# Information Technologies: Leading Innovative Factor for the Development of Independent Tourism

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**Abstract**—Independent travel has blossomed and become an important movement in modern tourism. However, past research has never explored the use and impact information and communication technologies have on independent tourists.

The purpose of the research is to analyze the results of two surveys held in the Russian Federation that show the way different travel search engines, booking systems change the concept of modern tourism. This study illustrates that independent vacation planning is booming today's travel market, which is becoming more personalized, digitalized and independent from giant tour operators. The article discusses how internet users' requests in the search engines have changed within only one year and how these changes influenced people choice of accommodation and destination.

**Keywords**—independent tourism, information technologies, distribution channels, travel search engine, online booking system

#### 1 Introduction

Modern tourism has become a social phenomenon, or a lifestyle. It has shifted from the category of high-end product to the category of product available to a wider audience of consumers. Tourism is important for the country's economy due to the advantages that the economy enjoys with its successful development [2].

Tourism is altering from a massive to a more personalized thing. On the one hand, this happens because modern people are experiencing routine fatigue, they are stressed out, and thus, they are seeking for privacy and solitude while having a rest; on the other hand, a modern traveler prefers individual tours to standardized group tour packages, that meet his/her desires and wishes. The trend can be better explained by the fact that tourists are becoming more educated, knowledgeable, having a wider and more diverse tourist experience [11], [13] and [16] and therefore strive to gain a new unique travel background.

The dominant trend that drives the development of world tourism is the formation and growth of the tourism industry as an experience and impression industry. In other words, there is a transformation of the Services Tourism into the Experience Tourism [7] and [9].

Modern travelers are in search of new experiences, emotions, and feelings. Tourist services are valuable if their chain provides consumers with high-quality experience in a tourist destination (cultural, social, aesthetic, artistic, etc.). The value of the tourist experience is in its novelty, uniqueness and exclusiveness. The basis of the new tourist experience is the cultural and natural diversity of destinations, the queerness of resources, the originality of culture and cultural traditions, the creativity and technological effectiveness of the infrastructure, originality, friendliness and hospitality of residents and tourist staff [12], [14], [15].

Independent tourism has blossomed because of the rapid development of information and Internet technologies, the emergence of online booking systems, accessibility to information in general, as well as the growing number of offers in the tourist market [6], [10]. The development of Internet technologies has changed the ways of communication in the modern tourism. IT have not only reduced the importance of the location and volume of services sold, boosted their productivity and efficiency, coordinated the activities of different units, and improved interaction with partner organizations, but also helped emerge new distribution channels for products and services produced by subjects of the tourist market, and formed a new type of a consumer [5].

This trend expands opportunities and increases the profits of enterprises operating in the tourism industry. It contributes to the creation of a kind of communication platform for the interaction of potential tourists with the subjects of the tourist market, through which they have a wider choice and the possibility of direct influence on the unique tourist product they form, which in turn significantly increases the demand for travel. With the Internet Technologies a tourist can find the necessary information that will be a basis for making decisions [3]; [4], and allow to get answers to questions that arise at all stages of tourist activity: prior, during and post the trip. The shortcomings of the mass package tourism product offered by travel agencies-intermediaries are seen as important prerequisites for the development of independent tourism, such as: standardization, overloading of the tourism program or, on the contrary, too much free time; rigidity of excursions (limited excursions with only the so-called tourist minimum: the most popular historical and cultural objects in the destination); insufficient adaptation and development of routes for a number of socio-demographic groups of the population, including children, youth, etc.; limited travel objectives, etc. [1]. Efforts of tour operators to include exclusive elements into the program of a tour inevitably increase its final cost; as a result, such products are of lower demand. Independent tourism, being an alternative to package tourism, allows a tourist to focus on his/her own needs and interests within financial capacities [8].

As for the definition in its most general notion, Independent Tourism is framed as an individual or in a small group (no more than 10 people) journey (tour), the route and program of which is planned and designed by the tourist him/herself, in addition, all essential services are booked and purchased independently. Moreover, travelers are not members of a traditional tourist group and do not purchase a packaged tourist product (tour), which includes a range of services of transport, accommodation, entertainment enterprises, etc. [6]. The Federal Law of November 24, 1996 No 132-FZ (as drafted on

04.06.2018) 'On the basics of tourist activity in the Russian Federation', refers to Independent Tourism as 'tourism organized by tourists independently'.

