**Introduction**

The world of advertising and marketing has always been focused on converting viewers of an advertisement (impressions) from potential customer to buying customer. Logically, it is safe to say that the probability of conversion drastically increases with exposure to a particular brand, such as through an advert. Traditional forms of media relied on mass production of adverts to maximize exposure. However, technological shifts have seen a different strategy geared towards collecting metadata on impressions and advertisement clicks. The purpose of this analysis is to determine whether or not we can optimize our advertisement serving capabilities towards those more inclined to click on the advert and thus yield in the highly coveted conversion.

Our approach to this analysis is multifaceted. First, we perform an exploratory data analysis on the data, reviewing, transforming, and filtering as seen fit. We then proceed to a logistical model to determine the plausibility in modeling the binary nature of our data. We then attempt other models using tools with the predictive capabilities necessary to predict our data. Lastly, we compare the results of these models to determine their merit in integrating into practice.

**Data Description**