

ISSN 2518-1467 (Online),
ISSN 1991-3494 (Print)

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

Х А Б А Р Ш Ы С Ы

ВЕСТНИК

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН

THE BULLETIN

OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN

1944 ЖЫЛДАН ШЫҒА БАСТАҒАН
ИЗДАЕТСЯ С 1944 ГОДА
PUBLISHED SINCE 1944

3

АЛМАТЫ
АЛМАТЫ
ALMATY

2018

МАҰ
МАЙ
МАМЫР

NAS RK is pleased to announce that Bulletin of NAS RK scientific journal has been accepted for indexing in the Emerging Sources Citation Index, a new edition of Web of Science. Content in this index is under consideration by Clarivate Analytics to be accepted in the Science Citation Index Expanded, the Social Sciences Citation Index, and the Arts & Humanities Citation Index. The quality and depth of content Web of Science offers to researchers, authors, publishers, and institutions sets it apart from other research databases. The inclusion of Bulletin of NAS RK in the Emerging Sources Citation Index demonstrates our dedication to providing the most relevant and influential multidiscipline content to our community.

Қазақстан Республикасы Ұлттық ғылым академиясы "ҚР ҰҒА Хабаршысы" ғылыми журналының Web of Science-тің жаңаланған нұсқасы Emerging Sources Citation Index-те индекстелуге қабылданғанын хабарлайды. Бұл индекстелу барысында Clarivate Analytics компаниясы журналды одан әрі the Science Citation Index Expanded, the Social Sciences Citation Index және the Arts & Humanities Citation Index-ке қабылдау мәселесін қарастыруда. Web of Science зерттеушілер, авторлар, баспашылар мен мекемелерге контент тереңдігі мен сапасын ұсынады. ҚР ҰҒА Хабаршысының Emerging Sources Citation Index-ке енуі біздің қоғамдастық үшін ең өзекті және беделді мультидисциплинарлы контентке адалдығымызды білдіреді.

НАН РК сообщает, что научный журнал «Вестник НАН РК» был принят для индексирования в Emerging Sources Citation Index, обновленной версии Web of Science. Содержание в этом индексировании находится в стадии рассмотрения компанией Clarivate Analytics для дальнейшего принятия журнала в the Science Citation Index Expanded, the Social Sciences Citation Index и the Arts & Humanities Citation Index. Web of Science предлагает качество и глубину контента для исследователей, авторов, издателей и учреждений. Включение Вестника НАН РК в Emerging Sources Citation Index демонстрирует нашу приверженность к наиболее актуальному и влиятельному мультидисциплинарному контенту для нашего сообщества.

Б а с р е д а к т о р ы

х. ғ. д., проф., ҚР ҰҒА академигі

М. Ж. Жұрынов

Р е д а к ц и я а л қ а с ы:

Абиев Р.Ш. проф. (Ресей)
Абишев М.Е. проф., корр.-мүшесі (Қазақстан)
Аврамов К.В. проф. (Украина)
Аппель Юрген проф. (Германия)
Баймуқанов Д.А. проф., корр.-мүшесі (Қазақстан)
Байпақов К.М. проф., академик (Қазақстан)
Байтулин И.О. проф., академик (Қазақстан)
Банас Иозеф проф. (Польша)
Берсимбаев Р.И. проф., академик (Қазақстан)
Велихов Е.П. проф., РҒА академигі (Ресей)
Гашимзаде Ф. проф., академик (Әзірбайжан)
Гончарук В.В. проф., академик (Украина)
Давлетов А.Е. проф., корр.-мүшесі (Қазақстан)
Джрбашян Р.Т. проф., академик (Армения)
Қалимолдаев М.Н. проф., академик (Қазақстан), бас ред. орынбасары
Лаверов Н.П. проф., академик РАН (Россия)
Лупашку Ф. проф., корр.-мүшесі (Молдова)
Мохд Хасан Селамат проф. (Малайзия)
Мырхалықов Ж.У. проф., академик (Қазақстан)
Новак Изабелла проф. (Польша)
Огарь Н.П. проф., корр.-мүшесі (Қазақстан)
Полещук О.Х. проф. (Ресей)
Поняев А.И. проф. (Ресей)
Сагиян А.С. проф., академик (Армения)
Сатубалдин С.С. проф., академик (Қазақстан)
Таткеева Г.Г. проф., корр.-мүшесі (Қазақстан)
Умбетаев И. проф., академик (Қазақстан)
Хрипунов Г.С. проф. (Украина)
Юлдашбаев Ю.А. проф., РҒА корр.-мүшесі (Ресей)
Якубова М.М. проф., академик (Тәжікстан)

«Қазақстан Республикасы Ұлттық ғылым академиясының Хабаршысы».

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы»РҚБ (Алматы қ.)

Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде
01.06.2006 ж. берілген №5551-Ж мерзімдік басылым тіркеуіне қойылу туралы куәлік

Мерзімділігі: жылына 6 рет.

Тиражы: 2000 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28, 219 бөл., 220, тел.: 272-13-19, 272-13-18,
www: nauka-nanrk.kz, bulletin-science.kz

© Қазақстан Республикасының Ұлттық ғылым академиясы, 2018

Типографияның мекенжайы: «Аруна» ЖК, Алматы қ., Муратбаева көш., 75.

