

A STUDY ON EFFECTIVENESS OF RETARGETED ADVERTISEMENTS

A REPORT

submitted by

MUTURI AKHIL DANAM
ELECTRICAL ENGINEERING DEPARTMENT
EE12B039

*in partial fulfilment of the requirements
for the award of the degree of*

BACHELOR OF TECHNOLOGY



DEPARTMENT OF ELECTRICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY MADRAS

MAY 2016

CERTIFICATE

This is to certify that the report entitled **A Study on Effectiveness of Retargeted Advertisements**, submitted by **Muturi Akhil Danam, EE12B039, Department of Electrical Engineering** to the Indian Institute of Technology, Madras, for the award of the degree of **Bachelor of Technology**, is a bona fide record of the research work carried out by him under my supervision. The contents of this project, in full or in parts, have not been submitted to any other Institute or University for the award of any degree or diploma.

Dr. M. Geetha

Assistant Professor

Department of Management Studies

Indian Institute of Technology Madras

Prof. Devendra Jalihal

Professor

Department of Electrical Engineering

Indian Institute of Technology Madras

Date: 10 May 2016

Place: Chennai

ACKNOWLEDGEMENT

This report is the result of a lot of dedicated work, an evolving mind and a colossal amount of learning. As I submit this report I believe I put in my sincere efforts and wish to acknowledge many great people without whose help this work would not have been possible.

Foremost, I wish to acknowledge the enormous amounts of efforts made by my project guide **Dr. M. Geetha**. She was always there for me supporting in every small effort of mine. Albeit her busy schedule, she took out time and insisted upon meeting in person, to clear any kind of doubts I had. There was one moment when it felt like this project is not going any further, that is when she took charge and made this entire work possible. She is more like a mentor than a research guide to me.

It was **Prof. Devendra Jalihal**, my co-guide, who had this ability to understand my perspective better than any other which gave me this freedom to express thoughts.

I believe this report will be incomplete without the mention of **Nisha** and **Rintu**, my project mates. We always have been together throughout the tenure of the project despite all ups and downs. They shared all possible thoughts, resources to bring the best out of us.

ABSTRACT

The main objective of the project was to study the effectiveness of retargeted advertisements in online purchasing scenario. Both the qualitative and quantitative approaches were used for the study on effectiveness of retargeted advertisements. The results showed that online users value their privacy and security and social media like Facebook advertisements and Google advertisements are dominant in retargeting. Predictive segmentation seems to be a better option in the emerging world in comparison with retargeting advertisements.

CHAPTER 1

INTRODUCTION

Every business organization would like to think that an online user who comes in contact with a business follows a very straight and orderly path to purchase, and they hope that someone visits the site for the first time, then becomes interested in buying the product, and hands over their credit card to purchase the product from the company. But in reality, the buyer's journey is probably not so linear. So marketers need to be prepared to help their buyers to undergo that process. One great way to do that is with retargeting advertisements. In this project the effectiveness of retargeted advertisements is studied. In this chapter we will look at the basic understanding of retargeting.

1.1 Retargeting

Retargeting is the process of advertising specifically to visitors and customers who have expressed an interest in a specific product, service or brand (Freimark, 2015). Retargeting display ads has resulted in very high website conversion rates compared to other forms of digital marketing. When using other forms of marketing, we take a lot of things for granted. This cannot be done while retargeting. (Ayyar, 2016). Retargeting helps to reach potential customers in an easy and cost effective way and it is more beneficiary if a new product or brand is being launched. (Rowland, 2014). Retargeting can benefit a company of any size and type. It can help either short or long sales cycles. (Roubtsov, 2014).

The basic pattern which can vary slightly depending upon the platform and chosen retargeting is that a visitor arrives on a site and begins browsing and using JavaScript, a cookie is placed in a visitor's browser and that visitor leaves the site and continues browsing the web. Eventually, they land on a website that serves ads to visitors. The cookie in the visitor's browser will enable the ads to be displayed based on the preconfigured settings. (Freimark, 2015).

