

# **The Interactive Effect of Product Involvement with Brand Familiarity and Ad Appeal on Engagement: An Eye-Tracking Study of YouTube Ads**

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Video advertising on the internet is gaining popularity amongst new as well as established brands. Independently, these ads can either have high or low ad appeal. This research studies the interactive effect of product involvement with brand familiarity and ad appeals on outcome parameters like brand engagement, ad stickiness, and intention to purchase. Firstly, a pretest is conducted on 30 ads with 54 participants to segment the ads aired on YouTube into high/low brand familiarity and ad appeal. Four ads are then selected that are either high/low on brand familiarity and high/low on ad appeal. Further, an eye-tracking study using inputs from 103 subjects captures quantitative elements like ad completion rate (ACR), ad abandonment rate (AAR) and click through rate (CTR). It also captures behavioral aspects of eye gaze and fixations. This is then followed by a survey to corroborate the findings from the eye tracking data. Findings reveal that brands that are yet unfamiliar to a market can create engagement by focusing on ad elements. However, brands that are familiar to a market cannot automatically assume engagement. The strategy and treatment for each of the segments identified in the study have to necessarily be different to reach their desired outcome, which is explained by the interactive effect of product involvement with brand familiarity and ad appeal.

**Keywords:** Ad effectiveness, eye tracker, innovative metrics, online advertising, YouTube ads

In recent years, several brands have been increasingly resorting to digital marketing as part of their media-mix. It is not surprising then that video advertising, digital marketing tools accounted for 33% of the digital investments in 2017 (FICCI-EY M & E Report 2018). Popular platforms for such video advertising are social media websites. Among the various social media options available to advertisers, YouTube as a platform has become one of the primary channels for video advertising. However, the effectiveness of ads aired on such platforms is yet questionable. This is especially so because the measurements are provided by the platforms themselves and are a black box to advertisers. According to a recent report, the Broadcast Audience Research Council (BARC) is on the verge of developing a tool that will be an unbiased measurement of the effectiveness of digital content

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([www.barcindia.co.in](http://www.barcindia.co.in), 2018). This tool named 'EKAM' will be able to measure video across different pipes and offer a more standardized analysis to advertisers. Until such time and depending on the efficacy of EKAM, advertisers are at large about the effectiveness of their ad spends. While they continue to spend on advertising online, it would be beneficial to know what is working and what is not. For instance, if advertisers could be able to say more about the audience-content fit or about the ease-of-understanding of the ad itself, it could provide direction to better advertising. Another issue at hand is the stickiness of the commercials-given the option of skipping the ad after a certain length of mandatory viewing. It, therefore, becomes crucial for the advertiser to understand the factors that might have a bearing on effectively communicating to its audience and staying relevant in a highly skippable environment (Goodrich et al., 2015). This study uses eye-tracking technology in developing a robust measure of relationships between the ad content cues like product shot, and logo shot and engagement with the ad in the context of YouTube advertising. Further, this study also measures product knowledge and product involvement and its relationship with ad completion rate (ACR) and intention to purchase.

## Literature Review

Ever since the inception of YouTube in 2005, it has been growing in popularity mainly for its user-generated content ([www.YouTube.com](http://www.YouTube.com)). Unsurprisingly, it has also grown as a sort-after medium for advertisers looking for eyeballs. However, digital media, due to its inherent nature poses exciting challenges to both practitioners and researchers (Tangmanee, 2016). Such challenges have led to the discovery of new knowledge around advertising metrics and their effectiveness on the internet. The following sections review the research work that has been conducted to study the advertising metrics and their effectiveness of YouTube. It has been logically divided into advertising metrics, YouTube as a channel, and eye tracking and ad elements.

