ЦИФРОВАЯ ТРАНСФОРМАЦИЯ: ЭКОНОМИКА, ПРЕДПРИНИМАТЕЛЬСТВО, ТЕХНОЛОГИИ, ИННОВАЦИИ, ЛОГИСТИКА, БИЗНЕС-ПРОЦЕССЫ

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Developing methods of evaluating online data for internet business promotion

Galina I. Kurcheeva^{1⊠}, Victoriia V. Titova²

^{1, 2} Novosibirsk State Technical University, Novosibirsk, Russia, kurcheeva@yandex.ru[™]

Abstract. Rapid development of the information technologies leads to a continuous replenishment of the Internet marketing tools. The problem of introducing a new mechanism for evaluating results for improving the effectiveness of promoting goods and services in the Internet environment can be attributed to the most important ones. Gaps in comprehension of the problem in relation to web analytics in Russia have been indicated. Studying the main theoretical basis for changing the approach to marketing measures was conducted to increase the efficiency of businesses in the Russian Internet market. The direction of web analytics development in Russia has been defined. The Russian researches are found to focus on the practical part. There are considered the methods of obtaining economic data from the web analytics systems. The problems of business development in the Internet environment in Russia have been defined. As a result, it has been inferred that the existing methods of performance assessment are not applicable. The classification of performance evaluation parameters has been developed. The parameters were divided into 3 levels, depending on the metrics. The first level is associated with presentations, clicks, expenses on advertisements, the second level - with conversion and its cost, the third - with return on investment (ROI). The parameters were divided into the status and economic aspects, depending on their impact on the brand and on the financial condition of the business. According to the developed classification, the process of forming a marketing event was arranged; it is based on definition of the effectiveness level, which the company can achieve. There has been created and illustrated the sequence of events to evaluate the effectiveness of business in the Internet environment.

Keywords: Internet promotion, marketing event, e-commerce, Yandex.Direct, Yandex.Metrica, Google Analytics, Google Ads, conversion, return on investment (ROI), transaction

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Научная статья

Разработка методики оценки онлайн-данных для продвижения бизнеса в интернет-среде

Галина Ивановна Курчеева¹⊠, Виктория Владимировна Титова²

 $^{1,\,2}$ Новосибирский государственный технический университет, Новосибирск, Россия, kurcheeva@yandex.ru oxtimes

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Аннотация. Стремительное развитие информационных технологий приводит к постоянному пополнению инструментария интернет-маркетинга. Внедрение нового механизма оценки результатов для повышения эффективности продвижения товаров и услуг в интернет-среде можно отнести к категории постоянно актуальных проблем. Отмечена недостаточная степень изученности данной проблемы в отношении вебаналитики в России. Для изменения подхода к маркетинговым мероприятиям по увеличению эффективности бизнеса компаний на российском интернет-рынке проведено исследование основной теоретической базы, определено направление развития веб-аналитики в России. Подтверждено, что российские исследования в основном сосредоточены на практической части. Рассматриваются способы получения экономических данных из систем веб-аналитики, проанализированы существующие методики. Установлены проблемы развития бизнеса в интернет-среде в России. Сделаны выводы, что существующие методы оценки результативности неприменимы в ряде случаев. Сформирована классификация показателей оценки эффективности. Проведено разделение показателей на три уровня в зависимости от метрик. Первый уровень связан с показами, кликами, расходами по рекламным объявлениям и производными от них; второй - с конверсией и ее стоимостью; третий - с показателем ROI. Разделены показатели на статусные и экономические аспекты, в зависимости от их влияния на бренд и финансовое состояние бизнеса. На основе разработанной классификации разработан процесс формирования маркетингового мероприятия, в основе которого лежит определение уровня результативности, которого может достигнуть компания. Разработана и проиллюстрирована последовательность действий для оценки эффективности бизнеса в интернете.