Г л а в н ы й р е д а к т о р
д. х. н., проф. академик НАН РК
М. Ж. Журинов

Р е д а к ц и о н н а я к о л л е г и я:

Абиев Р.Ш. проф. (Россия)
Абишев М.Е. проф., член-корр. (Казахстан)
Аврамов К.В. проф. (Украина)
Апель Юрген проф. (Германия)
Баймуканов Д.А. проф., чл.-корр. (Казахстан)
Байпаков К.М. проф., академик (Казахстан)
Байтулин И.О. проф., академик (Казахстан)
Банас Иозеф проф. (Польша)
Берсимбаев Р.И. проф., академик (Казахстан)
Велихов Е.П. проф., академик РАН (Россия)
Гашимзаде Ф. проф., академик (Азербайджан)
Гончарук В.В. проф., академик (Украина)
Давлетов А.Е. проф., чл.-корр. (Казахстан)
Джрбашян Р.Т. проф., академик (Армения)
Калимолдаев М.Н. академик (Казахстан), зам. гл. ред.
Лаверов Н.П. проф., академик РАН (Россия)
Лупашку Ф. проф., чл.-корр. (Молдова)
Мохд Хасан Селамат проф. (Малайзия)
Мырхалыков Ж.У. проф., академик (Казахстан)
Новак Изабелла проф. (Польша)
Огарь Н.П. проф., чл.-корр. (Казахстан)
Полещук О.Х. проф. (Россия)
Поняев А.И. проф. (Россия)
Сагиян А.С. проф., академик (Армения)
Сатубалдин С.С. проф., академик (Казахстан)
Таткеева Г.Г. проф., чл.-корр. (Казахстан)
Умбетаев И. проф., академик (Казахстан)
Хрипунов Г.С. проф. (Украина)
Юлдашбаев Ю.А. проф., член-корр. РАН (Россия)
Якубова М.М. проф., академик (Таджикистан)

«Вестник Национальной академии наук Республики Казахстан».

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Собственник: РОО «Национальная академия наук Республики Казахстан» (г. Алматы)

Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов Министерства культуры и информации Республики Казахстан №5551-Ж, выданное 01.06.2006 г.

Периодичность: 6 раз в год

Тираж: 2000 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28, ком. 219, 220, тел. 272-13-19, 272-13-18.

www: nauka-nanrk.kz, bulletin-science.kz

© Национальная академия наук Республики Казахстан, 2018

Адрес типографии: ИП «Аруна», г. Алматы, ул. Муратбаева, 75

E d i t o r i n c h i e f

doctor of chemistry, professor, academician of NAS RK

M. Zh. Zhurinov

E d i t o r i a l b o a r d:

Abiyev R.Sh. prof. (Russia)
Abishev M.Ye. prof., corr. member. (Kazakhstan)
Avramov K.V. prof. (Ukraine)
Appel Jurgen, prof. (Germany)
Baimukanov D.A. prof., corr. member. (Kazakhstan)
Baipakov K.M. prof., academician (Kazakhstan)
Baitullin I.O. prof., academician (Kazakhstan)
Joseph Banas, prof. (Poland)
Bersimbayev R.I. prof., academician (Kazakhstan)
Velikhov Ye.P. prof., academician of RAS (Russia)
Gashimzade F. prof., academician (Azerbaijan)
Goncharuk V.V. prof., academician (Ukraine)
Davletov A.Ye. prof., corr. member. (Kazakhstan)
Dzhrbashian R.T. prof., academician (Armenia)
Kalimoldayev M.N. prof., academician (Kazakhstan), deputy editor in chief
Laverov N.P. prof., academician of RAS (Russia)
Lupashku F. prof., corr. member. (Moldova)
Mohd Hassan Selamat, prof. (Malaysia)
Myrkhalykov Zh.U. prof., academician (Kazakhstan)
Nowak Isabella, prof. (Poland)
Ogar N.P. prof., corr. member. (Kazakhstan)
Poleshchuk O.Kh. prof. (Russia)
Ponyaev A.I. prof. (Russia)
Sagiyani A.S. prof., academician (Armenia)
Satubaldin S.S. prof., academician (Kazakhstan)
Tatkeyeva G.G. prof., corr. member. (Kazakhstan)
Umbetayev I. prof., academician (Kazakhstan)
Khripunov G.S. prof. (Ukraine)
Yuldashbayev Y.A., prof. corresponding member of RAS (Russia)
Yakubova M.M. prof., academician (Tadjikistan)

Bulletin of the National Academy of Sciences of the Republic of Kazakhstan.

