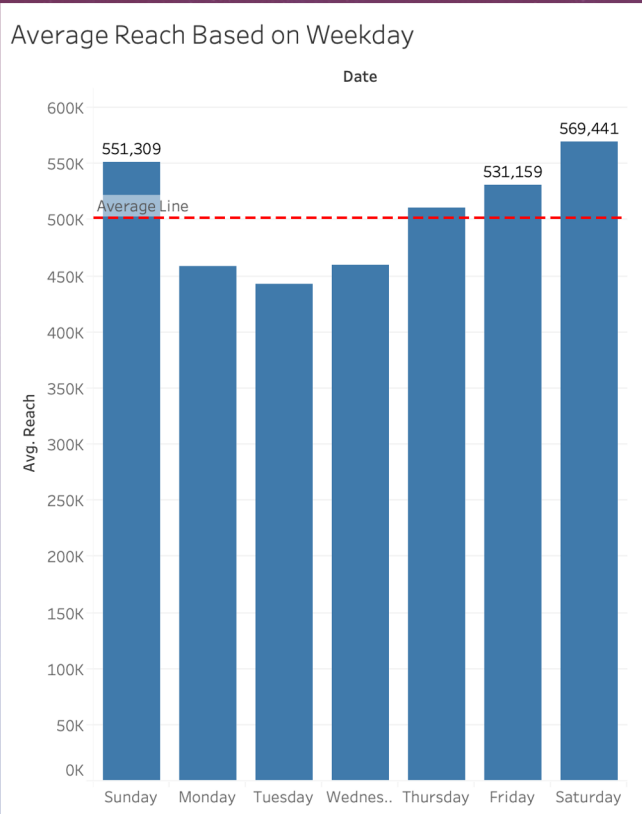
Average Engagement Rate Based on Content Type



Average Engagement Rate Based on Content Type



WHAT IS THE BEST DAY TO REACH AND ENGAGE PEOPLE



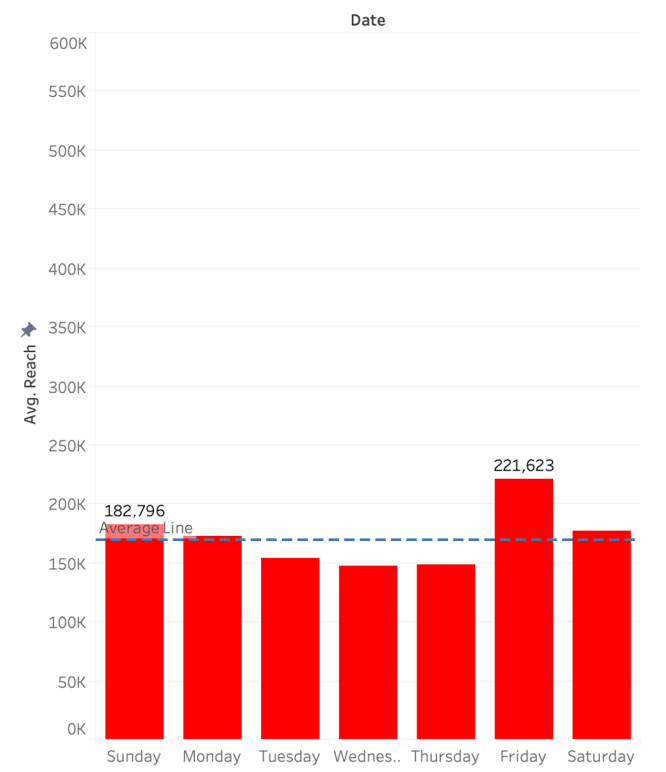
Posts can reach more people on Friday and Weekend.

Engagement rate do not have a difference.

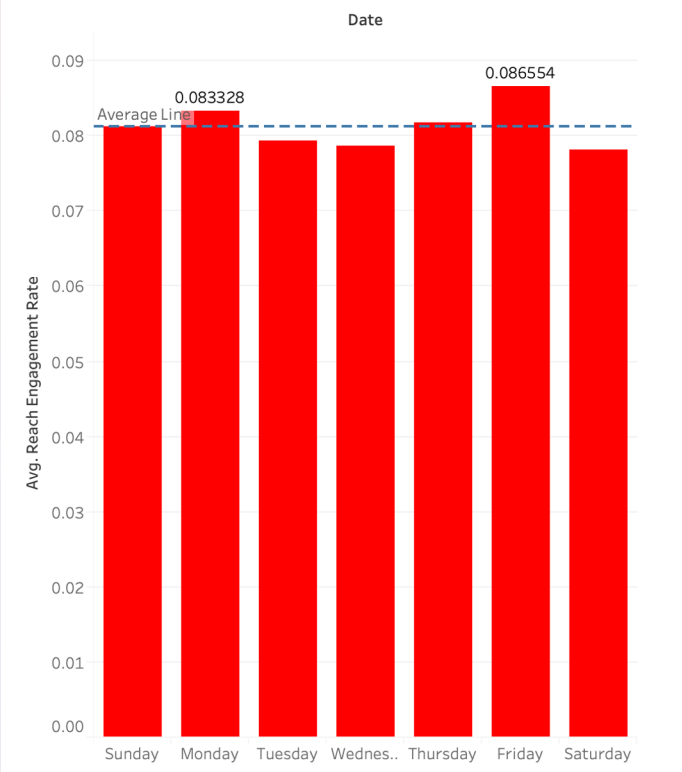
WHAT IS THE BEST DAY TO REACH AND ENGAGE PEOPLE



Average Reach Based on Weekday



Average Engagement Rate Based on Weekday



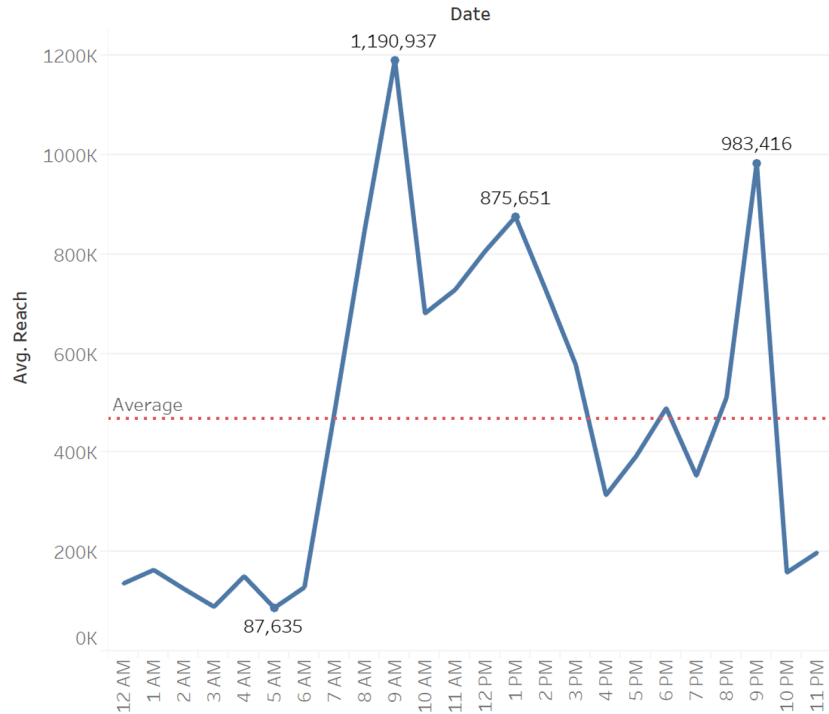
Posts can reach more people on Friday.

Engagement rate does not have a difference.