### Advertising Metrics

Several scholars have studied advertising as a communication tool over the years. Online advertising, which refers to advertising on the internet, is the latest muse in this line of study. In one of the earliest seminal papers on advertising on the internet, five significant advantages had been listed for advertising online (Berthon et al., 1996). These are awareness efficiency, locatability/attractability efficiency, contact efficiency, conversion efficiency, and retention efficiency. Here the authors have described the internet as a means to locate and attract the right audience, making them aware of products and services, converting them into customers and finally retaining these customers. In a more recent study that reviews research on online advertising, the author has categorized all research in online advertising into seven major buckets (Ha, 2012). The seven significant topics are attitudes towards online advertising, the internet as an online medium, interactivity in online ads, online ad processing and execution, audience measurement, online/offline advertising synergies, and online advertising education. Brechman et al. (2016) identified intrusiveness, type of creative content, the positioning of the ad, brand awareness and ad attitudes as some of the crucial factors that have a bearing on ad effectiveness. They found that limited-interruption and pre-roll advertising were both more effective than regular clutter advertising. Another recent study deliberated on the engagement of ads on YouTube by measuring brand awareness, ad attitude and ad features of green automobile ads (Puspitasaria et al., 2014). This study revealed that among the three factors brand

awareness, ad attitudes and ad features, the former two had a more significant role in generating consumer engagement. Mainly, three core constructs emerging out of high-order advertising effectiveness were the memory (ad recall), affect (attitude toward ad and attitude toward brand) and desirability (purchase intention) of consumers.

### YouTube as a Channel

YouTube has over 1.9 billion users which accounts for more than one-third of all internet users as of 2018 ([www.YouTube.com](http://www.YouTube.com)). Its popularity as a medium for advertising has been on the rise. According to information on its website, YouTube has launched local versions in more than 91 countries. India is one amongst those listed countries. Additionally, it is also possible to navigate YouTube in 80 different languages, accounting for coverage of 95% of all internet population. Due to YouTube's user-friendliness, YouTube has been adopted rapidly across the world to view online content. As a medium, YouTube offers advertisers several options. Advertisers can play their video ads either before the video content (pre-roll) or in the middle of it, by interrupting the video content (mid-roll) (Breachman et al., 2016). They can even choose to make their ad skip-able after the initial 5 seconds or not provide an option to skip the ad. Other studies have also considered the congruency of the ad content with the video content (Belanche et al., 2017; Kononova & Yuan, 2015). For instance, if the video content is on make-up tips and the ad is a cosmetic ad, the chances of recall for the ad are much higher. This means that ad congruency with video content is an essential factor for ad recall. Belanche et al. (2017) also reveal that customers who are highly involved in the product, do not consider an ad that is for the same product as intrusive. Gupta & Singh (2017), study the various guerrilla tactics applied by advertisers to advertise their ads on YouTube. They conduct a content analysis of electronic ads and come up with keen insights on the use of YouTube as a new age platform to advertise.

### Eye-Tracking and Ad Elements

The credentials of an eye tracking system in evaluating the advertisement content objectively has been conclusively established. Experimental results show that the eye tracker equipment system supports the analysis of eye movement data for tracking multiple moving targets (Tangamane, 2016; Zhang, 2015). Eye-tracking has been used to study consumers' attention dispersion and its effect on commercial avoidance at the moment to moment tracking in video ads (Teixeira et al., 2010). However, according to them, tracking of the gaze that is moving, especially in video advertising where the objects are moving, is challenging. This is one of the primary reasons why there are not enough studies that use the eye-tracker to measure video ads. Thankfully advances in technology and upgrade in the software are enabling better analysis of video advertising using the eye tracker. Some of the other methods of studying the effectiveness of a new ad on digital channels (YouTube) include a combination of neural networks and neuroscience-based metrics (brain response, heart rate variability and eye tracking). The findings suggested a significant correlation between neuroscience metrics and self-reported effectiveness of ads and the direct number of views on the YouTube channel (Guixeres et al., 2017). This study of multi-methods also points towards the reliability of each of these measures, establishing the robustness of eye trackers as reliable data collection devices. Eye trackers have also been used to study metrics like complexity and aesthetics in website designs (Chassy et al., 2017). Another study using the eye tracker studied three key advertising elements (product, brand, and

endorser) and monitored data gathered across three eye movement indicators – Transformed Fixation Time (TFT), Transformed Fixation Number (TFN) and Average Gaze Duration (AGD). Marrying the data with the above three constructs, the important takeaway was the eye movements on product elements, and endorser elements tend to positively relate to ad effectiveness as against eye movements on brand elements (Zhang et al., 2018).

