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Measuring the effectiveness of online advertising campaigns in the aspect of e-entrepreneurship

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Abstract

A fast and problem-free access to information is a very special good in the contemporary entrepreneurship. Over a span of recent years the internet has become one of the main marketing communication channels and online advertising is permanently present in advertising campaigns of both large and small companies. The main goal of the article is to present the model forms of effectiveness of online advertising and analyse the online advertising effectiveness. It has been assumed that the greater effectiveness of online advertising contributes to improving the entrepreneurship among entities that use it. The article contains hypothesis that online advertising is the effective form of advertising. The hypothesis has been verified on the basis of desk research, as well as exploratory and experimental research.

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1. Introduction

Year in, year out online advertising is becoming more and more important in creating marketing campaigns. It reaches a great number of recipients and enables quite easy assessment of its effectiveness. It is interactive, because apart from informing recipients about a given product, it also allows them to perform interactive actions such as: visiting company’s website, sending e-mails with inquiries or purchasing in online stores [1]. Such a fast and problem-free access to information is conducive to the development of entrepreneurship. This role is emphasized by many authors [2]. Currently, the internet is one of the main channels of marketing communication and online advertising has already settled in advertising campaigns of both small and large companies. The word „internet” is purposefully written in a lowercase letter as it is treated as a communication media, much like traditional media, i.e. radio, press and television. The main goal of this paper is to present exemplary forms of evaluating the effectiveness of online advertisements.

2. Methodology

The goal of the research was to assess the effectiveness of online advertising from the standpoint of an entrepreneur. The main goal was divided into several detailed goals such as:

- Assessing the effectiveness of the internet campaigns settlement.
- Measuring the impact of the location of the advertising unit on the website on its effectiveness.
- Assessing the selection of tools for measuring the effectiveness of internet campaigns.
- Assessing the designation of the most effective locations that allow advertisement transmission.

The detailed goals will confirm or disprove the following research hypotheses:

- The effectiveness of online advertising depends on proper selection of the form of the advertisement, its, impression location, advertising unit location on a website and campaign settlement model.
- Advertisers regard online advertising as the most effective.

Research that has been carried out is explorative and aimed at providing more detailed explanation of the research problems. In order to gain the most credible results, the research survey method with the use of survey data collection technique was adopted. The questionnaire was designed using the online platform that allows to create and distribute survey e-forms.

Research survey with the use of IT techniques. It has been assumed that 50 entrepreneurs would participate in the research and 50 surveys were filled in by the respondents. The group of respondents consisted of employees from marketing departments or similar departments, low/mid/high level management and company owners. The companies vary in terms of size, the market that they operate on and activity profile. The non-probabilistic method was used in the selection of the research sample. This method allowed to gain the most representative sample of the whole population.

3. Measuring the effectiveness of advertising campaigns

Online advertising campaigns can be executed on the basis of different settlement models. Campaign settlement models can be divided into three main groups, such as: **impression models** (FF, CPM), **effectiveness models** (CPC, CPA, CPS, CPV, CPL and others) and **hybrid models** – CPM+CPC, CPM+CPS, and others [3], [4]. The oldest and the simplest impression model of campaign settling is the **FF model** (flat fee). The cost of marketing campaign in this model depends on two factors, i.e. the advertisement size and the impression time. The advertiser pays the publisher a specific sum for the impression time of one advertising unit (e.g. 1 month), regardless of the number of generated advertisement views during that period. Therefore, reaching the target recipients is guaranteed only by the number of persons that visit the advertising contractor’s website [5]. This model is commonly used in image-building and brand campaigns as it allows to improve the brand awareness and at the same time promotes a specific product [6]. The payment in this model is the most beneficial, mainly from the standpoint of publishers (website owners) as they receive a pre-agreed sum of money for a pre-agreed advertisement broadcasting time, regardless of generated web traffic [7]. The group of impression models also includes the **CPM model** (from Latin: *Cost Per Mille*), also known as the **CPT (Cost Per Thousand)**. This model is based on the CPM index which determines the
cost born by the advertiser in order to reach 1000 recipients of the advertisement. The fact whether or not the advertisement recipient made any action regarding the advertisement (e.g. clicked on an advertisement or made purchase in an advertised store) is not taken into consideration in this case. Just as the flat fee model, it is also commonly used in image-building and brand campaigns, where much of the emphasis is put on the effect of memorising the brand by the advertisement recipients, not on performing specific actions (e.g. product purchase, sending an inquiry regarding contact) The payment use in this model is most beneficial from the standpoint of advertising contractors, as they receive payments or real number of advertisement broadcasts, regardless of the impact of the advertisement on recipients (e.g. sale). This form of settlement often uses the advertisement impression limit for a given user, the so called camping model [8]. In order to settle advertisement impressions in this model, it is necessary to use the AdServer which, on the basis of logs, allows to determine the number of impressions on a given webpage and use that data to assess the publisher’s payment [9], [10]. The CPC model (Cost per Click) is an effectiveness model and it is one of the most popular methods of settling online advertising campaigns. It is based on a CPC index, which determines the cost per click (interaction) on an advertisement unit. The advertiser pays a specific sum only for actual clicks on the advertising unit that will redirect the user to an advertised website [11]. The assessment of the effectiveness of the CPC model uses the CTR index (click through rate), which is a click-frequency rate. It allows to determine what percentage of the total advertisement impressions ended up with the user interaction (clicking on the advertising unit) and redirecting to the advertiser’s website. This model is often used in campaigns carried out by affiliate networks and contextual advertising networks, such as AdWords, AdKontekst, OnetBoksy. From the standpoint of the website owners, settling the campaigns on the basis of pay per click is less profitable than the CPM or FF advertisement impressions, as the number of clicks on advertisements depends largely on the advertisement creation quality (the creation should attract attention of the recipient) and matching the theme of the advertisement to the theme of a target website [12].