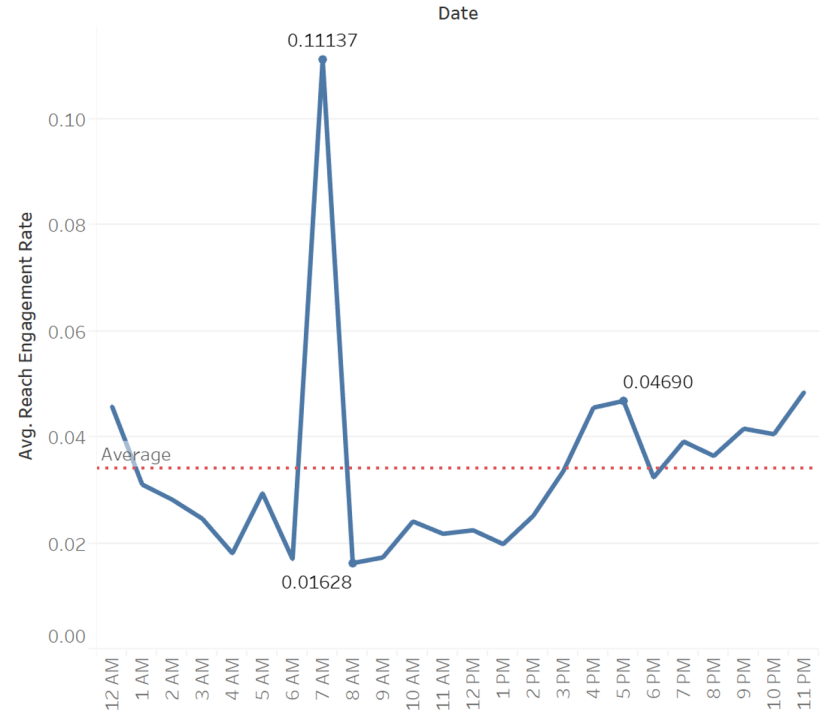
WHAT IS THE BEST TIME TO REACH AND ENGAGE PEOPLE



Average Reach Number Based on Hour For Discovery



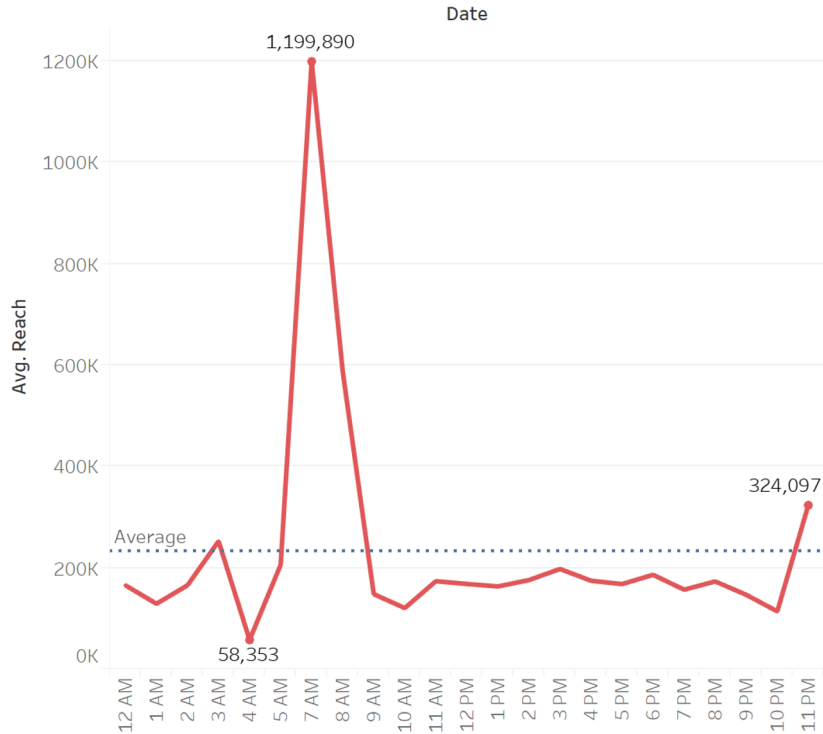
Average Engagement Rate Based on Hour For Discovery



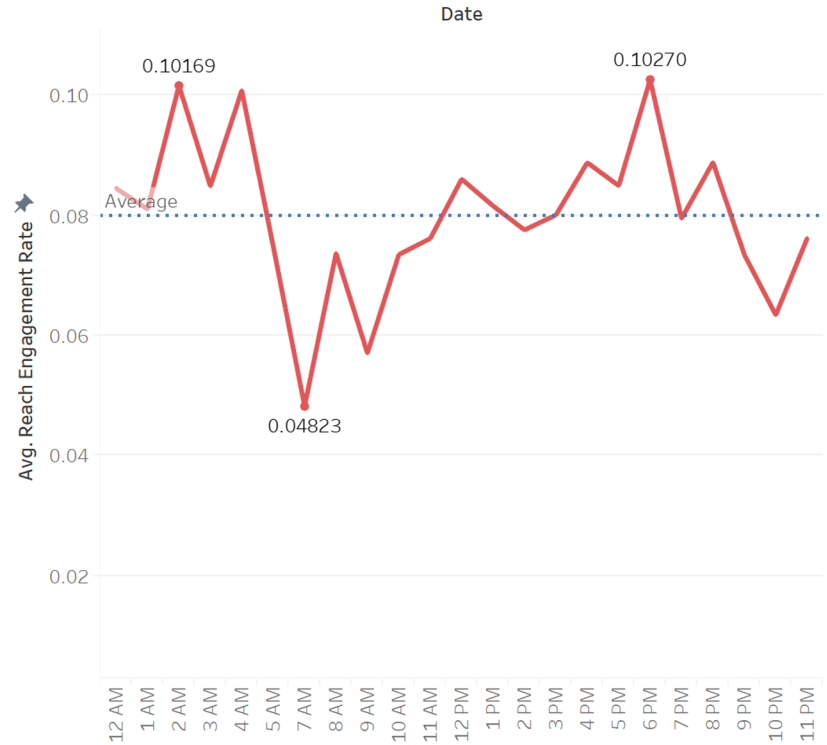
WHAT IS THE BEST TIME TO REACH AND ENGAGE PEOPLE



Average Reach Number Based on Hour For TLC




Average Engagement Rate Based on Hour For TLC

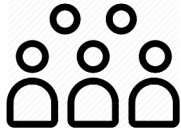


DOES PROMOTION WORKS?

