

## Mobile Technologies in Implementation of Programs of Internal Tourism Development

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**Abstract:** Now a days great attention is paid to the programs of the development of domestic tourism, its informational support, the development of new tourist products. But in spite of efforts in this direction, the population of Russia still has not enough information about tourist recreational opportunities of particular regions and in the whole country. Because of development of the mobile technologies and the mobile internet it is necessary to solve this problem with the help of the development of mobile applications in tourism, which will reflect all opportunities of every region of Russia as full as possible. The research has shown a deficit of development and use of the mobile technologies for progression of domestic tourism. The experience of the USA and China shows that the domestic tourism can reach 95%. It is necessary to create highly developed, transnational and modernized tourism industry for this. In the future the regions which invest in mobile technologies will lead in the market of Russian domestic tourism.

**Key words:** Domestic tourism, tourist flow, smartphone, content, mobile applications, tourist potential of the region

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### INTRODUCTION

The topic of the research is the active development of the domestic tourism of Russia, increasing sales of smartphones and pads in the world, increasing use of a mobile device, development of the mobile content's market. It raises appeal of development of applications, as a way of raising competitive for the final customer. According to the world tourism organization UNO (UNWTO) in 2015 world tourist flow got the highest number 1.18 billion tourists, it exceeds the same index 2014 in 4.4%. The flow increased, despite world fear of the global terrorism threat propagation.

According to the world tourism organization, the flow of foreign tourists increased by 5% or 29 million arrivals. The total number of arrivals to the region in 2015 reached 609 million. The number of tourists who came to the Asia-Pacific increased by 5% or 30 million and reached 277 million. The South and North America also showed the growth of tourist flow by 5% or 9 million arrivals. This region had 191 million arrivals. The regions of the Middle East had also the growth of tourist flow. The number of tourist trips there increased by 3% and reached 54 million. In Africa there were 1 million more arrivals. And in the last year there were 3% more arrivals. At the same time the rates of Russia and Brazil which showed the growth of

international tourist flows in the last years, reduced the number of trips in 2015 because of economic crisis.

In 2015 in Russia the domestic tourist market has been developing which has recently begun. The 2015 year with its economic crises and unexpected geopolitical events has become for the Russian tourism the period which changed the paradigm of the industry and proved that the perspective is in development of domestic tourism.

The experience of different countries (the USA, Great Britain, France, Germany, Japan) demonstrates the advantages and opportunities of development of the domestic tourism sphere, but not only like a sphere, which gives employment, but also like a way of business development, profitable economic sector, sector promoting human development and improving production efficiency.

In 2015 the number of workplaces in tourism increased by 7.2-284 million. According to the World Travel and Tourism Council, in the last year the contribution of the tourism sector to the global GDP increased by 3.1% to 7.2 trillion US dollars. The researches show that the tourism growth in some countries advanced the economic growth of the country: this trend was registered in Iceland, Japan, Mexico, New Zealand, Qatar, Saudi Arabia, Thailand and Uganda. According to the predictions of the WTTC, in 2016 the

total contribution of the tourism sector to the world GDP will increase by 3.5% and again, the 6th year will advance the world economic growth.

**MATERIALS AND METHODS**

In 2016 the trend of optimization of the tour operator’s activity in Russia will go on, based on the recession of the Russian economy and consumer activity. The growth of domestic tourism will be increasing in this year. But the competitive contest between different Russian regions will take the first place. In modern economic conditions it is necessary to expect the growth of booking by consumers tourist services during the trip through Russia. But a potential customer knows only about the traditional tourist directions in Russia. The regional tourism development is contained by lack of adequate informational provision available tourist recreational resources and events.

The analysis of the market dynamics of sales of smartphones in Russia and the internet-traffic was made to identify the prospects for the development of mobile technologies in the tourism industry. The modern generation is the customer of tourist services, focused firstly on mobile devices, they use a mobile phone during the trip-not only for booking but also for studying and finding solution of different problems.