Another settlement model in the effectiveness model group is the CPA model (Cost Per Action), i.e. the settlement for a performed action. The advertiser bears costs of the advertisement only when a user performs a specific interaction, e.g. enters the advertised website and fills in the order form or provides contact details. The rates in this form of settlement may depend on actions performed by the user or upon the defined percentage on sales. The model is used primarily in marketing activities in which the main goal is to sale product or service. It is less commonly used in image-building activities. This model is very popular among bank service selling or insurance selling companies, which execute their advertising campaigns in cooperation with affiliate networks, e.g. Netsales, Fialo [13], [14]. In order to assess the effectiveness of the CPA model it is possible to use the so called CR (conversion model), which allows to determine which percentage of users “incoming” under the impact of the advertisement will perform a given action (e.g. filling a form). The CPA settlement model has many forms such as CPS, CPL, CPE, CPO, CPV. These models are different from one another by the type of action the advertiser pays for. In the CPS model (Cost Per Sale) the advertiser pays for the advertisement only when the user makes purchase of a product or service under the impact of the advertisement. This form of settlement is used in partnership programmes of online stores that offer a specific income percentage on sales generated by the person that made purchase under the impact of the advertisement [15]. The CPV model (Cost Per View) is commonly used in advertising campaigns that use the pop-up, pop-under and interstitial advertisement formats. The advertiser pays only for each one-time impression of a website (pop-under) or an advertisement (pop-up, interstitial) [16]. Currently, this model is also used in the Google Adwords network video advertisements in which the advertiser pays for each view of the advertisement by the user. These advertisements are displayed in the YouTube search results or before a target video. Another form of the CPA model is the CPL model (Cost Per Lead) which consists in charging fees for providing contact data by the user through the registration process or filling in a form. The predetermined fee is charged for each performed ‘lead’. This model is very often used in affiliate networks and in campaigns that advertise bank products such as credits and bank accounts. The final and the most recent group of campaign settling methods are hybrid models. They are created via combining a couple of settling models, e.g. CPM+CPC, CPM+CPL, CPM+CPS. The hybrid model is becoming more and more popular in the internet campaigns as it guarantees a certain level of profit for the publisher (settlement for impressions) and allows the advertiser to reduce costs as they pay more only under the condition that the user clicks on the advertisement [17]. The ROI rate model (return on investment) which shows the percentage return on investment can be useful in the assessment of online advertising campaign effectiveness. It allows to determine whether or not the means invested in advertising campaigns generated any profit e.g. in a form of additional online store orders. This rate is relatively unpopular among small and medium-sized advertisers. It is also the only model that allows to determine whether or not
running a given advertising campaign is economically justifiable [18], [19].

