



SUPERCARS FANS ON TWITTER







CONTENT

Project Objective

- Second Screen Phenomenon
- Exploratory Data Analysis
- Q1 Which factors have a great impact on TV viewers?
 - Regression Analysis
- Q2 How does Supercars improve tweet engagement based on fans' attitude?
 - Sentiment Analysis + Topic Modelling
 - Positive Topics
 - Negative Topics

Limitations





Project Objective

CHAMPIONSHIP

TIM Repgo

Use machine learning to help supercars gain insights from live-tweets to improve its management









Exploratory Data Analysis

Top 20 Bigrams in the Tweet



- Bi-gram
- Key findings
 - "chaz mostert" & "paul morris"
 - "final lap" & "last lap"
 - "safety car"





- Regression analysis
- Remove multicollinearity
 - Cities

0.8

-06

- 0.4

- 0.2

- 0.0

- -0.2

-0.4

• Number of tweets



	coef	P> t
const	0.0715	0.739
weekday	0.3960	0.000
number_of_player_mentioned	-0.0211	0.000
number_of_team_mentioned	-0.0117	0.298
number_of_video	0.0525	0.001
number_of_url	0.0138	0.000
total_engagement	0.0004	0.028
tv_channel_7mate Ade	-0.7453	0.000
tv_channel_7mate Bri	-0.3139	0.103
tv_channel_7mate Mel	0.1979	0.196
tv_channel_7mate Per	-1.0169	0.000
tv_channel_7mate Syd	-0.3976	0.044
tv_channel_7mate Tasmania	-1.7646	0.000
tv_channel_ATN7	0.8507	0.000
tv_channel_BTQ7	0.7747	0.000
tv_channel_HSV7	0.9535	0.000
tv_channel_SAS7	-0.0645	0.676
tv_channel_Southern Cross Tasmania	-0.7521	0.000
tv_channel_TVW7	-0.2736	0.077
start_time_new	0.0328	0.000

Tweet relevant variables have smaller impact on TV viewership than TV channels

Recommendations:

- Add more videos in Tweets (Zote, 2020)
- Focus on collaboration with TV channels like ATN7, BTQ7 and HSV7
 - Put ads according to popular shooting angles



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 start time new	0.0328	0.000
. 이번 이 가 있는 것 같은 것 같		

TV channels in Tasmania have great negative impact

Recommendations:



- Marketing and advertising (TV ads, newspaper, magazines)
- **SUPERCARS** But the potential value of fans is unknown



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Weekday and start time have positive impact

Recommendations:



Schedule important events at the end of the week and in the afternoon



SUPERCARS

Q2 - How does Supercars improve tweet engagement based on fans' attitude?

Positive tweets are more likely to inspire user engagement than negative or neutral tweets (Anderson & Xu, 2019)

Sentiment analysis:

Dividing all tweets into positive, negative and neutral categories

Topic modelling :

- to figure out the most common positive topics to help supercars in increasing user engagement on Twitter
- to analyse the negative topics to enhance future success of supercars

Q2-1: Positive Tweets - Topic 1





Topic 1:

Congratulating Chaz Mostert's

victory after passing Jamie Whincup on last lap and discussion of top drivers in Bathurst 1000.

Total engagement: 804 (Sum of likes, comments and retweet)

Average sentiment: 0.575



Q2-1: Positive Tweets - Topic 2

Topic 2:

<u>Congratulating</u> of Nissan team get the second place, and Nick Percat and Oliver Gavin on their third place.

Total engagement: 332 Average sentiment: 0.576



Q2-1: Positive Tweets - Topic 3





Topic 3:

<u>Congratulating</u> Paul Morris and Chaz Mostert on their wins.

Total engagement: 281 Average sentiment: 0.581

Q2-1: Positive Tweets

Recommendations:

- Refresh the match process and results timely
- Launch campaigns in Twitter prior to the event
- The winners of previous events can serve as spokespersons for Supercars. Supercars can post their pictures, videos or even relevant driver GIF in the official account







Chaz Mostert's GIF



Q2-2: Negative Tweets - Topic 1





Topic 1:

Mainly focus on the crashing of Jamie Whincup happened at the beginning of the lap race.

Total engagement: 31 Average sentiment: -0.49

Q2-2: Negative Tweets - Topic 2





Topic 2:

Another famous player Craig Lowndes and the penalty he confronted.

Total engagement: 19 Average sentiment: -0.43



Q2-2: Negative Tweets - Topic 3







Q2-2: Negative Tweets

Recommendations:

- The appropriate method to tackle the commercial advertisements mixed in their twitter discussion
- The management team should also focus more on racing safety
- Compared with positive & negative analysis, they may share positive tweets more



Limitations



- The dataset only contains Tweets that contain #vasc
- The data preparation process designed for English texts only (Xue et al., 2020)
- Further details of event 11 might is suggested to be taken into consideration





Xue, J., Chen, J., Chen, C., Zheng, C., Li, S., & Zhu, T. (2020). Public discourse and sentiment during the COVID 19 pandemic: Using Latent Dirichlet Allocation for topic modeling on Twitter. *PLoS ONE*, 15(9), e0239441–e0239441.

Zote, J. (2020). 5 strategies to amplify your Twitter engagement. Retrieved from https://sproutsocial.com/insights/twitter-engagement/

Anderson, B., & Xu, Q. (2019). Winning over fans: How sports teams use live-tweeting to maximize engagement. In The Golden Age of Data (pp. 182-193). Routledge.



Q&A



