

## METHODS AND PRACTICE OF DEVELOPING AN INTERACTIVE MAP OF THE DISTRIBUTION OF TOURIST FLOWS

Tairova M.M.<sup>1</sup>, Abdulloev A.J.<sup>2</sup>, Kadirova N.R.<sup>3</sup>

<sup>1</sup>Associate Professor of Economics, Candidate of Economic Sciences

<sup>2</sup>Head of Department (PhD); <sup>3</sup>Student

<sup>1,2,3</sup>Department of Economics, Bukhara State University, Bukhara, Republic of Uzbekistan

**ABSTRACT:** Tourist flows have an impact on the development of the economy of the constituent entities of Uzbekistan, affecting the level of demand for related industries, contributing to the modernization of infrastructure and logistics, the introduction of progressive management and marketing technologies. As part of the topical issue of improving the tourism sector and managing tourist flows, we propose a more detailed consideration of the logistics system of tourism as an element of its infrastructure. Also, the management of logistics services in tourism is an objective necessity due to the complication of the tasks of managing a tourism enterprise, tourist flows and large amounts of information processed in the tourism sector. In this regard, it seems relevant to further consider the currently existing digital logistics services for managing the logistics system of tourism infrastructure and develop our own proposals to improve the efficiency of managing tourist flows in the context of further digitalization.

**KEYWORDS:** tourism, tourism development, tourism activity, Tourism potential, administrative center, demand, tourist, travel, the Silk Road, potential tourist, tourism industry, digitalization, logistics.

Recently, the growth in the mobility of the tourism sector has caused changes, which are expressed in a reduction in travel time, a decrease in prices for the purchase of our own vehicles, a reduction in the cost of transport services, the creation of new and changes in existing tourism products, etc., but these measures do not solve the problem of tourism management. flows in tourist destinations. In order to develop mechanisms for managing tourist flows using digital logistics services and solving the problem of overtourism of certain tourist destinations, we propose to create an interactive logistics map (together with Yandex maps and online navigation) with a system of indicators and tips for the movement of tourists.

First of all, it is necessary to define a common database, in other words, the objects to which the creation of an interactive logistic map for managing tourist flows will be directed, which is clearly presented.

In our proposed scheme, the emphasis is placed on: geopolitical, socio-economic and topographic position of a tourist destination, safety factors in a tourist destination and geolocation of attractions (places and objects of attraction for tourists).

Having examined modern digital logistics services, we noted that these services offer automation of various types of services (room reservation, ticket purchase, online excursions, etc.), a huge variety of maps with tourist attractions printed on them are offered. But we came to the conclusion that what a tourist lacks is precisely the opportunity to plan his trip, wasting time as little as possible (waiting in queues at the entrance to the museum, traffic jams on the way to the sights, an excessive flow of tourists that does not allow to see or even do anything photo for memory), taking into account that in the modern world the criterion of time is one of the dominant ones, given the dynamic rhythm of modern life. We believe that our proposed interactive logistic map will help to calculate the load on objects that a tourist plans to visit, and will help the spatial and temporal distribution of tourist flows, which is extremely important for their effective management. It is planned that the system of indicators will work for the tourist as an individual router, showing the congestion of a particular object and route on the way to it. The map will also provide a tourist with an opportunity to book objects and dock them in time.

The card we offer is aimed at a tourist planning an individual tour without the services of intermediaries (travel agents and tour operators). However, we are not trying to completely exclude travel agents and tour operators from the process of providing travel services. In our opinion, in the context of digitalization, it would be advisable to reorient intermediaries to a different type of activity, for example, strengthening work with corporate clients and providing information support for the process of providing tourism services by developing new digital services.

As the object on the basis of which we conducted the approbation, we took the destination - the cultural and historical center of Bukhara, which is one of the main points of tourist attraction in the country.

Bukhara city, as a tourist destination, faces two problems:

- intense tourist flow is not only a source of income, but also a factor influencing the living space of local residents;
- an intensive tourist flow creates a significant load on the urban infrastructure of Bukhara city, and there is a need to manage the logistics of mass tourism, as well as accompanying problems arise, manifested in the supply of tourists with resources and an uneven distribution of resources across a tourist destination, deterioration of the quality of the environment and urban socio-cultural situation.

