Formation of Digital Marketing in Targeted Advertising

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Abstract This article discusses targeted advertising. Targeted advertising in our minds has led to the fact that it is between contextual and media advertising. On the one hand, targeted advertising is based on the principles of bid management, bid management, the need to regulate targeting, and SPS models. On the other hand, targeted advertising provides for a wide coverage, a wide range of visions, and an increase in search demand. Targeted advertising in our minds has led to the fact that it is between contextual and display advertising. This article discusses the advantages, disadvantages, and advantages of targeted advertising placement systems, how to place them, what the scale should be, and what the target audience is intended for placement.

1 Introduction

Most modern Internet systems rely on financial support for online advertising. Due to the fact that advertising is in the best interests of the user, many Internet marketers turn to advertising focused on an advertising broker who is responsible for individually delivering ads that meet their desires and interests. Most existing targeted advertising systems need to access users' profiles in order to investigate their features, but they raise serious privacy concerns and do not want users to participate in advertising systems. This document provides is based on the confidentiality of the system structure to promote targeted advertising. In our product range, an advertising broker is positioned between advertisers and users of a targeted ad and offers a specific reward

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rate to encourage users to print interesting and useful ads that do not respond to them. When a user clicks on their behavior, they identify themselves based on their potential conflict of interest and privacy, and advertisers pay an advertising broker per click on the ad. Target audience, focused on specific customers. As an advertising tool, targeting allows you to divide a new (target audience) client who is waiting for news and meets expectations thanks to a well-thought-out advertising mechanism using the Internet. Ad targeting allows you to target specific groups of consumers.

For the first time, targeted advertising appeared on social networks. These platforms started using user survey data to provide accurate and fast search results.

Later, new features appeared in Internet marketing. Browsers collect information about users and search for an audience based on this data.

To use this tool correctly, you need to understand the psychology of your target audience, the interests of your clients, and their socio-demographic parameters. Let's look at a simple example to confirm this and understand how targeted advertising works.

2   Literature Review

People find themselves more in social networks. This is done for many purposes, as they play the role of consumers, they search for information about products, buy and consume them, and tell others about their experiences as they see fit. Marketers are responding to fundamental building blocks by expanding the use of digital marketing channels. By 2017, a third of global advertising spending will be delivered to digital channels. Thus, in the future, consumer marketing will be focused on the digital environment, especially on social networks and mobile devices. Therefore, marketing research is necessary to study, understand, and analyze consumer behavior and taste in the digital environment.

The work of scientists Ziyadin S., Doszhan, R., etc. explores how consumers perceive, experience and are influenced by the digital environment in which they are located, as part of their daily life [1].

Ziyadin S. and Serikbek A. also write that one of the new directions of modern marketing in the global web has become the Internet marketing of educational services. They also say that the object of marketing educational services are educational organizations, consumers of educational services, both legal entities and individuals, as well as the state and directly those bodies that determine the rules and conditions for licensing and accreditation of educational organizations, as well as those organizations that participate in the promotion of educational services on the market [2].

In their work, Turow J. and King J. explore the opinions of Americans about behavioral targeting of marketers-a controversial issue currently facing government policy makers. They write that behavioral targeting involves two types of activities: tracking user actions and then adapting ads for users based on these actions [3].

3 Methodology

Like classic video advertising, Internet video is used. Yes, but the airtime on the TV is much cheaper. In addition, online video advertising offers advertisers a number of tools, such as targeting and real statistics (Fig. 1).

Let's look at and analyze what tools you can use to attract target audiences:

- Re-marketing. You can already attract those users who will interact with any interaction that occurred on your video or YouTube channel. If you have linked your YouTube account to AdWords, the list of repeat ads will be created automatically.
- Demographic data. Why pay for an empty-point action. Set targeting for users of the desired age and gender.
- Keyword. Context keys compare videos with web content. It works very well for increasing sales.
- Topics. Everything is easy here: showing a video on a Youtube video about a specific topic.
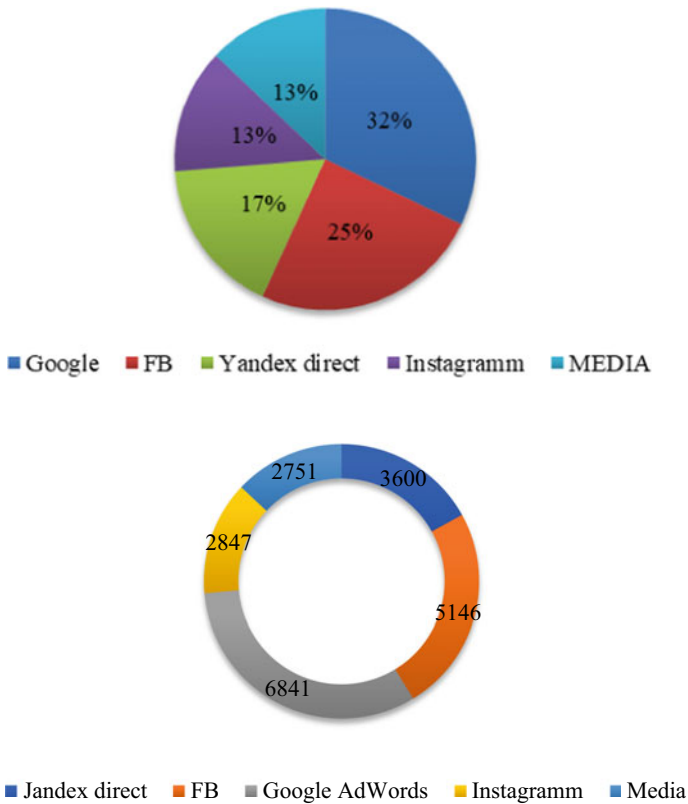

Fig. 1 Distribution of requests by the advertising channel

Table 1 Pros and cons of targeting ads in Instagram

	Plus	Minus
1	Low entry threshold in contrast to other advertising methods	Complexity of settings/Cabinet (at first glance)
2	Accurate targeting of your target audience	There is no trust in advertising
3	Speed	You can't reach your audience without Facebook
4	Consistency of results	Blocking payment cards and advertising cabinets
5	Scalability	Dear subscribers. Relative to other methods
6	The reach of advertising to the user	There is no clear need for the product or service you are selling
7	Clear measurable results	
8	Analytics. When working with the site	
9	Ability to advertise for an active audience in your profile	

- Thematic audience. You can create an audience that takes into account the specifics of your business [4] (Table 1).

We have formulated an approximate list of various goals that can be set for an advertising campaign on the Internet.

Branding: the purpose of branding campaigns is to enhance various components of the brand, such as awareness, image, or customer intent. These campaigns are usually part of a broader media strategy, and most often their combined effect is evaluated together with other media.

The work to increase customer loyalty is also carried out within the framework of branding and is aimed at expanding the experience of the consumer's relationship with the brand online, but with the specific goal of interacting directly with the Internet user [5].

Growth of sales in offline mode (traditional types of sales) continues to be the ultimate goal of the brand promotion campaign, with the exception of image advertising. Achieving this goal may be more important for specific campaigns, which means that the assessment can be performed with greater accuracy.

Online sales growth: these campaigns are primarily aimed at increasing sales on the brand's website or in partner networks. Such campaigns can also simultaneously pursue the goals of achieving advertising and branding effectiveness.

Determining the number of potential consumers is based on a result-oriented method, but does not aim to increase purchases on the Internet. The goal is to study the range of people who use interactive Internet resources, such as games and questionnaires, for classification purposes [6].

Increasing the reach and repeatability of messages: as Internet penetration increases, it quickly becomes a medium that allows you to increase the impact of an

advertising message. One of the goals of Internet campaigns may be to expand the impact of the message and ensure repeatability in other media.

Reducing the cost of attracting customers may be another goal of online campaigns. For result-oriented advertisers, it is the main one.

Different indicators can be used to achieve each of the above goals. The following is a basic but not exhaustive list that provides an overview of the evaluation tools available to advertisers. In many cases, the same indicator can be used to measure the achievement of different goals [7] (Table 2).