ISSN 2518-1467 (Online),

ISSN 1991-3494 (Print)

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty)

The certificate of registration of a periodic printed publication in the Committee of Information and Archives of the Ministry of Culture and Information of the Republic of Kazakhstan N 5551-Ж, issued 01.06.2006

Periodicity: 6 times a year

Circulation: 2000 copies

Editorial address: 28, Shevchenko str., of. 219, 220, Almaty, 050010, tel. 272-13-19, 272-13-18,
<http://nauka-nanrk.kz/>, <http://bulletin-science.kz>

© National Academy of Sciences of the Republic of Kazakhstan, 2018

Address of printing house: ST "Aruna", 75, Muratbayev str, Almaty

UDC 00.004

A. Ismailova¹, O. Pokussay¹, A.Omirbay¹, V. Yakovlev¹, S. Sovetkin¹, D. Likhachevsky²¹Seifullin Kazakh Agro-Technical University, Astana, Kazakhstan,²Belarusian State University of Informatics and Radioelectronics, Belarusia.E-mail: a.ismailova@mail.ru, olga_270695@mail.ru, assylzat96@mail.ru,
nobusan13@gmail.com, info@kvadra.kz, likhachevskyd@bsuir.by

THE USE «Call-TRACKING» TECHNOLOGY IN THE MODERN WORLD

Abstract. The world becomes more and more developed and with the advent of the Internet, mobile communication, applications, the call-tracking develop and gains momentum. In this article, the concept of call-tracking, and also its great popularity, a role and application are considered in detail.

In the modern world, companies use a large number of channels to attract customers: contextual advertising, banner advertising, advertising on radio or TV, outdoor advertising and etc. Therefore, all types of call-tracking are considered which exist at the moment and the principles of their work are described in the article.

As a result, using call tracking solutions for measurement of performance digital and offline - advertising, marketer can now better optimize their strategy to attract potential customers and increase revenue. Data and call tracking ideas - also called call analytics, call attribution and call intelligence - allow marketers to generate best conversion calls, to reduce their cost for leadership, to personalize the customer experience and to stimulate growth. The work considers the main advantages of using this technology among companies. The real example of the application of call-tracking by the company in Russia is described. The detailed description is provided.

Keywords: technology, call-tracking, tracking, advertising, website, calls.

Introduction. The relevance of this topic is determined by the fact that calls with variable success have been trying to track for a long time. But with the increase in the number of customers, as well as the massive transition of buyers to the Internet, it became necessary to automatically track each call, which led to the emergence of the concept of call-tracking.

Before developing and implementing this technology in the company, we considered the concept of "call-tracking".

Call-tracking - is a method of tracking offline conversions (calls) from the site. Today, call-tracking is included in the gentleman's set of marketers, because up to 70% of applications are received by phone. The main task of service - the analysis of payback of advertising investments.

Call-tracking is a technology for tracking call sources, and also collecting additional information about calls. It allows you to evaluate the effectiveness of the advertising campaign and the quality of the call center specialists [1].

Methods of research. The history of call-tracking begins with a traditional, "lamp" way to find out the source of the call - just ask the customers where they found out about us. The method is still in demand in some places, although it is unlikely that in such a labor-intensive way it has ever been possible to track every call. Tracking in manual mode has the lowest efficiency. However, if you have a piece of goods or a very expensive B2B service, you can easily talk to each customer and find out the source of the call. In the mass market, people come from hundreds of Internet sources and few say for sure where he/she took the phone. The most frequent and logical answer - the number I saw in advertising somewhere on the Internet.

Then the marketing went to promo codes, which were applied and are now used as an analogue of call-tracking. A unique promo code is displayed on the site next to the phone for a unique visitor. Then the buyer makes a call and says the manager his "code word". According to the promo code, the manager understands from what advertising a call is made and can add this fact to the statistics. In general, the

method of tracking calls on promo codes is not reliable, has a rather high error. In connection with the quick development of advertising, there was a static call-tracking, which is ideal for offline advertising. It suits those who do not strive for high detail and just want to monitor the effectiveness of advertising channels. When you place an ad on sites, then a virtual phone number is determined (leased) for each source. Each incoming call is recorded in the corresponding section of the report. In general, the use of the call-tracking service in the static version - inexpensive and convenient, but for full-fledged analytics is not enough.

We found out that the call-tracking service is needed to "count" calls from each advertising channel. A person visits a site from an advertisement, from a particular source and sees the phone number assigned to that source or visitor. After the call, the system determines the source by a unique phone number and "puts a plus" on a specific channel - "the leader came from here" [2].

With this conversion tracking method, you can easily measure how many requests a particular traffic channel actually receives and optimize your ad campaigns more effectively.

In essence, call-tracking works according to the similar scheme with tracking of online conversion by the systems of analytics (Google Analytics, Yandex. Metrics).

According to various statistics, a large number of applications (about 70%) in B2C (business for people) segment occurs through the phone, and in B2B (business to business) as much as 10% more. Thus, it turns out that setting up goals in Metrics or Google Analytics, Internet marketers do not get a complete picture of what is happening. Therefore, the optimization of advertising campaigns is not entirely complete.

Because the huge share of applications goes via phone, special services have developed which would help us to trace calls. One of them is call-tracking, which we will develop and implement in Kazakhstan.

Call-tracking has become a substitute for managers forced to record the sources of the call to the database with the words of the buyers. Modern dynamic call-tracking itself will record each call, determine the source right up to the keyword, and also bring the user's device, operating system and other data into the database, and will know exactly whether the person has called before [3].