## 2 Methodology

The objective of our paper is to research the factors that influenced the development of independent tourism in the Russian Federation. One of these factors is an increase in the volume of paid services for the population of Russia. Data on the volume of paid services of the population are taken from the report of the Federal State Statistics Service of the Russian Federation. Changes in the volume of paid services altered the way the Russians save for and plan their holidays. Information technologies, such as search engines, ticket/accommodation booking systems, and other services, have become an excellent tool for meeting the needs of the population. Survey held by the giant Russian search engine Yandex shows how user requests have changed between 2014 and 2015. According to the results of Yandex survey, (Table 1) today users are less interested in travel companies, travel packages or hotels, while we are witnessing a rise in the users' requests for booking and purchasing specific travel services, such as buying a plane ticket and hotel reservations. Search engine Yandex was chosen because it was the leader in the Russian segment during the period under review (http://gs.seo-auditor.com.ru/sep/2015/).

The article also presents the results of a sociological survey held by the National Agency for Financial Research. Respondents were questioned about *how* they plan their vacation. The survey results proved that independent vacation planning is becoming a sustainable tendency, especially within the age group from 18 to 44 years old. The latter can be explained by the following: Information technologies are rapidly developing and finding their way into all scopes of human lives. People are extensively using different devices (gadgets), moreover, services providing various travel products are emerging each year. As a result, travel services, which used to be available only at travel agencies, can now be purchased by anyone from his/her couch with a smartphone. Young people are more likely to use information technologies, since for most of them these are more familiar methods of finding information and purchasing services or goods. Furthermore, young people want to get unique experience from their trip, which ordinary tour operators cannot offer.

#### 3 Results and discussion

### 3.1 The Results of the Yandex 2015 Survey

There were huge changes in 2015 in the tourist market: Russians began to save on vacation, they began to travel less abroad and more within the Russian borders. The demand for travel better describes what is happening in other areas - the economy, politics, that is, changes in the tourism sector are an indicator of more extensive changes in the society. Yandex studied the tourist preferences of Yandex users from January

2014 to June 2015. All data are from a Yandex search engine and Yandex.Travel Service.

The study is based on the statistics of search queries. When people get ready for the trip, they search for a variety of things - from tickets and hotels to local cuisine and sea temperature. To take into account all requests for tourism topics, the company focused on sites that Yandex offered in search results in response to a particular request. The query was considered tourist if the user went to one of the 30 most popular travel sites (for example, tophotels.ru, tonkosti.ru, tury.ru, ayda.ru, tripadvisor.ru) or if the sites from this list exceeded the others on the first page results.

Thus, the study focused on travel in the broadest sense of the word and included both package and independent tours. These were a variety of tourism options – from cruises and safaris to kayak trips and trips to the country recreation centers. Finally, travel is not only a rest, but it can be any trip – business trips, personal affairs, and so on.

Judging by the wording of the search queries, there were two most important changes in the tourist market: first, people started to organize trips by themselves more often, and second, they began to look for cheaper accommodation options. The scale of these changes is illustrated by the examples in the table below (Table 1). The table shows the changes in the wording of tourist requests in 2015 in comparison with 2014. The table also gives the percentage of requests with these particular words among all tourist requests. Examples of queries are given in square brackets.

