▪ Journal of Competitiveness

An analysis of the tourism industry competitiveness of Czech regions

Tetiana But

Abstract

This article analyses tourism industry competitiveness in Czechia using statistical and economic research methods. The scientific contribution of this study is defined in three ways: (i) the study of the competitiveness of the tourism industry in the 13 Czech regions and Prague, using Porter's model of the five forces of competition, has identified a significant level of competition among regions and a small impact of substitute services; moreover, based on the model, the use of substitute services among neighbouring regions in the tourism industry outside the country is recommended; (ii) the result of an ABC analysis, which covers all functions of the tourism industry in the Czech regions, is to strengthen the positions of powerful regions in the tourism industry by reducing the cost of prices for tourism services; (iii) based on the results of building a strategic map of the tourism industry in the Czech regions, it is recommended to strengthen advertising activities for certain regions, which will increase the cash flow in the tourism industry in the Czech regions. The study confirms that the tourism industry is one of the industries that continues to benefit from competitive advantages, a finding which should benefit the Czech tourism industry.

Keywords: *Czechia, competitiveness, region, tourism industry, ABC analysis, strategic map*

JEL Classification: R11, Z30, Z32.

Article history: Received: August 2023; Accepted: September 2024; Published: September 2024

1 INTRODUCTION

The intensification of competition in the global and European tourism markets requires in-depth research both at the level of tourism enterprises and at the level of countries and regions. Competitiveness is an important scientific and practical research area today, a condition for integration into the globalised world economy. Tourism is one of the activities with a high level of competition. Most scientific works on this issue focus on studying competitiveness at the level of a travel agency or a tourist product. Even so, the issues of the tourism industry competitiveness of a country or a particular region are extremely important.

When studying the competitiveness of the Czech tourism industry, it is important to take into account the movement of tourist flows in recent years and in the post-Covid period. Tourism is an important economic activity at the national and regional levels. However, during the coronavirus pandemic, the tourism industry became one of the most affected sectors of the economy. Its share in the gross domestic product of Czechia dropped to 1.55% (CZK 95 billion), and employment in the sector totalled 215,200 people. Hired employees accounted for 84%, while the self-employed accounted for 16%. The overall impact of the pandemic on employment was milder. The share of tourism in total employment in the national economy fell to 4.02%. Many people were rescued, or at least helped in the worst cases, by various support programmes. However, within two years, one in ten employees and one in seven entrepreneurs quit their jobs. In the future, experts predict pressure to better optimise the workforce, which will have a positive impact on productivity growth (CSU, 2023a).

The share of tourism in the formation of the Czech GDP in the national economy in 2021 was 1.53%. This was a sharp decline over two years, as the same share reached 2.76% in 2019,

