Online Tourist Portals of St. Petersburg and Leningrad Region: Current Status and Prospects

Anna Tanina1*, Svetlana Kalmykova1 and Olga Zaborovskaia2

1 Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russian Federation
2 State Institute of Economics, Finance, Law and Technology, Gatchina, Russia

1E-mail: tanina13@mail.ru
2E-mail: kalmykova_sv@spbstu.ru
3E-mail: ozabor@mail.ru

Abstract. Digitalization of tourism in the Russian Federation is primarily associated with the increasing importance of tourism, not only as a way to spend leisure time, but also as a branch of the economy that can generate a significant income and ensure territorial development. Despite a large number of diverse tourism resources in the country, tourism development was highly uneven, concentrating in a limited number of regions.

Information technology and especially the Internet has greatly toughened global competition over tourist flows. In today's world, tourists would rather visit a place about which they can get sufficient information and where a trip can be easily arranged. The role of national and regional tourist web portals, supported by relevant government agencies, is significantly increasing in this context. The tourist information infrastructure should not only provide up-to-date and complete information, but also ensure usability for the tourist (including independent).

Tourism within St. Petersburg and Leningrad Region is featured by rather close links between the regions and unification of tourist flows between them. Both regions have a significant quantity of tourist resources, which ensures development of various types of tourism. Creation of the 'Silver Necklace' interregional route consolidated further integration between tourist resources of the neighboring regions. Tourist portals of these regions, nevertheless, significantly differ in their content and interactive capabilities. As part of the study, the information presented on tourist portals of Russia, St. Petersburg and Leningrad Region in terms of implementing interactive services was reviewed.

1. Introduction

Until recently, tourism management in Russia was aimed mainly at using tourist resources and creating new tourist products. Traditional problems for Russian tourism (undeveloped infrastructure, visa-related difficulties, most regions lack popularity as attractive tourist areas), requiring participation of not only tourist industry representatives, but of the authorities at various levels as well, have not been resolved.

The Olympics and the FIFA World Cup showed that investments in tourism can become not only a source of the additional income due to the increase in the number of tourists involved in these events, but also serve as a means of creating a positive image of the territories and ensure a rise in tourist flows in the future.

The new 2035 Tourism Development Strategy [1] focuses on the promotion of Russian tourist products both for external and internal target audiences, which requires an intense use of digital technologies.

In recent years, the number of studies related to the digital technology impact on the development of various sectors of the economy, including tourism, has increased (Bataev, A.V., Gorovoy, A.A., Mottaeva, A. (2018), Jens Kr. Steen Jacobsen, Ana María Munar (2012), Saenko, N.R., Prokhorova, V.V., Ilyina, O.V., Ivanova, E.V. (2017)) [2-4].
The increasing use of online sources for travel planning has required special attention to the online content hosted by tourist organizations, including the use of mobile devices (Ana maria – Cătălina Radu, Andra Ileana Dobrescu (2014), Dan Wang, Zheng Xiang, Daniel R. Fesenmaier (2014), JungHwa (Jenny) Hong, Kalpesh Kaushik Desai (2019), Hyunae Lee, Namho Chung, Yoonjae Nam (2019), Ivan K. W. Lai (2013), Kang Sanghoon, Jodice Laura W., Norman William C. (2019), Peixue Liu, Honglei Zhang, Jie Zhang, Ye Sun, Mengyuan Qiu (2019), Stefan Gössling (2017), Youngjoon Choi, Benjamin Hickerson, Deborah Kerstetter (2017), Zheng Xiang, Dan Wang, Joseph T. O’Leary, Daniel R. Fesenmaier (2014)) [5-14].

The tourist information centers activities is of great importance in increasing tourist attractiveness of the territory, including the tourist portals format (Aneta Pawłowska, Łukasz Matoga & Elżbieta Stach (2015), Enrique Sigalat-Signes, Ricard Calvo-Palomares, Bernat Roig-Merino, Iván García-Adán (2019), Eunjung No, Jin Ki Kim (2015), Geqi Wu (2018), Korchagina, E., Shignanova, R. (2018), Luis Del Vasto-Terrientes, José Fernández-Cavia, Assumpció Huertas, Antonio Moreno, Aida Valls (2015), Tor Korneliussen, Michael Greenacre (2017) [15-20].

2. Methods
Methodological base of the study included analysis of the websites of the Russian Federation, St. Petersburg and Leningrad Region tourist portals, and an expert assessment of the interactivity level of these portals.

3. Results and Discussion
Hotels and airline companies, which have been using the Global Distribution System (GDS) for decades, became the leaders of digital technologies within the tourist industry. The spread of the Internet and the growing number of independent tourists have led to the popularity growth of such platforms as Booking.com, TripAdvisor, etc. The basis for building an independent tour is the possibility to obtain the most reliable and complete information on prospective places of tourist interest, hotels, restaurants, transport, etc.