Discovery


❖ Only focus on **Video** content type

❖  **99** video promotion out of about 9,000 posts

❖ Reaches **66.9%** more 

TLC

❖ **155**  promoted

 **66.4%** reach

❖ **27**  promoted

 **56.8%** reach

❖ **23**  promoted

 **28.8%** reach

CONCLUSIONS



Video is the best content type to reach and engage people

Friday and **Weekend** perform slightly better at reach number

Friday performs slightly better at reach number

8-9 am best time to reach, engage people

7-8 am best time to reach people

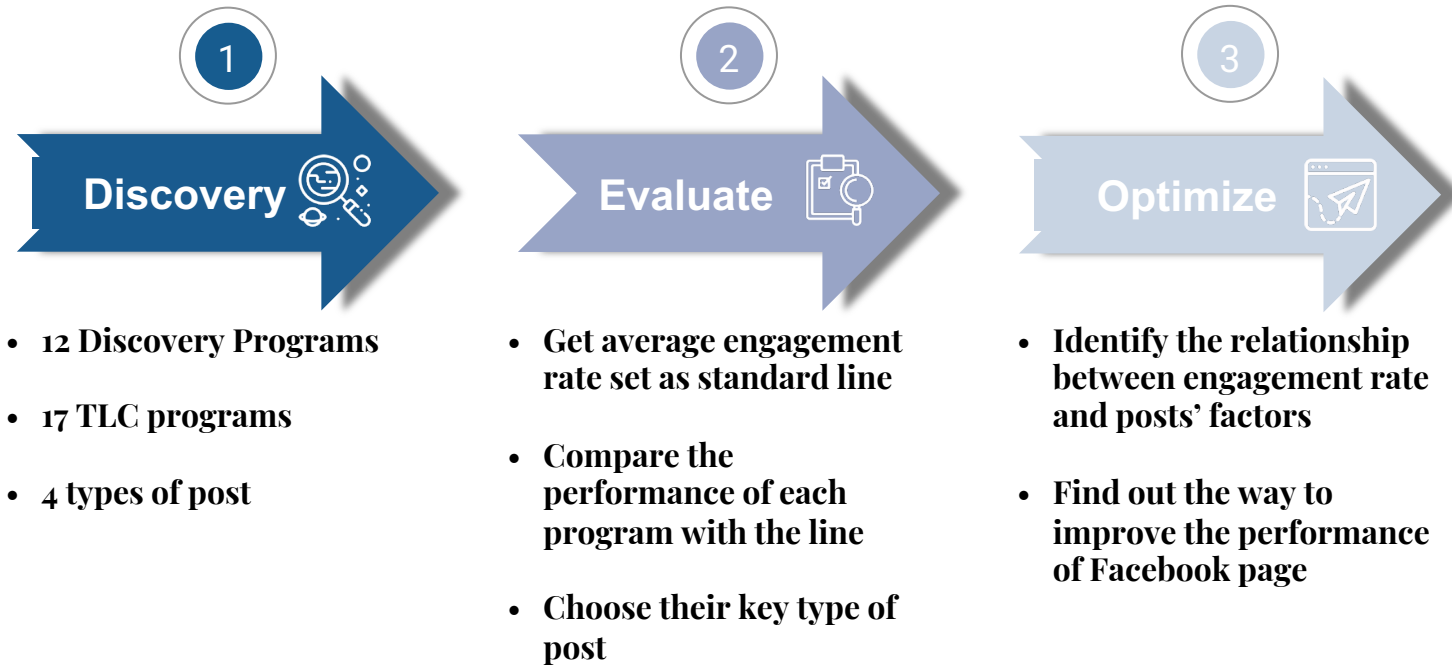
After promotion, **video** gain **67%** reach

After promotion, **Video** gain **66%** reach

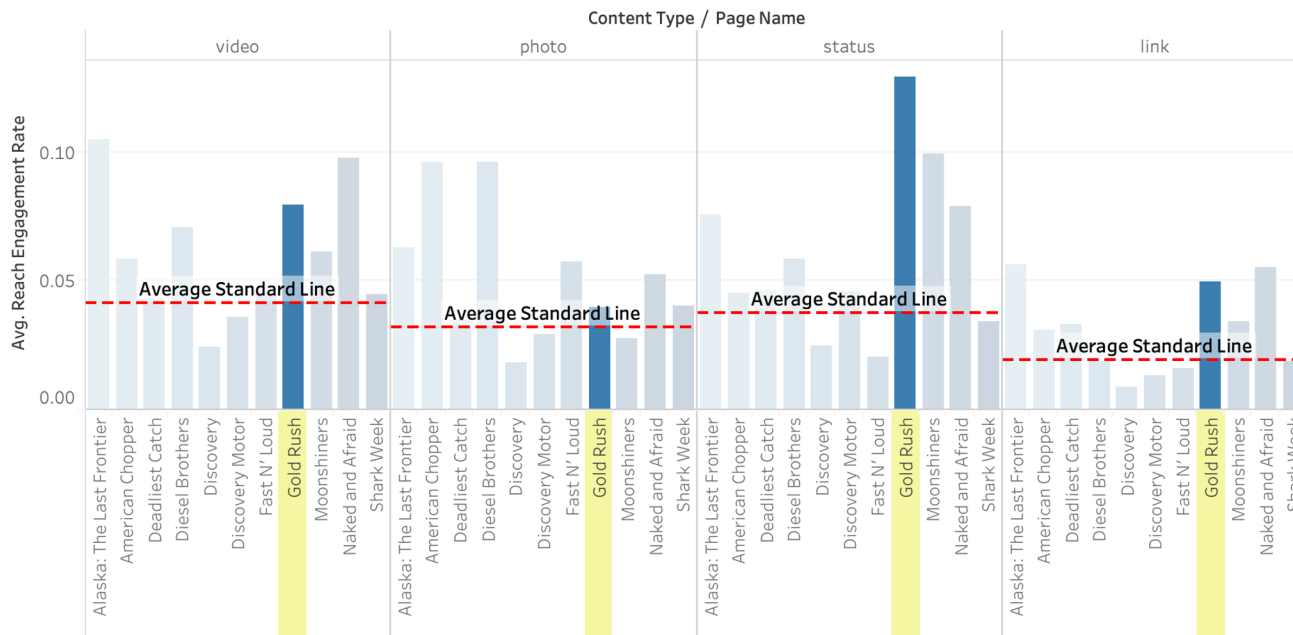
Link gain **57%** reach

Photo gain **29%** reach

THE PROCESS OF PROGRAM ANALYSIS



SELECTION CRITERIA



Average of Reach Engagement Rate for each Page Name broken down by Content Type. Color shows details about Page Name. The view is filtered on Content Type,

- Calculate the average engagement rate standard line to filter out above-the-average programs.



SELECTION CRITERIA

Page Name	Content Type			
	video	link	photo	status
Discovery	2,064	698	669	180
Discovery Motor	791	416	137	130
Gold Rush	278	111	109	4
American Chopper	223	44	62	17
Shark Week	215	97	31	7
Deadliest Catch	190	88	16	3
Fast N' Loud	188	77	62	1
Naked and Afraid	176	68	43	4
Alaska: The Last Fr. II	142	46	30	3
Diesel Brothers	114	36	18	12
Moonshiners	97	37	12	2

Count of Reach Engagement Rate broken down by Content Type vs. Page Name. The view is filtered on Content Type, which keeps link, photo, status and video.

- **The number of a specific type of post is not too small.**

Page Name	
Discovery	38,934,681
Fast N' Loud	3,292,236
Deadliest Catch	2,962,308
Shark Week	1,790,829
American Chopper	1,296,270
Gold Rush	1,285,344
Moonshiners	1,230,283
Discovery Motor	697,366
Diesel Brothers	664,757
Alaska: The Last Frontier	557,581
Naked and Afraid	439,942

Average of Page Fans broken down by Page Name.