which was more than agriculture, forestry and fishing combined. Every 25th Czech worked in tourism (CSU, 2023a).
Total tourism expenditure reached CZK 155.2 billion, i.e. 13.7% more compared to 2022. This is the cumulative demand figure of all visitors who spent their holidays in Czechia. However, in 2019, this figure almost doubled (CZK 308.2 billion), reaching the highest value since the start of monitoring in 2003 (CSU, 2023a).
Inbound tourism consisting of foreign visitors accounted for 32 % or CZK 50.0 billion. The remaining 68 % of the funds (CZK 105.1 billion) were generated by domestic tourists (CSU, 2023a).
A study of the competitiveness of the hotel business in the Czech Republic shows that, in 2021, a total of 3 million overnight stays took place in Czechia through the booking portals of Airbnb, Booking, Expedia Group or Tripadvisor. Approximately 53% were local customers, while 47% were foreigners. In previous years, foreign residents prevailed (CSU, 2023b).
In the third quarter of 2022, the total number of arrivals at mass accommodation facilities increased by 11.1% (20.4 million nights) compared to the previous year, while the number of overnight stays increased by 7.4%. More foreigners stayed in accommodation facilities, but the number of domestic guests decreased compared to the previous year. Compared to pre-holiday 2019, the number of visitors in the summer months reached 97% (CSU, 2023c).
According to the Czech Statistical Office, 3.8 million tourists stayed in Czech hotels, guesthouses and camping sites in the first quarter of 2023, which is 1/3 more than the previous year. The number of foreign visitors increased by almost 90% compared to the previous year. However, the number of local tourists has also increased. In the first 3 months of 2023, tourists spent almost 10 million nights in accommodation, which is a quarter more compared to the same period the previous year (CSU, 2023d).
The number of tourists increased slowly after the covid crisis but has not yet reached pre-pandemic levels. Tour operators still lack 1/5 of the number of foreign tourists who came to the Czech Republic before the crisis (CzechTourism, 2023a).
The largest number of foreign visitors (by nationality) in 2023 came from Germany. Germans still accounted for a quarter of foreign tourists in the surveyed hotels (438,000 arrivals, index 188.3%). The second largest group is made up of guests from Slovakia (154,000, index 158.8%), and the third, from Poland (133,000 arrivals, index 170.5%). The next largest groups are citizens of the United Kingdom and Italy (CSU, 2023d).
According to CzechTourism (2023 a), the profit from the Czech tourism industry in 2022 reached approximately CZK 118 billion (EUR 5 billion) and increased by approximately CZK 51 billion (EUR 2.1 billion) compared to 2021. However, revenues have not yet reached pre-pandemic levels, whereas in 2019 they totalled approximately CZK 167 billion (EUR 7 billion). This income from the tourism industry includes money spent by foreign tourists in Czechia on accommodation, food and transport services (CTK, 2023).
In 2022, Ukrainians made the largest contribution to the Czech tourism industry, spending approximately 42 billion CZK (€1.7 billion). Germans took second place (approximately CZK 18 billion, or €750 million), and Poles came in third, with their contribution to the tourism industry amounting to approximately CZK 12 billion (€500 million). Slovakia is in the top five with 12.3 billion CZK, and the United States with approximately 3 billion CZK (Czech Television, 2023; Radio Prague International, 2023).
The largest expenditures of Ukrainians in the Czech tourism industry are related to the full-scale intervention of the Russian Federation in Ukraine. Tourists from other countries were among the most frequent visitors to Czechia before the studied period.
Czechia is still losing foreign visitors, especially customers from Asia, America and Russia (Czech Television, 2023).

Last year, the average expenditure per person per day by foreign tourists was around 1,900 CZK (€79), which is 300 CZK (€12.5) less than in 2021 (Radio Prague International, 2023).
But et al. (2023a), But et al. (2023b), But et al. (2024) proves the significant tourism potential of the Prague, Liberec, Kralovohradec, Moravian-Slezky, Zlín, and South Moravian regions. But only the capital of the Czech Republic, Prague, has a high level of competitiveness; it accounts for half of the foreign tourists coming to the Czech Republic. The overcrowding of tourists in Prague is explained by the use of modern technologies to transform the metropolis into a more pleasant place to live and visit. However, increasing the competitiveness of the tourist potential of the rest of the Czech regions depends on the strategic issues of the concepts of smart or intelligent cities, which remain exclusively in the hands of local governments within their independent competence. The study shows that when creating smart sustainable cities in the Czech Republic, it is advisable to focus on individual cities rather than regions. The highest degree of smart city implementation is achieved in cities of any size and does not depend on the number of residents.
This approach to the analysis of the competitiveness of the Czech tourism industry is explained by the dependence of tourism companies on digital transformation, the long-term success of which is now considered important when their leaders "rebuild" their companies - changing their talents, operating model and technical capabilities to support continuous innovation. Today, artificial intelligence is revolutionizing the advertising industry, promising large-scale hyper-personalized advertising. Some agencies are investing heavily in AI, touting the technology's ability to enhance creative work (Smaje & Zemmel, 2024).
Thus, the competitiveness of the industry is based on a more complex system of competitiveness components and interrelationships between them. In addition, the specificity of tourism is that its competitiveness depends not only on the activities of purely tourism enterprises and the internal organisation of the industry, but also on the internal and external environment of the country (economic, political, socio-cultural, technological, environmental, international, demographic, etc.) (Bezkhlibna, 2023).
It can therefore be assumed that the competitiveness of the tourism industry in the Czech regions is determined by the presence of the following:

-favourable economic, political, socio-cultural, technological, environmental, international, demographic, etc., conditions of the country;

- a general development strategy for the tourism industry and related industries;
- competitive advantages that allow producing a tourist product on the market that meets the requirements of certain consumer groups in terms of consumer value, innovation, cost, etc., and to offer this tourist product on the market;
- competitive tourism enterprises;
- competitive enterprises of related industries (But et al., 2023, But, et al., 2024, Burda et al., 2023).

