Do you have a concern measuring the impact of your marketing and advertising?

What is analytics, how can it help your nonprofit organization, and how can you get started?

INFORMS Pro Bono Analytics provides nonprofit organizations with volunteer analytics professionals to help them make better decisions with their data. If your nonprofit has a problem that would benefit from an analytical solution or if you would like to explore possible projects, please visit our website at:

www.probonoanalytics.org

Impactful marketing and advertising is one of the keys to success for every organization, especially nonprofits. The only way to determine marketing and advertising impact is by measuring and analyzing the various channels in which ads are delivered in addition to the message of the advertising. For most organizations lacking the bandwidth for such an analysis, this is much easier said than done. Raising awareness, increasing participation, soliciting funding, driving foot traffic, promoting the mission — whatever the reason for marketing and advertising -- a nonprofit organization is doing itself a disservice if there are no measurements for success and no analysis to provide recommendations for improving marketing and advertising efforts.

Our partner, Goodwill of Greater Grand Rapids, came to Pro Bono Analytics seeking volunteer help to get a better understanding of the effectiveness of their media advertising campaigns and the impact their campaigns had on driving foot traffic to their stores. Goodwill Industries International Inc. provides job training, employment placement services, and other community-based programs for people who have barriers preventing them from otherwise obtaining a job. In addition, Goodwill Industries may hire veterans and individuals who lack education or job experience or face employment challenges. Goodwill is funded by a massive network of franchised retail thrift stores that also operate as nonprofits. As with most other retailers, store traffic for franchisee Goodwill of Greater Grand Rapids, had been declining and there was no clear direction as to which media campaigns were more effective than others.

Goodwill of the Grand Rapids, Michigan Region had used a variety of both paid and unpaid advertising channels (radio, print, and television) and it was important to understand the difference across the ad channels and whether or not they were a paid service. They wanted volunteer help identifying which channels/payment status would yield a statistically significant effect on the transactions. Additionally, they wanted help identifying the effectiveness of their various coupon and discount offerings included in their advertising.

Our volunteer team got together and began working through Goodwill’s advertising and sales data from 2014 to 2017 to identify relationship trends between advertising channel and spend and in-store foot traffic and sales. They determined that building linear regression models in R would be the best, most powerful approach for showing relationship trends and recommendations and analysis.

Result of the Project

Having Pro Bono Analytics volunteers review their data proved successful for Goodwill of the Grand Rapids, Michigan Region. Our volunteers were able to determine that paying for printed advertising (magazines, newspapers, etc.) had the most positive impact on increasing in-store foot traffic and recommended that Goodwill consider investing more advertising budget into this channel in general. They also proposed decreasing some advertising spend on underperforming channels in addition to creating a survey to inquire with in-store customers to see which media channels they utilize. This project served as an excellent first step towards more efficiently using marketing and advertising to support Goodwill’s efforts.