1.2 Types of Retargeting

There are a number of retargeting options. The major types of retargeting that a professional services firm might want to consider are:

1. Pixel-based:

These ads for a firm will show up on other sites after a visitor has left the site. This works by placing a piece of code on the website. The code will drop a cookie when a new visitor, visits the website. That cookie will allow for the retargeted ads to be served up to those individuals once they leave. (Freimark, 2015).

2. Search retargeting:

Search retargeting serves ads to individuals that haven't yet visited the firm's website but are using certain keywords or keyword phrases that are related to the firm, its services, or the challenges that the firm's help to solve. This technique allows online marketers to segment visitors into very specific groups based on their search keyword data. (Roubtsov, 2014). Search retargeting is a great way to reach users beyond their initial search. Because it targets recent interest, it's also highly effective. Ads can be displayed both on Facebook and the web. (Laura, 2015).

3. SEM/SEO retargeting:

SEM/SEO retargeting is closely related to site retargeting and has to do with the search terms used prior to clicking to or arriving on the site. (El-Shinnawy, 2012). This is a more complex form of retargeting. (Freimark, 2015). Using this type of Retargeting, a firm can target ads based on keywords and/or tags from the site. By looking at the search terms that brought a visitor to the site it is possible to understand much more about why they came to visit. (Hamman, 2011).

4. List-based:

Target ads to the existing contacts. Upload the list to a platform (such as Facebook or Twitter) and ads will appear to those people on the list. (Freimark, 2015).

5. Email retargeting:

This option targets people from the email campaigns and the actions the firm took within an email. (Freimark, 2015). Like site and search retargeting, email retargeting relies on cookies, but, in this case, cookies are triggered by a tracking pixel located in the signature of an email. The tracking pixel is activated when a recipient opens that email, resulting in a cookie being placed on the recipient's machine, which essentially tags the person who opened the email so that he or she can be retargeted while they browsing the internet later on. (Laura, 2015). Email is extremely effective for both prospecting and retention. (Roubtsov, 2014).

6. Social retargeting:

This type of retargeting tracks users on social media and how they consume content (such as what they read and share) and serves them ads accordingly. (Freimark, 2015). It works like site retargeting except it involves placing a Facebook tracking pixel on the website. The pixel lets to capture audience data for Facebook retargeting. This technique also includes in-app targeting people that are performing certain actions in the mobile application. (Hamman, 2011). Facebook isn't the only social network in the retargeting game. In 2013, Twitter introduced "tailored audiences" which enables marketers to deliver promoted tweets to the company website visitors and custom audiences. (Roubtsov, 2014).

7. Contextual or partner retargeting:

Using the pixel method listed above, contextual or partner retargeting exchanges pixels between websites that are highly relevant to the searcher and target to each other's visitors. (Freimark, 2015).

1.3 Major Benefits of Retargeting

There are a number of benefits to retargeting ads to the visitors and existing contacts. Having a targeted audience who is already familiar with the website in some form will increase the effectiveness. It keeps the brand in front of the prospective clients and top of mind. It builds brand awareness through repeated exposure. (Freimark, 2015). It has the ability to target by where prospects are in the sales funnel, such as having an awareness campaign for new visitors, and conversion offers for those later in the funnel. It has the ability to advertise services based on how engaged user is. It helps remind users of the reasons they engaged with you to begin with, which can trigger more actionable steps. (Kim, 2014).

CHAPTER 2

LITERATURE REVIEW

Relevant literature can be found in news articles, magazines and various advertisement agency reports, research papers to know the effectiveness of retargeted advertisements. The focus was mainly on magazines followed by news articles and advertisement agency reports.

2.1 EFFECTIVENESS OF RETARGETING

Retargeting is a marketing tool to target a user who has previously visited a website and already has familiarity with that brand and what you have to offer. (Quinn, 2012). Predictive advertising will be an incredible emerging world for the brands to exploit. (Goodwin, 2014). Traffic can be driven to the website through blogging, social media, SEO, pay-per-click ads, postcard campaigns, drip messaging and so on and these methods take up a fair amount of our time and money. Such things could be overcome by retargeting (Russer, 2012). Retargeting display ads has resulted in very high website conversion rates compared to other forms of digital marketing but things cannot be taken for granted with retargeting. (Ayyar, 2016). Retargeting helps to reach potential customers in an easy and cost effective way and it is more beneficiary if a new product or brand is being launched. (Rowland, 2014).