- **At least one program from different size group**

FINAL RESULT OF SELECTION

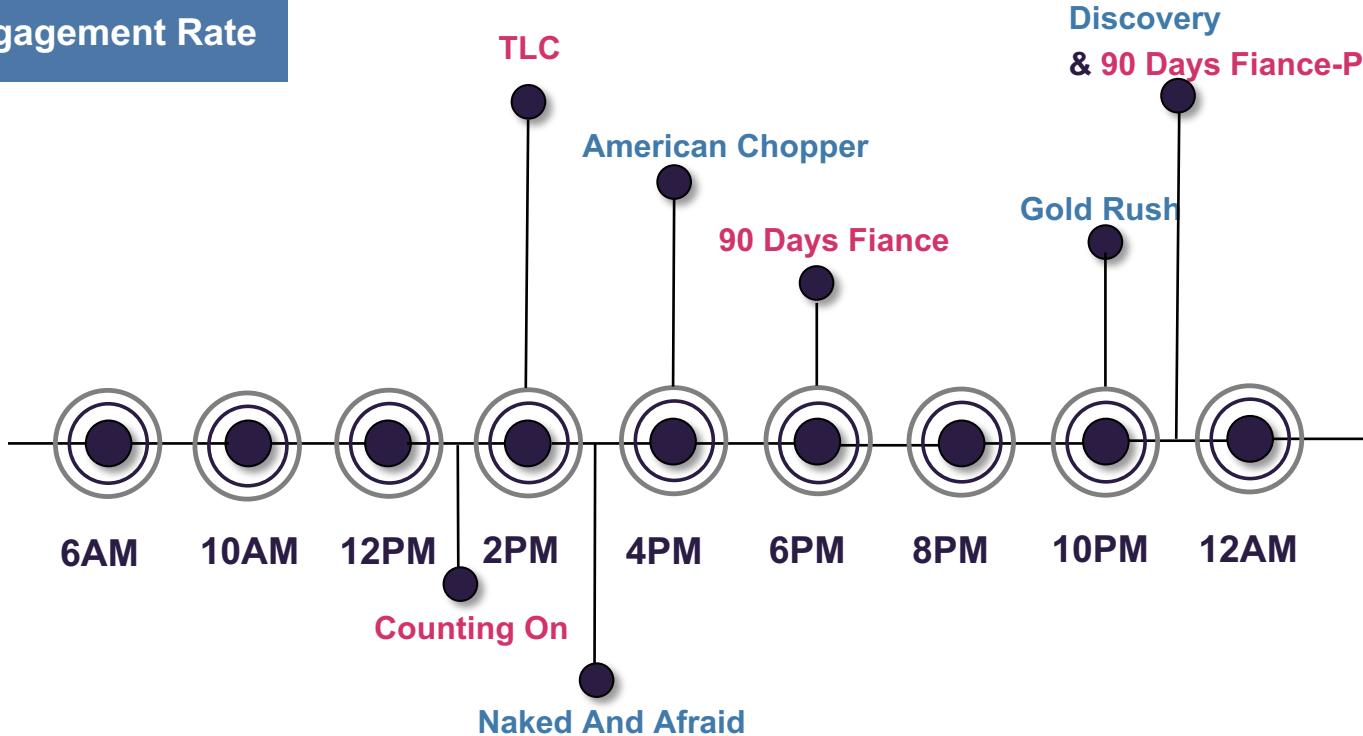


Program Name	Size	Number of Followers	Type of Post
Discovery	Biggest Program	38,934,681	Video
Gold Rush	Middle-size Program	1,285,334	Video
American Chopper	Middle-size Program	1,296,270	Photo
Naked and Afraid	Small Program	439,943	Link
TLC	Big Program	3,308,671	Video
Counting On	Middle-size Program	2,404,062	Link
90 Days Fiance	Small Program	433,554	Video & Photo

POST TIME ANALYSIS-TIME OF THE DAY



Engagement Rate



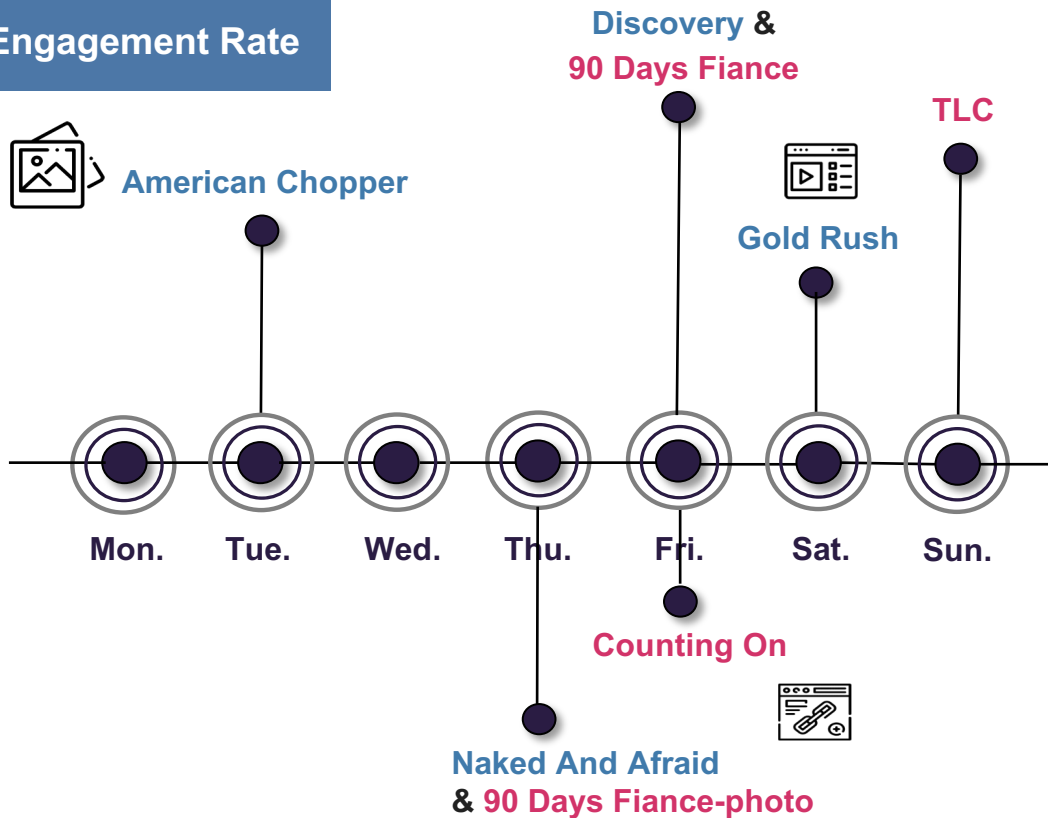
POST TIME ANALYSIS-DAY OF THE WEEK



Engagement Rate



American Chopper



- Video Type performs better on Weekend.
- Link-type and Photo type are more suitable for Weekdays.

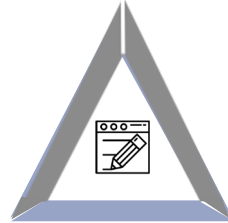
REGRESSION MODEL



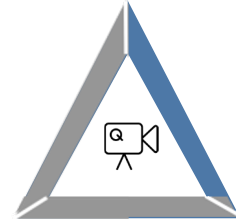
Discovery



Post Title Word Length



Post Content Word Length



Video Length

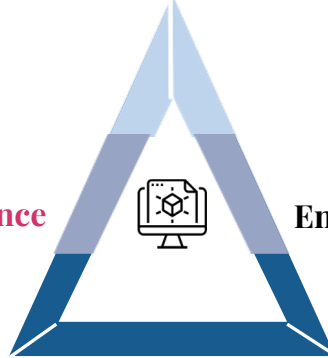


Discovery

Gold Rush

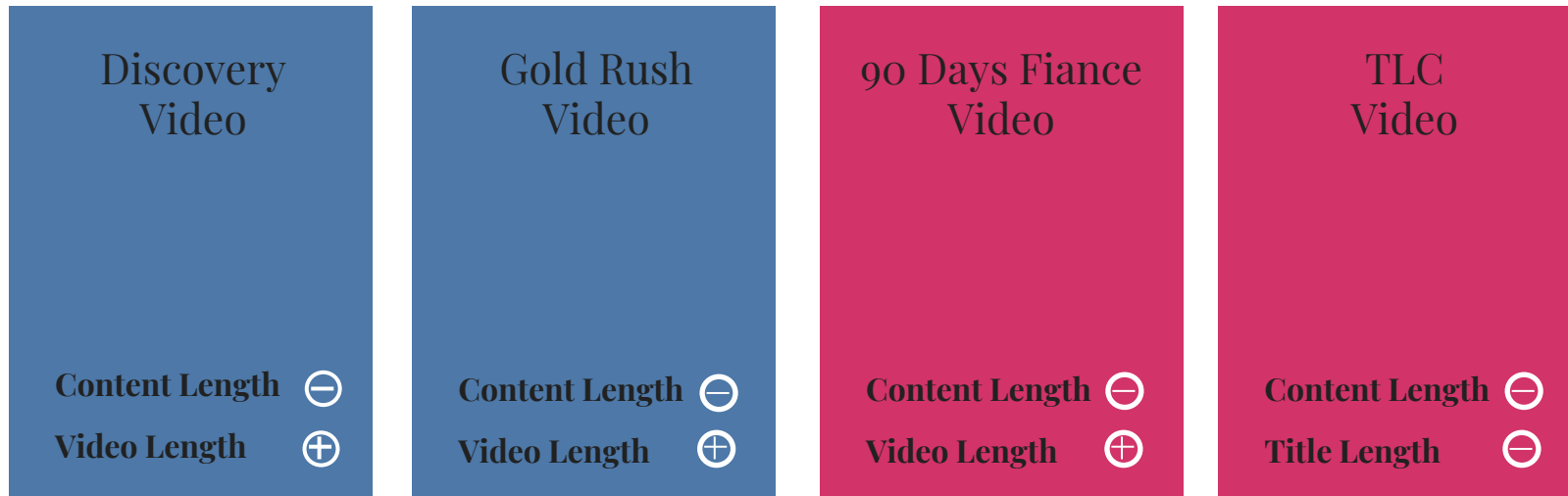
90 Days Fiance

TLC



Engagement Rate

SIGNIFICANT FACTORS FOR EACH PROGRAM

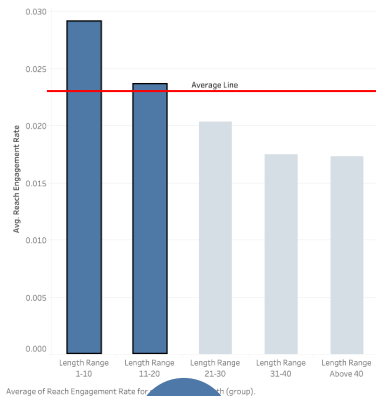


- Overall, Content Word Length has a **NEGATIVE** effect on engagement rate.
- Video Length has a **POSITIVE** effect on engagement rate, except TLC program.