The development trends of tourist and hotel services show that now it is not enough for a good tourist company to offer websites for mobile devices. Changing customer preferences brought business to development of mobile applications for different purposes, which help to satisfy tourist demand (Xiang and Pan, 2011). The number of available mobile applications increases: Apple Apps Store и Google Play Market, at the beginning of 2015 the number of available applications had >1.4 million applications according to statistical source

Statista.com. This number shows the perspective of the market of mobile applications. According to Apple, at the beginning of 2015 developers of Apple Apps Store earned 25 billion dollars from sales of mobile application and games and it is not the limit.

According to Nielsen, the average time of use of applications is increasing and the average number of active used applications on smartphones is increasing too. Now, people use more applications and spend more time using it, it means that the interest of users in mobile applications increases and applications become the standard of using of smartphones.

**RESULTS AND DISCUSSION**

At the moment the main factors which exerts on the market of mobile applications are the falling economic development and the development of mobile access to the Internet. According to J’son and Partners Consulting, in money form the Russian market of smartphones in 2015 increased by 6% in comparing with 2014. The low-cost kinds of smartphones (it is possible to buy devises of elementary level less than 2000 rubles) helped to keep the market and customers who became more receptive to prices in crises.

At the beginning of 2016 some producers of smartphones applied for a new increase of prices for products in Russia by 15-20%. Because of increasing cost of devises and decreasing purchasing power the tendency of 2015, the retention of high demand for low-cost smartphones will take place in 2016. The market content of smartphones in 2016 will depend on the further macroeconomic situation in the country and the ruble. Despite this, according to J’son and Partners Consulting’s predictions, by 2020 the smartphone market will have increased >70% against 2015 (Fig. 1).

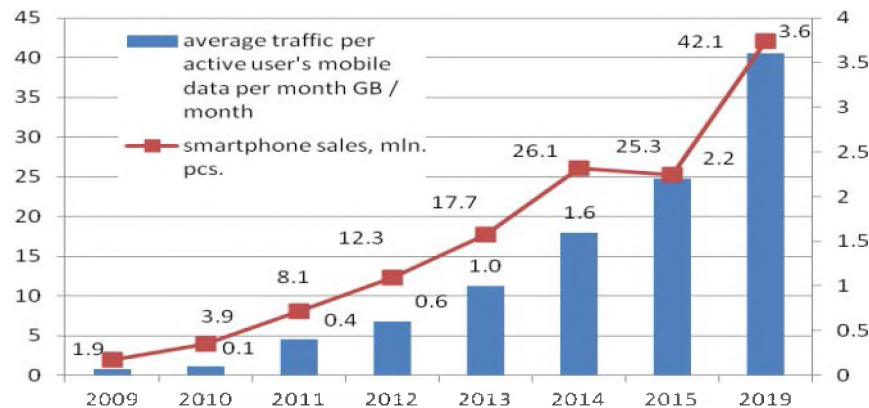


Fig. 1: The content of the Russian smartphone market (million items) and the average traffic per one active user of mobile data transmission in a month (GB/month)

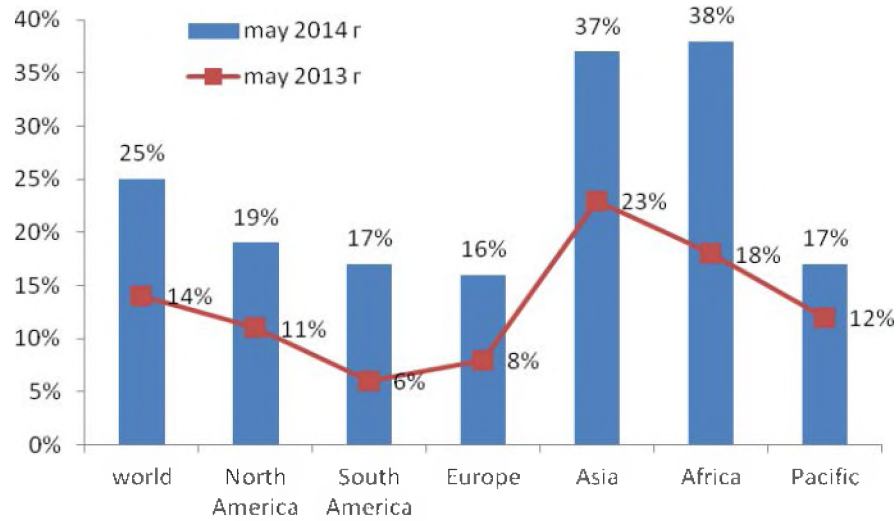


Fig. 2: The share of mobile and general Internet traffic in a regional context, 2013-2014

