

# Monetization model of digital products: economic and marketing efficiency

Belov F.D.

Russian Research Institute of  
Economics, Politics and Law in the Scientific and Technical Sphere (RIEP)  
Russia, Moscow  
[fdbelov@yandex.ru](mailto:fdbelov@yandex.ru)

**Abstract** — The article presents a research, conducted by the author, whose object is to build an optimal model of monetization of digital products. The research examined a variety of online services for monetization and promotion of digital products, detected their advantages and disadvantages, and also evaluated the efficiency of monetization that they provide. An original solution was also offered — a totality of digital products of the same subject-matter that promote each other, based on Google services. The result of the presented research was the model, created by the author, which allows to monetize digital products effectively. The article is of interest to online marketers working in the field of digital marketing because it is based on the experience of the author in this sphere. The conclusions, made in it, are confirmed empirically, and the proposed model was tested on digital products, created by the author.

**Keywords** — digital marketing, monetization, promotion of digital products, SEO.

## I. INTRODUCTION

Digital technologies occupy an increasing part of our life every year. The Internet becomes available even to citizens, living in distant parts of our country, opening up their infinite possibilities and benefits. The cost of connecting to the Internet is decreasing, new access technologies are emerging, the speed of data exchange is increasing and the number of users is also increasing. This is evidenced by statistics. For example, the number of Internet users in Russia in 2017, as a percentage of the population, amounted to 76.41% (109.5 million people) (Fig. 1) [4].

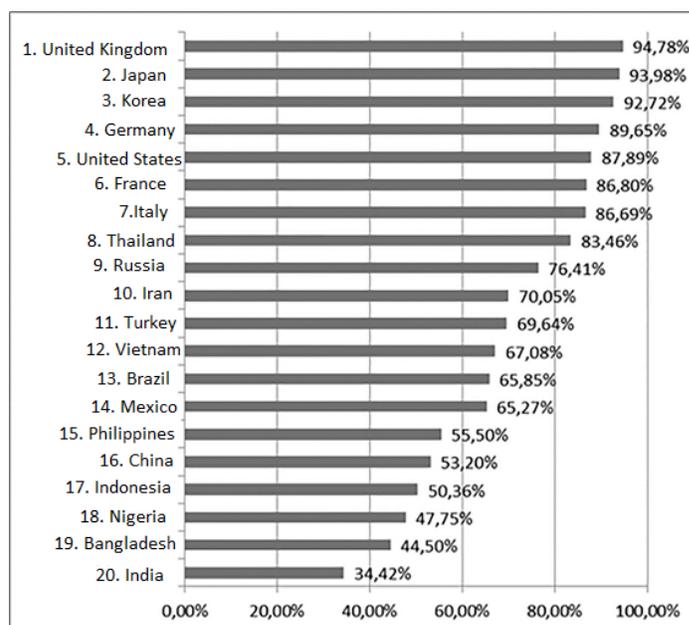


Fig. 1 The number of broadband Internet users in Russia and countries of the world as a percentage of the country's population in 2017

As it can be seen from Fig. 1, Russia is among the top ten countries with a developed Internet and is ahead of many of the dynamically developing countries, for example, China, India, and Brazil.

In the mobile communication market, and as a result of mobile Internet access, Russia also occupies a leading position. (Fig. 2).

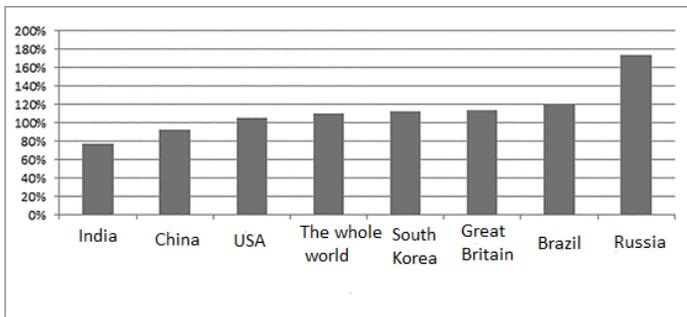


Fig. 2. A number of active mobile communication subscribers in Russia and world countries as a percentage of the country's population as of March 2018.