## Study Objectives

- (i) This research aims to establish the relationship between advertising effectiveness parameters like brand familiarity and ad appeal on the stickiness of the ad, especially in the online environment of YouTube content. The stickiness of an ad is measured using the following metrics:

*ACR (Ad Completion Rate)* – the percentage of ads the user has watched thoroughly, without abandoning (leaving the ad somewhere along) indicating stickiness of the commercial

*AAR (Ad Abandonment Rate)* – the inverse of ACR, where we measure how many users have left the ad without watching it completely

- (ii) This study also establishes the relationship between Fixation Time (FT) on cues in the ad (product shot and logo shot) and combinations of high(low) brand familiarity with high (low) ad appeal.
- (iii) Finally, this research also studies the interactivity of product knowledge and involvement in the outcome parameters of ACR, CTR, and intention to purchase for all four categories of brands.

## Methodology

This study adopts a multi-stage approach, which was executed in a series of lab experiments using online ads and eye tracking technology. The study had three stages – Stage 1 was a pretest on 30 ads to select the ads for the experiment; Stage 2 was a (2x2) lab experiment for brand familiarity and ad appeal. This study used eye trackers to capture different advertising metrics. Stage 3 was a survey that followed the lab experiment that helped to corroborate self-reported data with the eye-tracking behavior of the subjects.

A total of 54 participants were included in the pretest for this study. Their ages ranged from 21- 34 years (average age=24.4 years), with experience in internet browsing and viewing video content on YouTube. The final study had 103 participants. The final chosen participants (similar to subjects from the pretest) were randomly assigned to 4 different conditions of curate ads, selected based on the results of the pretest. The same 103 subjects took the survey at the end of the experiment. The survey was conducted for better explanations of the data collected through the eye tracker and for other metrics like product knowledge and product involvement. Recruitment of participants was done through a form floated in a private university located in Pune where the experiment took place. Students who enrolled in the study received course credits for their participation. Ethical approval was granted from the Independent Ethics Committee at the university before data collection. The details of the multi-stage study are explained further in the following sections.

## Stage 1. Pretest

A pretest was conducted using 30 ads of various consumer brands that were aired on YouTube at the time of the study. Appendix 1 has a list of the 30 ads that were used in the pretest. The pretest was carried out to categorize a battery of ads into various buckets across the constructs of brand familiarity and ad appeal. These ads were shown in random order to 54 students from the university, to nullify ordering effects (Brunel and Nelson, 2003). The participants in the pretest were asked to rate each of the ads on two elements – brand familiarity and ad appeal, on a scale ranging from 0-10, 0 being not at all familiar (appealing) to 10 being highly familiar (appealing). This scale is a semantic differential scale (Malhotra & Dash, 2010). Mean scores were then calculated for all 30 ads on brand familiarity and ad appeal and plotted on a matrix X-axis – brand familiarity, Y-axis – ad appeal). Figure 1 is a graphical representation of all the brands plotted on a graph. The results from the matrix were then used to identify the ads for the experiment. Selected ad videos were similar on other parameters like ad length and ad technique (slice of life advertising). The four ads chosen for the experiment were Samsung (high on brand familiarity, high on ad appeal), Tata Motors (high on brand familiarity, low on ad appeal), IKEA (low on brand familiarity, high on ad appeal), and Uber Eats (low on brand familiarity, low on ad appeal).