2.2 BEHAVIOURAL TARGETING

Though the conversion increases by using retargeting, it is likely that the consumer gets alienated after continual retargeting. It is vital to understand the behavioural targeting. (Nutley, 2014). The importance of behavioural targeting in capturing the relevance of online marketing can be proved through improved CTR (Click through Rate). The users who have similar search or browsing behaviours will have similar interests and thus have higher probability to click the same ad than the users who have different online behaviours and hence online users can be grouped into different user segments (Yan et.al, 2009). Perception, Privacy concerns, Targeted visible ads and Advertisement characteristics are empirically the four dimensions of behavioural retargeting.

Though consumers have positive perceptions towards online behavioural targeting, privacy concerns are still salient issues in online behavioural targeting. (Alnahdi, et. al, 2014).

Consumers with high degree of impulsiveness tend to be more positively influenced by a high-quality website. Understanding how and why consumers react to varying degrees of website quality is a critical factor for designing online marketing strategies. (Wells, 2011). Income actually had a negative effect on impulse purchases; as incomes rose, people became less likely to buy on impulse and offering a reason to purchase is an effective way to increase online impulse buying. (Jeffrey & Hodge, 2007). Though site targeting is extensively used, surveys show that search targeting is more effective as it brings in new consumers. These consumers are those who haven't visited the website and are interested in your brand. (Plomion, 2012).

2.3 CROSS-DEVICE RETARGETING

Generic ads are most effective before consumers seek out product quality information at a review site. Dynamic retargeting becomes relatively more effective only after consumers have visited a product review site. Also the greater effectiveness of retargeting further increases for consumers who are at that time also browsing category-level content. (Lambrecht and Tucker, 2013). It is very important to retarget app users during the times of decay and introduction of new OS in the market as mobile is becoming the dominant way users access the Internet, while laptop and desktop usage falls behind. (Wyder, 2015). It is essential even for the established brands like Apple to realize the seriousness of mobile marketing to meet other players. (Sloane, 2014). As customers regularly swap between channels, brands should recognize these transitions and be able to follow the patterns, providing customers a great brand experience. (Grieves, 2014). Cross-channel retargeting is an emerging field in marketing which uses the analysis of consumer behavior and purchase intent to display relevant ads across websites and other channels. (Sahgal, 2012).

Cross platform and Cross device retargeting will make mobile advertising more efficient and more powerful. (Gupta, 2014). Mobile retargeting helps to personally identify a mobile user by its device ID which is associated with huge personal database. Advertising on mobile have more

sophisticated retargeting capabilities than on desktop and benefits from deeper user information. (Calligaro, 2015). Pixel tracking is one of the unique ways used by mobile advertisers. (Gupta, 2014). Email marketing makes a greater impact on the user in travel and leisure industry. Welcome and retargeting emails after signup helps the brands in driving engagement and sales. (Hulls, 2015).

OBJECTIVES OF THE STUDY:

To understand the concept of retargeting and its procedure and to study the functioning of retargeted advertisements and to study the effectiveness of retargeting and to identify the behavior of consumers towards retargeted advertising.

In this chapter we looked at how retargeting can be effective in various scenarios. There are various methods to study the effectiveness of retargeted advertisements which will be dealt in next chapter.

CHAPTER 3

METHODOLOGY

The different types of approaches which were followed in order to know the effect of retargeted ads on the sales and marketing strategy of firms are qualitative approach and quantitative approach.

QUALITATIVE APPROACH:

Qualitative approach is about finding out not just what people think but why they think it. It's about getting people to talk about their opinions so you can understand their motivations and feelings.