The number of tourists arriving in Bukhara city may be comparable to the number of local residents or even exceed it. Almost all aspects of the city's life are affected by the intensive tourist flow: transport and housing and communal systems, supply, security issues, environmental conditions, etc., in connection with which it is necessary to search for solutions for the effective management of tourist flows.

We propose the creation of a new digital service - an interactive logistic map in conjunction with the existing digital services of online maps in the Yandex. At the moment, among tourists, the digital logistics service Yandex.Maps, a Yandex search and information mapping service, is in great demand. Let's consider its main opportunities for a tourist. The simplest digital logistics service of Yandex.Maps is an interactive 2D map of the center of Bukhara city.

By clicking on a certain circle, using satellite communication, you can see what exactly is presented on the map and what this attraction looks like, and it is also possible to build a route from the attraction to the nearest metro or to another object.

Another example of the digital logistics service Yandex.Maps is a volumetric interactive map of the sights of the center of Bukhara, operating in click-through mode.

A volumetric interactive map presents to the tourist all the sights in a scalable miniature, i.e. a tourist can not only see the name of the attraction, but also understand exactly how the object of interest looks like. By clicking (clicking) on a certain object that has attracted the attention of a tourist, it becomes possible to find out the type of this object, its history and mode of operation. It is also possible to plot a route from one object to another.

The success of tourism businesses undoubtedly depends on the ability to use new business models, new ways to attract employees and customers, and the ability to constantly find new ways of working.

The tourism industry operates on the basis of intensive communication with tourists and markets. The Internet has undoubtedly revolutionized the travel industry, becoming the main source of travel information when defining and choosing travel services. The use of information and communication technologies contributes to an increase in the number of options that are available to tourists when choosing holiday destinations, leads to a reduction in the gap between supply and demand and, therefore, allows the tourism industry to become more competitive.

Launched in the early 2000s, the first digital logistics services for tourists focused primarily on online booking and ticketing. Now information technologies completely change and set economic trends. It is difficult to imagine the organizational mechanism of the tourism business in the absence of modern communication links, digital solutions, software products.

Today, tourist activities are impossible without digital services. Using various special sites and applications, a tourist chooses a hotel, book tickets, finds transfers and receives other services. Most of the large travel companies are specifically engaged in the development of mobile applications that allow tourists to choose at a better price all the options they need and buy tickets than it is suggested to do on the company's website. Tourist enterprises, taking into account the existing high level of competition among sellers of tourist services, are engaged in the development of various special offers for consumers, promotions, discounts, bonuses, and also develop and implement digital logistics services.

Centers for training digital knowledge will open in all regions of the country. On April 28, President Shavkat Mirziyoyev signed a decree "On measures for the widespread introduction of the digital economy and e-government." The document provides for the accelerated formation of the digital economy with an increase in its share in the country's gross domestic product by 2023 by 2023. All healthcare institutions, schools, preschool education organizations, villages and makhallas should be connected to high-speed Internet in 2020-2021.

Currently, the digital services market has turned significantly towards the tourism sector and shows good development prospects. Modern digital logistics services are in great demand among tourists and are becoming a powerful tool that allows them to solve many problems: create the image of travel companies, optimize the communication processes of tourists and tourism entities, create a certain information space, save time and money, greatly facilitate travel and open up to tourists many possibilities.

The intensity of the use of Internet technologies is largely determined by the productivity of activities in the field of tourism business, for which reliability, efficiency of processing and transmission of the necessary information are

becoming increasingly important. It is difficult to imagine modern travel without the use of such digital logistics services. They help to automatically form trust ratings between all participants in the tourism industry, contributing to the unification of manufacturers and consumers of tourism services in the market as soon as possible.

The variety of digital logistics services and their broad capabilities determine the further development of digital technologies, since they are extremely in demand among the tourist flow.

Along with the development of digital logistics services, the following trends in the development of digital technologies in general have emerged, such as:

- installation of automated equipment in the offices of tourist enterprises;
- introduction in travel companies of practical automated systems for the creation, promotion and sales of tourism products;
- creation for employees of specialized systems for managing large databases;
- introduction of telecommunication systems for booking places in hotels and booking tickets for various types of transport;
- introduction and active use of multimedia marketing systems.