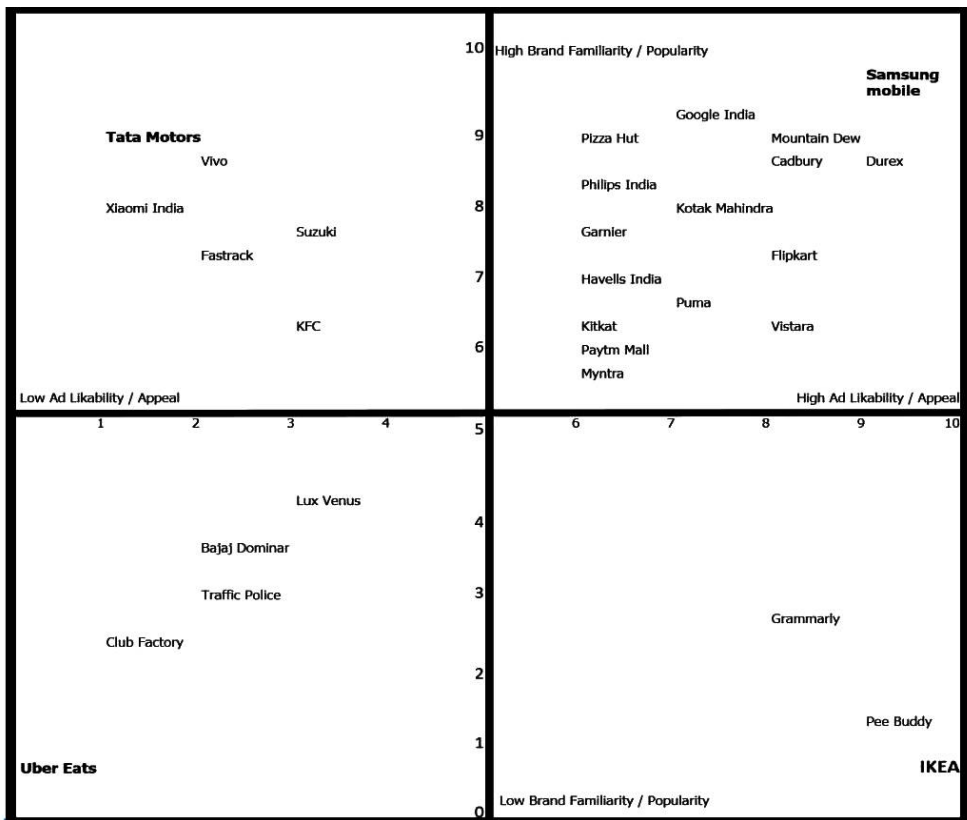


Figure 1. Brands based on brand familiarity and ad appeal

## Stage 2. Experiment using Eye-Tracker

In this experiment-based study, ads selected after the pre-test were embedded in YouTube videos as a pre-roll. The ads were of Samsung mobile phone, Tata Motors, Ikea and Uber Eats. These ads were then viewed by subjects as a pre-roll to the YouTube content that they originally intended to watch. One hundred three subjects/participants could choose from 4 different kinds of video content that they would like to view. Subjects were briefed using a standard vignette on the use of the internet for information search. The ads were viewed on laptops that had eye trackers attached to them. The subjects were made for relaxing and choosing the video of their choice. Twenty-eight subjects/participants viewed the Samsung ad, 24 subjects viewed the Tata Motors ad, 25 subjects viewed the Ikea ad, and 26 participants viewed the Uber Eats ad.

The views were then measured based on ACR, AAR, and CTR (Bytyci, 2014). This study helps to establish the relationship between effectiveness parameters of the ad with its outcome variables of ACR, AAR, and CTR.

## Results

First, Ad completion rate (ACR) for each kind of ad was measured. Following Belanche et al. (2017) method, each ad was divided into four quarters, namely Q1, Q2, Q3, and Q4. Q1 was the first 5 seconds of the ad. Q2 was for the next 5 seconds, Q3 was the next 5 seconds, and Q4 was the last 5 seconds of the ad. Subjects were given the option of skipping the ad after the first four seconds. Quite predictably most subjects viewed the ad until this point. Table 1 lists out the four quarters and ACR for each quarter.

Table 1. Ad completion rate (ACR) measured over four quarters for all four ads

Ad acceptance	High brand familiarity		Low brand familiarity	
	Samsung high ad appeal	Tata Motors low ad appeal	Ikea High ad appeal	Uber Eats Low ad appeal
Total no. of viewers	28	24	25	26
Viewers in Q1	100% (28)	95.83% (23)	100% (25)	92.30% (24)
Viewers in Q2	67.85% (19)	41.66% (10)	76% (20)	38.46% (10)
Viewers in Q3	53.57% (15)	33.33% (8)	60% (15)	19.23% (5)
Viewers in Q4	35.71% (10)	16.66% (4)	40% (10)	15.38% (4)

In the first 5 seconds of the ad or Q1, Samsung had 100 percent views, Tata Motors had 95.83% views, Ikea had 100% views and Uber Eats had 92.30% views. Figure 2 depicts the Ad Completion Rate for the four brands over the four quarters. As is evident from the figure, Tata Motors and Uber Eats, both ads with low ad appeal have steeper falls, than Samsung and Ikea which had higher brand appeal. Noteworthy here is that compared to brand familiarity ad appeal dictates the trend of ACR.