As it can be seen from Fig. 2, in terms of the distribution of mobile phones, Russia is ahead of most of the dynamically developing countries of the world [5]. In fact, according to the authoritative association GSMA, the number of registered SIM cards in Russia, as of January 2019, is 1.8 times more than the population and is about 230,000 thousand.

The importance of digitalization is indicated at the highest state levels. Thus, in his May decrees in 2018, Russian President Vladimir Putin instructed the Government to accelerate the introduction of digital technologies in the social and economic sphere, thereby outlining the priority development objects of the country until 2024. At the moment, important steps have been taken in this direction. The Internet portal of public services has been launched, with the help of which, several dozens of public services can be obtained in digital format without contacting specialized organizations. At the same time, from the point of view of marketing, citizens are attracted to using this portal by receiving discounts for online payment of state fees, are constantly informed via e-mail about the appearance of new services, receive digital notifications about the generated rent bill, traffic police fines, etc., which can also be paid online.

In terms of digitalization, the commercial sphere does not stand aside either. Over the past few years, the Russian e-commerce market is developing extremely dynamically. According to the Association of E-commerce Companies (AITC), the volume of the e-commerce market in Russia in 2017 exceeded 1 trillion rubles. In 2016, the Russian e-commerce market increased by 21% and reached 920 billion rubles, which is the third digital economy in the country. [6]

The data of the largest Russian retailer in the field of electronics and home appliances "M.Video" speak about the increase in the e-commerce market. In 2017, the increase in Internet sales of M.Video amounted to 30.3%, and in the third quarter of 2017, it increased by 54.6% as compared with the same period of 2016. [7]

All these data suggest that consumers are looking for the goods and services they need on the Internet and pay for them online. And in order to attract as many customers as possible to their products, e-commerce digital market players develop a

variety of marketing strategies, for which huge amounts of money are channeled.

With the emergence of Web 3.0, more and more companies seek to strengthen their presence on the Internet in general and in search systems in particular (for Russia, this is Google and Yandex). The search system became the most popular platform, currently used by users all over the world to gather information. Researches demonstrate the efficiency of search systems in obtaining the necessary information from the Internet and directing traffic to relevant offers from various brands. All this led to the launch of popular advertising formats, including search marketing (SEM) and SEO optimization approaches, which allow the website to be placed on the first page of search systems for the necessary key queries. [1] The emergence of the site in the top search results, accordingly, leads to an increase in incoming traffic, which has a beneficial effect on the monetization of the site. Gradually, classical SEO approaches, mainly based on increasing the link weight of the site, began to lose their relevance. This is due to the emergence of exchanges of links, on which SEO-specialists purchased links from other sites, thereby increasing the link mass of the promoted site. That is, almost any site could get into the top search results, as soon as the owner purchased the required number of incoming links. To fight this trend, search systems began to change the algorithms for the inference of sites in the TOP, giving preference to the quality of the site, usability to the convenience of the site for the user. Changing in approaches to the promotion of sites has led to a changing in monetization approaches.

Now we can confidently say that we live in the golden age of electronic commerce in the period of the formation of electronic marketing. In this connection, the number of services on the Internet constantly increase, making it possible to earn online and also to promote digital products to electronic markets (websites, videos, ad units, mobile applications, etc.). Their variety is amazing, confronting web marketers with a difficult choice, which ones to use to get the maximum effect.

Over the past decade, the digital marketing sector showed a strong increase and made several sudden changes. Analysts predict that commerce will spend about \$613 billion on Internet marketing services around the world. [2] In addition, it is predicted, that the digital marketing industry will increase up to \$79 billion by 2020. [3] taking into account the rapid increase of digital marketing, every year new service providers emerge, offering different options for monetization and promotion, often ineffective. This is due to the fact, that the threshold of entry into this industry is quite low because does not require large financial investments, in this connection, the industry is attractive for companies — beginners.

