

Homework: Using Pivot Tables for Facebook Marketing Recommendations

ECO 230: Business and Economics Research and Communication

Instructor: James M. Murray, Ph.D.

Data Set

The data set comes from the following study on Facebook marketing and performance metrics:

Moro, S., Rita, P. and Vala, B., (2016) “Predicting Social Media Performance Metrics and Evaluation of the Impact on Brand Building: A Data Mining Approach” *Journal of Business Research*, Vol. 68, pp. 3341-3351. Available at <http://www.sciencedirect.com/science/article/pii/S0148296316000813>

You may download the dataset here: <http://murraylax.org/datasets/facebook.xlsx>

Please see the full documentation for the dataset here: http://murraylax.org/datasets/facebook_datadesc.pdf

The data set includes statistics related to the Facebook marketing of a globally known cosmetic brand. Facebook marketing is an important part of many businesses’ marketing strategy. Facebook interaction can help businesses build their brand and market new products. Organizations use such statistics to better understand the effectiveness of their Facebook marketing.

Exercises

Directions: Use pivot tables and pivot charts in Excel to produce statistics and data visualizations to inform the following marketing decisions. All of your responses must include explanations written in complete sentences and be supported by appropriate tables and graphs in every answer.

1. There are four types of Facebook posts that can be made, including links, photos, statuses, and videos. Does one or more of these types have a higher average number of engaged users than the others? Does this depend on whether the post is paid or not paid? If your marketing team wants to make at least two different types of posts on a regular basis, what types of posts should it focus on based on average engaged users?
2. What two days of the week generate the highest average number of engaged users?
3. Your marketing team has decided that it will make two to three Facebook posts, but that it will use different weekdays each week and aim to have at least one post for each weekday in the course of the month. The team reasons that this may help reach different segments of its target population. The team is considering whether it should occasionally pay Facebook for sponsored posts. If your team decides it is willing to pay for sponsored posts for two weekdays, which weekdays should it choose to maximize the average number of engaged users?
4. Does your answer to the previous question change if you focus only on the month of September? If so, re-answer the question focusing only on September.

Submission: Due by Monday, September 17, 11:59 PM CDT, to the appropriate Canvas assignment submission space. All answers must be typed and submitted as a PDF document.