

Executive Summary

Internet has emerged as a new powerful advertising medium and despite extensive research on advertising in traditional media; marketers and researchers face considerable uncertainty in the online environment. Lack of models for measuring and predicting advertising/promotional performance is a major deterrent faced by marketers. The understanding of online consumer response to marketing stimuli is at best rudimentary. Specifically, how consumers' react to discount coupons and what aspects of the media and the content impact consumer's click behaviour on the Internet are unknown. Hence there is a need to identify methods that measure consumer's interaction with advertising / promotional stimuli while they are visiting a web site.

This study adopts a quasi-experiment set up in an attempt to understand the online consumer behaviour towards marketing stimuli. We build our understanding by modelling consumer's probability to respond to marketing stimuli. Moreover, consumers arriving at a website are heterogeneous; to capture the unobserved heterogeneity among the consumers we modify our model to improve the prediction probabilities.

Clickstream data was used which allow investigation of how consumer's respond to promotional offers. Offers were made to the consumer through a vehicle called 'banner ad'. The banner ads were varied in size, location within a web page, and different pages within a website. Also the content of these banner ads were varied for products (namely, Online Tour Booking, Games, Clothes, etc.) and offer types (percentage discounts) made by different marketers.

We used binary logit modelling to estimate the parameters of our baseline model and used the latent class approach to capture the unobserved heterogeneity among web users. Our empirical results indicate that click through behaviour is dependent on a product type contained in the banner ad; page on which the

banner containing the offer was shown; position of the banner; and number of different banners the visitor was exposed to during the session. Response probabilities however differed across products. "Online Tour Booking" had a higher clicking probability than compared to other product categories. The response probability to a banner ad was highest when the offer was shown at the right side of a web page and on a web page that was associated with online shopping. Increasing the number of exposures to a banner ad (same offer) had a decreasing impact, indicating ad burnout. Our results also suggest that there are at least two segments of consumers with different propensities to click.

The important implications of this study are as follows: Firstly, banner position and page types have a positive effect on the click probability. This implies that website publishers can charge a premium from advertisers for specific ad positions and ad sizes. Secondly, the click probabilities are more significant for product offerings that have low physical interaction during purchase (for example, "Online Tour Booking & Reservations"). Thirdly, a negative relationship exists between the number of ad impressions made and click probability. Marketers and advertisers can apply the findings of our study to number of areas like media planning, online advertising revenue estimation, efficiency improvement of promotional campaigns, promotional budgeting and numerous other applications.