Digitization: New possibilities for the Tourism industry

I V Barashok¹, L L Rudenko², E V Shumakova³, Iu V Orlovskaiad

¹PhD in Historical Sciences, FEFU senior lecturer, FEFU, 8 Sukhanova St. Vladivostok 690090 Russia
²PhD in Technical Sciences, FEFU senior lecturer, FEFU, 8 Sukhanova St. Vladivostok 690090 Russia
³PhD in Economic, FEFU senior lecturer, FEFU, 8 Sukhanova St. Vladivostok 690090 Russia
⁴FEFU assistant lecturer, FEFU, 8 Sukhanova St. Vladivostok 690090 Russia

Abstract. The purpose of our research is to study the state of digitalization in the tourism sector, the potential news and the impact that digitalization has on the tourism development. Digitalization in tourism makes the tourist business more flexible, adapted to modern conditions and competitive in a dynamic "digital world". Now it can be seen that the research object is digital technologies of travel companies as new business channels aimed at creating new consumer behaviors in order to improve the service quality and profit for tourist companies. The result of this research is to offer new digital opportunities for tourism businesses for example, the development models for digital platforms in Primorsky Krai. The main methods used in the research process are the analysis of publications of domestic and foreign sources on the digital economy problems of the, the comparative method, and content analysis.

1. Introduction

1.1. Digital transformation of tourism
Tourism is a complex of the economic realm, describing itself as "a cluster of production units in various industries that provide consumer goods and services demanded by visitors" [1,2]. The need to coordinate various actors of tourist activity (tour operators, service providers, consumers of tourist products) led to the inclusion of IT technologies in the tourism sector. The transition to the digital economy has accelerated the transformation of the tourism industry – moving from a traditional approach to making transactions to a new business model (e-business). A variety of e-business models have developed: electronic booking platforms for various information intermediaries; electronic platforms that integrate various businesses in the tourism industry; and a virtual community model that is an Internet platform for communicating consumers of tourist services. The opportunities offered by digital technologies in tourism demonstrate two aspects from the consumer point of view and the producer of tourist services. First of all the consumer spends a minimum of effort to search for a tourist product, can receive consulting services online, evaluate and select a tourist destination, and minimize the cost of using tourist services. On the second hand, digitalization increases the enterprise competitiveness in the tourist services market for tourist products producers [3]. The Covid-19 pandemic exacerbated the economic situation and caused serious changes in the tourism sector. As a result, the problems of digitalization of tourism at the
state and especially regional levels exposed. The purpose of the article is to study the state and possibilities of the tourism industry digitalization, its impact on tourism, and to propose a solution to increase the competitiveness of the regional tourist product.

The largest number of articles on tourism digitalization presented in foreign sources. The authors note the tourism industry transformation and consumer culture. Travel agencies, following the consumer, using artificial intelligence, data analysis, adapt their products to the customer needs. Now it can be seen that digital transformation encourages innovation in tourism [4,5]. Digital technologies have expanded distribution channel networks (social networks, tourist information portals, platforms for local use), which has a significant impact on the tourism sector growth [6,7,8]. In most foreign countries, tourism development depends on digital platforms, which are considered as a tool for effective interaction between different actors of tourism activity. The platform aggregates information about travel, booking, and various services. The Computer-Assisted Teaching and analytical systems, based on data and using algorithms, provide strategic management of the tourism sector [9]. Russian authors consider the problems of digital platforms functioning in the Russian Federation, their impact on the regional tourism development, and the possibility of using IT platforms for cluster activation of the tourist space [10, 11,12].

2. Theoretical part

2.1. Regional approach to digitalization in tourism

In Russia, inbound and domestic tourism are priority areas of development [13,14]. The development of domestic tourism is especially relevant in post-pandemic conditions. For this reason, the primary task of Russian regions is to create conditions that ensure the growth of tourist flows. Digital technologies allow us to solve this problem by promoting a tourism destination, a regional tourist product, personalizing tourist services and forming a positive image of the territory in the consumer's mind.

In recent years, the e-tourism segment has seen a steady increase in search demand for air transport, railway transport, and accommodation services by 15-25% per year. There is a significant increase in search demand for tours by 65% [15]. The overall picture in the Russian e-tourism market shows growth to a minimum of 20% per year [16]. However, digitalization is not effective in all regions. Based on the research findings conducted by the analytical center under the government of the Russian Federation, several barriers identified in the development of the digital economy in the regions. Among the key barriers that are typical for almost all regions, we can note training, financial barriers, and the development of information infrastructure [17]. The index of the business digitalization index in Primorsky Krai is 25 [18], which in General is a good indicator for the far Eastern Federal district, but the level of digitalization in different sectors of the economy differs significantly. In the tourism business, the process of mastering online technologies is slower and more complex, seeing that are mainly micro-enterprises, for which the digitalization costs are high [19]. The analysis of the seaside travel agencies websites showed that companies use the most accessible tools that are typical at the initial stage of digitalization: booking ready-made travel packages, social networks integrated with the site. It is extremely rare for travel agencies to use the online payment service, integrated with the site module of the feedback system, online consultants. There is no single information space in the tourist services market in Primorsky krai, it’s a digital tourism ecosystem implemented based on electronic platforms. It should be noted that electronic platforms are considered as an effective tool for solving the main strategic tasks of tourism facing Russian regions [1/1]. In order to find opportunities and conditions for the digital technologies activation of in the tourism business of Primorsky Krai, the authors studied the most popular online platforms that promote, book and sell tours in Russia. These are online platforms such as:

– Tutu.ru – an online platform that brings together travel service providers based on partnership relations: carriers (air, railway), distribution facilities, and leading tour operators in Russia: Pegas Touristik, Coral Travel, Biblio Globus, NTC Intourist, Tez Tour, and TUI.