Advertising based on the use of Internet users by sending, the definition of which involves user actions taking into account the target audience, leads to the fact that the previous actions of users are not on the Internet, but threats that caused harm to the result (registration, receipt, visit, site that did not complete the introduction to the product). Many online retailers use retargeting, because, according to Criteo, companies that specialize in determining the target audience based on user actions, accumulating information about them, 90% of visitors leave the site without making a purchase. Taking into account that 70% of visitors are directed to e-Commerce sites by a link to paid advertising, we can say that thanks to this method, the conversion rate or index of the number of site visitors increases dramatically [8]. But targeted advertising has its drawbacks:

Table 2 9 types of indicators for evaluating the effectiveness of online activity

Impressions (display)	Conversion	Traffic
• number of impressions • number of" visible " ads • number of ads viewed • the timing of	• coefficient of CTR • conversion rate • conversion rate after viewing • click-through conversion rate	• number of visits • number of pages viewed • duration of the visit • number of rejections from visits
Interaction	Subscription	Media
• coefficient of the interaction • interaction time • indicator of viewed videos • indicator of fully viewed videos • video viewing time • social media activity	• number of subscriptions (requests for information, games, brochures, etc.) • the subscription price • recommendation coefficient (social networks, "viral" online marketing campaign on the Internet)	• General rating point (GRP) • memorability of ads • the level of coverage • the rate of repeat messages
Sales (distribution)	Return on investment (ROI)	Post-tests
• additional sales • revenue received • conversion rate for the target audience • influence on the frequency and volume of purchases • traffic at retail outlets initiated by advertising on the Internet	• cost of attracting buyers (offline versus online) • return on investment (revenue received/ advertising expenses)	• impact on recognition • the impact on memorability of advertising • influence on the brand image • influence on purchasing intentions • influence on recommendations

- A small level of motivation to go to the link •. Because the person who saw this ad Did not want to buy something, they entered the social network.These ads may be the reason that the consumer most often tries to open.
- For this reason, the conversion rate is much lower.
- It is not possible to advertise certain types of goods and services (alcohol, tobacco, or products that cause harm to health) that are prohibited by the moderator
- Unacceptable to all [9].

4 Results and Analysis

Digital media is expected to account for more than 51% or $ 240 billion of planned marketing spending in 2019.Currently, search advertising is the most popular type of digital advertising: marketers 2018 increase advertising spending by 12%. Therefore, this year, 67% of all search ads will be mobile, and the total cost of this category of online advertising will amount to 29.5 billion dollars [10].

However, research on this topic provides information in which research and analysis of factors that may affect the effectiveness of Facebook ads, limited or special and other researchers have been conducted. Previous research has analyzed and placed ads on the Facebook platform for a company that is a traditional food manufacturer, and found that the most profitable ads are mobile ads. It is one of the most effective methods in terms of cost and time. Surprisingly, none of them believe that they give a good return on investment in Facebook advertising (ROI). Facebook claims to offer the cheapest rate for ads that meet their rules, requirements, and regulations and attract more of their users. In other words, the cost of advertising with a high coefficient of attraction will be lower. How consumers perceive marketing communications depends on the relevance of advertising and the ability to introduce marketing communications into the consumer's mind. Which types of social media ads significantly affect the relationships of their members are related to the disruptive advertising section, as well as the parts covered by the potential development model (ELM). Which features of advertising in social networks should be more attractive, and which ones are annoying, should be created in such a way that the consumer can remain conscious. Because if necessary, your ad should be a reminder of the first one. This is handled both in the ad and in the entire model. These features only affect ads if the buyer can receive marketing messages, so the ability to receive is a feature in the mode. If a consumer can get a marketing relationship, he/she can form an attitude towards it, it is divided into negative and positive relationships that form the level of engagement. This also shows that the level of engagement affects decision—making [11].

