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Internet demand marketing analysis for Black sea resorts' touristy services

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Abstract. Internet usage percentage based on the latest statistics was 71% of the total population in 2018. That allows considering the Internet users' behaviour to be relevant to the whole citizens' behaviour accordingly to the large regularity. Therefore, the potential customers' preferences marketing research technologies and methods application for the Internet is of current interest. This article discusses Internet demand marketing analysis for Black Sea resorts' touristy services and correlation formulas that allow analyzing the tourist's attendance in the region.

1. Introduction

Internet using percentage based on the latest statistics was 71% of the total population in 2017. That allows considering the Internet user behaviour relevant to the whole citizens' behaviour accordingly to the large numbers regularity. Therefore, the potential customers' preferences marketing research technologies and methods application for the Internet is current interest point.

2. Materials and methods

In this paper, authors make the research of the Black Sea coast tourism services market demand in 2018 (also taking into account summer season and holidays). During the research there were collected data, methods and algorithms for data collection from search engines (Yandex), and used statistical state and non-government reporting systems. Used methods were content analysis, economic modeling, graphical analysis, statistic, techno-economic, system and structural analyses, expert estimation method. Also it was used applied economical, marketing and management researches approaches given by authors Aksen D, Altinkemer K Agatz N.A.H. [1], Fleischmann M. and van Nunen J.A.E.E. [2], Ayanso A., Diaby M. and Nair S.K. [3], Bell D R, Gallia S. and Moreno A. [4], Bowersox D.J., Closs D.J., Cooper M.B. and John C.B. [5], Boyer K. and Hult G. [6], Busse C., Schleper M.C., Weilenmann J. and Wagner S.M. [7], Campbell A.M. and Savelsbergh M. [8], Chetyrbok P.V. [9], Crainic T.G., Ricciardi N. and Storchi G. [10], Doty D.H., Glick W.H., Huber G.P. [11], Dumrongsiri A., Fan M., Jain A. and Moinzadeh K. [12], Easterby-Smith M., Thorpe R. and Lowe A. [13], Forman C., Ghose A. and Goldfarb A. [14], Gallino S., Moreno A. [15], Gao F., Su X.[16], Hamari J., Sjöklint M. and Ukkonen A. [17], Ishfaq R., Defee C.C. and Gibson B.J. [18], Jauch L.R., Osborn R.N. [19], Johnson M.E., Whang S. [20], Kämäräinen V., Punakivi M. [21].



3. The study of Internet demand marketing analysis for Black Sea resorts' touristy services

In previous publications authors made several researches on touristy sphere subject [23; 24; 25]. It was Internet demand marketing analysis for Black Sea resorts' touristy services that need future research.

The Internet is flexible and dynamically developing environment for information dissemination. Thus, data collection and analysis involve time-fixed data research, extraction, processing and analysis in different forms that are available in the Internet. In this paper authors used data about potential tourists of Black Sea resorts.

Yandex search system was used. To collect data from it we applied the wordstat data collection service. Wordstat is open system for accessing search queries statistics on Yandex system, which allows potential tourists and Internet users requests analyzing, based on their components qualitative specifications (query topic, word form, etc.) and quantitative ones (query frequency per month, query frequency history per year, etc.).

At the first stage statistical data were collected on the following Internet requests: "Recreation at Crimea" (figure 1), "Recreation at Caucasus Black Sea Coast" (figure 2), "Recreation at Bulgaria Black Sea Coast" (figure 3), "Recreation at Turkey Black Sea Coast" (figure 4).

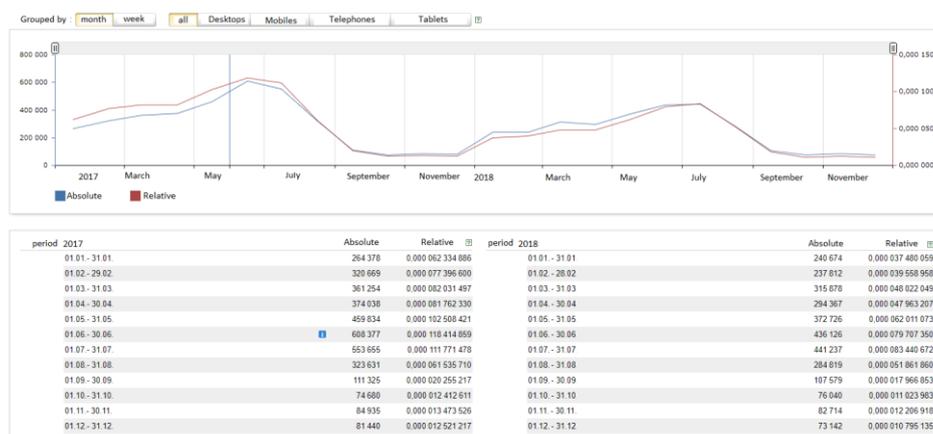


Figure 1. Internet inquiries statistical data estimation "Recreation at Crimea".