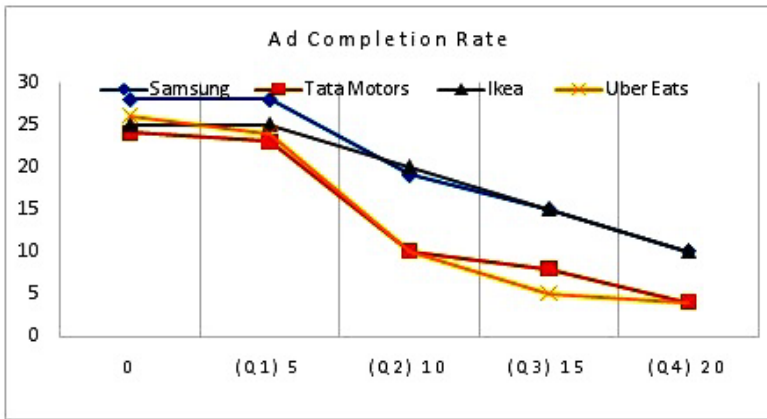


Figure 2. Ad completion rate (ACR) for the four brands

The pattern of ACR for highly familiar brands (Samsung mobiles and Tata Motors) were significantly different for ads with high or low ad appeal. This pattern was observed for brands that were low on brand familiarity too (Ikea and Uber Eats). Therefore, it seems like the likelihood of subjects viewing the whole ad or in other words the Ad Completion Rate, was better based on ad appeal than on brand familiarity. However, when the ad appeal was high, brands that were unfamiliar to subjects had a better ACR as compared to familiar brands. The reverse was true for brands with low ad appeal. Here familiar brands had a significantly better ACR as compared to low familiar brands especially in the 3<sup>rd</sup> and 4<sup>th</sup> quarters. This means that between the two factors, ad appeal scores significantly over brand familiarity towards ensuring better viewing of the ad. However, brand familiarity as a factor can be crucial when the ad appeal is low. Since AAR is 100 minus ACR ( $AAR=100 - ACR$ ), this study does not report it separately.

Further, each ad was marked for 2 ad elements such as product shots and logo shots. The eye tracker revealed exciting results. Samsung (high brand familiarity and high ad appeal) had a significantly different heat map as compared to Ikea (low brand familiarity and high ad appeal). Figure 3 and Figure 4 refer to product shots of Samsung and Ikea, respectively. As is visible in the figures and the gradation scale provided in the top left-hand corner of the respective figures, the darkest blurbs are where there is a concentration of eye gaze; it is followed by the grey areas surrounding the dark blurbs which are the next concentration of eye gaze. Lastly, the white outlines capture the eye gaze of mild interest. All the spots where the picture is visible is where the eye gaze has not landed on the picture. This means that the visible areas of the picture were never looked at by the subjects in the study.



Figure 3. Samsung product shot



Figure 4. Ikea product shot



As is seen in Figure 3, subjects can locate the product (mobile phone), and the heat map is around the product for a familiar brand like Samsung. However, for an unknown brand like Ikea (Figure 4), subjects concentrate on the most attractive element in the figure – the child, rather than the product shot of storage boxes. This stark difference between a familiar brand and an unknown brand provides direction to ad filmmakers. For unfamiliar brands, the product shots have to be neat, clear and unambiguous. As customers (subjects) are unsure of what the product looks like, they seem to fixate on whatever is attractive in the frame, in this case, the child. As a result, they have almost completely missed the product shot in the frame.

The results for the product shots are yet again different from the results of the logo shots. Logo shots are usually at the end of the ad and are centered on the screen. Therefore, brand familiarity or the lack of it did not make a difference to the heat map around the logo. Figure 5 and Figure 6 are the logo shots for the Samsung (well-known brand) and Ikea (an unknown brand). As is easily visible from the figures, the heat map around the logo is similar for both familiar and unfamiliar brands.