– Online tours - a relatively new resource opened in 2012. The online platform offers millions of tours from 130 tour operators in 80 countries.
Level Travel - an online platform that integrates the largest tour operators (Coral Travel, Sunmar, Biblio-Globus, etc.), which provides personalized tour selection.

Слетать.ру. Service for selecting and comparing tours of the largest tour operators in Russia (more than 140). A distinctive feature is the wide coverage of Russian regions. Currently, the company opened 500 branches in 185 cities of the Russian Federation.

In our opinion, taking into account the successful operation of the studied digital platforms, it seems appropriate to test and implement its own model of a digital platform on the example of Primorsky Krai.

The digital platform model will allow the most effective promotion and regional tourism products sale, as well as the personification of tourist services, which will be economically beneficial for the sustainable reproduction of the tourist offer. It assumed that both tour operators and tourists could use the digital system directly. This system will list all tours/excursions of the Primorsky krai and for each of them will be presented the companies that offer and conduct them. Based on a number of parameters, the tourist will be able to book/buy a tour, choose the most suitable company by rating and leave a feedback of their trip later.

The advantage of the proposed digital platform will be that it will instantly reflect real information about the availability of seats at current rates with the possibility of reserving them. In practice, these two functions often separated, since instant booking is possible only after providing financial guarantees for payment. The system also allows you quickly arrange excursions and tours get full information about the application at any time by phone or via the Internet. Table 1 shows the digital platform fragment for tours model and excursions in Primorsky Krai.

| Outdoor activities | Tour name | Rating | Company /website | Tour conditions | Price | Payment system | Feedback |
|--------------------|-----------|--------|------------------|----------------|-------|----------------|----------|
| Climbing to the Pidan mountain | Travel company №1 “Foritour” www.foritour.ru | 8.6 | http://foritour.ru/tury-po-primoryu/aktivnyj-otdyx-2/vosxozdenie-na-pidam-1-den/ | 1700 | Card, cash | 4656. Tatiana Contacted the Foritour company, was satisfied |
| | Travel company №2 “Mirabeltour” www.mirabeltour.ru | 7.9 | mirabeltour.com/ru/primorskiy-i-habarovsky-krai/tury-po-primorskomu-krayu/vosxozdeniya-v-gory/odnodnevnie-vosxozdeniya/gora-pidan | 1500 | Card, cash, faster payments system | 79443. Mikhail We booked the tour online back in April. In the summer, we decided to climb the mountain. The impressions are indescribable. Great! |
| | Travel company №3 “Five star” www.5stars-vl.ru | 9.0 | http://5stars-vl.ru/rest-in-primorye/mountains/128-gora-pidan | 1500 | Online via the website, Primorye Bank | 89787. Arthur I always use the services of "five stars". Fast, high-quality, reasonable |
The difference between the model and existing digital platforms is that the proposed digital platform allows you to group tours by several criteria, it will speed up the search, make it more variable and targeted. The following items offered:

- type of recreation / tourism (active recreation, environmental, entertainment tourism, etc.);
- title of the tour company;
- tour company rating;
- conditions of the tour/excursions;

| Holidays at the seaside | Travel company №1 “Foritour” | 9.0 | http://foritour.ru/tury-po-primoryu/otdyx-namore-na-ostrovax/leto-more-ostrov-russkij/ | 650 | Card, cash 74563. Elena Booked the tour on the website of Foriter. In pictures, everything is beautiful, but in life it is even better. We liked it. |
| --- | --- | --- | --- | --- | --- |
| | Travel company №2 “Mirabeltour” | 9.8 | mirabeltour.com/ru/primorskiy-primorskij-i-habarovsky-skij-krai-po-gorodov-eksкурсии-po-vladivos-toku-veloprogulka-po-ostrovu-russkij | 750 | Card, cash, faster payments system 87698. Petr. Very convenient and fast delivery. Good company. The girls recommended a tour to the island. |
| | Travel company №3 “Five star” | 7.9 | http://5stars-vl.ru/page/543-ostrov-russkij-sreda | 1100 | Online via the website, Primorye Bank terminals, cashless payment, online store 7876. Antonina. An unforgettable vacation at the sea. Lucky with the weather. |
‒ cost of the tour/excursion;
‒ payment system;
‒ feedback module.

One of the most important positions is the company’s rating and the feedback module. Rating of a travel company is necessary to eliminate unfair competition among tour operators. In addition, the rating allows the consumer to determine the company choice. Reviews are a mechanism for building consumer confidence in the manufacturer. This is the idea of the seller (manufacturer) goodwill, his integrity, ability to conduct trade. Feedback (signal) provided through the review, which allows the manufacturer to develop a strategy for its future activities, improving the consumer value of the tourist product in accordance with the consumer’s requests.

3. Conclusion
Digitalization creates a singular advantage for the tourism sector in several areas. For the consumer and the tourist services producer is a customized process of interaction between tour companies and the consumer, which allows you to maintain the tourist’s loyalty and the business profit, increase the conversion rate and increase the security level. Digital technologies permit to engage in post-sale support, that is, support and receive feedback. For tourism destination is an opportunity for sustainable reproduction of a regional tourist product and promotion on the Russian market. The tourism business of Primorsky Krai needs to pay attention to the market digitalization and the formation of a unified digital ecosystem. The possibilities of the proposed model can be used at the initial stage of creating an ecosystem in the future, the network of actors in the tourist market can be expanded on the partner programs basis.

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