2 LITERATURE REVIEW

Numerous studies of competitiveness in the tourism industry use different methods and with different results. Many international experts offer modern approaches to this topic. Studies of increasing competitiveness in tourism, presented in the works of such scientists as (Bertocchi, et al. (2023); Bezkhlibna, et al, (2018); Crnjar, (2018); Bolaky, (2012); Fernandez, et. al. (2020); Long and Qi, (2023); Gabor, et al. (2021); Sarancha, (2020); Luo, et al. (2022); Koerner, et al. (2013); Vasquez and Llorach, (2021); Vasquez, et al. (2021); Pol, et al. (2023). Some scholars study the ability of human capital to increase competitiveness in tourism. Others focus on a more detailed study of the factors that determine the competitiveness of a country. Or establishing a mechanism for regional cooperation in tourism. Other scholars assess the competitiveness of a particular country and provide recommendations based on the experience of more developed countries. Therefore, it is important to take into account countries in terms of their level of development and promotion of regional governance. At the same time, it is important to take into account the experience of rapid response to overcome the crisis gained during COVID-2019.

The problems and prospects of tourism development, taking into account international experience in the context of European integration, were studied on the example of Ukraine by Prychepa et al. (2022); But, et al. (2018).

A new tool for analysing the international competitiveness of tourist destinations based on the evolution of tourist flows and the adaptation of conditional β-convergence to the tourism sector while offering diagnostics in the short, medium and long term, was studied by De la Peña, et al. (2019).

Tleuberdinova et al. (2022) assessed the competitiveness of a tourist destination on the example of Kazakhstan based on the development of tourism competitiveness indices while taking into account internal and external factors, by quantitative and qualitative methods suitable for tourist destinations.

Phaosathianphan and Leelasantitham (2022) investigated competitiveness in terms of the user's continuous perception of the impact on tourism destinations, where they proposed a conceptual model based on four studies: the life cycle of the individual traveller, success, continued entry, and the impact of travel and tourism on destinations.

Grassini et al. (2023) proposed a formative and reflective framework for assessing tourist destination competitiveness (TDC) based on the combined use of the partial least squares method (PLS-PM) and the method recently proposed by Fattore, Pelagatti, and Vittadini (FPV) (Fattore, et al. 2011). The results of the analysis indicate that available resources are the main driving force of TDC, followed by created resources and supporting factors, and emphasise that the best rankings are for large cities with multifaceted tourism, as well as for sea and mountain destinations with cultural attractions.

Psofogiorgos and Metaxas (2015) examine competitiveness in detail, focusing on the opposing views of Michael Porter and Paul Krugman, who emphasise the geographical concentration of firms to increase productivity, innovation and exports.

Porter studied competitiveness in his classical works as practical recommendations on how to cope with competition for corporations, regions, nations, and more recently, healthcare and philanthropy (Porter, 1990, 1998a, 1998b, 2000, 2004, 2008; Porter & Ketels, 2003).

Porter's "five forces" have shaped a whole generation of academic research and business practice. He determined that competition for profit goes beyond established industry rivals and includes four other competitive forces: customers, suppliers, potential entrants and substitute products. In Porter (2008), the extended rivalry that results from all five forces determines the industry structure and shapes the nature of competitive interaction within the industry.

Putra et al. (2023) investigated the enhancement of regional competitiveness for gastronomic tourism through the use of Instagram as a social media platform that combines images with textual information, while analysing how regional tourism authorities share information about the diversity of traditional foods. Basle, (2023) studied the competitiveness of the gastronomic tourism destination on the example of Slovenia, Italy and Croatia based on the development of a new theoretical model - GADECOMP, which is able to measure the perceived quality of the gastronomic destination through its competencies, which are reflected in the offer of the gastronomic destination.

Romão and Nijkamp (2019) investigated whether regional innovation systems affect the competitiveness of tourist destinations in Europe. The results of the study indicate lower levels of productivity in regions where tourism services are more labour-intensive, while regions where education, innovation and productivity show higher levels are those where tourism gross value added is less important for the regional economy.