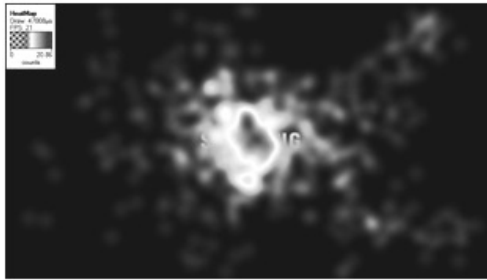


Figure 5. Samsung logo shot



Figure 6. Ikea logo shot

The eye-tracker revealed a new pattern for an ad that was either high or low on ad appeal. When the brands were familiar then irrespective of ad appeal, the subjects' gaze was fixed on the logo shot. However, when the brands were unfamiliar, as in the case with Ikea and Uber Eats, a low ad appeal revealed distracted subjects. While the Ikea Logo gets right fixations indicating audience engagement, Uber Eats gets distributed fixation, indicating distraction and disengagement. Figure 6 and Figure 7 are logo shots for ads with high and low ad appeals for unfamiliar brands. Figure 7 is for Ikea (high ad appeal), and Figure 8 is for Uber Eats (low ad appeal).



Figure 7. Ikea – High ad appeal

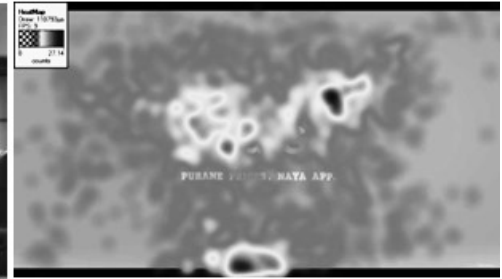


Figure 8. Uber Eats – Low ad appeal



### Stage 3. Survey

Subjects who viewed the ads were then asked to fill a survey form. The form contained questions related to product knowledge (Beatty & Smith, 1987) and personal involvement inventory (PII) (Zaichkowsky, 1985). These questions specifically related to the involvement of the subject with the product, attitude toward the ad, brand familiarity, ad recall, brand recall, and intention to purchase. Few open-ended questions were also administered related to the appeal of ad elements.

This study was conducted to help establish the relationship between viewer dependent parameters like product knowledge and their involvement with the product on stickiness parameters of ACR, AAR, and CTR. The interaction of product knowledge and product involvement with brand familiarity and quality of ad content is also studied to pin the significant relations that lead to the effectiveness of ads on YouTube.

## Results

The survey revealed an interactive effect between product involvement and brand familiarity and influenced ACR and CTR. However, there was no interactive effect between product involvement and ad appeal on ACR or CTR. This demonstrates that higher ad appeal can compensate for lack of brand familiarity in ensuring viewers watch most of the ad. However, if the ad is uninteresting, then unfamiliar brands lose their viewers faster than native ads. Product involvement also is an explanatory variable for CTR and intention to purchase and show a better main effect than ad appeal.

## Discussion

Fishbein's well known multi-attribute model proposes that attitude towards a given object (e.g., brand) is based on the summed set of beliefs about the object's attributes weighted by the evaluation for these attributes (Fishbein, 1967; Lindgren & Konopa, 1980). The eye-tracking findings of the eye-movements along with the post surveys indeed established that communicating the presence of desirable attributes creates positive consumer attitudes in terms of memory, affect and intention to buy.

Results were comparable between the pre-test and the experiment on brand familiarity and ad appeal. Product involvement was an explanatory variable for groups with high ad likeability for high brand awareness and low brand awareness. However, the reverse was not true. While the interactive effect of product involvement and ad likeability had significant results on recall, it did not come through for intention to purchase. The interactive effect of product involvement and brand awareness were significant on intention to purchase for ads that were high on ad likeability.

Broadly the communication of the two conventional types of benefits in utilitarian (objective and functional) and hedonic/experiential (encompass emotional responses, sensory pleasures and aesthetic considerations) seems to have a crucial bearing on the liking of the ad. The criteria used when considering hedonic benefits are subjective and symbolic, centering on the appreciation of the product or service for its own sake apart from more objective considerations. On the basis of the findings, four categories have been summarised in the next page.

### Category I: High Brand Familiarity and High Ad Appeal

The ads in the category started with an advantage on awareness levels. Still for it to score high on ad likeability, it had to meet some filters. While simplicity and directness helped, the execution needs to have a certain amount of style and ambiance for it to be liked. A strategy perhaps could be the use of a celebrity brand ambassador fitting into the brand profile. For example, the Samsung mobile phone using a Bollywood celebrity in Tiger Shroff helped in generating a positive affinity. Hence offering a hedonic benefit through execution drama would work for a brand already high on awareness and familiarity.