Results of a research. We have considered why call-tracking is necessary according to theory. Let's say that you have a website the main purpose of which is to receive calls from a visitor interested in buying a product or service. You start advertising on this site from different sources (Yandex Direct, targeted advertising, a banner on the site, advertising in the popular Vkontakte group, etc.) and start to get a lot of calls. Do you want to know which of the sources of advertising brings the most calls, and which one and none at all? Then you need static call-tracking. And now we will complicate a task. Let's say that you want to know which specific announcement the person who called you has transferred to. Or, if you use contextual advertising, which keyword the caller came from. Yes, it is possible to make it too, and dynamic call-tracking will help. For you, this call will not be different from the usual one, but you will know exactly what traffic channel it came from [7].

We have considered why call-tracking is necessary in practice. "What do I need from what I know from what specifically the customer called," you ask. Everything is simple, knowing this - you can save a lot of money on advertising. This is especially nice when you are an advertiser, but it is very necessary if you are a director or any other specialist in advertising on the Internet. After all, you can increase the effectiveness of the advertising campaign and reduce the cost of 1 client from advertising.

An example of dynamic call-tracking in practice. And now we will show a real example from our practice in figures. As for 1 month to get the advertising budget savings of almost 6,000 rubles. We found a man who shared data on saving money with call-tracking on his personal experience.

He spent on advertising in Yandex Direct the amount of not more than 45 thousand rubles with VAT per month. The main goal of advertising is to get calls from interested users in purchasing, with whom sales managers continue to work. In this example, we show only the numbers from Yandex Direct, we will not take other sources of advertising into account. Data on received unique calls from Yandex Direct in May are shown in figure 1.

№	Имя кампании	Ключевое слово	Средняя стоимость за клик	Средняя длительность разговора	Процент успешных звонков	Средняя стоимость за звонок
1	yandex / cpc	cpc	4	03:33	100.00 %	85.47 %
2	google / cpc	cpc	1	02:41	100.00 %	85.47 %
3	direct / cpc	cpc	34	02:42	70.59 %	85.47 %

Figure 1 – Data on received unique calls from Yandex Direct in May 2017

The amount he spent on advertising with VAT is shown in figure 2.

Дата	Размер бонуса всего, руб.	Показы	Клики	CTR (%)	Расход всего, руб.	Ср. цена клика, руб.	Ср. расход за день, руб.
с 01.05.15 по 31.05.15	0.00	333007	1626	0.48	43 785.31	26.89	1 421.88

Figure 2 – Advertising costs in May 2017

If to make a simple calculation, then we will receive that 1 call of the unique user has cost 1152,25 rub. for him. In late May-early June, he has carried out the deep analysis of the received calls. Knowing which particular ad and keyword the buyer called, he disabled ineffective ads. In addition, at the end of May, he increased traffic from the RSA quite well due to low-frequency requests, began to receive cheaper clicks, and, in addition, increased their number. So, the result was not long in coming. The number of unique calls from Yandex Direct in June is shown in figure 3.

direct / cpc	cpc	26	1407
yandex / cpc	cpc	15	483

Figure 3 – Data on received unique calls from Yandex Direct in June 2017

The cost of advertising in June is shown in figure 4.

Дата	Размер бонуса всего, руб.	Показы	Клики	CTR (%)	Расход всего, руб.	Ср. цена клика, руб.	Ср. расход за день, руб.
с 01.06.15 по 30.06.15	0.00	210168	1721	0.82	35 757.30	20.78	1 428.33

Figure 4 – Advertising costs in June 2017

The cost of call-tracking for June was 2400 rubles. Total net savings of 5628.01 rubles. And this is with a fairly small budget for advertising. But that's not all. Due to the increase in the coverage of the RSA for low-frequency requests, it began to receive more calls from this source. And the price of a click on the RSA is much lower than on the search. Total, 1 unique call from advertising in June costs 872.13 rubles. Believe - it is very good price of a lead for the b2b segment in Moscow.

In the business environment, from 30 to 100% of sales are done by phone - it all depends on the specifics. Many managers (about 66%) are confident in the effectiveness of incoming calls, especially compared to other types of contacts with potential customers. Internal statistics show that firms that make sales on the Internet miss about 30% of calls, but quite often they do not even know about it.

Call-tracking is a special technology, through which it is possible to associate incoming phone calls with the source of advertising, detailing information to the keyword.

Call-tracking is a technology that allows you to track, analyze and process phone calls. Tracking and processing can be done in different ways: manually and automatically. There is a logical question: what is the purpose of call-tracking, what does this system provide? Firstly, thanks to it, setting up your advertising campaign can be very effective. Call-tracking begins to evolve with the setting of the advertising campaign and its binding to the tracker. What is call-tracking used for? One large marketing agency has conducted a research. The Agency examined 100 organizations operating in eight different business sectors. It is revealed that about 70% of all orders are carried out by phone and, certainly, businessmen should consider it not to miss profit. Thanks to call-tracking you can make your business truly efficient and profitable. In table 1, the systems of call-tracking, taken from Internet sources are considered [11].

The discussion of the results

Based on the reviewed all types of call-tracking system, we will develop our system in the Republic of Kazakhstan. What will our technology consist of? Each user on the site is allocated a unique virtual phone number from the prepared pool. The script in the system automatically determines the advertising source from which the visitor came, as shown in figure 5. What is a pool of numbers? This is a set of virtual numbers leased from the service call-tracking or own. The number of rooms must be enough to cover all the people who are present at the same time on the site.