**Table 1.** Changes in the wording of tourist requests in 2014 and 2015

	Requests, the number of which decreased	Requests, the number of which increased
People started to organize trips by themselves more often	Requests for 'hotel vouchers' decreased by 11% Examples of requests: [Turkey Kemer vouchers, September], [vouchers Pegas tourist]	Requests for 'plane or train ticket' increased by 18% Examples of requests: [a ticket to Sochi from Kirov by plane for 1000 rubles], [tickets from Ufa to Anapa by train]
	Requests for 'travel agencies' decreased by 12% Examples of requests: [travel agency all Egypt in Egypt], [travel agencies at Ivanovo]	Requests for 'booking and hotel' increased by 20% Sample requests: [how to book a hotel in Stockholm], [how to book a hotel in English]
	Requests for 'last minute deals and tours' decreased by 21% Examples of requests: [last minute vouchers from Nizhny Novgorod to Crimea], [uletai.ru last minute tours]	Requests for the 'private sector' increased by 38% Examples of requests: [private accommodation in Abkhazia, private sector without intermediaries], [private accommodation at the sea in Sochi]
People started to save more on accommodation	Requests for 'hotels' decreased by 9%, for 'inns' decreased by 5% Examples of requests: [Sevita Hotel in Arkhipo-Osipovka], [Vietnam Nha Trang Hotels 4 stars, reviews]	Requests for the 'hostels' increased by 22%, the 'recreation facilities' increased by 5% Examples of requests: [hostel villa Saint-Exupery, Nice, how to book], [reviews about the recreation facility Donskaya]

Examples of requests: [the best hotel in Koh	Requests for 'cheap or economy-class hotels' increased by 15% Examples of requests: [the cheapest hotels in Istanbul, prices from 400 rubles], [economy-class hotel with kids in Crete]
Requests for 'hotel and review' decreased by 7% Examples of requests: [Georges Lvov Hotel reviews], [Montenegro hotel rating according to travelers]	Requests for 'hotel and prices' increased by 16% Examples of requests: [hotels with a pool in Divnomorskoye prices 2015], [the cheapest tour to the Club Sera and the price]

Source: Yandex Search, April - June 2015

One of the reasons for the development of independent tourism is the increase in the volume of paid services for the population. According to the Federal State Statistics Service, the volume of paid services for the population in Russia in 2014 was about 7.4 trillion rubles, and it even raised in 2015 - 2016, despite the decline in the real incomes of the population. (Fig. 1)

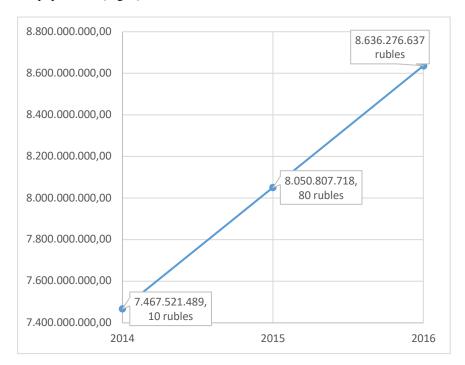


Fig. 1. The volume of paid services for the population from 2014 to 2016

Thus, the Russians did not deny themselves on vacation, but reduced the cost on services of tour operators. As a result, the demand for hotels that travelers book themselves has increased. This dynamics can be better illustrated by the Yandex survey in 2015 that proved that the Russians are now more inclined to plan vacation by

themselves; consequently, hotel-booking requests grew by 20 percent, while requests for travel companies fell by 12 percent. Moreover, most popular 'all inclusive' countries such as Turkey and Egypt were closed for the entry, which stimulated the development of independent tourism.

#### 3.2 Results of the study by the National Agency for Financial Research

There has been an increase in those who prefer to plan their own holidays, while the number of clients of travel agencies has not changed much over the past year. Furthermore, a larger number of the Russians on vacation are planning to rent a car. This is evidenced by the results of the study held by the Analytical Center 'National Agency for Financial Research' (NAFR) in March 2019<sup>1</sup>.

The percentage of the Russians who would organize their own vacations has increased since 2018: book tickets (from 28% to 34%) and rent housing (from 26% to 32%). The proportion of those who would go to a travel agency to organize the upcoming vacation has not changed: every third Russian will do so (29%).

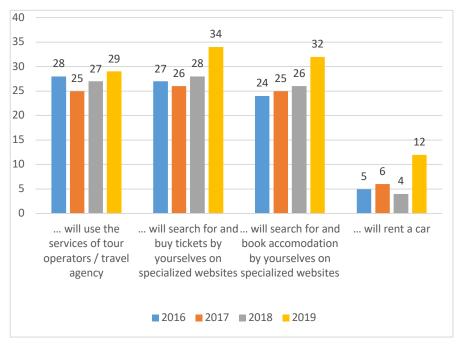


Fig. 2. The results of respondents' answers by year

Young and middle-aged people (up to 44 years old) most often prefer to organize their holidays by themselves: buy tickets (46%) and book accommodation (45%).