For Qualitative Approach, three interviews were taken. One of the interviews was with Creative Head, Interface Communication, Royapettah, Chennai and the other two interviews were with employees of the ad agency.

QUANTITATIVE APPROACH:

Quantitative approach involves using scientific or mathematical data to understand a problem, such as analysing surveys to predict consumer demand. The quantitative approach focuses on the results from a large number of people, instead of focusing on individuals. Often a combination of the two approaches is used to solve a problem, taking advantage of each approach's strengths.

Some responses from general customers were taken with the help of questionnaire to know opinion on how they encounter retargeted ads and their reaction to it. Questionnaire mainly focuses on questions like their educational status, the amount of time they spent on internet, the amount of money they spend on online purchases every year, number of ecommerce purchases they made in last year, reaction to retargeted ads in mobile apps, in email page and in social media websites and some statements which were scaled on Likert scale from 0-5 from strongly disagree to strongly agree.

For Quantitative Approach, an experiment on online testing for a retargeted advertisement was conducted. In order to analyse how effective the particular advertisement is, we need to calculate click through rate. More detailed explanation of this aspect will be discussed in the next chapter.

AD TESTING:

Ad Testing, also known as advertising research, is designed to improve advertising effectiveness. Companies often test their advertising with a subset of a target market before rolling out a campaign to a broader target market. The goal is to save money by optimizing both the message and calls to action before spending advertising dollars. Ad testing is one of the best ways to see how effective a new ad might be without blindly blowing the budget. Test feedback can be used to refine the advertisement or kill it altogether. The test provides insights to help to make informed decisions about how to best use the advertising budget.

Ad testing allows to determine which market segments to target, give input to ad creators to better understand the audience, make an informed go or no-go decision , evaluate the performance of an ad agency , and to get the highest ROI out of the advertisement spend.

CHAPTER 4

ANALYSIS

QUANTITATIVE ANALYSIS:

Online testing for a retargeted ad is analysed mainly using click through rate of that particular advertisement.

CLICK THROUGH RATE (CTR):

A ratio showing how often people who see your ad end up clicking it. CTR can be used to gauge how well the keywords and ads are performing. CTR is the number of clicks that your ad receives divided by the number of times your ad is shown expressed as a percentage ($\text{clicks} \div \text{impressions} = \text{CTR}$). **Click-Through Rate** was a key measurement of an ad's success. (Nutley, 2014).

Example:

If you had 5 clicks and 1000 impressions, then your CTR would be 0.5%, since $5 \div 1,000 = 0.5\%$.

An experiment was conducted on the real estate industry with an advertisement budget of Rs 5000/- with a control group and test group. We calculated CTR's of retargeted advertisement and normal advertisement. Based on the values of CTR's, we achieved the following results which will give some insights into the effectiveness of retargeted advertisements. In the next chapter we will look at the results of the corresponding experiment and analyze it critically.

CHAPTER 5

RESULTS

In the previous chapter we looked at the experimental setup, the results and analysis of the experiment can be seen in the further sections.

Results from Quantitative Analysis:

The following table presents the results of the experiment done by an advertisement agency over a period of one week. The middle column represents all the details of different particulars of the retargeted advertisement and the right column represents all the details of different particulars of the normal advertisement.

TABLE NO: 1

COMPARISION OF RETARGETED ADVERTISEMNT AND NORMAL ADVERTISEMENT

PARTICULARS	RETARGETED ADVERTISEMENT	NORMAL ADVERTISEMENT
Cost of advertisement	Rs 5000	Rs 5000
Average clicks received	300 – 500	50-60
Cost per click	Rs 17 (5000/300)	Rs 83 (5000/60)
Average Number of viewers	10000	30000
Click through rate	3% (300/10000)	0.17% (50/30000)

The result of this is that advertisement which is retargeted had a higher CTR than the normal advertisement.