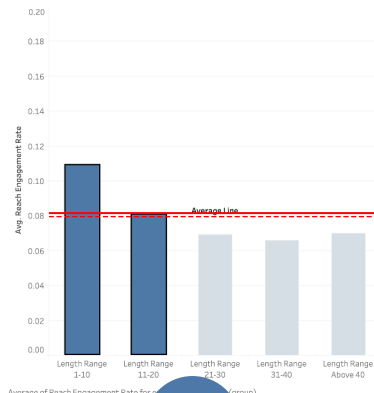
HOW MANY WORDS WILL BE TOO MANY

Discovery



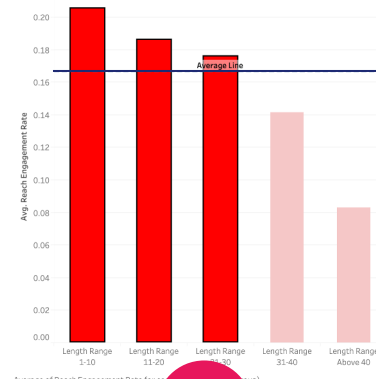
Threshold → **20**

Gold Rush



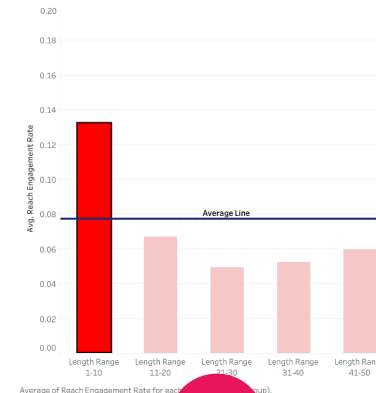
20

90 Days Fiance



30

TLC



10

- Various threshold word number of value for each program
- Once the length is over the threshold, the engagement rate will be below average

RECOMMENDATIONS

- **Promotion works**

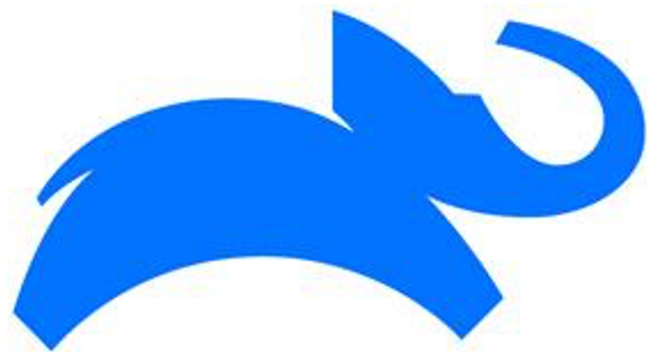
The paid promotion has a positive effect on reach for three types of content (video, photo, and link), where the video shows the highest growth rate of reach.

- **Efficiency**

The best time and weekday is distinct for each program. We should make an independent strategy based on different situation.

- **Length matters**

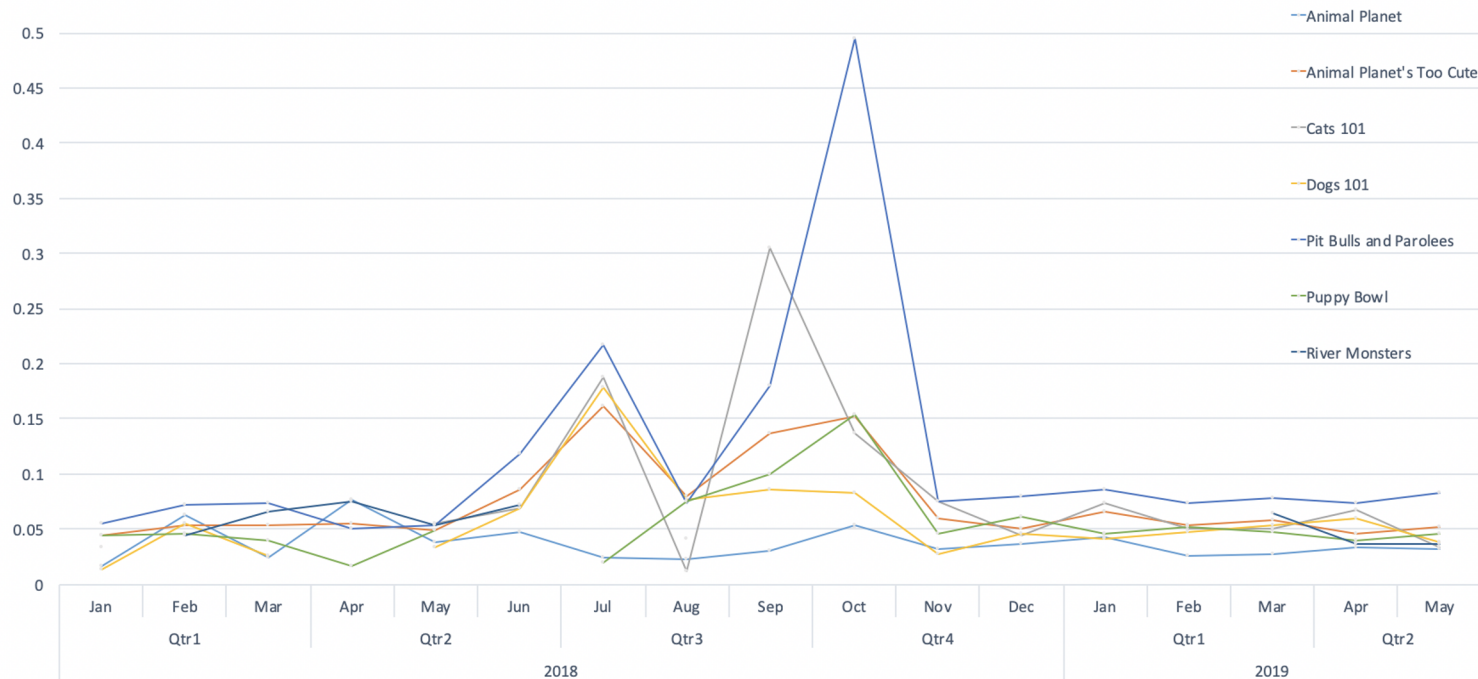
Each program has its own best content length range, so Discovery needs to be very careful about going out of this range to keep the engagement rate high.