Systems of call-tracking

№	Name	About the service	Cost	Features
1	2	3	4	5
1	"Target Call" from Yandex. Metrics	In Yandex. Metrics, you can activate the service "Target Call". The service allows you to assign a number to any of the traffic sources. The amount of numbers is unlimited. Service counts the number of calls and gives detailed statistics	One "number-day" of Yandex costs 11 rubles. Pay for the service one month in advance, that is, the minimum cost is 330 rubles.	The "target call" works only with the Yandex. Metrica counter. If you do not want to put it for some personal reasons, then you will not be able to connect the service. So far, the service is available only for Moscow, St. Petersburg, Nizhny Novgorod and the region, Samara and the region. Calls from banners installed on other sites cannot be tracked either - "Target Call" works only according to the code assigned to the website, tied to the number
2	Track calls with Google	AdWords has the ability to track phone calls (conversions) for your ads with the extension "Phone Numbers." In setting up the conversion account, you can set the minimum talk time so that useless short calls are not considered. The tool allows you to detail the statistics for queries or campaigns. You can track calls for advertisements, for numbers on the site, for conversions imported from AdWords from other systems	The service is free	The feature works only for AdWords advertising. You can track calls from more than 20 countries, including Russia, Poland, Germany, USA, etc.
3	CallTracking.ru	Quite a powerful analyzer with good functionality. Allows you to track conversions both offline and online. Calls from each advertising system are distributed as standard in channels with separate numbers. Allows to trace and analyze the efficiency of inquiries, that is the used keys. There is a free demo version for testing	Connection is free. The package can be selected depending on the required number of channels: Basic (3 channels) - 1500 rubles per month. Advanced (8 channels) - 3990 rubles per month. Expert (20 channels) - 9990 rubles per month. Separate tariffs for analytics of calls to a keyword	Technical support of the service promises accuracy of counting with an error of up to 10%. If you do not pay the package, then keep access to the personal cabinet and the accumulated statistics, it is stored in the service indefinitely. Call records are stored for 1 year. Dedicated phone numbers remain with the customer for two weeks after the last paid period ends. The service connects to many CRM-systems (Salesforce, BPM online, amoCRM, SugarCRM, Microsoft Dynamics CRM and Bitrix 24) and integrates with popular analytics systems and contextual advertising automation services
4	Calltouch	One of the first services with a dynamic system of call tracking (tracking calls to sessions). A solid geography of services (40 countries and 60 cities). Technical support declares an error of counting no more than 7% and promises to increase the number of allocated numbers in case of default	Standard packages are not available, but you can calculate the cost of services on an online calculator. For example, for mobile and regional numbers, when you connect 5 static phones with an average session duration of 3 minutes, 500 sessions per day will cost you 11,000 rubles per month.	The numbers do not connect themselves to the interface of the account, you need to make a request to the technical support. A lot of settings, which you can not easily figure out yourself. There is a demo version for testing

<i>Продолжение таблицы</i>				
1	2	3	4	5
5	Comagic	The system of call tracking works with all major Russian cities (37 regions). Immediately need to pay for connecting numbers (450 rubles per room + monthly fee per room for 250-450 rubles depending on the package), so the first month will be more expensive than the next. The error in counting is about 10%. It integrates with third-party amo CRM and has its own CRM	There are three basic standard packages: Lite — 1000 rub/month. Optimum — 3000 rub/month. Enterprise — 20000 rub/month. It is possible to connect to any package in addition functions at additional expense.	When purchasing any package, provided a personal manager. In the Lite package, besides functionality, there is only integration with CRM. Optimum already has a dedicated API, integration with Yandex.Direct and Yandex.Metrics, Google AdWords, Google Analytics, contextual advertising automation systems
6	Lptracker.ru	In the market recently. The service analyzes each advertising channel, connects to an external CRM, "captures" the visitor immediately when entering their site-fixes his profile vk.com Oh. That is, even if the visitor did not call you and did not leave a number, you get his contacts for the base of cold calls.	There are three packages: Freelancer - 900 rubles per month. (up to 100 customers per day and only 1 site). Startup - 2000 rubles per month. (up to 500 visitors a day from a single site, in total you can connect 3 sites).	More than 10 different products (call records, virtual numbers, customer geolocation, order collection, etc.). There is a Callback widget for accessing visitors who have decided to leave the site. You can analyze your offline advertising, for example, ads on transport.
7	Our technology	Is in development	The free period is 14 days. The paid version, depending on customer requirements	It does not depend on the country, has a box solution, which includes a service for tracking, CRM, API for third-party developers and the ability to integrate into the most popular CMS. It allows analyzing traffic sources and thus optimizing them. In the future, it is planned to include in the box solution mine PBX[17]