Kunst and Ivandić (2021) conducted a study of tourism competitiveness by the most used indicator of travel and tourism competitiveness index (TTCI) with the analysis showing that changes in the TTCI indicator are often not associated with changes in indicators related to the efficiency of the selected tourism activity.
Bednárová, et al. (2018) also found, based on this Travel and Tourism Competitiveness Index (TTCI), with a focus on Slovakia, that the TTCI is independent of tourism revenues, expenditures, or gross domestic product. Thus, the study identified improvements in the factors influencing Slovakia's competitive position. This experience is useful for other EU countries, but does not address the issues of improving the competitiveness of the Czechia.
Thus, Brelik and Grinberga-Zalite, (2019) determined the competitiveness of tourist regions in Europe based on the TTCI indicator, thereby identifying Poland's competitors and the strengths of rural tourism development in the country.
The significance of the tourism competitiveness index based on the statistical relationship between the TTCI and some of its component factors on national success indicators was investigated by Dempere and Modugu, (2023). This approach is useful for studying the impact of COVID-19, as it controls for overcoming the first wave of the initial surge of the pandemic. In particular, the impact of COVID-19 on tourism competitiveness has been studied in Gavurova, et al. (2023b); Grancay, (2020). The results of the studies showed that the image of the destination affects the increase in tourism competitiveness, as such places have a higher level of security, which is essential for tourists.
For example, Leon, et al. (2022) propose a new alternative method for measuring tourism competitiveness, the TTCI index. The authors believe that indicators such as tourism revenues, tourism contribution to GDP, and the number of international arrivals can only roughly assess tourism competitiveness. They propose to conduct principal component analysis, the DP2 distance method, goal programming, data coverage analysis, and boundary calculation. However, this approach does not take into account the absence of large tourist destinations in countries that are highly developed and highly competitive.
Nyanga et al. (2020) studied the relevance of business intelligence as an innovation that can contribute to the productivity and efficiency of businesses and travel agencies.
How to make your business more sustainable and competitive in the tourism market was studied by Mijajlović, et al. (2020). The researchers used an innovative and new MCDM model based on the integration of FUCOM (full consistency method) and fuzzy MARCOS (measuring alternatives and ranking according to compromise solution) methods, which resulted in assessing the best spas that will become a benchmark for other resorts when providing guidance on how to turn their business into something more sustainable and competitive in the market.
The implementation of systematization of innovations in tourism products based on the innovation model was studied by Cruz et al. (2023). The result was a sequence of innovations based on computational intelligence methods to increase competitive advantage in Cuba. This approach will be useful for increasing the competitiveness of tourism in any country, including the Czechia.
The innovative approach on the example of Spain was studied by Moreno-Izquierdo, et al. (2018); But, (2023c). Scientists have noted that competitiveness in tourism depends on the use of artificial intelligence in the era of innovation. This approach points to the promotion of strategies that will facilitate the development of intelligent tourist destinations.
Tourism development will also be facilitated by strategies that take into account the political stability of the destination and government support Moradi, et al. (2023). This will allow for better prioritization and increased competitiveness in tourism.

Costa, V. and Costa, C. (2019) studied the hospitality sector competitiveness by analysing the differences in the financial ratios of hotels and other tourism companies using the test of statistical significance. Such an approach to analysing hotel sector competitiveness is crucial for determining the sector's development strategy from the point of view of investors and hotel managers, as well as government agencies that formulate tourism policy.

Increasing the competitiveness in tourism of such a sector as the Czech hotel business was studied by Tothova, et al. (2022). The result indicated that active environmental strategies applied in the hotel industry are a competitive advantage. This approach indicates that the advantage of the hotel industry in tourism is environmentally friendly hotels.

Nugra-Betancourth, et al. (2023) studied the strengthening of tourism competitiveness in Ecuador as part of the 2030 National Tourism Development Plan by analysing the hotel sector using a descriptive method with data for the last 5 years and with a focus on Latin America and the Caribbean. Tourism marketing, innovation, quality of service, knowledge management have the greatest impact on the tourism sector, and the management of the hotel sector requires the proper use of information related to demand, passenger flow, destinations, preferences, expectations, and desires.