The mobile video demo will also change. For example, Snapchat outputs a feature that users can swipe photos of friends left and right with their finger for editorial content where marketers can participate and suggest. This is due to the fact that in the new year, income growth is 2.5%, despite the fact that there was a fall. This corresponds to the sum of 183 billion dollars. Annual revenue from advertising on

Fig. 2 Top 10 players
patented in the field of web
advertising
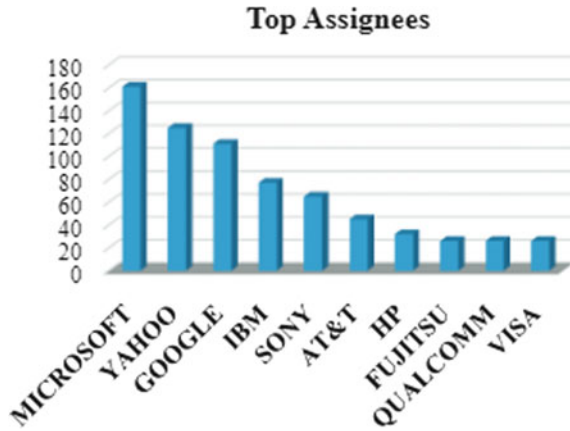
the Facebook social platform is expected to grow by 32.1%, while Google advertisers spend 14.8% more. In addition, Facebook will test the ad display feature before all native videos, which will help marketers expand access to the most popular sites in social networks today [12].

The most important thing is that online advertising does not like the Asian games: according to the latest data, 90% of mobile devices that block ads operate in Asia.

If nothing is done to solve the problem of ad blocking, this policy will exceed \$ 75 billion for e-Commerce sites by 2020.

Figure 2 shows the top 10 players patented in the field of web advertising that are regulated. The maximum number of patents in this area is about 161 Microsoft, followed by Yahoo, Google and IBM. There are also very few patents of many companies/individuals. About two-thirds of the concessionaries are united by a single patent organization [13].

Figure 3 shows the various criteria used for targeting ads, such as previous browsing history, user Profile, events related to vehicle mobility and storage locations, and so on. Analysis has shown that ads based on a user's profile are the preferred criteria that users follow closely in their browsing history [14].

Figure 4 above shows trends based on demographic categories. Targeting based on location derived from demographic information is most preferred, since high patent activity is visible in this area. The chart 6 above also shows that with the advent of social media, the use of social media for ad targeting has appeared since 2018 and activity in this area has been slowly increasing in recent years [15, 16].

Digital advertising is a major topic in the marketing literature, and as far as consumer behavior is concerned, it looks at how consumers respond to various aspects of digital advertising. Schumann considered how to overcome negative reactions to personalization with appeals to normative reciprocity (instead of appeals to utility). Lambrecht studied ad retargeting, where personalized recommendations based on previous browsing histories are made when the consumer returns to the site. Negative reactions to retargeting occur, but they are mitigated when consumer preferences

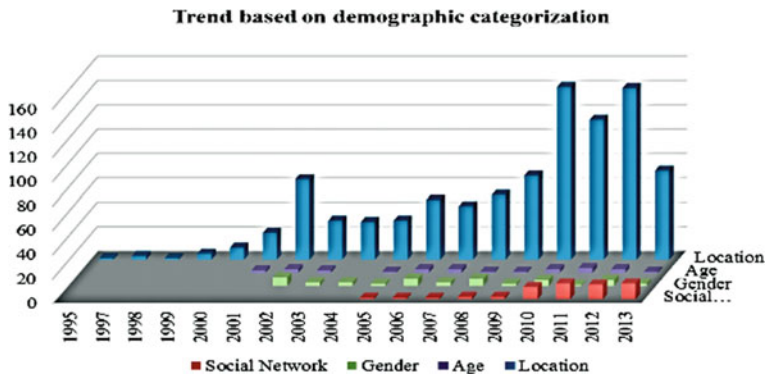**Fig. 3** The criteria used for targeting advertisements

Fig. 4 Trends based on demographic categories

become more accurate. He found that personalized advertising on a website is more favorably perceived when consumers better perceive control over personal information used for personalization, which is directly consistent with the literature on psychological responses and offers a theoretical way forward [17].

5 Conclusion

In this work, we studied the problem of targeted advertising with regard to privacy, and also proposed a compensation scheme to encourage users to watch interesting ads. The compensation structure is aimed at promoting targeted advertising by creating irrational conditions. Within this framework, we analyze the interaction between advertisers, the advertising broker, and users through step-by-step game modeling. The results of the simulation show the effectiveness of the proposed structure, in which users are motivated to suppress interested ads, and the advertiser and advertising broker achieve significant success in their revenue. Thus, with the appropriate design, the compensation system can accept targeted ads and bring profit to all organizations [18].

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