In this article, the author offers an effective model, developed on the basis of the conducted research and its results. The central part of the model is a site with attendance of at least 1000 people per day. Such a number of visits to the site, based on the experience of the author, can be considered the starting

point for the start of its monetization. The subject-matter of the site, in general, does not matter. However, the basic requirement is that it should not be an online store, because, in this case, a different income generation mechanism, sales works. Investments, put in website promotion, are also not taken into account, as they can be completely different, depending on the methods of promotion. It is considered, that the author promoted the site on his own without paying for the work of content managers and SEO specialists.

## II. RESEARCH METHODOLOGY

The object of the author research is to build an optimal model for monetization of digital products. In the course of the research, Internet services for the monetization and promotion of digital products, that are the object of research, were studied. The subject of the research is to detect the efficiency of the research services in terms of monetization. The main idea of the research is the construction of an optimal model from digital products of the same subject-matter, which would promote each other and monetization services of these products. Also, the model should be economically profitable, i.e. its implementation should require a minimum financial investment. During the research, a systematic approach was used, during which the object of study was considered as a totality of interrelated objects. The characteristics and capabilities of monetization services, the possibility of establishing a connection between them to achieve the greatest economic efficiency were studied.

## III. RESULTS OF THE RESEARCH

In the Russian market, the main players in terms of the offer of services for promotion and monetization are Yandex and Google. For example, the Russian company Yandex offers to promote users' sites its Yandex.Direct service, an advertising network that allows ads to be posted on partner sites and in Yandex search results. Also, the Yandex.Direct family includes video ads, allowing to place author's 15 second commercials on Yandex external networks (in InPage and InStream blocks). The external networks of Yandex include such large portals as Kinopoisk, Yandex.Afisha, the websites of the CTC, Ren TV, NTV, and other TV channels, that have huge audiences of visitors. Placement of video and contextual ads is paid by click, i.e. in the case of a user transition to the advertiser's resource. [8]

As part of the monetization, Yandex acts as a service (YAN) allowing to place ads units on partner sites. That is, the partner site is a platform where advertisers show their ads, while Yandex acts as an intermediary between advertisers and site owners.

Google also offers a broad toolset for promoting products and services to the Internet markets. Like Yandex, Google has its own contextual advertising service called Google Adwords, which works on the same principle as Yandex.Direct, in particular, it allows to place advertisements on Google partner sites and in search results. In addition to Google Adwords, the

company has an AdMob service for placing ads in mobile applications for devices on the Android and IOS operating systems. Google also owns the well-known YouTube video hosting portal, which, itself, is a powerful channel for promoting products and services through the placement of videos. Another interesting fact is that videos, posted on YouTube, also require promotion through special media marketing methods. It is also necessary to mention the Google service which centralizes in itself the income, obtained through working with the services listed above, this is Google AdSense. In addition to the user's virtual bank, which allows to accumulate and allot their income, AdSense is a platform that allows to place ads from other advertisers of Google partners on the user's websites. All this makes AdSense a powerful system of analytics, accounting and allotment of finances, as well as a serious advertising tool, that allows to earn on their sites. [9]

Do not forget about the social networks Vkontakte, Facebook, Twitter, etc. that also have their own advertising tools. For example, it is possible to promote digital products in social networks by delivering the necessary information to users through hashtags, as well as using target advertising, offered by social networks.

In addition to the Google and Yandex services described above, there are still a huge number of third-party tools, that allow to promote, sell and monetize digital products.