### Category II: High Brand Familiarity and Low Ad Likeability

Quite simply, if the brand, despite its generous awareness levels, does not meet the conditions as stated in Category I, chances are the brand will end up in low ad likeability. It is essential to make a creative leap for corporate/brand communication to garner affect. An example would be the ad from the automobile giant Tata Motors with its corporate/range campaign flaunting its lead brands in the passenger segment, which did not generate much affinity. The ad, of course, lacked any focus and was rambling through their display of various models and offerings triggering no positive feelings for the brand. The eye tracking parameters like ACR and CTR were also low due to the same reasons.

### Category III: Low Brand Awareness and High Ad Likeability

Low brand awareness and high ad likability can be a challenging position for any brand. The brand communication would, therefore, require to be far more creative and impactful to ensure better ad appeal. This further means the product must come with a certain amount of innovation in their advertisement. A case in point was Ikea. Here the novelty of the treatment of the movement, the moving camera, the number of elements in the ad, all created an appeal amongst the audience. However, the eye-tracker study stands testimony that subjects have almost wholly missed the product shots throughout the ad. This ad provides new insights to marketers as it has high scores on ad appeal but also was inconsistent with a theory on the eye-tracking parameters.

### Category IV: Low Brand Awareness and Low Ad Likeability

A brand can quickly end up in this grid if the communication offers no clear utilitarian (objective and rational) or hedonic (subjective and emotional) benefits. The brand that stood out in this grid was Uber Eats making a valiant effort to connect with the past communication of an edible oil brand but making no inroads in the audience affinity for the brand. The eye-trackers did not pick up any purposive involvement of the audience with an element of brand communication. An ad for a brand that is neither familiar nor has much appeal loses all battles. Low scores on ACR, CTR and a scattered heat map are indicators of an unengaging ad.

## Conclusion

This study has brought out several challenges of new media that require a better understanding. Video streaming channels like YouTube attract millions of internet users. However, this cannot be directly translated into sizeable eye-balls for all advertisers.

By categorizing brands into familiar and unfamiliar brands and ads into ads with high appeal and low appeal, the study starts to segment marketers based on their brand awareness and the creative output of their investment in ads. Ad avoidance is the biggest challenge faced in current times. It, therefore, becomes imperative that brands develop deep insights and infuse innovation and creativity to help manage this phenomenon.

The segmenting of brands and ads have helped in unearthing insights that might not have been possible otherwise. The use of technology (eye-tracker) to capture observed behavior has aided in this process, to build in rigor and for replicable outcomes. It adds to the academic knowledge base of contributing to theory around ad construction. The patterns in the eye-tracking movement also corroborate these findings. Practitioners are benefited by having answers to questions like “How can we help create effective ad content that is appealing and high on stickiness for YouTube?” and “How can we help facilitate behavioral targeting to enable focused online communication?” Marketers that have brands that are yet not established must adopt different strategies and treatments for their ads as compared to established brands. This lesson is an insight for brands that may be popular in other markets but are new to some others. Ikea and Uber have established brands in certain European and American markets but if they were to use the ads as is in Indian markets it may not have desired results, leading to low engagement and brand acceptance.

*Limitations:* This study is a laboratory experiment and suffers from its usual flaws. For instance, subjects may be guarded in their reactions because they are aware that they are in a study. Future research can consider this limitation and work on it while designing the study. This study has randomly assigned subjects to each group thus not considering the effect of gender or age on the outcome variables. Future studies can group subjects based on these variables to study their effect.