Krukowska and Swieca (2018) investigated the function of tourism as an element of regional competitiveness on the example of all sixteen voivodeships in Poland through the rational use of their resources, among which, in addition to natural and cultural resources, the availability of tourist accommodation facilities is important, which not only allows increasing the tourist flow in the region, but also gives it a competitive advantage over other regions when creating regional tourism products. The cluster approach to increasing competitiveness in tourism is explored in Kolveková, et al. (2019); Huggins and Izushi, (2011); Portolan, A. (2019). This approach encourages us to think about new clustering criteria and solutions in tourism, especially when it comes to sustainable development. It should be noted that in the Czech Republic, the Prague region significantly exceeds the value of the other regions, so this region can be considered as a separate cluster.

Increasing the competitiveness of tourism through the attractiveness of natural and cultural resources was studied by Stanisic, et al. (2022); Pantovic et al. The scientists noted that the development and improvement of natural tourist attractions and their active use with cultural resources will ensure competitiveness in tourism in the EU, which will allow EU governments to choose indicators of accessibility and attractiveness of natural and cultural resources. This approach points to the need to improve the natural tourist attractions and cultural resources of European countries. Zhang et al. (2023) analysed the importance of regional tourism competitiveness in terms of resources, economic and environmental benefits while creating a system of evaluation indices for integrated competitiveness using the TOPSIS entropy weight on the example of Chinese regions.

The study of increasing competitiveness in tourism in European countries was conducted by Radjenovic, et al. (2020); Radukica, et al. (2023). The results showed that the level of competitiveness of European countries depends on the maximum use of cultural and creative tourism, taking into account tourism prices. This approach determines that countries with lower prices for tourism products attract more tourists and receive more revenues from the industry, compared to higher levels of competitiveness of prices for tourism products in other countries. Increasing competitiveness in both European countries and the United States was seen not only as a means of counteracting declines in mature industries, but also as a stimulus to growth in new high-tech sectors of the economy in the study by de Man et al. (1997).

Despite certain scientific achievements in this area, a number of theoretical and practical aspects of competitiveness at the level of the tourism industry in the regions are insufficiently or narrowly covered: in a particular country or a particular direction of development. Taking into account the dynamics of the external environment, changes in the market conditions and trends in the Czech Republic, this study has chosen to use strategic analysis tools that can be used to analyse competition in the Czech tourism industry. The model of the five forces of competition

by Porter will help to determine the level of competition in the industry by analysing the interaction between real and potential consumers, substitute services and suppliers.
ABC analysis can be used to rank the Czech regions in terms of gross tourism value added to identify those that belong to Group A and need to strengthen their positions in the tourism market. The development of a map of strategic groups will help to assess and compare the market positions of competing regions, identify competitors with similar strategies, and draw strategic conclusions to improve competitiveness.
This problem requires constant and detailed research. This is what determined the choice of the topic of this article.

3 METHODS

This article analyses the tourism industry competitiveness in the Czech regions using statistical and economic research methods. The stages of the analysis of the tourism industry competitiveness in the Czech regions are shown in Figure 1.

