Arctic tourism: Prospects for the development of historical routes

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Abstract. The Arctic region is a platform for international cooperation in research, security, protection of environment, logistics and more. Arctic is the northern façade of the country, reflecting the beauty and splendor of Russian Federation. However, the tourism industry in the region started developing only recently, in the 1950s. It just so happened that at present the main consumers of tourist services in the region are foreign citizens. Tourism increases efficiency of international cooperation, forming connections and promoting the historical, cultural, civil, and patriotic traditions of different nations. Recently, a new trend in international research has emerged – roadology, linked to the development of tourism based on historical routes. For arctic tourism, this new development is extremely relevant. Climate-related transport difficulties in the Arctic region are the main obstacle to increasing tourist flows. The use of historical routes built on traditional routes and paths of nomads, military, Soviet Air Force, sports competitions or discoverers, facilitates creating most optimal and interesting tours already containing points of tourist interest associated with historical events. The article suggests different types of historical routes, the use of which will allow developing tourist routes and setting clear goals for tour operators forming them. When creating tourist routes, we can use expert scores and ratings of points of tourist interests. The article provides examples of Arctic tours, allowing increasing the attractiveness of the region.

1. Introduction

In planning strategies for development of a tourist destination or a tourist cluster, scientists often use historical routes. They allow concentrating efforts in promoting the brand of the territory, basing on places already familiar to people or important for them.

According to the National Standard of the Russian Federation, GOST R 50681-2010 "Tourist services. Designing tourist services", tourist route is a route of tourists (sightseers) developed in accordance with safety requirements and including visits to various historical places, cultural sites, natural landscapes, etc. for cultural-cognitive, wellness, sports and other purposes.

The freshly emerged trend in science – roadology – deals with research on the use of historical paths, roads, and routes for tourism development among other things. Roadology, according to R.G. Bailye, is the science or the study of roads or journeys and, by extension, the study of how they are used, where they lead, and the landscapes of small towns, tourist courts, dinners, and roadhouses. The purpose of roadology is to study the processes of exchange of culture, art, religion, philosophy, technology, language, science, architecture and all other elements of civilization along the historical routes during commercial activity. This branch of science has become an independent academic discipline only...
recently, when China began to develop the One Belt One Road initiative, and now it is taught at the university [3].

2. Results
The use of historical routes in tourism received a new momentum at the beginning of the 21st century. Designs of the most popular tourist routes are based on the development vectors of economic projects: One Belt and One Road [4], also called the New Silk Road [5], the Great Tea Road [6], the Alsib historical air divisions’ route [7] or American popular historic highway, Mother Road or Route 66 [8].

Tourist routes are a travel plan combined with a schedule of visits to points of interest (POIs) that have to be visited during limited time [1].

The tourist route should include not only the POIs, but also the route, departure and arrival points, the list of overnight stays, parking lots, etc.

The following figures contain examples of historical routes. As we can see from the figures 1-4, historical paths are present both in individual countries and continents, and in intercontinental context (The Belt and The Road, Alsib). All the routes shown in the figures are already used for the sale of tourist products, except for Alsib, which will begin to function after 2021.

![Figure 1. Economic Route One Belt One Road [9]](image1)

![Figure 2. The Great Tea Road [10]](image2)
Historical paths are an attractive and accessible way for tourists to get involved in national history. The use of historical routes, which take a sufficiently long amount of time, allows to combine several different types of tourism, selected by purpose, when developing a tour.

In the design of tourist routes based off historical ones, various classification schemes are used, for example, by ways of transportation: water transport; walking route; air transport; ground transport; combined movement along the route.

Naturally, when talking about historical routes, we can use, in addition to the currently familiar cars, trains, ships, bicycles and other types of transport, authentic forms of transportation: dog teams, sleighs with deer, horses, etc.

The next classification feature may be travel goals. For example, they can be military-patriotic, cultural-domestic, sports, cinematic, scientific, shopping, etc.

Naturally, the goals can be expanded, for example, the Alsib route is a compilation of historical and military-patriotic routes.

Routes can be classified by territorial basis: within one country, within the continent, transcontinental.

And by the duration of the tour: short-term – within 1 day, medium-term – up to 14 days, long-term – more than 14 days.

Creation of tourist services on the basis of historical routes is one of the most important areas of tourism development in Russia. Ones of the promising, but underestimated due to the complexity of route design, tourist destinations are the Arctic regions of the Russian Federation and the Arctic as a whole.

The potential of the Arctic region in terms of the creation of tourist routes based on historical ones is almost inexhaustible, as this area for many years attracted discoverers, scientists, military and
specialists in many other areas of activity, interested in conquering unexplored territories and natural processes.

As an example of the historical route we can list the research of the Northern Sea Route presented in Figure 5, which was crucial for the exploration and development of the Far North and in general for Russian presence in the Arctic [13]. According to the legislation of the Russian Federation, the Northern Sea Route is the historically established national unified transport communication of Russia in the Arctic [14].

![Figure 5. The Northern Sea Route [15]](image)

The tourist route in this direction began operating in 2014 and is now among the top 20 destinations for travel in the world according to Wunderlust. The 27-day tour takes place twice a year between the cities of Murmansk and Anadyr. The tour costs $21,900 / person in July 2020 [17]. In 2019, the Silversea Tourism Company sent tourists along the path of the pioneers of polar expeditions – the Northern Sea Route, offering to follow in the footsteps of famous foreign explorers of the Arctic, to one of the most remote and hard-to-reach places in Russia, as: Franz Josef Land, New Land, Medvezhie Islands, Wrangell Island, Kolyuchin Island and others. The route of the tour is shown in figure 6. Tour begins in the city of Anchorage in the USA and ends in the Norwegian city of Tromsø. The cost of the 27-day tour ranges from $37,800 to $63,900 per cabin, depending on the class chosen.