## References

- BARC India to Solve the Digital Puzzle with its “EKAM” range of products. (2018). Retrieved from <https://www.barcindia.co.in/AnnouncementDetails.aspx?ID=82>
- Beatty, S.E., & Smith, S.M. (1987). “External search effort: an investigation across several product categories,” *Journal of Consumer Research*, 14, 83.
- Belanche, D., Flavián, C., & Pérez-Rueda, A. (2017). User adaptation to interactive advertising formats: The effect of previous exposure, habit and time urgency on ad-skipping behaviors. *Telematics and Informatics*, 34(7), 961-972.
- Berthon, P., Pitt, L. F., & Watson, R. T. (1996). The World Wide Web as an Advertising Medium: Toward an Understanding of Conversion Efficiency. *Journal of Advertising Research*, 36(1), 43-54.
- Brechman, J., Bellman, S., Robinson, J. A., Rask, A., & Varan, D. (2016). Limited-Interruption Advertising In Digital-Video Content: An Analysis Compares the Effects of “Midroll” Versus “Preroll” Spots and Clutter Advertising. *Journal of advertising research*, 56(3), 289-298.
- Brunel, F., & Nelson, M. (2003). Message Order Effects and Gender Differences in Advertising Persuasion. *Journal of Advertising Research*, 43, 330-341.
- Bytyci, R. (2014). Understanding the effectiveness of Video Ads: A Measurement Study. *Working paper*. Retrieved from <https://www.researchgate.net/publication/270960398>.
- Chassy, P., Fitzpatrick, J. V., Jones, J. A., & Pennington, G. (2017). Complexity and aesthetic pleasure in websites. *The Journal of Interaction Science*, 5, 13-13.
- Fishbein, M. (1967). A Behavior Theory Approach to the Relations Between Beliefs About an Object and the Attitude Toward the Object. In Fishbein M (Eds.) *Readings in Attitude Theory and Measurement* (pp. 389-399). New York: Wiley.

- Goodrich, K., Schiller, S. Z., & Galletta, D. (2015). Consumer reactions to intrusiveness of online-video advertisements: do length, informativeness, and humor help (or hinder) marketing outcomes? *Journal of Advertising Research*, 55(1), 37-50.
- Guixeres, J., Bigné, E., AusínAzofra, J. M., Alcañiz Raya, M., ColomerGranero, A., Fuentes Hurtado, F., & Naranjo Ornedo, V. (2017). Consumer Neuroscience-based metrics predict recall, liking and viewing rates in online advertising. *Frontiers in psychology*, 8, 1808.
- Gupta, H., & Singh, S. (2017). Social Media in Contemporary Marketing: YouTube Advertising for the Guerrillas. *Media Watch*, 8(3), 413-422.
- Ha, L. (2012). Online advertising research in advertising journals: A review. *Journal of Current Issues & Research in Advertising*, 30(1), 31-48.
- Kononova, A., & Yuan, S. (2015). Double-dipping effect? How combining YouTube environmental PSAs with thematically congruent advertisements in different formats affects memory and attitudes. *Journal of Interactive Advertising*, 15(1), 2-15.
- Lindgren, J.H., & Konopa, L.J. (1980). A comparative analysis of multi-attribute attitude model. *Journal of Academy of Marketing Science*, 8, 374.
- Malhotra, N. K., & Dash, S. (2010). Marketing Research: An applied orientation (English) 6<sup>th</sup> Edition, Pearson India.
- Mid-year Update on Our Five Creator Priorities for 2018. (2018). Retrieved from <https://youtube-creators.googleblog.com/2018/07/mid-year-update-on-our-five-creator.html>
- Puspitasari, A. F., & Shen, C. W. (2015). Brand Awareness, Ad Attitudes, and Ad Feature Toward Engagement on YouTube: An Empirical Study of Green Automobiles. *Asia-Pacific Management and Business Application*, 2(3), 170-183.
- Reimagining India's M&E sector. (2018). Retrieved from <https://www.ey.com/Publication/vwLUAssets>
- Tangmanee, C. (2016). Fixation and recall of YouTube ad banners: An eye-tracking study. *International Journal of Electronic Commerce Studies*, 7(1), 49-76.
- Teixeira, T., Michel, W., & Rik, P. (2010). Moment-to-Moment Optimal Branding in TV Commercials: Preventing Avoidance by Pulsing. *Marketing Science*. 29 (5), 783-804.
- Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*. 12, 341-52.
- Zhang, X. B., Fan, C. T., Yuan, S. M., & Peng, Z. Y. (2015). An advertisement video analysis system based on eye-tracking. In *Smart City/SocialCom/SustainCom (SmartCity)*, 2015 IEEE International Conference (pp. 494-499).
- Zhang, X., & Yuan, S. M. (2018). An Eye-Tracking Analysis for Video Advertising: Relationship Between Advertisement Elements and Effectiveness. *IEEE Access*, 6, 10699-10707.

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