4. Website statistics

Each marketing action oriented to increasing the website popularity requires a permanent control. The viewing statistics are used in order to carry out the control process. This data allows to constantly monitor the effects of carried out actions. There are both commercial and non-commercial solutions available on the market – each with different pricing and functionality [20], [21]. Website owners in Poland tend to use such statistics as: Stat24, Piwik or Google Analytics. The Stat 24 statistics are a tool created by the Polish company Redefine Ltd., which specialises in providing services supporting the development of websites. Stat24 offers two kinds of services, paid (statBiznesPRO) and free (statStandard) which vary in terms of available functions. The statStandard service is primarily aimed at owners of blogs, homepages and hobby-oriented websites, theme websites and small company websites. On the other hand, the statBiznesPRO service is aimed at owners of advertising and interactive agencies, large online portals and websites and online stores. The free version of the service has limited functionality. It is required to position the stat24 advertising button on a website (e.g. impression of the research questionnaires). The Stat24 usage allows to gain valuable data on users visiting the website and use it to optimize the website, which leads to increasing the effectiveness of marketing actions [22]. The Piwik statistics are a continuation of the phpMyVisites open source GPL licenced project which was created in 2003 and since 2007 known as Piwik. Unlike solutions offered by other producers, the Piwik statistics offer full control over the statistics code and allow full discretion (only the owner and persons authorized by him have an access to statistics) as they are installed on a website owner’s server. The installation is free and very simple, therefore the whole process should not take more than 5 minutes [23]. One of the main advantages of the Piwik statistics is the access to API which gives virtually unlimited possibilities of adapting the statistics to individual needs and the mobile version dedicated to mobile devices such as smartphones and tablets. It is a great alternative to other free statistics such as Google Analytics, stat24. These statistics are used by millions publishers of websites and large companies and organizations such as T-Mobile, Wikimedia, Forbs, Sharp [24]. The Google Analytics platform was created in 2005 by the American search engine giant – Google Inc. It was created on the basis of the system purchased from the Unrich Software company [25]. According to the data published by Google in 2012, 10 million websites used the Google Analytics services, including 55% of the ten thousand world’s biggest services. Statistics are available to users both in the free version, which has some limitations, as well as in the paid Google Analytics Premium version. The latter has no limitations and is available only in selected countries such as France, Spain, USA, Great Britain, Germany, Japan. Due to its price ($150,000 per year), the paid version is primarily aimed at large online services [26]. The platform also allows to combine statistics with Google Adwords software, allowing access to information on paid key words [27], [28]. Google Analytics statistics have a series of useful functions, from basic metric data to advanced reports allowing to monitor marketing activities [29], [30]. The Google Analytics platform offers a vast array of functions and configuration capabilities, which makes it a very good alternative to every commercial solution that offers the analysis of effectiveness of online marketing activities.

5. Results

The research show that as many as 76% respondents execute advertising campaigns by means of the Internet. In the following question, the respondents (who answered positively to the previous question) were asked to pick the campaign settlement model that was the most often used in their respective companies. Each respondent could select up to 3 answers and, when selecting the field “other”, write their own answer (Fig. 1).
Almost 80% of the respondents declared that the settlement model they use the most in the internet campaigns is the CPC (cost per click) model. The second most often declared model, indicated by over 42% of the respondents, is the Flat Fee model (cost per impression time). The respondents to a lesser degree use such effectiveness models as the CPA, CPL and CPS, as declared by 20% of them.

The next question was also aimed at entrepreneurs who use internet campaigns. The respondents were asked to choose the campaign settlement models that they consider the most effective. Each of them could select up to three answers (Fig. 2).

According to the majority of the respondents (over 60%), the most effective model of settling online advertising campaigns is the CPC model. It is followed by the CPS effectiveness model indicated by over 47% of the survey
participants. In case of the Flat Fee model, only 26% indicated it as one of the most effective. The CPM model is considered the least effective model of settling campaigns.

The next question was to determine which types of advertisements the respondents consider the most effective in terms of the impression location. Each entrepreneur was allowed to select up to two answers and provide their own answer (Fig. 3).

According to the majority of the respondents (28 out of 50), the most effective type of online advertising is the search engine advertisement. Nowadays, the search engines have become the primary tool for searching for information on the Internet. Therefore, the search engine advertising offers the possibility of accessing large and well-adjusted group of recipients.

Another most effective advertising location are websites connected strictly with the theme of a given advertisement. This answer was indicate by 50% of the respondents. Just like the search engine advertising, advertisement on theme websites offers the possibility of accessing a selected target group.