Ключевые слова: интернет-продвижение, маркетинговое мероприятие, электронная торговля, Яндекс.Директ, Яндекс.Метрика, Google Аналитика, Google Реклама, конверсия, показатель возврата инвестиций, транзакция

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Introduction

The Russian e-commerce market was marked by the fastest growth in 2020, according to the e-commerce research agency. The market growth rate is 58%. The total market volume reaches 37 billion dollars; with this revenue, Russia ranks 9th among other countries. The data are provided by the Data Insight agency [1].

Experts say that the volume of the Russian advertising market will outstrip the volume of the global one in the next three years. The Russian Internet advertising market is formed of the sales of display and contextual advertising on the Runet, as well as of advertising in online video. In 2021, the TV advertising market in Russia is 192 billion rubles, while the online advertising market is 303 billion rubles.

Reasons for the growth of the Russian advertising market are multifactorial, but one can single out a change in the composition of the leading group of advertisers due to the strengthening of the positions of certain market segments. The segments of e-commerce, financial technology, retail are increasing the advertising budgets in the fight for the market shares and audience coverage.

Methods of promoting goods and services on the Internet in practical business activities are very popular, but the methodological approach to assessing the effectiveness of Internet marketing is considered fragmentary, from a scientific point of view. The Russian authors A. Ye. Baranov, F. Yu. Virin, V. Dolgov, I. Mann, A. P. Pankrukhin, and other scientists are more focused on the practical features of using the Internet environment for the marketing purposes.

Theoretical aspects of organizing Internet marketing are discussed in the works of foreign researchers. For example, The Interactive Advertising Bureau sets the standards for measuring the effectiveness of Internet advertising abroad.

The growth of e-commerce and e-advertising leads to a strong and rapid development of industry, emergence of new approaches and tools. Companies should monitor all emerging opportunities to strengthen their position.

Developing e-commerce has contributed to the increasing competition among business organizations in the Internet environment. The main goal of the companies is the struggle for the target customers that can be attracted through various advertising channels. Now there is a problem of optimizing the costs and increasing the efficiency of invested funds when promoting goods and services on the Internet. Web analytics tools have emerged to overcome the difficulty. This essential area is developing at a rapid pace.

Web analytics, according to R. S. Bazhanov, is a science of measuring, collecting, analyzing, presenting, interpreting the information about the website visitors in the Internet environment. The main task of web analytics is to monitor the attendance of an Internet resource, determine the target Internet audience, study users' behavior, make decisions on the development and expansion of the website's functionality [2].

The noted state of web analytics in the country affects the number of methods and tools developed for non-standard situations of data collection and analysis. A continuous use of counters at the stages of web

analytics development in Russia, the leadership of the Yandex.Metrica system make the development of the industry advantageously different from other countries.

This idea is supported by the words of O. V. Demkina and N. G. Shalamova, who consider that the development of the information technology market and, in particular, of web analytics, is in its infancy in Russia [3].

The main key metrics for measuring the effectiveness of achieving the tasks set by the business were developed by R. S. Bazhanov. A table of the specific categories of targeted actions for various Internet projects was compiled based on the types of projects and metrics in the article [2]. Two tables for determining the monthly profit of the company and assessing the efficiency of the resource were compiled in the following work [4].

The methods for assessing the effectiveness of e-commerce systems developed by the authors are used in the course of studying the creating online stores. The technique is based on the practical use of e-commerce systems and creation of a sales funnel [5]. The emphasis on knowledge of the customer's past purchasing power on the Internet is placed in the development of a personalized sales promotion system [6].

The authors found when studying this scientific base that when describing the methods and systems for determining the result of a marketing event in the research papers [2, 4-7], it is a priori implied that the company can establish the value of each of the proposed indicators through the analytics systems.

The leading analytical systems in Russia are Yandex.Metrika and Google Analytics, according to the research laboratory Ruward: Track [8].

Yandex.Metrica is a tool for assessing website traffic, analyzing visitor behavior and advertising effectiveness, which is installed on a website on a counter principle and allows tracking the changes in consumption of services and goods by visitors.

