

MATH500 Project

Social Media Analysis of the Ford Fiesta and Nissan Micra
launch events

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1. Overview

2. Sentiment Analysis

3. T-test

4. Conclusion

1. Overview

Company Overview



		
Model	Micra	Focus
Geographic Scope	United Kingdom	United Kingdom
Facebook Page	Nissan UK	Ford UK
Followers	19.1 Million (2017)	8.6 Million (2017)
Sales EU	547.343 (2016)	1.041.431 (2016)
UK Market Share	5.66% (2016)	11.82% (2016)

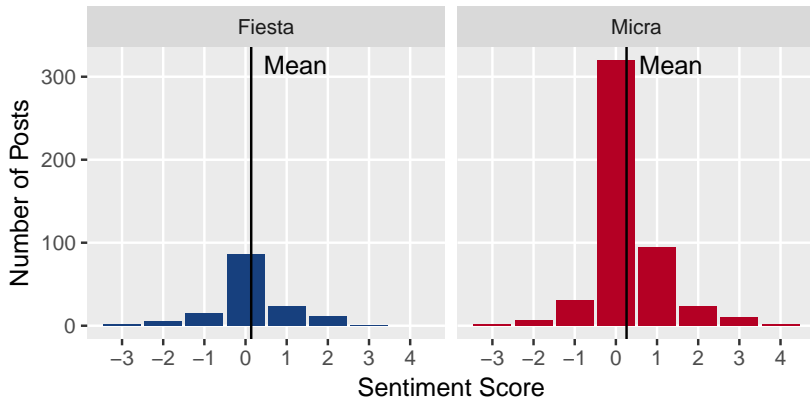
Figure 1: Company Overview

Approach to Research

- ▶ The aim of our analysis was to compare the launch events of the new Ford Fiesta and new Nissan Micra via Facebook
- ▶ Sentiment Analysis was carried out on the launch posts to compare customer reactions to the new products
- ▶ T-tests were conducted on the manufacturer's UK Facebook pages to determine whether the launches had an impact on customer engagement

2. Sentiment Analysis

Sentiment Analysis Overview



Model	Standard Deveiation	Mean	No. Outliers
Ford Fiesta	0.9546719	0.137931	3
Nissan Micra	0.8493203	0.2597137	6

Sentiment Analysis Result

Outliers

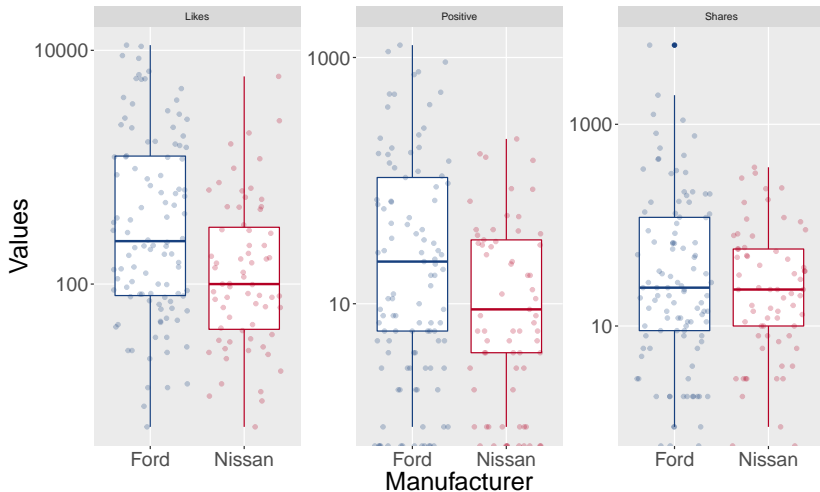
- ▶ Outliers were identified within the data set when initially visualising the sentiment scores
- ▶ Trimming the top and bottom 0.5% of data yielded the best results in removing outliers while maintaining the integrity of the data

Findings

- ▶ The Nissan post contained ~3 times as many comments as Ford
- ▶ The comments towards the Nissan Micra were generally twice as positive as those towards the Ford Fiesta
- ▶ The majority of neutral comments were from people tagging their freinds

3. T-test

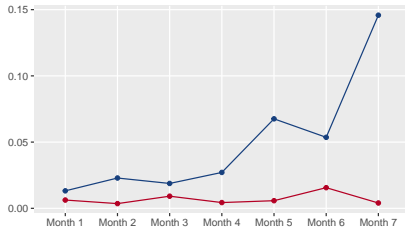
T-test Overview



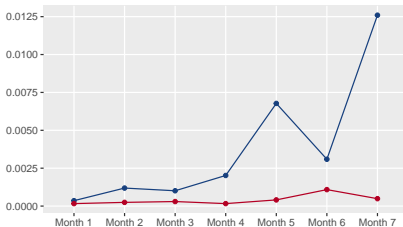
	Likes	Positives	Shares
p-Value	0.00042	0.013	0.01

T-test Overview (over time)

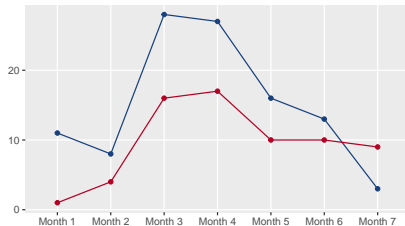
Likes per Follower



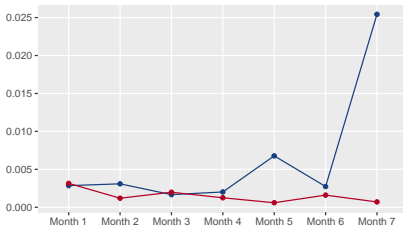
Positive Reactions per Follower



Number of Posts per Page



Shares per Follower



● Ford ● Nissan

T-test Results

- ▶ Ford had a greater customer engagement rate on their page, despite having half the followers as Nissan
- ▶ T-test for the likes was significant at the 95% confidence interval indicating that Ford has a higher positive engagement than Nissan
- ▶ The t-test for shares was also significant at a 95% confidence interval showing that a higher proportion of Facebook users were inclined to share Ford's posts
- ▶ Ford had a higher tendency to share posts from other pages causing outliers in their post history
- ▶ Ford had more posts on their page in the given time period than Nissan
- ▶ Both companies increased their facebook activity around the time of the launch events, however declined shortly after

4. Conclusion

Company Recommendation

- ▶ Despite having a lower overall page engagement than Ford, the Nissan Micra launch post had a higher engagement
- ▶ Post content has a high impact on post engagement suggesting the companies should focus on the quality of the post content
- ▶ If Nissan increased their Facebook activity and post quality throughout the year, their future launch events would take better advantage of their higher follower base

References

Ford Sales Figures EU & Market Share - accessed on 18.11.2017

<http://carsalesbase.com/european-car-sales-data/ford/>

Nissan Sales Figures EU & Market Share - accessed on 18.11.2017

<http://carsalesbase.com/european-car-sales-data/nissan/>

Ford UK Facebook Page <https://www.facebook.com/forduk/>

Nissan UK Facenook Page <https://www.facebook.com/NissanUK/>