Based on the above, we can conclude that the modern tourism sector is under the influence of significant changes due to the introduction of new technologies. The successful operation of any tourist enterprise in the tourism market is practically unthinkable without the use of modern digital logistics services.

The use of digital logistics services in the tourism sector contributes to increasing the competitiveness of travel companies and travel agencies. Today, new technologies are mainly used in the booking system, the integration of communication networks, in multimedia systems and information systems interconnected with marketing and management. Their growing implementation ensures a quick proposal and promotion of a tourist product: advertising, distribution and sales of tourist services; there is an opportunity to find and open new marketing channels.

Speaking about the benefits for the tourist flow - the importance of digital technologies is due to the creation of opportunities for searching, collecting, operational analysis and transfer of information to the consumer of tourist services quickly and with a minimum level of costs<sup>1</sup>. Tourists receive services of a higher quality, their emotional perception improves, which again makes it possible to significantly strengthen the relationship between consumers and the parties providing tourist services.

Thus, the benefits of using digital logistics services are obvious both for tourists themselves and for participants in the process of providing tourist services.

## References

- [1] Abdullayevna, Q. Z., Anvarovich, Q. A., & Muxtorovna, N. D. Theoretical foundations of enhancing the competitiveness of the national economy. *gwalior management academy*, 87, 54.
- [2] Abdulloev, A. J., Tairova, M. M., & Aminova, N. B. Environmentally friendly and sustainable supply chain management in the platform economy.
- [3] Agzamov, A. T., & Rakhmatullaeva, F. M. (2021). Regional aspects of tourism development. *Academia Globe: Inderscience Research*, 2(6), 153-156.
- [4] Asliddin, A., & Suxrob, D. (2015). Role of agricultural marketing in economic development. *Economics*, (8 (9)).
- [5] Bayazovna, G. N. (2020). Marketing communication strategy and its essence. *Вопросы науки и образования*, (1 (85)).
- [6] Junaydulloevich, A. A., Mukhammedrizaevna, T. M., & Bakhritdinovna, A. N. (2020). Environmentally friendly and sustainable supply chain management in the platform economy. *Economics*, (3 (46)).
- [7] Junaydulloyevich, A. A., Furqatovna, O. N., & Baxtiyorovich, A. B. (2021, March). Training highly qualified staff in development of uzbekistan. In *E-Conference Globe* (pp. 288-292).

---

<sup>1</sup> Reichstein C., Härting Ralf-C. Potentials of changing customer needs in a digital world – a conceptual model and recommendations for action in tourism // *Procedia Computer Science*. 2018. Vol. 126. P. 1484-1494