<sup>&</sup>lt;sup>1</sup> The nation-wide poll by NAFR was held in March 2019. 1.600 respondents were interviewed in 140 localities in 42 regions of the Russian Federation. Age: 18 +. The margin of error does not exceed 3.4%.

Among people older than 60, only every tenth person does so (15% buy tickets, 12% book accommodation). Residents of the Russian megacities are planning vacations on their own less often than residents of other cities (23% vs. 34% rent housing, 28% vs. 35% book tickets), but more often use the services of travel agencies (37% vs. 30%).

The number of the Russians who are planning to rent a car on vacation has grown (12%, an increase of 8 percentage points). This service is in demand among residents of Moscow and St. Petersburg who go on vacation (17%), among men (16%, 8% among women), as well as among young and middle age people (20%).

Question: "If we are talking about your upcoming vacation, how likely it is that you ..." the percentage of respondents who answered "Definitely, yes; Most likely, yes" (as a percentage) of all respondents.

Question: "If we are talking about your upcoming holiday, how likely is it that you ..." the percentage of respondents who answered "Definitely, yes; Most likely, yes" (as a percentage) of all respondents, by age group

Question: "If we are talking about your upcoming holiday, how likely is it that you ..." the percentage of respondents who answered "Definitely, yes; Most likely, yes" (as a percentage) of all respondents, by type of locality.

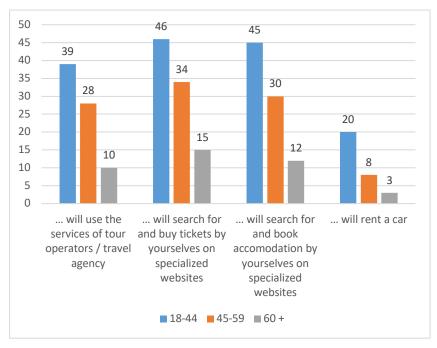


Fig. 3. The results of respondents' answers by age

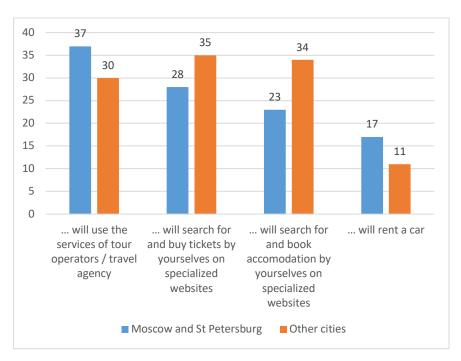


Fig. 4. The results of respondents' answers by city (Source: NAFR)

Hence, consumers, mostly young people, are opting for independent tourism. Though the demand for the services of tour operators is still not decreasing. The dynamic growth of independent tourism is associated with the development of information technologies that have found their way into all spheres of human activity.

#### 4 Conclusion

People have always been traveling independently, but before they did not have an opportunity to get a good, high-quality tourist product, so people themselves organized their rest and leisure. Independent tourism is not a new trend in tourism. Today, new tools have emerged in the form of the Internet, when a person can book tickets, a hotel, and choose a tour. Independent travel requires through organization as you need not only to book tickets and a hotel, but also to explore the city where the tourist travels around, read about the country, traditions, choose attractions that the tourist wanted to see, as it is not real tourism if you come to a place and learn nothing.

Each person has his or her own reasons for independent travel. Someone thinks that it is cheaper to book and book everything by yourself. However, this is far from being the case; tour operators buy seats in airplanes and book hotels at a price much lower than an independent traveler does. One of the main problems for independent travelers is emergencies. If something happens to a tourist, then he has no one to count on except

for him or herself. While, when the traveler tours around with a tour operator agency, then the manager should handle with all the issues immediately.

There has been a redistribution of demand in the tourism services market over the past few years: consumers are organizing their own vacations by themselves. A significant contribution to the transformation of the industry is made by the youth who prefer to book their own accommodation, buy air and train tickets, and plan their route in detail. However, it cannot be said that the demand for tour operator services is falling down: over the past three years, we have seen steady growth in this segment. However, the independent tourism market is dynamically developing. In many ways, the trend for independent travel is supported by the development of modern information and communication technologies, mobile applications and rental services that anyone can use when planning an upcoming vacation.