![Figure 6. Map of the tourist route "Journey along the legendary Northern Sea Route" [18]](image)

Since the main target audience of this route are foreign citizens, historical routes under developed are connected primarily with names of foreign researchers.

For the development of Arctic tourism, tours should be developed using different historical paths depending on the purpose of the trip. Points on the routes of tours are optimized taking into account the possibilities of modern tourism. We present them in Table 1.
Table 1. Examples of Arctic routes using historical paths

| Travel goals          | The name of the historic path | Departure point – arrival point | Tour content                                                                                                                                                                                                 |
|-----------------------|-------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Military and patriotic| Alsib Historic Air Route      | Great Falls (USA) – Krasnoyarsk (Russia) | Tourist route using light aircraft, following along the historic route of delivery of military aircraft from the United States to the USSR during World War II. Tourist route using water and light land transport in the POI, passing through the territories of the main reindeer herding regions in Russia (Chukotka, Yamal, Kola Peninsula). In every region tourists get to learn about the life of nomadic people and processes of deer migration. |
| Cultural and domestic| Historic reindeer herders' routes | Murmansk – Naryan-Mar – Anadyr (Russia) | A tour along the route of reindeer herders’ migration in the Yamalo-Nenets Autonomous Region [19] will allow to see and experience the life of indigenous peoples. It is a combined tour using land and air transport. |
| Sports                | Arctic Ski Crossing Expedition | Salekhard – Yar-sale – Tarko-sale – Cape Kamenniy – Salekhard  | This route is travelled using pneumatic all-terrain vehicles along the trail of a ski expedition conducted in 1994 as part of a high-latitude autonomous scientific and sports expedition "Arctic" led by Chukov V.S. [20]. |
| Cinematic             | "Chelyuskins"                 | Norilsk – Schmidt Island – Geographical North Pole – Schmidt Island – Norilsk | The combined water-railroad route, based on events that subsequently appeared in the feature film "Chelyuskins" (1984), which describes the disaster that occurred in 1934 with the steamer "Chelyuskin" and the feat of 104 people who survived the ice. |
|                      | Great Northern Expedition – Western Squad | Murmansk – northern sea route stops – Petropavlovsk-Kamchatsky – Vladivostok – Moscow – Naryan-Mar – Varandei – Dolgiy Island – Vaigach Island – Amderma – Naryan-Mar | The water tourist route tracking the footsteps of Arctic explorer Malygin S.G. The main purpose of the expedition was to describe the geography, geology, botany, zoology and ethnography of the Russian North. |
| Scientific            | Great Northern Expedition – Eastern Squad | Okhotsk – Petropavlovsk-Kamchatsky – Kodiak – Bering isle – Petropavlovsk-Kamchatsky | Water tourist route based on the historic route of V. Bering during the Second Kamchatka Expedition, conducted as part of the Great Northern Expedition |
|                      | Isai Ignatiev's Trade Expedition | Green Cape – Chaunska Bay – Green Cape | Tourist route along the trade historical route of Isai Ignatiev [21] in 1646. The merchant made silent exchange with the Chukchi. |

In order to most efficiently select POIs in the design of tourist routes to the Arctic, it is recommended to use the point-rating method, which consists of expert analysis of points of attraction and selection of the most optimal ones, based on a number of parameters. A sample point-rating evaluation is listed in Table 2.

Table 2. POI point-rating evaluation

| Options          | Weight \((a_i)\) | Departure point \((x_1)\) | POI name \((x_2)\) | ... | POI name \((x_{n-1})\) | Arrival point \((x_n)\) |
|------------------|-----------------|---------------------------|-------------------|-----|------------------------|-------------------------|

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Using this approach, it is necessary to first determine whether individual characteristics will be assigned weights based on their degree of importance; if this does not happen, \( a = 1 \). Then, we need to choose a system of points on the basis of which the criteria will be evaluated, we recommend to choose at least a ten-point scale.

Thus, the total value for each point of tourist attraction can be calculated using formula (1):

\[
f(x) = \sum_{i=1}^{n} (a_i \cdot x_i).
\]

(1)

Attractiveness of the tourist route, its cost and, accordingly, the profit of the tour operator depend on the accuracy of the POI assessment.

The use of historical paths has a number of advantages that will allow adopting them for tourism purposes, including:

1. Tour operator does not need to develop their own points of interest on the route. They, most likely, have already been formed through the course of history.

2. The target audience of the route depends on its goals and points of departure. For example, the "Great Tea Road" route begins in China, which allows us to assume the following: the main consumer of tourist services on this route will be tourists from China.

3. The ability to do an authentic tour or storytelling using the modes of movement, accommodation and nutrition that have been used historically.

4. Increasing citizens' interest in studying historical events, thereby forming civic identity and patriotic upbringing.

5. The resurgence of interest in "forgotten" attractions, their restoration for tourism purposes will lead to the emergence of accompanying infrastructure, and, accordingly, the creation of new jobs.

6. Establishing intercultural communication. This is particularly evident in the historic transcontinental routes (One Belt One Road).

These advantages in the compilation of tourist routes should be used to increase tourist flows to the Arctic region of the Russian Federation and boost the tourist attractiveness of the region and the country as a whole. The development of Arctic tourism will increase the interest of the country's citizens and will contribute to the development of the region as a whole.

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