The popularity of the mobile Internet is increasing in the world at a rapid pace. If in 2012 a user spent in the mobile internet 74.4 min in a day, in the second quarter of 2014 this factor increased 108.6 min in a day, it means it increased almost in one and a half times, according to Statista.com. The active subscriber base of mobile data is growing faster, than on traditional PC: use of the mobile Internet in the world increased by 36% for 2011-2014. In 2014 4% of Internet traffic was generated by mobile devices by 2019 a part of mobile internet traffic will make up 15%, according to Cisco. The highest part of traffic, generated from mobile from the total Internet traffic is in Africa and Asia. This is because in this region a mobile device is more available to users, it gives access to the Internet and replace necessity in a more expensive laptop or PC (Fig. 2).

According to J'son and Partners Consulting in 2014 there were about 99 million subscribers of mobile data in Russia, the use the mobile internet has reached 70%. It is important to note that for the future analysts talk about reducing cost of the mobile Internet in Russia. The low price of traffic "opens" the mobile internet for any user of a smartphone or a flatbed PC.

Options of mobile application are not very different from options of sites, the purpose of both is to provide information about products and services which a company offers. The main difference of mobile application is that they provide more opportunities for presenting information to consumers. A mobile phone is always with a user and if a phone is networked, this owner can always be interested in a

specific commercial offer. A certain advantage of a mobile app is that fact, that it can work without network connect.

In the nearest future smartphone and pad will become the main mean of finding information online. In consideration of this predictions, an increasing access to the mobile internet and popularity of location-based services, it is necessary to appraise all opportunities of mobile applications in tourism. Mobile applications have taken its place in many spheres of human activity and now are used not only for entertainment but also for doing business and making different advertising campaigns. Modern technologies allow to adapt applications for different mobile devices and make simple for human.

A mobile application is a program, which is installed on a particular platform with a specific functional and which allow to comply different actions. With the advent of WAP technology in 1997 in the market of cellular communication, the number of mobile applications and their developers began to grow. The ability of the Internet access by a phone allowed to install different applications on a device and games even those people who had no home computer. Moreover, WAP could work even on low-cost phones, therefore the number of users of mobile application has also increased.

According to the forecast prepared by PwC, the next generation of innovation solutions in the sphere of mobile technologies will direct on recognizing and designing of contextual situation of a consumer. Information about users in three main features the physical location, virtual

and social environment will be the main resource that will allow to create mobile applications and services with radically new features and capable to predict consumers' preferences. Mobile devices will be able to become really digital assistants.

Programs, positioning itself as mobile application are created under consumers' needs. There are no same consumers, so there are no same applications. In general we can divide some kinds of mobile applications subject to their orientation and functions: promo-applications for mobile devices, applications-events, applications-services, games, online-stores, mobile applications for business, other kinds: content applications, social networks, system applications etc.

In America a mobile application is used by every third traveler, in Europe-every fifth. Unfortunately, Russia is behind this rate (Pan *et al.*, 2011). According to our estimates, only the 15th Russian tourist uses mobile applications for travelling. In America and Europe the majority of travelers use mobile applications on the planning stage: look for and buy tickets, book hotels, Russian travelers use applications directly during the trip: (most often check flight status), they buy tickets and book hotels with the help of a computer.