animal planet™



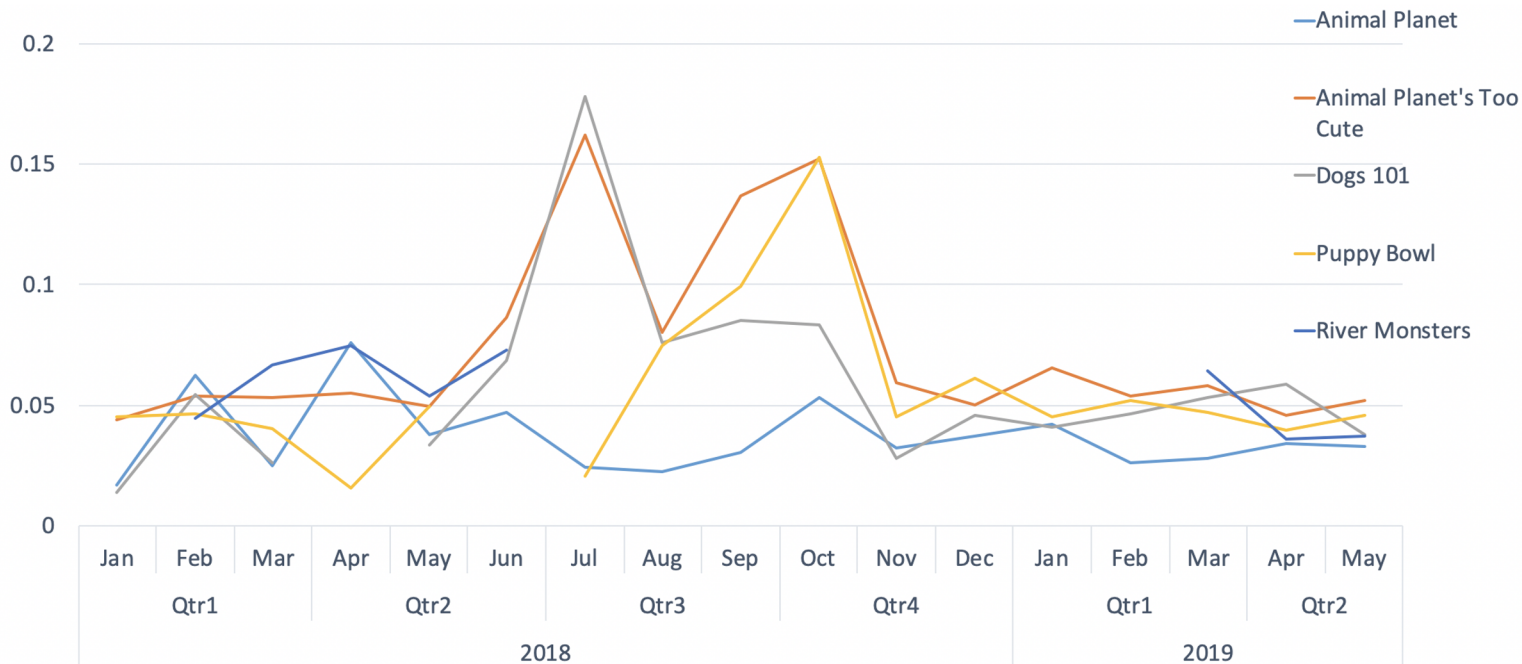
TIME SERIES ANALYSIS



From Jan 2018 to May 2019, Pit Bulls and Parolees has the Highest Engagement rate, and it reached the highest point in October 2018. Furthermore, cats 101, Dogs 101, and Animal planet's too cute have a similar trend in the whole year.



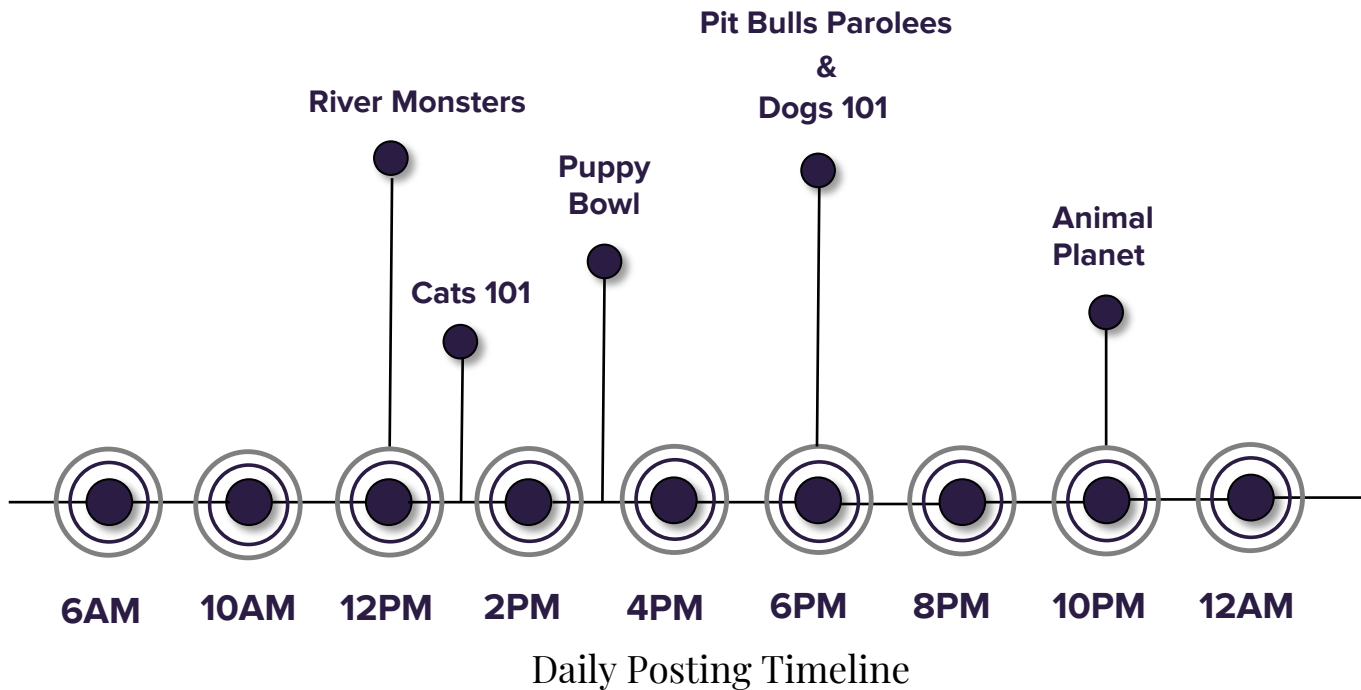
TIME SERIES ANALYSIS



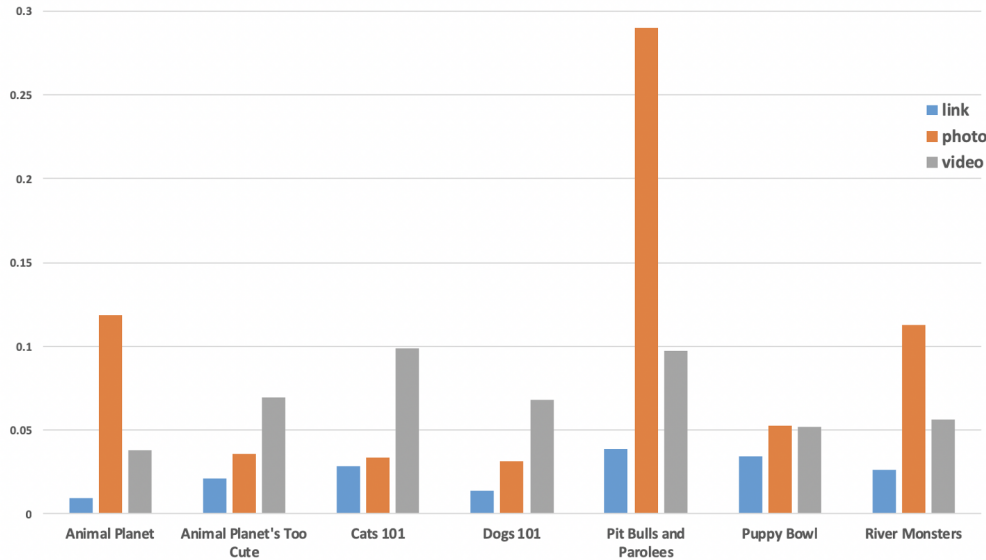
Aside from Cats 101 and Pit Bulls & Parolees, Dogs 101, Puppy Bowl, and Animal Planet's too cute showed a better performance than the other programs.