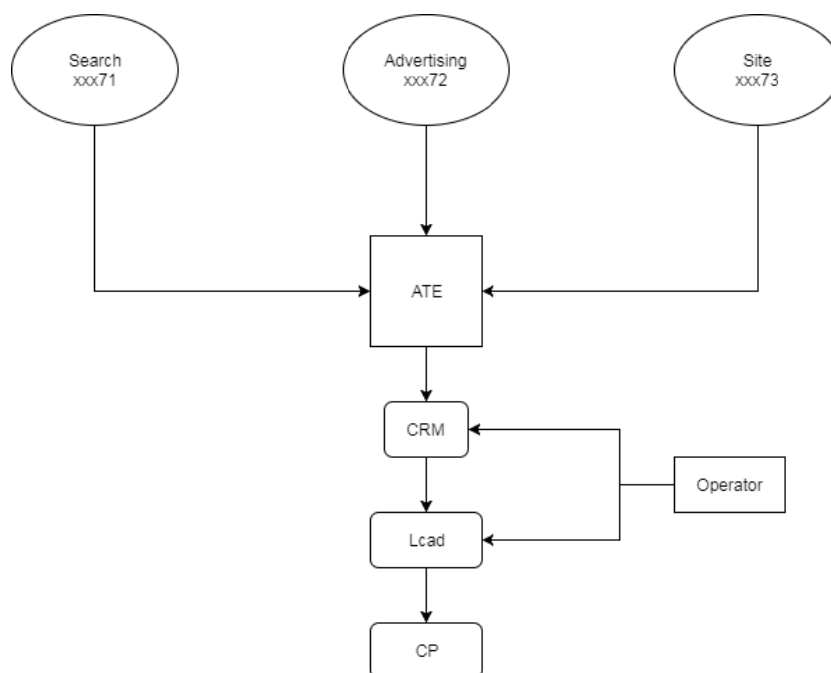


Figure 5 – Call-tracking structure

Each advertisement will be assigned its own number. Accordingly, we will immediately understand from which source the customer is calling. An example is shown in figure 6.

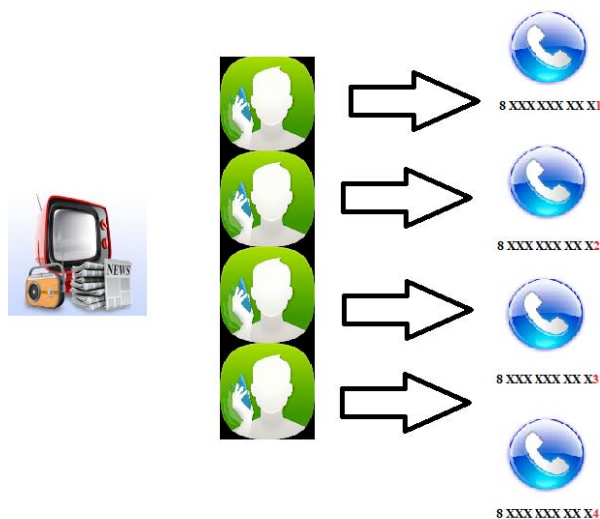


Figure 6 – Analyzing sources of incoming call traffic

Conclusions.

Based on the above, we can note why we need call-tracking:

- Defines the sources of calls by phone - which advertising brings calls and sales, and which uses the advertising budget for nothing.
- Allows you to monitor managers and improve the quality of service.
- Reduces the number of missed calls - and therefore, customers that could go to your competitors.
- Submit statistics about calls to GoogleAnalytics or other analytical platforms.
- In the case of integration with CRM, automatically creates transactions, tasks and contact cards upon the fact of the call.

First of all, the service is relevant for companies that have a more or less significant advertising budget.

Call-tracking in any form carries certain costs. And saving on ineffective advertising should cover them. Also, it is necessary to take into account the peculiarities of the business sector. It should be connected to telephone calls. For example, a modern online store, this service may not be useful, because most of the purchases are made online, without using the phone. But a service store, for example, a travel agency, call-tracking can be very useful - the primary treatment often happens by phone. The same goes for insurance companies, real estate sales, furniture, windows, etc. For example, according to polls, about 55% of car dealers have used or continue to use the call-tracking service to track effective advertising channels. Using call tracking systems in your advertising campaigns, you will receive various reports on calls and, most importantly, you will be able to really evaluate the work of the Call-center and, as a result, optimize it [26].

REFERENCES

- [1] Charles T.M., John M.D. (2001) Dynamic, real-time call tracking for web-based customer relationship management [Google Academy] 2-3 (in Eng.).
- [2] John T.L., Paul J.M. (1997) Telephone call tracking and billing system and method [Google Academy] 1-2 (in Eng.).
- [3] Daric W., Scott F., Anuj A., Nitin A., Ebbe A., Mark H. (2004) Method and apparatus to allocate and recycle telephone numbers in a call-tracking system [Journal of technical Sciences] (in Eng.).
- [4] William A.K., Dorsey P.B., David A., Barry P., Lisa M. (1996) Incoming call tracking with interactive data collection [Journal of technical Sciences] (in Eng.).
- [5] Yiu F.K. (2006) [Journal of Innovative technology] Call tracking systems (in Eng.).
- [6] Christopher L.R. (2003) Method and system for call tracking to discover inmate-employee fraternization [Google Academy] (in Eng.).
- [7] Tappero J.W., Khan A.S., Pinner R.W., Wenger J.D., Graber J.M., Armstrong L.R. (1996) Utility of emergency, telephone-based national surveillance for hantavirus pulmonary syndrome [JAMA] 275: 398–400 (in Eng.).