The widespread use of mobile Internet and availability of smartphones have become prerequisites for the popularity of mobile applications, including travel planning. Mobile applications either serve as a convenient mobile equivalent to the company website (tour operator, airline company, hotel chain, navigation system, transport or concert tickets aggregator, etc.) or as an independent application with certain functionality (phrase book, currency converter, guidebook, geotracker, tour audio guide, loyalty program app, etc.).

Travelport's Global Digital Traveler Research revealed that 86% of travelers follow recommendations of travel experts when planning a trip, whereas 69% want to get as much information as possible about the city of their visit. And review sites have the greatest influence (85%) on Russian tourists [21].

A detailed monitoring of the information provided by the official sources (including tourist portals) is necessary for the effective promotion of a tourist area in these conditions. Based on these prerequisites, the survey of user friendliness of the information provided by tourist portals of St. Petersburg, Leningrad Region, as well as the information from the National tourism portal russia.travel, related to these regions, was carried out.

The National tourism portal contains the following basic sections: regions of Russia, travel guide, news, events, tourist routes, journal, as well as an interactive country map in 13 languages.

When choosing a region (Leningrad Region or St. Petersburg in our case), one can choose a suitable way of travel (on foot, by car, by bus, by water, by air, by rail, by bicycle, by horse) and the route type (military glory, gastronomic tourism, city tour, kids tour, culture, nature or religion tours). Titles of these filters do not coincide with the tourism classification by types, but they are easy to perceive and to understand by everyone [22].
Each route can be viewed in further detail. A brief description is given for each route, types of available transport, total duration and length are highlighted. Information is given on the route focus and its compatibility with other projects and routes (for example, with the 'Silver Necklace of Russia' inter-regional historical-cultural and tourist project). Information on each route can be shared via social networks (Vkontakte, Facebook, Odnoklassniki, Twitter).

Location and attraction type (monuments, museums, etc.) are indicated, a photograph is presented and a brief description is given for each tourist site. An interactive map with all attractions along the route and the path between them is presented on the left side of the page [23].

When scrolling a site page to another display object, the map pointer moves accordingly, showing objects location relative to one another and the route between them. In addition, the description contains information on the distance and travel time between the objects.

The portal also has an interactive country map with 'what' and 'where' option possibilities. Different types of tourism (mountaineering, equestrian tourism, speleotourism, etc.) and tourist attractions (obelisks, palaces, museums, etc.), as well as infrastructure objects (sanatoriums, water parks, concert venues, farms, etc.) and interesting places (cinematic places, places of extraction, abandoned temples, etc.) are highlighted. There is a possibility to select an object of interest from the list or find it independently, but problems with request processing similar occur periodically. A large number of objects can be found manually by changing the map scale. The claimed function of constructing a route to the selected object from any place did not function at the time of this writing, which turns the map into a standard online map with marked attractions and tourist infrastructure facilities [24].

Digital services presented by the Official Touristic Portal of Leningrad Region http://www.lentravel.ru/ were also evaluated.

The 'Directions' tab contains sorting by districts of the region. The 'Routes' tab - sorting by cities, districts, themes, ways to get around, accessibility for the disabled people. The 'Guidebook' tab provides information on popular destinations, attractions, infrastructure (accommodation, catering, tourist information centers, leisure, etc.), Leningrad Region profile, local crafts and arts, indigenous peoples, nature and climate. Information is available in 5 languages.

The site provides an interactive map of the region. Its usability was evaluated. One can choose the following groups of objects on the map: attractions, hotels, restaurants, tourist information centers, travel routes, ski resorts. The possibility of adding custom objects seems also interesting [25].

A route planner is implied, but it does not function properly. An object can be added to the route by choosing 'Learn More' tab, but when selecting 'Build a Route' tab, the website’s homepage with the ready-made route options is loaded.

The map interactivity is limited by displaying a picture and providing additional information on a tourist destination when selecting it on the map. But there is a difference in approach with regard to providing such information; an address (without any coordinates) and a telephone number are indicated as a contact information for the vast majority of attractions. Only when selecting the 'Learn more' tab for an attraction (but not for all of them) the site is specified, but there is still no hyperlink, i.e. the address has to be typed manually, but not by selecting a direct link.

Digital services provided by tourist portals of St. Petersburg were also analyzed. It should be noted that functions of providing information for the tourists in St. Petersburg are subdivided and thereby may cause difficulty in the initial information search. Tourists in most countries are accustomed to the fact that they can get basic information on the local tourist attractions in the Tourist Information Centers (as it is implemented in Leningrad Region, for example). There is a similar center in St. Petersburg as well, it is the St. Petersburg State Budgetary Institution 'City Tourism and Information Bureau' (formerly St. Petersburg State Budgetary Institution 'City Tourism and Information Center'), which was established in spring 2000 as the first unified cost-free public tourist information service in Russia. One of the SPb GBU 'GTIB' objectives is to integrate the latest information technologies in various branches of the tourist industry of St. Petersburg [26].
The Bureau’s website provides information on the location of 12 information centers of SPb GBU ‘GTIB’, located in close proximity to the city main tourist attractions, at Pulkovo Airport and the 'Marine Facade' terminal.