Google Analytics contains modern web analytics tools that allow collecting the detailed information about each website visitor.

The presented web analytics systems - Yandex. Metrica and Google Analytics - have their own advantages and disadvantages, which are associated with the features of the functionality. Despite the fact that the main functionality of the systems is similar, the tools have the distinguishing features.

Each of the analytics systems has its own service for creating and implementing advertising campaigns and ads.

Yandex.Direct is used to place contextual advertising on Yandex and on partner sites of its advertising network. We note that this service is used primarily in Russia.

Google Ads is a pay-per-click contextual advertis-

ing tool for advertisements that appear in search results or in the Google Display Network.

Companies are forced to resort to web analysis of the data they receive through the integration of advertising and analytical systems in order to promote various projects. This allows tracking the existing trends and achieving the targets.

However, data from the scientific works can be obtained only if the connection between advertising and analytic systems is configured and the minimum permissible level of access to each of them is available:

- 1. Link Yandex.Direct with Yandex.Metrica;
- 2. Link Google Ads to Google Analytics.

Advertising agencies are engaged in promotion on the Internet in most cases. Interaction options are possible when the company prefers to hide the data of the web analytics system for certain traffic channels. When promoting in Russia, where Yandex.Direct is one of the key advertising systems, the result of this decision creates a unique situation. Yandex.Metrica does not have the necessary access control functionality, so the only options for it would be to refuse to provide access to the entire system at once [9, 10].

This is a problem of web analytics in Russia, since the lack of access entails the lack of integration with the Yandex. Direct advertising system. A limited set of data in the advertising system, which does not allow assessing the effectiveness of advertising, drawing conclusions and making recommendations for making the next management decisions are the consequences of the problem. In this case, the existing methods for assessing the effectiveness of a marketing event become inapplicable. The agency cannot receive data, so the indicators and metrics that are mentioned by the authors of scientific papers become unattainable.

The problem typical for the direction of web analytics in Russia made it possible to determine that the zone for which an alternative classification of indicators and a new method of forming a marketing event is required is formed on the Russian Internet advertising market.

Scientific novelty, purpose of research, problem statement

Based on the above, the goal of the study was formed: to change the approach to marketing activities in order to increase the efficiency of companies' business on the Russian Internet market.

A number of tasks were set to achieve the goal: to study the basic theoretical basis of Internet promotion; to identify existing business problems in the Internet environment in Russia; to develop a classification for evaluating the effectiveness of marketing activities; to develop a process for the formation of a marketing event based on new levels of classification.

The novelty of this study is described in the following paragraphs:

- the novelty lies in studying the state of web analytics in Russia and forming a problem characteristic of this area;
- the novelty consists in the formation of a classification of indicators for assessing the effectiveness of advertising on the Internet, taking into account the peculiarities of the development of the industry in Russia:
- the novelty consists in developing a process of advertising promotion based on the classification of indicators for assessing the effectiveness of advertising on the Internet, taking into account the relationship between business tasks and key indicators, and also adapting to the requirements of any company.

Research methods and results

Analysis of the methods for assessing the effectiveness of marketing activities on the Internet, metrics and indicators used to determine the effectiveness of Internet promotion, synthesis of the process of forming a marketing event are the methodological basis of this study. The authors used the classification to achieve their goal.

We note that the variety of metrics for evaluating the effectiveness of advertising campaigns is also a deterrent to the growth of the Russian interactive advertising market. Finding a solution related to the presence of unified cross-platform metrics represents a great potential for the market.

The initial point in implementing the entire process of attracting customers via the Internet, as a re-

sult of increasing profits, is to determine the key goals and indicators of the Internet project. A link is created between business objectives and key metrics.

It was previously noted that the first stage in assessing the effectiveness of advertising promotion for a business is the conversion rate. In this case, this statement does not correspond to reality, since the described indicators are not immediately available to the advertising agencies. The initial level should contain indicators, statistics on which can be obtained in the advertising system without using the web analytics system.