- [8] Anshul K., Surojit C., Chen C., Jian Zh. (2010) Call tracking for online content items [Journal of Internet technologies] (in Eng.).
- [9] Marina Z. (2004) Marketing in CRM strategy [INTUIT] 6-7. <https://www.intuit.ru/studies/courses/1154/151/lecture/4208?page=6> (in Russ.).
- [10] Nick L., (2007) What is Call Tracking and How Does it Work? [REVLOCAL] 3. <https://www.revlocal.com/blog/google-adwords/what-is-call-tracking-and-how-does-it-work-> (in Eng.).
- [11] Zoe-Lee S., (2014) An SEO Beginner Guide: What is Call Tracking and Why Should I Care? [SearchEngineJournal] 1-2. <https://www.searchenginejournal.com/seo-beginner-guide-call-tracking-care/83173/> (in Eng.).
- [12] Vladimir E. (2011) Introduction to online advertising [INTUIT] 1. https://www.intuit.ru/studies/professional_skill_improvements/1381/info (in Russ.).
- [13] Natalia G., Roman S. (2012) Principles of marketing: Information [INTUIT] 1-3. (in Russ.).
- [14] Amir A.K., Drew F., Kambiz H.H. (2015) The relationship between e-lifestyle and Internet advertising avoidance [Australasian Marketing Journal 23] 38-48. (in Eng.).
- [15] Jian L., Cong W., Xin-yi Z. (2014) Research on behavioral targeted advertising in mobile Internet [The Journal of China Universities of Posts and Telecommunications, Volume 21, Supplement 1] 1-5. (in Eng.).
- [16] Alex M., Ben S. (2007) Marketing Through Search Optimization [How People Search and how to be Found on the Web] 198-203 (in Eng.).
- [17] Zack K. (2018) What is call tracking? [RINGDNA] 1-3. (in Eng.).
- [18] Tom R., (2010) Call Tracking: A Key Component in Campaign Marketing Analytics [KissmetricsBlog] 1-3. (in Eng.)
- [19] Carolyn L. (2017) What is call tracking? [CallRail] 2. (in Eng.).
- [20] Grant E. (2015) Are You Missing 80% of Your Conversions? The Importance of Call Tracking [Case Study] 2-3 (in Eng.).
- [21] Artur N. (2016) Call-tracking technology: working principle [Online-Journal] <http://online-journal.net/7462-tehnologiya-call-tracking-princip-raboty> (in Russ.).
- [22] Ivan R. (2018) How call tracking works, its types and advantages [Online-Journal] <http://online-journal.net/7849-kak-rabotaet-kolltreking-ego-vidy-i-preimuschestva.html> (in Russ.).
- [23] Anton G. (2010) Promotion of business on the Internet [Business of the week] 35-48. (in Russ.).
- [24] Anastasia D. (2007) Ways to advertise your business [Business of the week] 23-25. (in Russ.).
- [25] Eric W. (2009) Advantages of advertising on the banners [Internet=advertising] 77-85. (in Eng.)
- [26] Alexander M. (2015) Why call tracking for your business [Encyclopedia marketingas] 1-4. <https://www.marketing.spb.ru/lib-comm/dm/calltracking.htm> (in Russ.).
- [26] Bob E. (2014) Cold calls: saying doesn't mean selling [Encyclopedia marketingas] 2-7. https://www.marketing.spb.ru/lib-comm/dm/cold_calling.htm (in Russ.).
- [27] Michael K. (2004) Methods of information gathering and analysis tools [Information technology] 58-63. (in Russ.).
- [28] Ivan S. (2015) "I hear dead clients." Number of tracking: what, how and for whom [INTUIT] 21-26 (in Russ.).
- [29] Dmitry K. (2017) Myths about Call Tracking [INTUIT] (in Russ.).
- [30] Novak G. (2017) Analytical must have for business [New advertising] 19-23 (in Russ.).

А. Исмаилова¹, О. Покусай¹, А. Омирбай¹, В. Яковлев¹, С. Советкин¹, Д. Лихачевский²

¹Казахский агротехнический университет им. С. Сейфуллина, Астана, Казахстан,

²Белорусский государственный университет информатики и радиоэлектроники, Беларусь

ИСПОЛЬЗОВАНИЕ ТЕХНОЛОГИИ Call-TRACKING В СОВРЕМЕННОМ МИРЕ

Аннотация. Мир становится все более развитым и с появлением Интернета, мобильной связи, приложений набирает обороты и развивается call-tracking. В данной статье подробно рассмотрено понятие call-tracking, а также его большая популярность, роль и применение.

В современном мире компании используют большое количество каналов привлечения клиентов: контекстная реклама, баннерная реклама, реклама на радио или ТВ, наружная реклама и так далее. Поэтому в статье рассмотрены все виды call-tracking, которые существуют на данный момент и описаны принципы их работы.

