Data Science

Project 3

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01. Subscription

The Problem:

A company wants to know the monthly spend in acquiring different volumes of subscriptions, and what the points of diminishing returns are.

Data:

Historical monthly spend in the past 3 months

# of subscribers acquired in the past 3 months

Hypotheses:

The regression model to build the forecasting models on different spend amounts and the predicted/expected number of subscriptions.

0.2 Media Mix

The Problem:

A company wants to acquire 8k subscribers next month by running advertising via different paid media channels. What is the smallest budget the company needs to spend to satisfy the goal? And with the total budget, how much should be allocated to each channel to get the optimal results?

Data:

Type of channels: Facebook, Instagram, Snapchat, SEM, etc.

Historical monthly spend on each paid media channel from Jan 2017-March 2017

# of subscribers acquired by paid advertising from Jan 2017-March 2017

Hypotheses:

The regression model can help to predict how much total spend is required and the allocation for each channel in order to acquire 8K subscribers, based on the 3 month historical data.

https://analyticsartist.wordpress.com/2014/08/17/marketing-mix-modeling-explained-with-r/

http://www.b-eye-network.com/view/17152

0.3 Influencer Marketing

The Problem:

A company wants to know what constitutes a successful influencer marketing campaign.

Data:

Type of influencer: fashion, comedy, beauty, etc

Size of the influencer fanbase: Facebook, Instagram, Snapchat, etc

Engagement of the fanbase: low, medium, high

# of subscriptions driven by those influencers in the last 6 months

Other factors: PR, content sampling, live event, etc.

Hypotheses:

The regression model to identify the significance of each variable above, and the interaction of those variables (do combined factors drive a higher # of subscriptions?). Also, how many subscriptions can be acquired?

0.4 Content Acquisition

The Problem:

What type of content will drive the most # of videos watched and what is the optimal video length?

Data:

Type of content categories: Daily, Movie, Talk, and Show

Content pieces under each categories: title, episode. etc

# of videos watched on each title in the past 3 months

# of total minutes watched on each title in the past 3 months

Hypotheses:

The classification model to predict if an upcoming title will be popular and the # of video minutes watched that it can drive.

https://blog.kissmetrics.com/how-netflix-uses-analytics/