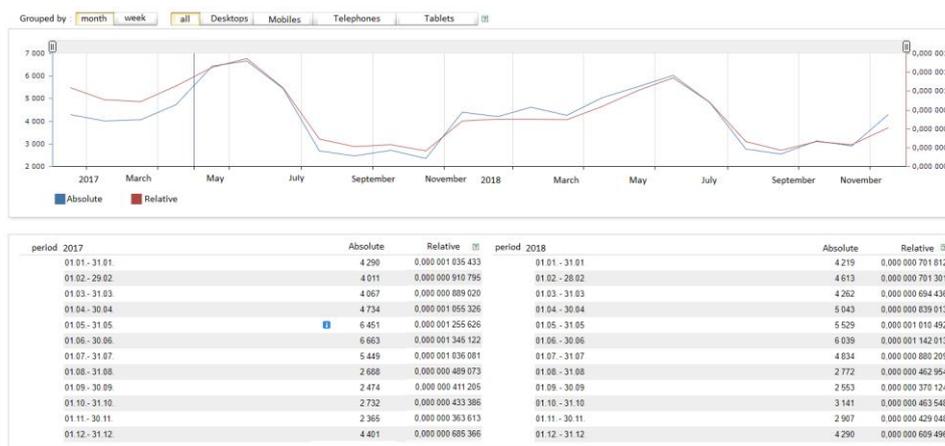


Figure 2. Internet inquiries statistical data estimation "Recreation at Caucasus Black Sea Coast".

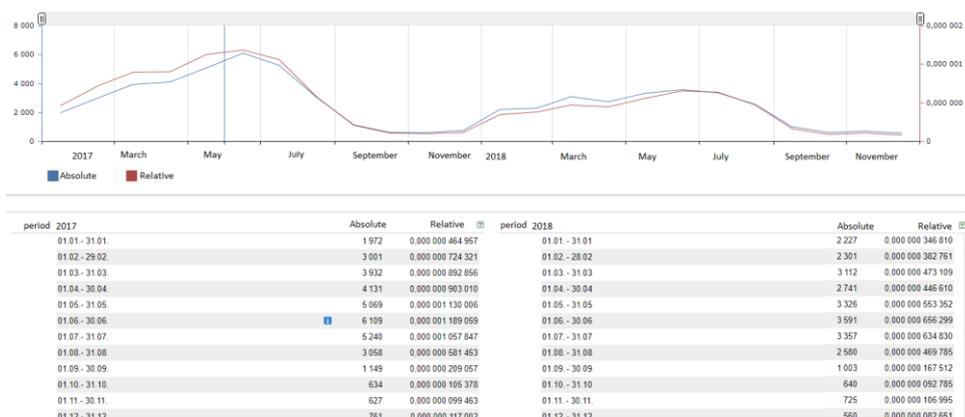


Figure 3. Internet inquiries statistical data estimation “Recreation at Bulgaria Black Sea Coast”.

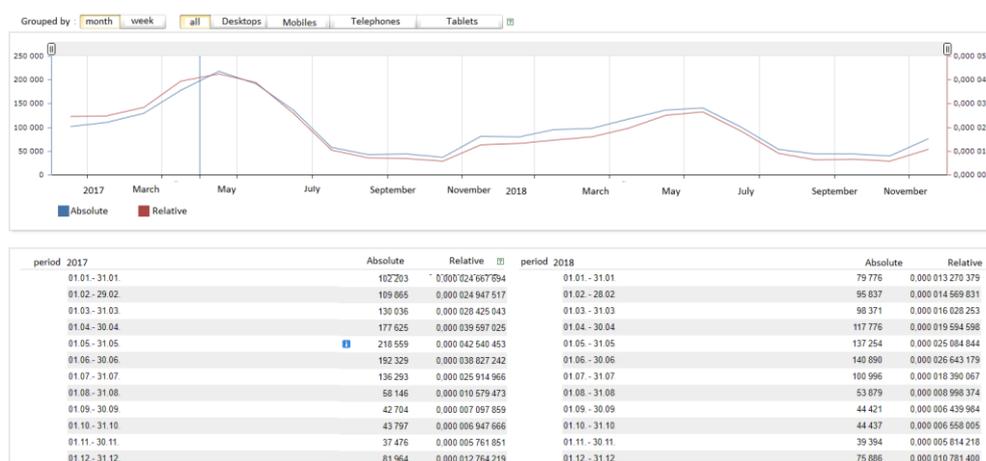


Figure 4. Internet inquiries statistical data estimation “Recreation at Turkey Black Sea Coast”.