News portals and social media advertisements were considered effective by every fifth respondent. Thanks to the development of mobile technologies, the social media have currently become an indispensable element of life of millions of people around the globe and therefore offer the possibility of accessing a large group of recipients. Only 12% of the respondents consider advertising on internet fora or e-mail advertisement effective.

6. Discussion

The majority of the respondents consider search engine advertising to be the most effective type of online advertising. According to the 76% of the respondents, the effectiveness of this form of internet advertisement is good (36%) and very good (40%). Only 14% of the respondents claim that the effectiveness of this type of advertising is weak (10%) or very weak (4%).

Another well-assessed type of online advertising was sponsored links advertisement. A total of 56% of the respondents consider this type of advertising to be very good (18 respondents) or good (10 respondents). According to every fifth respondent, effectiveness of this type of advertisement is optimal. Every fifth respondent also claims that this form is weak (6 respondents) or very weak (4 respondents).
The weakest type of advertisements in terms of effectiveness are pop-up windows. 13% of the respondents consider their effectiveness to be weak, and 23% to be very weak. Only 12% view effectiveness of these advertisements as very good (6%) or good (6%).

Other advertisements that were considered to be not very effective were interstitial ads. 44% indicated that they are weak or very weak effectiveness and only 10% of the respondents consider them very good or good. Every fifth respondent could not assess the effectiveness of this type of advertisement. As viewed by 34% of the respondents, the brandmark advertisement has an optimal effectiveness and only 12% regards this type of advertisement as good. 36% consider this type of advertisement weak or very weak and every fifth respondent could not assess the effectiveness of this type of advertisement. Almost every third respondent thinks that the effectiveness of banners is optimal. 20% consider this type of advertisement good and 10% - very good. A total of 38% claim that this type of advertising is weak (28%) or very weak (10%).

Similarly to the advertisement in a form of a banner, the respondents also assessed the effectiveness of advertising in a form of a billboard. Just as in case of a banner, every third respondent considers the effectiveness of a billboard to be optimal and 38% of the respondents consider it to be good or very good. Only 32% thinks that effectiveness of advertisement in this form is weak or very weak. According to 40% of the respondents, the effectiveness of video advertisements is very good or good, and 34% consider it to be weak or very weak. Only 22% regard this type of advertisement as satisfactory.

The opinions of the respondents regarding the effectiveness of advertisement in a form of mailing are varied. A total of 44% of the respondents think that the effectiveness of mailing is weak (24%) or very weak (20%) and 34% think that is good (20%) or very good (14%). 18% of the respondents consider the effectiveness of this form of advertising to be optimal.

The last type of advertisement assessed by the respondents was top-layer type ad. According to 36% of the respondents, its effectiveness was very good or good, and 24% assessed it as optimal. Only every third respondent claims that the effectiveness of this form of advertisement is weak or very weak.

The survey carried out among entrepreneurs allowed to clearly determine that online advertising is very popular in micro-companies. The main effectiveness models used by advertisers for settling online advertising campaigns were the cost per click and cost per action. According to entrepreneurs, the factors that affect the effectiveness of internet advertisements the most are the ad location, advertising creation and adjusting the theme of the advertisement to the theme of the target website. This is why the majority of the respondents declared that the most effective advertisement impression locations are theme websites and search engines (advertisements are adjusted to the key word typed by the user). They also indicated that the most effective advertisements are located at the very top of the website. This respondents’ opinion allows to confirm the hypothesis regarding the interrelation between the selection of the type of advertisements, ad impression location, the location of the advertising unit of a giver website, the campaign settlement model and the campaign effectiveness.

Most of the companies that participated in the survey declared that they use graphic ads in their campaigns. This allows to confirm the hypothesis that this form of internet advertising is widely used by entrepreneurs in their advertising campaigns. The research hypothesis regarding entrepreneurs’ opinion on the internet being the most effective advertising medium was also confirmed. Over a half of the respondents consider the internet to be the most effective advertising medium.

The goal of this paper was to present and assess the effectiveness models of online advertising. Year in, year out online advertising gains greater and greater participation in companies’ advertising budgets. It is also evolving through the emergence of new forms of online advertisements. Only a few years ago the main type of online advertisement most commonly used by marketing specialists was graphic advertisement on websites. Nowadays, this type of advertisement has been mostly replaced with search engine and contextual advertising.

References