POSTING TIME ANALYSIS



TYPE OF POST ANALYSIS

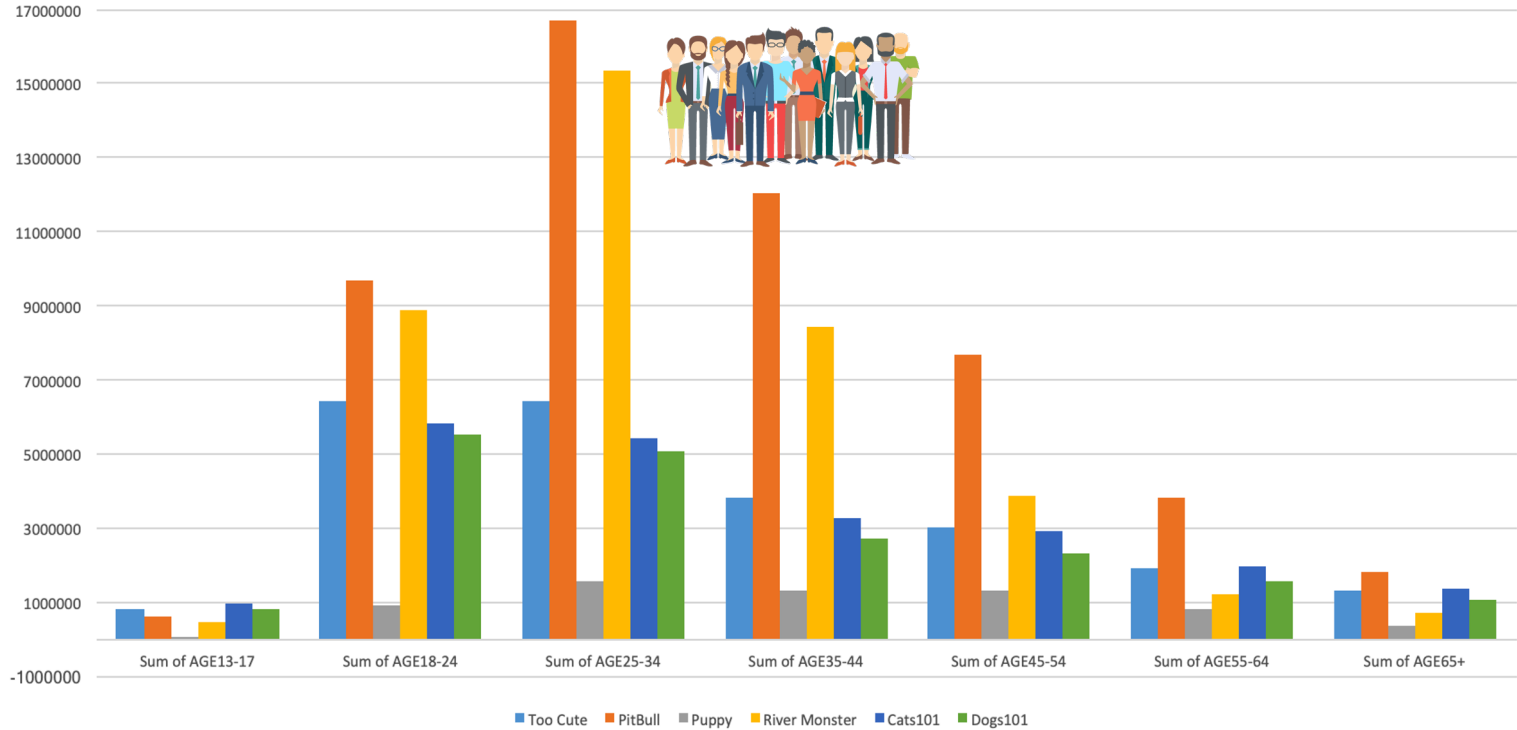


We analyzed different programs and found the content type that has the greatest impact on each program.

Program name	Content Type (Highest Engagement Rate)
Animals planet	Photo
Animals planet's too cute	Video
Cats 101	Video
Dogs 101	Video
Puppy Bowl	Photo
PitBulls and Parolees	Photo
River Monster	Photo

AGE GROUP ANALYSIS

Average Monthly Followers in Different Age Groups for 6 Programs - 2018



VIDEO POST ANALYSIS FOR ENGAGEMENT



	Animal Planet	Too cute	Cats 101	Dogs 101	PitBulls and Parolees	Puppy Bowl	River Monster
Longer or shorter video length: Which is more helpful to increase engaged users?	Not important	Shorter video length	Not important	Not important	Not important	Not important	Longer video length

- **Setting videos to be “Click-to-Play” is helpful for most of 7 programs to increase engagement.**
- **Video length only matters to two programs in terms of increase engagement.**

RECOMMENDATIONS

- **Efficiency**

More videos should be posted between 12pm to 10 pm to get a higher engagement rate.

- **Type matters**

Posting type should base on the Programs.

- **Target audience**

The age between 18-44 should be the primary audience for the Animal planet.



Content Genre Evaluation

WHERE ARE THE NEW CONTENT GENRE OPPORTUNITIES?



Third-party data (Resource: Tubular Lab)



Facebook, YouTube, Twitter, Instagram

Top 30,000
Popular Videos
(most viewed)
from Jan. 2018
to May 2019



Science Tech



News



Auto







Video information provided

- Video Title
- Platform
- Views
- Total Engagements
- Post Time
- Video Length

...

MOST FREQUENT KEYWORDS IN *SCIENCETECH* GENRE

Text Analysis using Ascribe Intelligence

Keywords	Description	Frequency
 Home	<ul style="list-style-type: none">• Home-related technology	215
 Robot	<ul style="list-style-type: none">• Most innovative techs	189
 Machine	<ul style="list-style-type: none">• Efficiency/automations	175
 Water	<ul style="list-style-type: none">• Water-technology/Water experiment	144
 3D	<ul style="list-style-type: none">• Application, emulations	104
 Bike	<ul style="list-style-type: none">• Technical Bike introduction	88

Sample Size: 700 (out of 10,000 videos)

Video Features:

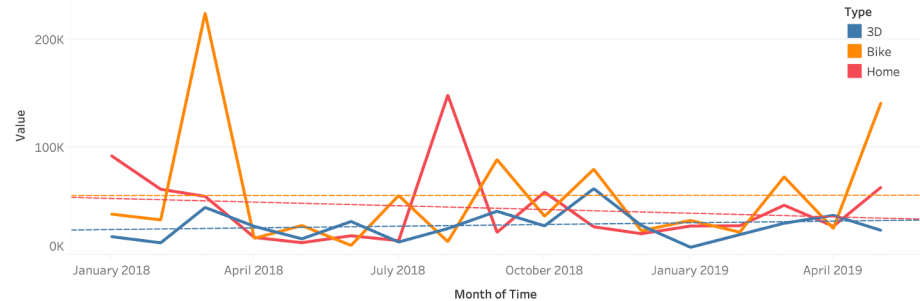
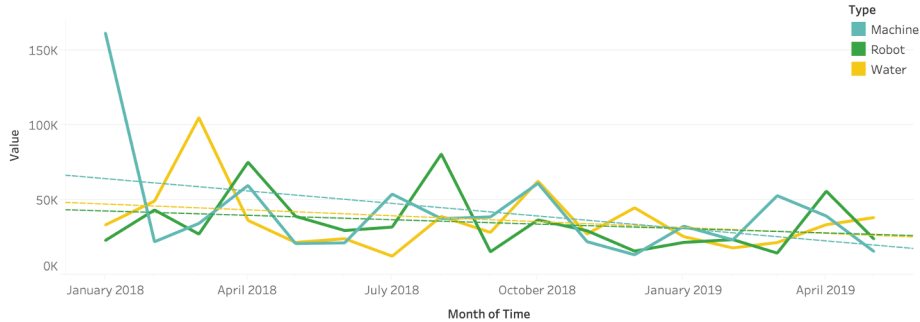
- The average length is 2 minutes
- Storytelling-based
- Emotion-driven



20 ~ 30 Videos
Per Keyword

ENGAGEMENT ANALYSIS OF *SCIENCETECH* GENRE






Average Monthly Engagement Counts Per Keyword



- Average monthly engagement counts are **47,000**
- The overall trend is steady, while **Machine** and **Home** show downward trends.