By analysing the two different types of advertisements which were run in different websites, shows that the ads which were run in Social media websites has a great effect on users. The ads which were run in social media websites had higher CTR's than the same ads which were run in other different websites. Especially in Facebook the ads had higher CTR's. The reasons why Facebook ads more dominates are in an average month, 1.28 billion users are active on Facebook, in an average month, more than 1 billion people use Facebook on a mobile device, one in five minutes spent on a mobile device are spent in Facebook's app and Facebook allows to target the audience in three ways: by interests, demography and geography. So the ads reach the right audience and will be seen only by users who were have profiled.

SUMMARY OF RESPONSES FROM INTERVIWES:

On Facebook, the audience can be chosen for the ads by using filters, which allows to target the audience in three ways: by interests, demography and geography. So the ads reach the right audience and will be seen only by users who were have profiled. Google AdWords, on the other hand, may trigger ads based on user preferences, but Google doesn't know people like Facebook does. It can't see what users "Like" or follow, nor can it see data from their personal profile. Relevant ads are triggered primarily by search terms.

CHAPTER 6

CONCLUSION

Social media advertisements are dominating more in retargeting. Especially retargeted ads in Facebook are more dominating because Facebook is a hugely powerful platform which have a lot of data to target customers and with over one fifth of the world's population as active users each month. Facebook does a much superior job of optimization than Google in Retargeting.

Facebook offers powerful and unique ways to show advertisements to the people who are most likely to care about business and reach people based on location, age, gender, interests and much more. Businesses can reach their goals by reaching the right people. The advertisements Facebook offer are designed to help them get the best possible response from the people who see their advertisements.

REFERENCES

1. *6 Targeting mistakes that can spell disaster for your campaign – Target Marketing* by **Rohan Ayyar. Jan14.2016**
Website: targetmarketingmag.com
Link: <http://www.targetmarketingmag.com/article/6-retargeting-mistakes-that-can-spell-disaster-for-your-campaigns/all/>
Date: 8/3/16
2. *It's time to add retargeting to your marketing mix – Delphic Digital* by **Mike Quinn. Sept7. 2012.**
Website: delphicdigital.com
Link: <http://delphicdigital.com/blog/its-time-to-add-retargeting-to-your-marketing-mix>
Date: 8/3/16
3. *Five elements to consider when designing retargeting display ads – Delphic Digital* by **Leah. sept12.2013**
Website: delphicdigital.com
Link: <http://delphicdigital.com/blog/five-elements-to-consider-when-designing-retargeting-display-ads>
Date: 8/3/16
4. *Retargeting is flawed; the future is pretargeting – Adage India* by **Tom Goodwin. Jul15.2014.**
Website: adageindia.in
Link: <http://www.adageindia.in/digital/digitalnext/retargeting-is-flawed-the-future-is-pretargeting/articleshow/45711042.cms>
Date: 8/3/16
5. *This Marketing Pro Practiced His Facebook Ad Targeting by Making His Roommate Completely Paranoid A lesson in niche marketing* by **Garett Sloane. Sept23.2014.**
Website: adweek.com
Link: <http://www.adweek.com/news/technology/roommate-makes-his-friend-paranoid-creepy-facebook-ads-160320>
Date: 22/2/16.

6. *Display Advertising in the cross channel mix* by **Colin Grieves**. **July16.2014**.
Website: **digitalmarketingmagazine.co.uk**
Link: <http://digitalmarketingmagazine.co.uk/digital-marketing-advertising/display-advertising-in-the-cross-channel-mix/776>
Date: 22/2/16.
7. *What you didn't Post, Facebook May Still Know* by **Somini Sengupta**. **March25.2013**.
The New York Times
Date: 22/2/16.
8. *Retarget site visitors to convert leads* by **Michael Russer**. **Feb.2012**.
Website: **realtormag.realtor.org**
Link: <http://realtormag.realtor.org/technology/mr-internet/article/2012/02/retarget-site-visitors-convert-leads>
Date: 22/2/16.
9. *Taking the Personalized Route - Is it worth the effect?* By **Katherine Hulls**. Jan.12, 2015.
10. *Twitter Debuts Ad Targeting based on Email Addresses and Cookies Smacks of marketing potential, could draw privacy ire* by **Christopher Heine**. July.3, 2013.
11. *Twitter's Tailored Audiences Program Gets More Targeted New tools for Brands to reach users* by **Garett Sloane**. Jan.14, 2014.
12. *Get Ready for More Mobile Ads on your Iphones as Apple Launches New iAds Taps Tech Partners to develop Marketing Machine* by **Garett Sloane**. Nov.21, 2014.
13. *Ads Tool Gives #Retargeting a Makeover RadiumOne Unveils Twitter-based product* by **Christopher Heine**. Dec.12, 2012.