В результате этого, используя решения отслеживания звонков для измерения производительности цифровой и офлайн-рекламы, маркетологи теперь могут лучше оптимизировать свою стратегию для привлечения потенциальных клиентов и роста доходов. Данные и идеи отслеживания звонков - также называемые аналитикой звонков, атрибуцией звонков и интеллектом вызова - позволяют маркетологам рынка генерировать лучшие конверсионные звонки, снижать их стоимость за лидерство, персонализировать клиентский опыт и стимулировать рост.

В работе рассмотрены главные преимущества использования данной технологии среди компаний. Описан реальный пример применения call-tracking компанией в России. Приведено подробное описание.

Ключевые слова: технология, call-tracking, отслеживание, реклама, сайт, звонки.

А. Исмаилова¹, О. Покусай¹, А. Омирбай¹, В. Яковлев¹, С. Советкин¹, Д. Лихачевский²

¹С. Сейфуллин атындағы Қазақ агротехникалық университеті, Астана, Қазақстан;

²Белоруссиялық информатика және радиоэлектроника университеті, Беларусь

CALL-TRACKING ТЕХНОЛОГИЯСЫН ҚАЗІРГІ КЕЗДЕ ПАЙДАЛАНУ

Аннотация. Әлем интернеттің, мобильді байланыстың, қосымшалардың пайда болуынан серпінді дамуда және call-tracking қарқынды дамып келе жатыр. Бұл мақалада call-tracking ұғымы және сонымен қатар оның үлкен атағы мен ролі, қолданылуы жан-жақты қарастырылады.

Қазіргі заманда компаниялар клиенттерді тартудың көптеген жолдарын қолданады: контексті жарнама, баннерлі жарнама, радио немесе ТД жарнама, сыртқы жарнама және т.б. Сондықтан мақалада қазіргі кезде бар call-tracking қызметінің барлық түрлері және жұмыс істеу принциптері қарастырылған.

Осының нәтижесінде сандық және офлайн-жарнаманың өнімділігін өлшеу үшін қоңырауларды қадағалау шешімін қабылдау арқылы маркетингтік потенциалды клиенттерді тарту және кірісті өсіру үшін өз стратегияларын оңтайландыра алады. Деректер мен қоңырауды қадағалау идеялары - қоңырауларды талдаулар деп аталады, қоңырауды аттестациялау және қоңырау шалу - маркетингтік жақсы конверсия қоңырауларын жасауға, көшбасшылық үшін шығындарды төмендетуге, клиенттердің тәжірибесін жеке-лендіруге және өсуді ынталандыруға мүмкіндік береді.

Жұмыста берілген технологияның компаниялар арасында қолданудың басты артықшылықтары қарастырылған. Ресейдегі бір компанияның Call-tracking қызметін қолдануының нақты мысалы сипатталған. Толық сипаттамасы келтірілген.

Түйін сөздер: технология, call-tracking, қадағалау, жарнама, сайт, қоңыраулар.

Information about authors:

Ismailova A. – PhD, senior lecturer of department «Information Systems», Seifullin Kazakh Agro Technical University, Astana, Kazakhstan, e-mail: a.ismailova@mail.ru

Pokussay O. – undergraduate 1 year students of the specialty 6M070300 - "Information systems", Seifullin Kazakh Agro Technical University, Astana, Kazakhstan, e-mail: olga_270695@mail.ru

Omirbay A. – undergraduate 1 year students of the specialty 6M070300 - "Information systems", Seifullin Kazakh Agro Technical University, Astana, Kazakhstan, e-mail: assylzat96@mail.ru

Yakovlev V. – undergraduate 1 year students of the specialty 6M070300 - "Information systems", Seifullin Kazakh Agro Technical University, Astana, Kazakhstan, e-mail: acousticksan@yandex.ru

Sovetkin S. – undergraduate 1 year students of the specialty 6M070300 - "Information systems", Seifullin Kazakh Agro Technical University, Astana, Kazakhstan, e-mail: info@kvadra.kz

Likhachevsky D. – candidate of technical sciences, associate professor, dean of the Computer Design Department, Belarusian State University of Informatics and Radioelectronics, likhachevskyd@bsuir.by

Publication Ethics and Publication Malpractice in the journals of the National Academy of Sciences of the Republic of Kazakhstan

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Submission of an article to the National Academy of Sciences of the Republic of Kazakhstan implies that the described work has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The National Academy of Sciences of the Republic of Kazakhstan follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct (http://publicationethics.org/files/u2/New_Code.pdf). To verify originality, your article may be checked by the Cross Check originality detection service <http://www.elsevier.com/editors/plagdetect>.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the National Academy of Sciences of the Republic of Kazakhstan.

The Editorial Board of the National Academy of Sciences of the Republic of Kazakhstan will monitor and safeguard publishing ethics.

Правила оформления статьи для публикации в журнале смотреть на сайте:

www.nauka-nanrk.kz

ISSN 2518-1467 (Online), ISSN 1991-3494 (Print)

<http://www.bulletin-science.kz/index.php/ru/>

Редакторы *М. С. Ахметова, Т. М. Апендиев, Д. С. Аленов*
Верстка на компьютере *Д. Н. Калкабековой*

Подписано в печать 08.06.2018.
Формат 60x881/8. Бумага офсетная. Печать – ризограф.
20,4 п.л. Тираж 500. Заказ 3.