- [8] Junaydulloyevich, A. A., Furqatovna, O. N., & Baxtiyorovich, A. B. (2021, March). Training highly qualified staff in development of uzbekistan. In E-Conference Globe (pp. 288-292).
- [9] Mubinovna, R. F. (2020). Investment as a factor of regional tourism development. *South Asian Journal of Marketing & Management Research*, 10(10), 71-76.
- [10] Muhammedrisaevna, T. M. S., Bayazovna, G. N., & Kakhramonovna, D. A. (2020). Goal and objectives of integrated marketing communications. *Economics*, 2 (45).
- [11] Muhammedrisaevna, T. M., Bakhriddinovna, A. N., & Rasulovna, K. N. (2021, March). Use of digital technologies in marketing. In E-Conference Globe (pp. 281-284).
- [12] Muhammedrisaevna, T. M., Shukrullaevich, A. F., & Bakhriddinovna, A. N. (2021). The logistics approach in managing a tourism company. *ResearchJet Journal of Analysis and Inventions*, 2(04), 231-236.
- [13] Mukhtorovna, N. D. (2021). Importance of foreign investments in the development of the digital economy. *ResearchJet Journal of Analysis and Inventions*, 2(04), 219-224.
- [14] Tairova, M. M., & Kayimova, Z. A. (2016). Foreign experience in managing higher education. the collection: Scientific and practical support for the integration of a modern learning environment: problems and prospects, Materials of international scientific and practical, 72-77.
- [15] Tairova, M. M., & NB, G. (2016). Rol'marketinga v sfere agropromyshlennogo kompleksa Uzbekistana. *Sovremennyye tendentsii razvitiya agrarnogo kompleksa*, 1616-1620.
- [16] Tairova, M. M., Sh, A. F., & Aminova, N. B. Discussion of tourism logistics based on the theory of separation and association of tourists and objects.
- [17] Tairova, M. S. M., Giyazova, N. B., & Dustova, A. K. (2020). Goal and objectives of integrated marketing communications. *Economics*, (2), 5-7.
- [18] Tairova, M., Asadov, F., & Aminova, N. (2019). Logistics system in tourism: features, functions and opportunities. *International Finance and Accounting*, 2019(5), 16.
- [19] Turobova, H. R., & Kodirov, A. A. (2016). The role of small businesses to improve the export potential. *Academy*, (12), 21-23.
- [20] Umarovna, T. M. (2020). Impact of covid-19 virus on tourism in uzbekistan. *Вестник науки и образования*, (23-2 (101)).
- [21] Urakova, M. H. (2021). Management accounting as an enterprise management tool. *International Engineering Journal For Research & Development*, 6(ICDSIIL), 3-3.
- [22] Urakova, M. K. (2019). Features of accounting processes of innovation and recommendations for its improvement. *Теория и практика современной науки*, (5), 71-73.
- [23] Абдуллоев, А. Ж., & Давлатов, С. С. (2016). Развитие сотрудничества банковского и аграрного сектора в Узбекистане. In Современное экологическое состояние природной среды и научно-практические аспекты рационального природопользования (pp. 4092-4095).
- [24] Абдуллоев, А. Ж., Таирова, М. М., & Аминова, Н. Б. (2020). Environmentally friendly and sustainable supply chain management in the platform economy. *Economics*, (3), 23-25.
- [25] Абдуллоев, А. Ж., Таирова, М. М., & Усманова, А. Б. (2020). Малый бизнес в сельском туризме и агротуризме. *Достижения науки и образования*, (5 (59)).
- [26] Абдуллоев, А. Ж., Таирова, М. М., & Усманова, А. Б. (2020). Особая характеристика агротуризма. *Вопросы науки и образования*, (11), 95.
- [27] Болтаева, Ш. Б. (2017). Значение обслуживания лизинга в сфере агара. in современное экологическое состояние природной среды и научно-практические аспекты рационального природопользования (pp. 1923-1924).
- [28] Кайимова, З. А., & Бахтиёрова, Г. Б. (2019). Инновационная деятельность и его преимущество. in наука-эффективный инструмент познания мира (pp. 42-43).
- [29] Кайимова, З. А., & Таирова, М. М. (2016). Инвестиционная деятельность коммерческих банков Республики Узбекистан. In *Современные тенденции развития аграрного комплекса* (pp. 1602-1603).

- [30] Рахматуллаева, Ф. М., & Болтаева, Ш. Б. (2014). Совершенствование системы управления персоналом на промышленных предприятиях. Экономика и финансы (Узбекистан), (5).
- [31] Таирова, М. М., & Кайимова, З. А. (2014). роль инновационного предпринимательства в развитии малого бизнеса узбекистана. Экономика и эффективность организации производства, (20), 52-54.
- [32] Таирова, М. М., Абдуллаев, А. Ж., & Гиязова, Н. Б. (2016). Особенности маркетинга в агропромышленном комплексе. In Современное экологическое состояние природной среды и научно-практические аспекты рационального природопользования (pp. 3871-3873).
- [33] Таирова, М. М., Кайимова, З. А., & Болтаев, Ш. Ш. (2016). Влияние социально-экономических факторов на развитие рынка труда в республики узбекистан. приоритетные направления развития современной науки молодых учёных аграриев, 1130.
- [34] Уракова, М. Х., Нутфуллоев, Т. Г., & Негматов, М. Ш. (2020). Совершенствование системы управленческого контроля в гостиницах. Вопросы науки и образования, (5), 89.