Assessing the Impact of Factors in a Facebook Post that Influence the EdgeRank Metric of Facebook Using the Power Ratio

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Abstract

Facebook is arguably the most important online social networking service, and most marketers today are trying to use Facebook’s network of 1.1 billion-plus registered users for social media marketing. Local television stations and newspapers are no exception. This paper investigates what makes an effective post.

A Facebook page operated by a brand has fans or people who like the page and follow the stories posted on that page. The posts on a brand page, however, do not always appear on every fan’s News Feed. This is determined by EdgeRank, a Facebook proprietary algorithm that determines what content users see and how it is prioritized on their News Feed. Facebook Power Ratio, a surrogate to EdgeRank, was developed by experts at Frank N. Magid Associates, a research-based media consulting firm. Regression models were built on the engagement factors of Facebook Power Ratio with the important variables being large photos, crime news, fans, thumbnail, government, and asking for question.

Objective

The objective of this project is to find the characteristics of a Facebook post that enhance the efficacy of a news outlet’s page among their fans using Facebook Power Ratio as the target variable.

Data Preparation

The dataset consists of 8,815 Facebook posts from 293 Facebook local TV stations and newspapers. Pages were analyzed from 62 different markets and included over-the-air broadcasters who produce news, plus the top one or two newspapers in the market. The pages were spread throughout the U.S. and Canada. These observations were collected from their respective pages within a 48-hour window on February 12-13, 2013. Each post observation describes the content, multimedia element, calls to action, and observed number of interactions (Likes, Comments, Shares) with the corresponding post to get the weighted engagement metric – Facebook Power Ratio.

Modeling

Liner regression models on Likes, Comments, and Shares were built individually using the Stepwise selection method with p-value to enter (0.05) and p-value to exit (0.05) on multimedia content and call to action.

The standardized parameter estimate table is provided for all the significant variables across the three models.

Data Exploration

Conclusions

- Large photo has a huge positive impact on the likes on a Facebook post.
- Crime and Government categories in the news contents has more comments than otherwise.
- Thumbnail has a high negative impact on the number of Likes, Comments, and Shares of a Facebook post.

References

http://www.whatisedgerank.com/
https://www.facebook.com/edgerankchecker

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