14. *Retargeting Research shows Context Is King* by **Michael Nutley**. Nov04.2014.

Website: **cmo.com**

Link: http://www.cmo.com/articles/2014/11/4/retargeting_research.html

Date: 15/3/16.

15. *Retargeting in CMO's Direct Line of Sight* by **Anoop Sahgal**. March8.2012.

Website: **cmo.com**

Link: <http://www.cmo.com/articles/2012/3/8/retargeting-in-cmos-direct-line-of-sight.html>

Date: 15/3/16.

16. *Retargeting for Greater User Retention* by **Rico Wyder**. Feb14.2015.

Website: **jumpstartmag.com**

Link: <http://jumpstartmag.com/news/retargeting-for-greater-user-retention/>

Date: 15/3/16.

17. *Retargeting your way to Success* by **Sally Rowland**. Jan.30, 2014.

18. *Capturing the Customer: How best to target your audience* by **Katherine Hulls**. Jan.14, 2015.

19. *Innovation in Mobile Advertising: What's buzzing* by **Vaibhav Gupta**. Feb.28, 2014.

20. *How can you Effectively Target your Mobile Audience* by **Claire Calligaro**. Sep.21, 2015.

21. *An Economic Analysis Of Online Advertising Using Behavioral Taregteing* by **Jianqing Chen,**

Jan Stallaert. June.2014. (Research article, Yan et.al statements can be found there)

22. *The effectiveness of online advertising via the behavioural targeting mechanism* by **Sangdow**

Alnahdi & Magad Ali, Kholoud Alkayid. June.2014.

23. *Online Impulse buying: Understanding the interplay between consumer impulsiveness and*

***Website quality* by John D. Wells, Veena Parboteeah, Joesph S. Valacich. Jan.2011.**

24. *Impulse buying on the internet*, Thesis by Claire Elazibeth Crafts.2012. (Jeffrey & Hodge statements can be found out there)

25. *The effectiveness of Retargeting in Online advertising* by Joes Kantola. Nov.11.2014. (Master's Thesis) (Lambrecht and Tucker statements can be found out there).

26. *Search Retargeting Barometer: Why marketers are paying attention* by Dax Hamman and Ben Plomion. 2012.

27. *The 7 types of effective retargeting* by Dax Hamman. Jul.21, 2011.

Website: imediaconnection.com

Link:<http://www.imediaconnection.com/articles/ported-articles/red-dot-articles/2011/jul/the-7-types-of-effective-retargeting/>

Date: 15/3/16

28. *What types of retargeting are available to online marketers today?* By Ivan Roubtsov. Sep.29, 2014.

Website: adgear.com

Link:<http://adgear.com/blog/2014/09/what-types-of-retargeting-are-available-to-online-marketers-today/>

Date: 15/3/16

29. *6 Types of retargeting every marketing should know* by **Noran El-Shinnawy**. Aug.20, 2012.

Website: searchenginewatch.com

Link: <https://searchenginewatch.com/sew/how-to/2199676/6-types-of-retargeting-every-marketer-should-know/>

Date: 15/3/16.

30. *5 types of marketing every marketer should know of* by **Laura**. Mar.31, 2015.

Website: bannersnack.com

Link: <https://www.bannersnack.com/blog/5-retargeting-types/>

Date: 15/3/16

31. *3 surprising benefits of retargeting* by **Larry Kim**. Jan.23, 2014.

Website: searchengineland.com

Link: <http://searchengineland.com/3-surprising-benefits-of-retargeting-181164>

Date: 15/3/16.