Women (56.4%) use applications more often than men (43.6%). Mobile technologies are used by residents of cities from 24-55 years old with higher education, with average income or income above average, inquisitive with active lifestyle and travelling at least twice a year. Rostourism has developed a mobile application for the internal tourism. The application for IOS is called Top Trip Tip. The companies "Rus-Tour" and "Magazin puteshestviy" has already used the application Top Trip Tip. According to experts, tourist companies can use it to promote their own services. Now the application contains data about 28 regions of the Russian Federation. Users will be able to learn any information about the place, different facts, the history of the city, for example. Applications with photos and audio guides make any trip easier and more interesting and comfortable. This application allows to combine all the information for travelers through Russia. Functionalities of Top Trip Tip allow to plan the route during the trip and to note places of interest. It should be noted that the content of the application will be constantly updated (Vishnevskaya *et al.*, 2014).

The leaders of domestic tourism in Russia are the Krasnodar region, St. Petersburg, Moscow, the Crimea and the cities of "The Golden ring". But and other regions of Russia have taken an active part in the process of increasing the tourist attractiveness, creation of new tourist routes and attraction of tourists. Under the

Ministry of culture of the Russian Federation at the initiative of ATOR the committee of import substitution is created in tourism. Its main mission is to maximize the range of tourist opportunities of regions, to show tourists all variety of recreation in Russia.

At the moment the committee has got more than 80 regional routes and it is the obvious confirmation of interest to the tourism development in regions. The compliant routes are approved by an expert group of the Committee, which consists from large Russian tour operators. At the moment 11 routes are approved in Moscow region, Penza, Vologda, Tula, Kaluga, Yaroslavl, Belgorod, Voronezh, Buryatia and Cherepovets. In 2016 the Department of Domestic Policy of Moscow is going to develop mobile applications for tourists with which they will be able to book hotels and choose travel routes.

Now the mobile project Golden Ring is created. At the heart of the project the mobile technologies oriented on support and advance of internal tourism of the country are involved. The basis of this project is mobile technologies, direct on supporting and promotion of domestic tourism of a country. The other example is the project Terra study it is a guide for education abroad. The creators of this project note with its help any student can choose a foreign language course at the best price and book it free. There are more than 200 schools all over the world in the catalogue Terra study and this list is constantly updated. The design project Pilgrim XXI, dealing with added reality, which helps to improve experience of travelers and to get new knowledge and impression.

Online travel services are getting more popular among travelers. According to statistics, the percentage of booking of tourist services in mobile applications is increasing at an average by 50-60% every year. In the nearest future this position will define the strategy of tourism development. Development of the domestic tourism is limited by lack of informational resources, disclosing tourist and recreational opportunities of the country. The analysis of the market dynamics of sales of smartphones in Russia and the internet traffic to identify prospects for development of mobile technologies in tourism has shown that the popularity of the mobile Internet is increasing at a rapid pace in the world. The falling price of the mobile internet in Russia creates preconditions for use of modern mobile technologies to develop domestic tourism. Modern mobile applications are a powerful marketing tool that allows to solve a lot of problem: to create image, support brand, increase loyalty to it from consumers, optimize process of communication and to create a certain information space.

## **CONCLUSION**

In the future Russian regions need to use mobile technologies to succeed in the market of tourist services and hold the positions. The power of competition in the Russian market of online travel, as well as economic and political uncertainty which now has weakened traditionally high demand on tourist products, also talk about the need to reconsider the existing model of business. There is a necessity to make information space of domestic tourism with the opportunity to get information about all tourist regions, routes, facilities and events. It is important to note the availability of a mobile version of this resource and location-based opportunities of applications.

## **REFERENCES**

- Pan, B., Z. Xiang, R. Law and D.R. Fesenmaier, 2011. The dynamics of search engine marketing for tourist destinations. *J. Travel Res.*, 50: 365-377.
- Vishnevskaya, E., T. Klimova, E. Dumacheva and I. Bogomazova, 2014. Current issues in the development of modern guide using GIS technologies. *Adv. Environ. Biol.*, 8: 305-309.
- Xiang, Z. and B. Pan, 2011. Travel queries on cities in the United States: Implications for search engine marketing for tourist destinations. *Tourism Manage.*, 32: 88-97.