In the course of the author research, the most effective services were detected in terms of the investment / income ratio. First of all, these are services that allow to make money on push-notifications. The service code is placed on the user's site, after which a subscription to push notifications for visitors emerges on the user's site. Advertisers pay the site owner for each click from the site visitors on push notifications. [10]

Also, monetization of the site through the use of CPA systems showed greater efficiency. CPA (Cost Per Action) is a payment model for online advertising. The partner's web site contains materials from an advertiser, registered in the CPA network. The advertiser advances conditions, under which the site owner receives a reward. As a rule, the site visitor should go to the advertiser's Internet resource by referral link by clicking on the advertising banner, placed on the partner's web site, and then perform some action, necessary for the advertiser (for example, a purchase), after which the site owner (network partner) is paid the agreed remuneration (for example, a percentage of the purchase price). As in the case of push services, CPA networks act as an intermediary between the consumer and the seller. [11]

The author also analyzed monetization by placing teaser ads on the website. This type of advertising is undesirable because it involves placing on the site a large number of banners of dubious content. The word "Teaser", itself, is derived from the English word "teaser", which translates as a bully, intriguer. Usually, such banners attract visitors with an intriguing slogan and a shocking image that prompts to go to the advertiser's site.

Such banners are usually placed on the “trash sites”, they violate the design of the site, its usability and are negatively perceived by the search networks.

With such a variety of services, that allow to monetize and promote digital products, it is actual, for any internet marketer, to create the most effective model, in terms of profit and cost reduction, their combination.

According to the results of the research, the following model was built (see Fig. 3)

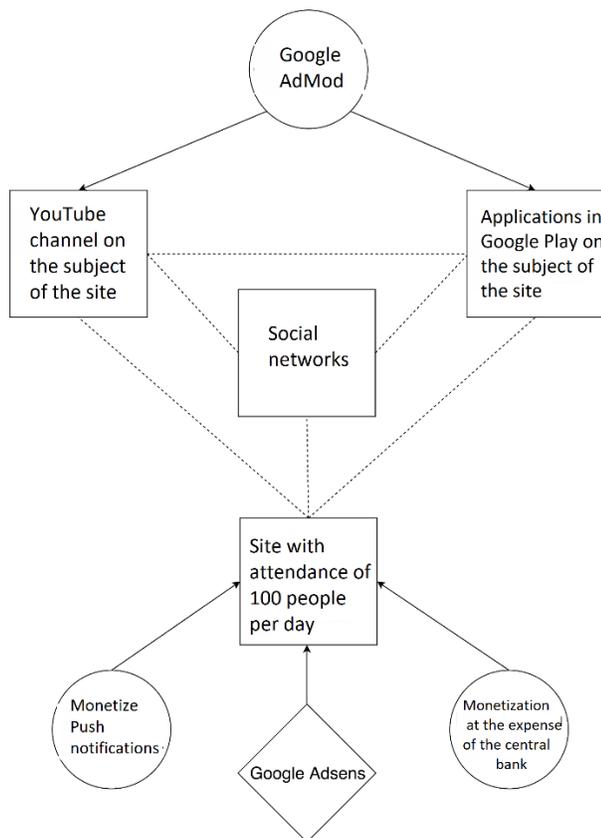


Fig. 3. Model of promotion and monetization of digital products.

#### IV. DISCUSSION OF RESULTS

Figure 3 shows the optimal, from the point of view of the author, model that allows to effectively monetize digital products, which are: a website, applications in Google Play and videos on YouTube-channel, united by one theme. The advantages of digital products on the same subject-matter are, that traffic moves from one product to another, thereby increasing attendance and, as a result, monetization, i.e. effect from services. The dashed lines in the diagram indicate the connection of mutual advance, the arrows - the connection monetization.

The efficiency of this model lies in the fact, that it does not require significant financial investments. So for placing mobile applications on Google Play, you need a license of a Google developer cost \$25, and the cost of a license for the designer of mobile applications Construct 3, will cost \$99 per year. To create videos there are a large number of free software products.

The model does not present contextual advertising services from Google and Yandex, because, to a greater extent, they are aimed at generating traffic to selling sites, while under the terms of the research the site is not selling. Of course, you can attract traffic through contextual advertising and on a non-selling site, but this is not advisable, because expensive. Contextual advertising is based on the principle of auction i.e. in search results, the placement of the contextual ads depends on the bid that the advertiser made at the auction — the more the higher. In 90% of cases, advertisers participate in the auction as they are owners of selling sites, that derive their profit from the difference in income from product sales and advertising costs. In this regard, bidding on contextual advertising auctions, especially for sales queries, is very high. Such costs will not be able to be covered by earnings from the monetization of a non-selling site due to the relatively small attendance of the site (1,000 people per day).