MOST FREQUENT KEYWORDS IN *NEWS* GENRE

Text Analysis using Ascribe Intelligence

Keywords	Description	Frequency
 Trump	<ul style="list-style-type: none">• Ironic video cuts of Trump's presentation	368
 Police	<ul style="list-style-type: none">• Recordings where police smartly and bravely caught the suspects	143
 School	<ul style="list-style-type: none">• Lovely stories about students helping each other• School bullying topic	138
 Dog	<ul style="list-style-type: none">• Relationships and love between dogs and humans• Dog rescues	137
 Baby	<ul style="list-style-type: none">• Lovely moments of baby and family• Cute animal babies	124

Sample Size: 910 (out of 10,000 videos)

Video Features:

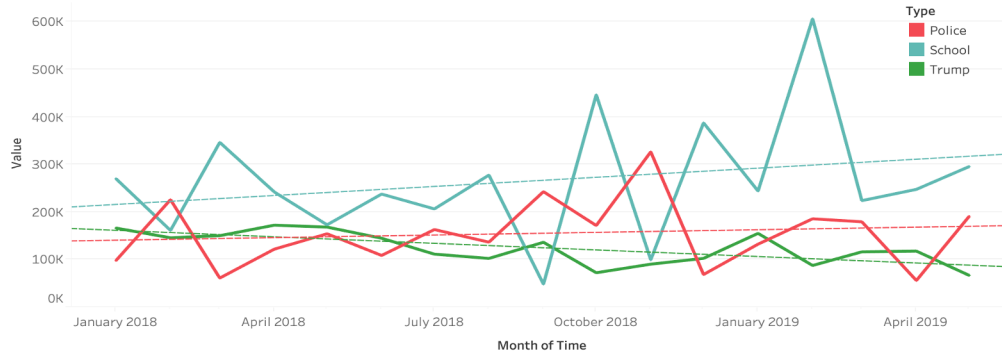
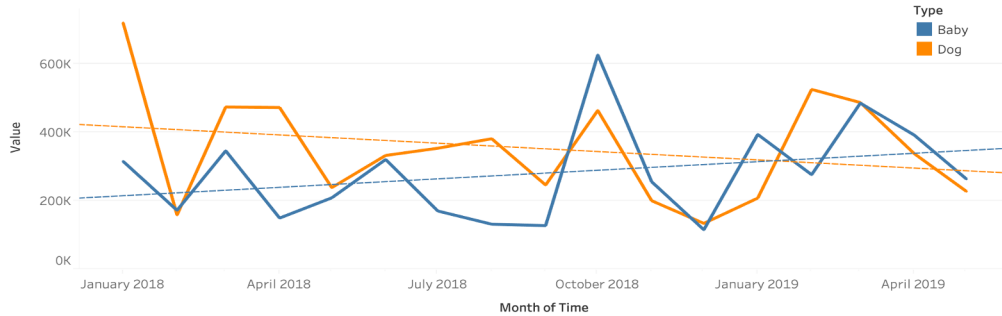
- The average length is 2 minutes.
- Old viral videos.
- Cross-posting between Facebook and YouTube.
- CNN, CBS platforms.



20 ~ 30 Videos
Per Keyword

ENGAGEMENT ANALYSIS OF NEWS GENRE






Average Monthly Engagement Counts Per Keyword



- Average monthly engagement counts are **234,395**
- **Dog** and **Trump** show downward trend while **Police**, **Baby**, and **School** are going upward.

MOST FREQUENT KEYWORDS IN *AUTO* GENRE

Text Analysis using Ascribe Intelligence

Keywords	Description	Frequency
 F1	<ul style="list-style-type: none">F1 racing footage	3,168
 Ferrari	<ul style="list-style-type: none">Emotion-driven videos related to Ferrari	284
 Motorsport	<ul style="list-style-type: none">Motorcycle race footage	250
 Crash	<ul style="list-style-type: none">Car crash or motorcycle crash footage	226
 Motorcycle	<ul style="list-style-type: none">Motorcycle race footage	188

Sample Size: 4,116 (out of 10,000 videos)

Video Features:

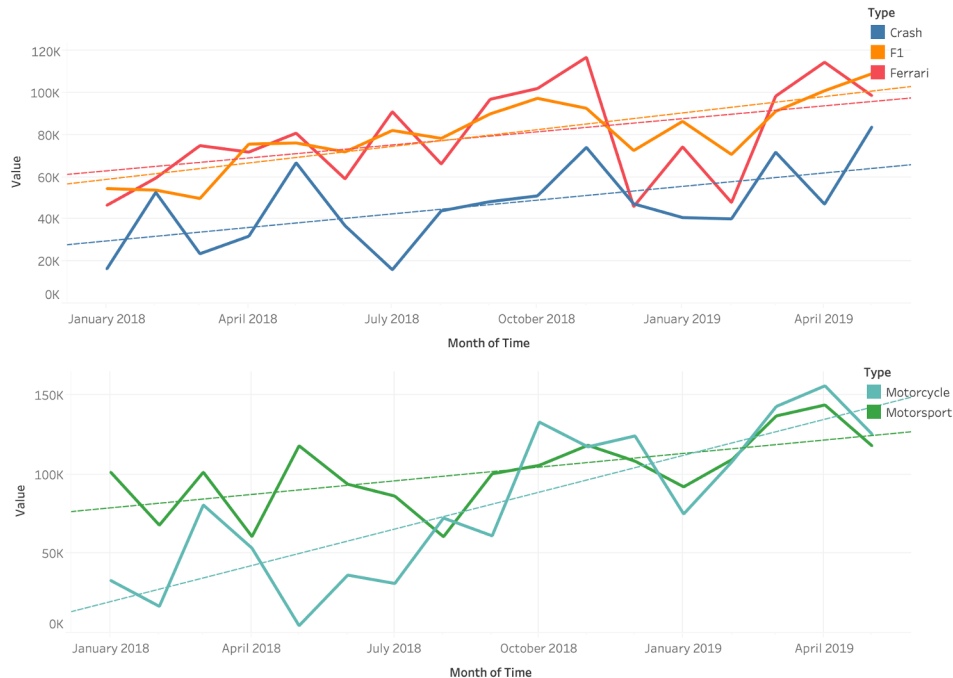
- The average length is 3-4 minutes.
- Emotional-driven.
- Fast-paced.



20 ~ 30 Videos
Per Keyword

ENGAGEMENT ANALYSIS OF *AUTO* GENRE

Average Monthly Engagement Counts Per Keyword



- Average engagement monthly counts are **76,934**
- The overall trend is going upward, and the **Motorcycle** has the highest increase rate.



WHAT DRIVES VIDEOS VIRAL?

Features of Popular Videos from *Our Analysis*



2-min video length



Emotion-driven



Cross posting

Research Result from *American Marketing Association*

- Ads between 1.2 to 1.7 minutes most likely to be shared.
- Ads that evoke positive emotions stimulate significantly positive social sharing while informational content hurts social sharing.
- Emotional ads are shared more on general platforms (Facebook, Google+, Twitter) than on LinkedIn.

Article: What Drives Virality (Sharing) of Online Digital Content?
The Critical Role of Information, Emotion, and Brand Prominence
Journal of Marketing - 2019, Vol. 83(4) 1-20
American Marketing Association 2019

Approximately 10% of the ads are not shared at all, and more than 50% are shared less than 158 times

RECOMMENDATIONS

- Science Tech, News, and Auto: Monthly count of the average engagement of keywords/analysis of the trends of specific keys terms in each of the three categories.
 - Auto -F1
 - Science Tech- Robot
 - Motorcycle

- We recommend that Discovery consider alternative viewing options to compete with other companies.
- They should prioritize the Auto category as it's the leading category in both repetitions of keywords searched and increasing engagement, according to graph timeline.

CURIOSITY

Thank you!

Q&A



Fordham University
MS in Marketing Intelligence
July 23rd 2019
New York