The illustrated data allow conducting simplified correlation between requests concerning both the Crimea and Bulgaria. The ratio is about 1 to 135. That means the one of 135 people interested in recreation in the Crimea, also interested in recreation in Bulgaria. In the case of the Caucasus and the Crimea the ratio is 4%. That means that from 100% interested in recreation in the Crimea, only 4% are looking for recreation in the Caucasus. This situation may seem paradoxical, but it can be explained by the difference in people's perception of these resorts names, the regions tourists' activity specifics and different approaches in the of Internet promotion field.

Analysis of data and development of tourism services demand hypothesis in the Internet on the example of some tourist destinations of Bulgaria.

The demand for information services in the field of tourism business is largely determined not by the real state of destination, its infrastructure, etc., but by the effectiveness of the "online" Internet promotion. For equally popular market players there are an approximately equal number of visitors to their websites and other representations. This allows authors to conduct a certain ranking on the hotels of Bulgaria (analysis of 10 major players) to assess the degree of success of the Internet promotion (table 1).

From the table 1 it is possible to get considerable scatter of the demand for various hotels in Bulgaria. From the mentioned above it can be derived simply taking this spread average, and show the deviations from the average in percent, which will correlate with the success of the Internet promotion of a particular hotel.

Approximated data can be commented as follows: the leader of the list is Hotel Mriya, the number of people interested in information about it and the rate is “heated up” by 200%. That means the

number of internet requests is about three times higher than the number of people who really can afford services that Hotel Mriya offers. Conversely, the outsider of the list of Internet promotion is Hotel Nizhnyaya Oreanda. It is “unheated”, that means the number of potential tourists who might be interested in the services of this hotel is more than double the real clients of this hotel.

Table 1. Ranking of the effectiveness of Internet-promotion on selected hotels in Bulgaria.

Name of destinations	Positions in PS
Detelina Hotel	2539
Kini Park Hotel	2438
International Hotel Casino & Tower Suites	1320
HVD Viva Club Hotel	1281
Gifid Hotel Foresta	924
Family Hotel Piter	433
Hotel Erma	258
Iti Dolce Vita Sunshine Resort Aquapark	98
Joya Park Hotel	78
Grifid Metropol Hotel	35
Marina Grand Beach Hotel	2333
Oasis Boutique Hotel	393
Grifid Vistamar Hotel	3404

For Crimea the table of success factors for promotion is illustrated at table 2.

Table 2. Table of success rates of promotion at selected hotels in Crimea

Name of destinations	Rate
Hotel Mriya	196.9906423
Hotel Intourist	185.1765206
Hotel Bristol	54.40238197
Hotel Levant	49.84049341
Villa Elena	8.081667376
Villa Sofia	-49.35133986
Oreanda Hotel	-69.82135262
Hotel Opera Prima	-88.53679285
Health Resort Foros	-90.87622288
Hotel Nizhnyaya Oreanda	-95.90599745

Not always popularity in the Internet is an objective criterion of the quality of a particular object of tourism. In many aspects the success of a particular institution on the Internet correlates rather with its network image and the applied technologies of advertising. In subsequent research authors are going to study dividing of the so-called organic popularity and paid one, and advertising results. From the data given above it is possible to resume the importance of using modern promotion technologies in the Internet to achieve higher economic results.

The next part of this research is evaluation of the main touristy destinations of the Black Sea resorts with an assessment of the effectiveness of their position in the Internet. Comparison of the “temperature information” of the Black Sea resorts. In our study of Yandex Internet requests for recreation in certain regions of the Crimea, the Caucasus and Bulgaria located as follows (table 3).

Table 3. Investigation of Yandex Internet requests for recreation in certain Black Sea regions

The Crimea	The Caucasus	Bulgaria
42.91666667	30	26.25
BSSC	BSEC	BSWC
30.37278298	35.10754411	34.51967291

Analysis indicates significant “information under heat” of the Black Sea South Coast (BSSC), a good accompaniment of the Black Sea Western Coast (BSWC), and “overheating” of the Black Sea Eastern Coast (BSEC). According to the official statistics in 2018, 43% of guests rested on the BSSC, 22% on the BSWC and 14% on the BSEC. The fact that 19% of representatives did not report the data makes it simplistic to recreants imagine as: 49% the BSSC, 28% the BSWC and 22% the BSEC.

4. Conclusion

In this article, it was illustrated the possibilities of data collecting and analyzing through the search engine statistics system of Yandex Wordstat. Authors concluded the so-called information temperature of certain tourist destinations (on hotels examples) of the Black Sea resorts based on the data obtained from various sources. Grounded on these data, it is possible to make evaluations and decision of effective investment of touristy destinations in the Internet promotion, to increase the number of clients and to obtain optimal financial results. It is possible to resume that the Black Sea Southern Coast is the “underheated” region that is the investments in Internet promotion can be especially profitable. As for the resorts of the Caucasus, there is obvious more developed Internet infrastructure and support.

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