We will divide the assessment of the results of promotion for business into three sequential levels.

Level Zero is tracking brand awareness metrics. At this level, the key value of indicators is set individually for each of the marketing activities, and is also subject to dynamic analysis.

The first tier is Conversion Tracking, a conversion rate that is calculated as the ratio of the number of conversions to all visits to a website. At this level, we take into account the cost of targeted actions on the website. This allows the most accurate assessment of the results of marketing activities, since a large number of conversions does not mean effective spending of the advertising budget.

The second level is the assessment of the rate of return on investment. It allows getting an objective idea of the feasibility of further use of advertising channels and contributes to the commercial activities of the organization on the Internet. The results are presented in the table.

Classification of performance indicators

Index	Indicator	Level	Aspect name
S11	Impressions	0	Status
S12	Clicks	0	Status
S13	CTR, %	0	Status
S14	Wed display position	0	Status
S15	Wed traffic volume	0	Status
S16	Wed click position	0	Status
S17	Wed frequency of impressions	0	Status
E11	Total consumption	0	Economic
E12	Wed cost per click	0	Economic
E13	Wed bid per click	0	Economic
E14	Wed cost per thousand impressions	0	Economic
E15	Share of advertising expenses, %	0	Economic
S21	Number of targeted actions on the website	1	Status
S22	Conversion rate	1	Status
E31	Transaction cost	1	Economic
S31	Number of transactions	2	Status
S32	Transaction rate	2	Status
E31	Transaction cost	2	Economic

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We use the parameters available in the Yandex.Direct system taking into account the restriction on the absence of customized integrations to compile sets of zero-level indicators.

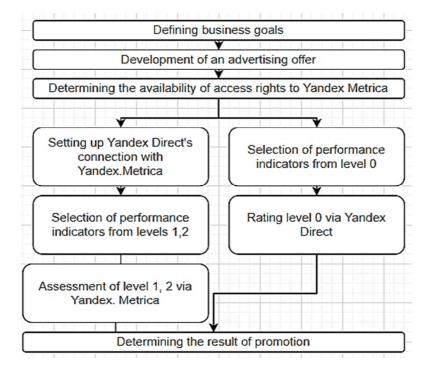
Let's divide the parameters into two groups:

- status aspects that show the quality of traffic on the Internet, as well as the reaction of network users to advertisements:
 - economic aspects that show the cost of promotion

and allow estimating the costs of a business to achieve status aspects.

The first and second level performance metrics are used for a situation in which Yandex advertising and analytical systems are showing results.

We have developed a process for the formation of advertising promotion based on certain levels of assessment (figure).



The process of forming advertising promotion

The initial emphasis is on creating a link between business objectives and key indicators in the formed process. The company needs to determine the result that it expects to receive from the advertising promotion, and on its basis to develop. The next stage is the first global difference from the existing processes [11-13], as it puts the technical aspect in a separate item. Determining the availability of access rights to the Yandex.Metrica analytical system leads to the fact that the company will need to choose one of the directions of development of the presented process.

Having access rights to Yandex.Metrica allows to configure the required integrations. Next, the company should choose whether the status or economic aspects are most important for their business tasks, evaluate the selected metrics in the analytical system and generate the result of promotion. In this case, you can focus on the indicators of both levels, but it is worth focusing on one of them for a correct operational assessment of the result.

The lack of access rights to Yandex.Metrica does

not allow to configure the required integrations. Next, the company should make a similar choice between status and economic aspects. The zero level provides a sufficient number of indicators for each of them to form the final result of the promotion.

As a result, we get the following procedure:

- it is necessary to determine through the developed process of formation of advertising promotion the level of data available for analysis and assessment of the effectiveness of the marketing event;
- it is necessary to correlate the available level of data with the developed classification of performance assessment indicators and determine how the available information corresponds to business objectives;
- you need to use indicators from the Yandex.Direct advertising system in the absence of the necessary level of data to assess the effectiveness of the promotion;
- if the required level of data is available, you need to rely on the indicators of the Yandex.Metric analytical system.