As the main means of monetization, the author suggests using Google services. First of all, this is due to the fact, that Google owns the market of mobile applications Google Play, as well as the YouTube video hosting portal, which makes it possible to effectively monetize digital products, hosted on these sites (mobile applications and video clips). While Yandex does not have a decent competitive offer in this regard.

Social networks, in this model, are presented as additional traffic generators. They should upload information from the site, as well as videos from YouTube channel (advisable in automatic form).

Services for the monetization of the site by subscribing to push-notifications, as well as by placing advertising materials on the site of advertisers from CPA networks, are effective for the reason, that they do not require any financial investments at all. At the same time, push-notifications increased the author’s income from monetizing the site by 50% compared to the income from placing Google AdSense ads units. Also, these types of advertising, in contrast to the teaser, do not affect the banner spamming of site, because of which it can fall under the filters of search systems.

#### V. CONCLUSIONS

It can be said for sure, that the model, built by the author, is economically effective because it allows to monetize digital products with minimal cost. In the course of the research, more than 50 services of monetization of digital products were studied and, based on the SWOT analysis, their strengths and weaknesses were detected. The constructed model fits well with the classical marketing theory of 4P (Marketing mix).

Monetization of a digital product is, in fact, a payment for its use, the personification of its price. Mutual promotion of digital products looks perfect in terms of marketing because its implementation requires only the production of new high-quality digital products and the improvement of existing ones (increasing the content of the site, improving its usability, making new videos, releasing and publishing the application on Google Play). Popular, respected online resources such as Google Play and YouTube were selected as placements for digital products. All this speaks about the consistency of the model and the possibility of its application in business in general and digital marketing in particular.

## **References**

- [1] Reema Aswani, Arpan Kumar Kara, P. Vigneswara Ilavarasan, Yogesh K. Dwivedi, "Search engine marketing is not all gold: Insights from Twitter and SEOClerks" — INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT Volume: 38, Issue: 1, Pages: 107–116 <https://www.sciencedirect.com/science/article/pii/S0268401217304048>
- [2] L. Sullivan «Report: Companies will spend \$65 billion on SEO in 2016 Media Post (2016)» <https://www.mediapost.com/publications/article/273956/report-companies-will-spend-65-billion-on-seo-in.htm> (Accessed 30 March 2017)
- [3] J. DeMers "The SEO industry is worth \$65 billion; will it ever stop growing?" Search Engine Land (2016) <http://searchengineland.com/seo-industry-worth-65-billion-will-ever-stop-growing-248559>. (Accessed 30 March 2017)
- [4] Top 20 countries with the highest number of internet users / [Electronic resource] - Access mode: <http://www.internetworldstats.com/top20.htm>
- [5] GSMA Association / [Electronic resource] - Access Mode: <https://www.gsmaintelligence.com/>
- [6] Association of Online Trading Companies / [Electronic resource] - Access Mode: <http://www.akit.ru/category/analytics/>
- [7] M.Video online sales showed record growth over the past two years / [Electronic resource] - Access mode: <http://www.akit.ru/онлайн-продажи-м-видео-показали-рек/>
- [8] Electronic contextual advertising service Yandex.Direct / [Electronic resource] - Access mode: <https://yandex.ru/support/direct/>
- [9] Electronic service of contextual advertising Google Adwords / [Electronic resource] - Access Mode: [https://ads.google.com/intl/ru\\_ru/home/how-it-works/](https://ads.google.com/intl/ru_ru/home/how-it-works/)
- [10] Electronic Push Notification Service / [Electronic Resource] - Access Mode: <https://pushprofit.ru/faq>
- [11] Overview of the most popular partner CPA-networks / [Electronic resource] - Access Mode: <https://cpainform.ru/networks/>