The map can be scaled, but there is no more helpful information for the tourists other than the TICs location. For more detailed information a different website has to be used: [http://www.visit-petersburg.ru](http://www.visit-petersburg.ru) [27].

This site provides information in the following sections: video, audio guides, thematic tourism, infrastructure (accommodation, gastronomy, transport), etc.

Detailed information is presented in the 'Accessible Environment' section, containing transport specificities, catering facilities, volunteer service contacts. The list of the downtown and suburban attractions, equipped for the disabled people admission, with a brief description of special programs, appears to be especially relevant. In addition, the 'Accessible St. Petersburg', 'Museum program for the visually impaired visitors', 'Museum program for the reduced mobility visitors' memo should be mentioned [28].

The selection of the attractions that are divided by categories, distance from the city center, visitation time, city district, TripAdvisor rating, and user ratings appears to be rather convenient for the users. Separately, one can choose among the cost-free attractions suitable for the people with disabilities, which are presented in the 'Special offers' section. Sections related to accommodation, leisure, gastronomy, etc. also have a similar set of options.

The 'Photos' [http://www.visit-petersburg.ru/ru/album/] and 'Video' [http://www.visit-petersburg.ru/ru/video/] sections could become an effective means of attracting the tourists, but there are only 10 videos available, and most of the photos refer to the events of 2016 and only one - to the event of 2019 [29, 30].

The 'Audio Guides' section contains audio materials for 61 attractions with their brief description. The description specifies which route an attraction belongs to. Besides, there is a possibility to download an audio guide, then go directly to the 'Routes' section to familiarize oneself with the map and descriptions of all related attractions.

The map is interactive for all the routes, which allows considering a route and objects of interest in detail.

The site supports personification and allows creating a personal profile in 'My St. Petersburg' section subject to registration or login with the Facebook, VKontakte, ESIA (Gosuslugi) account. After creating a profile, the client can select and save his/her personal sights of interest (from the list of 741 pcs.), events, accommodation, gastronomy, leisure and shopping facilities by selecting different search parameters [31].

There is a jivosite business manager available, to answer questions that may arise, which increases the portal-customer communication efficiency.

A large number of tourists increasingly use mobile applications while traveling. It was for them that the ‘Visit Petersburg’ application, which contains the same functionality and sections as the web version, was created. Nevertheless, the overall user ranking of the app is as low as 3.9 points. Basic complaints are: incomplete information on upcoming events and performance efficiency issues (slow response, crashes, etc.) [32].

Having considered the features of various tourist portals, it is now possible to evaluate their usability by the following criteria (Table 1).

| Table 1. Tourist portals interactivity assessment |
|-----------------------------------------------|
| Criterion (maximum points) | russia. travel | lentravel | visit-petersburg |
| information completeness and relevance (15) | 13 | 13 | 15 |
| mobile application availability (10) | 0 | 0 | 7 |
| interactive map with route planning and saving options (10) | 5 | 5 | 7 |
feedback, including online chat (10) & 5 & 2 & 8 \\
sorting objects by filters (10) & 10 & 10 & 10 \\
personal account (10) & 10 & 0 & 10 \\
integration with social networks (5) & 3 & 0 & 3 \\
website malfunctions absence (5) & 0 & 0 & 3 \\
audio guide (5) & 0 & 0 & 5 \\
events preview (5) & 5 & 5 & 5 \\
hotel booking, events tickets booking, transfer ordering, etc. (5) & 0 & 0 & 5 \\
'accessible environment' section (5) & 0 & 3 & 5 \\
number of languages (5) & 5 & 3 & 4 \\
Total & 56 & 41 & 87 \\

Source: compiled by the author

Table 1 shows that the largest number of interactive services is provided by the 'Visit Petersburg' portal. It is the most convenient for use by the city residents and visitors, although it has its drawbacks as well. Common problems for all tourist portals are the following:

- problems with social networks integration (ranging from its complete absence on the Leningrad region website, to various technical switching problems on the other two);
- poor performance or absence of a mobile application which reduces the mobility of information;
- omnichannelity problems, as information from different sources differs;
- complexity in using an interactive map (inability to add objects to the route, problems with saving information).

4. Conclusions

To summarize, it can be noted that the considered tourist portals provide a high-quality informative content, the presented photo and video materials are high quality and attract tourist interest. But it’s not enough for a modern tourist portal just to be informative; it’s necessary to maximize the potential tourist’s choice of attractions and route mapping. With tourists having an opportunity to use interactive maps and ability to build their own routes, it is necessary to ensure its full functioning and user friendliness.

In addition, it is essential to ensure omnichannelity of the service by integrating personal customer accounts on the tourist portals websites with social networks, mobile applications, as well as of tourist portals with each other, especially taking into account the growing popularity of interregional tourist routes.

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