Discussion of the results

The application of the classification of performance evaluation indicators will allow for each business request and the corresponding advertising offer to find a key performance indicator due to the zero level. The peculiarity of the zero level is its use in exceptional circumstances. The first level of metrics will help achieve the goals of a web portal in any direction through conversion rates, targeted actions of the company. The company independently determines the target actions for users who came from advertising. This makes the first-level metrics unique for each case and allows to convert the classification into individual recommendations. The second level is designed to cover the needs of projects related to e-commerce.

The developed process of forming an advertising offer allows to determine the order of actions, expand the process. This happens through the allocation of a bottleneck in the evaluation of the effectiveness of advertising on the Internet, determined in the study, into a separate block. The resulting process benefits from similar developments [11-14] due to a more multilevel transparent sequence of actions and the possibility of obtaining correct results for each case. Now the basis in the process is the condition of access rights and the subsequent multi-level model. The process is integrated into previously existing proposals for the creation of marketing activities due to the indicators and metrics involved in it.

Experts predict an increase in the demand for analytics in the next few years allowing full technological (automated) tracking of an advertising campaign from a visit to a website to a purchase and calculating the return on an advertising campaign (ROI). The developed approach allows the user to scale it. Adding the parameters of income from each target action, the return-on-investment ratio to the classification, will create a personal third level for the user. Determination of the results of promoting services on the Internet is made through additional blocks of information from CRM-systems containing information about the num-

ber of purchases and income. This will expand the process of forming an advertising promotion and add more variability to it. Therefore, the presented system is not finite, it can be developed and modified from a basic version to a personalized one for each type of business. However, it should be borne in mind that such an extension will not suit every advertiser. The advertiser must influence the company's revenues and control the relevant business processes in it.

Conclusion

Performing the research tasks we determined that when promoting business in Russia on the Internet, where Yandex.Direct is one of the key advertising systems, the lack of special access rights to the analytical system may be a problem. The researchers imply that the connections of the systems are established when describing the successive stages of determining the result of a marketing event. The opposite cases are not considered, but this is a significant problem for the analysis of results in Russia. In this case, the existing methods of performance assessment become inapplicable.

We have formed a classification of performance evaluation indicators that takes into account the narrow zone previously defined for business in Russia. We have introduced the division of indicators into 3 levels, depending on the metrics. The first level includes the impressions, clicks, ad expenses and metrics derived from them, the second level is related to conversion and its cost, and the third is related to ROI.

We have developed a process for the formation of advertising promotion, which is based on the connection of business tasks with key indicators and technical capabilities.

Combining the classification of performance evaluation indicators and the process of advertising promotion formation allows us to take into account the requirements for key performance indicators for any company.

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Information about the authors / Информация об авторах

Galina I. Kurcheeva – Candidate of Economics, Assistant Professor; Assistant Professor of the Department of Automated Control Systems, Faculty of Automation and Computer Engineering; Novosibirsk State Technical University; Novosibirsk, Prospekt Karla Marksa, 20; kurcheeva@yandex.ru

Victoriia V. Titova – Master's Course Student of the Department of Automated Control Systems, Faculty of Automation and Computer Engineering; Novosibirsk State Technical University; Novosibirsk, Prospekt Karla Marksa, 20; viktoria.titova15@yandex.ru

Галина Ивановна Курчеева – кандидат экономических наук, доцент; доцент кафедры автоматизированных систем управления, факультета автоматики и вычислительной техники; Новосибирский государственный технический университет; Новосибирск, проспект Карла Маркса, 20; kurcheeva@yandex.ru

Виктория Владимировна Титова — магистрант кафедры автоматизированных систем управления, факультета автоматики и вычислительной техники; Новосибирский государственный технический университет; Новосибирск, проспект Карла Маркса, 20; viktoria.titova15@yandex.ru