## 5 References

- [1] Beerli A., Martín J. D. (2004). Tourists' characteristics and the perceived image of tourist destinations: A quantitative analysis – A case study of Lanzarote, Spain. Tourism Management, 25, 623–636.
- [2] Boiko A.E. (2010). System approach to understanding tourism as a type of economic activity. Bulletin of Baikal State University. 3(71), 81-84. (In Russ.)
- [3] Chen J., Gursoy D. (2001). An investigation of tourists' destination loyalty and preferences. Journal of Contemporary Hospitality Management, 13(2), 79–85.
- [4] Cossío-Silva F.J., Revilla-Camacho M.A., Vega-Vázquez M. (2019). The tourist loyalty index: A new indicator for measuring tourist destination loyalty? Journal of Innovation & Knowledge, 4(2), 71-77. <a href="https://doi.org/10.1016/j.jik.2017.10.003">https://doi.org/10.1016/j.jik.2017.10.003</a>.
- [5] Frangos C.C., Karapistolis D., Stalidis G., Constantinos F., Sotiropoulos I., Manolopoulos I. (2015). Tourist Loyalty is All about Prices, Culture and the Sun: A Multinomial Logistic Regression of Tourists Visiting Athens. Procedia Social and Behavioral Sciences. 175, 32-38. https://doi.org/10.1016/j.sbspro.2015.01.1171.
- [6] Hernández J.M., Kirilenko A. P., Stepchenkova S. (2018). Network approach to tourist segmentation via user generated content. Annals of Tourism Research. 73, 35-47. https://doi.org/10.1016/j.annals.2018.09.002.
- [7] Mohamad M., Ali A. M., & Ghani N. I. (2011). A structural model of destination image, tourists' satisfaction and destination loyalty. International Journal of Business and Management Studies, 3(2), 167–177.
- [8] Moshnyaga E.V. (2013). The main trends in the development of tourism in the modern world. Bulletin of Russian International Academy for Tourism. 3 (9). (In Russ.)
- [9] Okumus F., Niekerk M., Koseoglu M.A., Bilgihan A. (2018). Interdisciplinary research in tourism. Tourism Management. 69, 540-549, <a href="https://doi.org/10.1016/j.tourman.2018.05.016">https://doi.org/10.1016/j.tourman.2018.05.016</a>.
- [10] Paül i Agustí D. (2018) Characterizing the location of tourist images in cities. Differences in user-generated images (Instagram), official tourist brochures and travel guides. Annals of Tourism Research. 73, 103-115. https://doi.org/10.1016/j.annals.2018.09.001
- [11] Ramseook-Munhurrun P., Seebaluck V.N., Naidoo P. (2015). Examining the Structural Relationships of Destination Image, Perceived Value, Tourist Satisfaction and Loyalty: Case of Mauritius. Procedia Social and Behavioral Sciences. 175, 252-259. https://doi.org/10.1016/j.sbspro.2015.01.1198.

- [12] Ryabova T.V., Ertman E.V. (2016) Social and cultural aspects of free independent tourism. Service Plus. Scientific Journal. 3(10), 3-9. doi: 10.12737/21117.
- [13] Tsaur S.H., Yen C.H., Chen C.L. (2010). Independent tourist knowledge and skills. Annals of Tourism Research. 37(4), 1035-1054. <a href="https://doi.org/10.1016/j.annals.2010.04.001">https://doi.org/10.1016/j.annals.2010.04.001</a>.
- [14] Yuksel A., Yuksel F., Bilim Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. Tourism Management, 31(2), 274– 284.
- [15] Zhang H., Fu, X., Cai, L. A., & Lu, L. (2014). Destination image and tourist loyalty: A metaanalysis. Tourism Management, 40, 213–223.
- [16] Zheng W., Huang X., Li Y. (2017). Understanding the tourist mobility using GPS: Where is the next place? Tourism Management. 59, 267-280, <a href="https://doi.org/10.1016/j.tourman.2016.08.009">https://doi.org/10.1016/j.tourman.2016.08.009</a>.

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