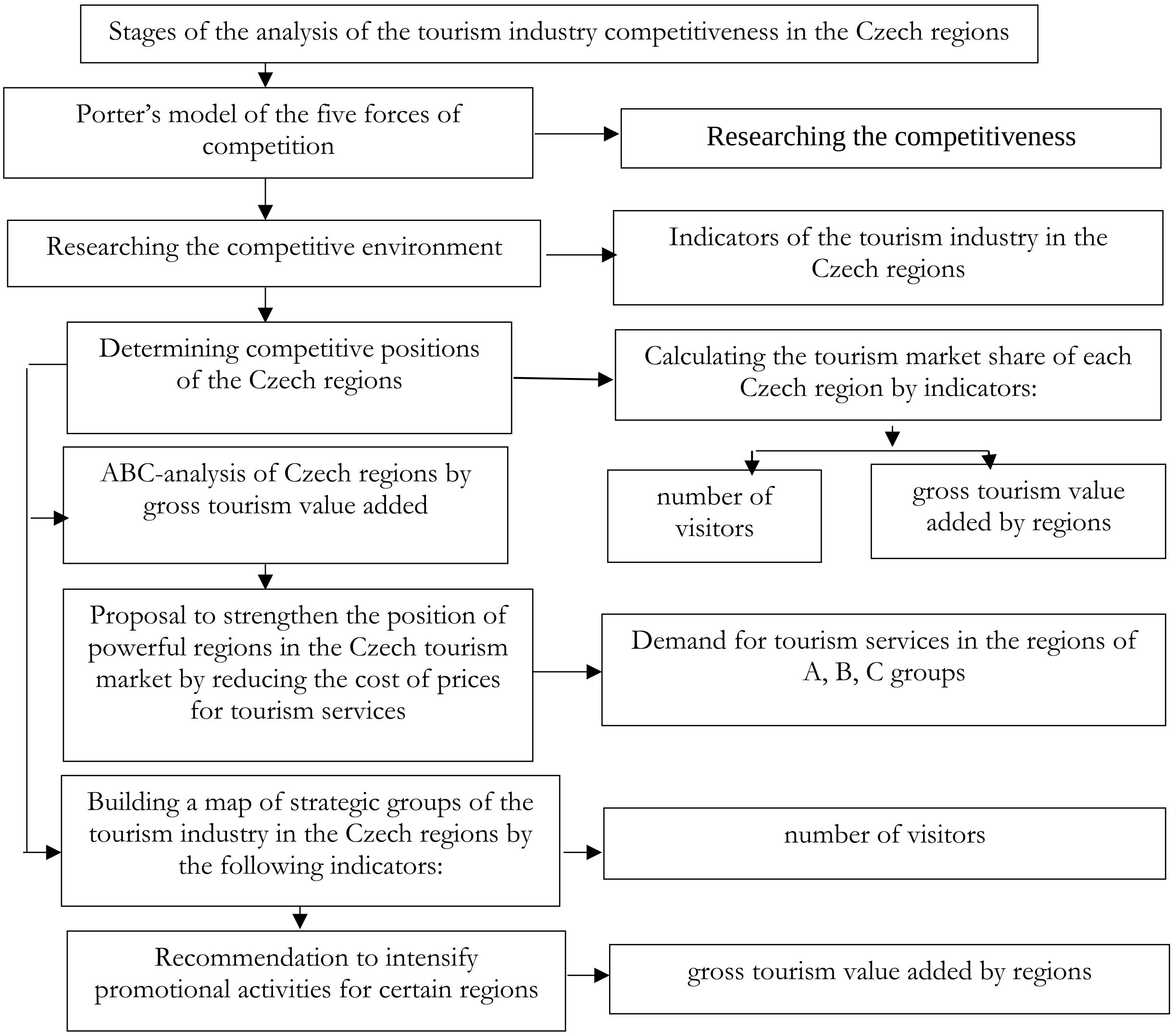

Fig. 1 – Stages of the analysis of the tourism industry competitiveness in the Czech regions

Source: Compiled by the author

A thorough analysis of the literature, statistical data and statistical methods was carried out. The study used the following methods to analyse the tourism industry competitiveness in the Czech regions: Porter's five forces model; ABC-analysis; development of a map of strategic groups, statistics and extrapolation (in using and processing primary information obtained in the course of marketing research on the composition and structure of tourist flows), the expert method (for collecting primary source information and processing the collected secondary source information in the scholarly research databases JSTOR, Econlit, Sciencedirect, and Google Scholar), as well as in domestic and international publications on improving the competitiveness of regions.

The study involved 13 Czech regions and the capital city of Prague. The competitiveness of the tourism industry in the Czech regions was analysed using the following indicators: pricing, gross value added of tourism in the Czech Republic, number of guests by region, attendance of mass accommodation facilities, number of domestic and foreign tourists by region, average length of stay of tourists in days, number of visitors to tourist attractions (museums, galleries, cultural monuments), and number of people employed in tourism by region in the Czech Republic.

4 RESULTS

The tourism industry competitiveness in the Czech regions should be studied in the following areas: demand research, supply research, optimisation of the supply-demand ratio in the tourism industry as a result of monitoring the state of the tourism market and conducting tourism policy aimed at reducing seasonal and territorial imbalances between supply and demand, improving the marketing system and communication activities as factors of stimulating supply and demand.

To study the competitiveness of the tourism industry in the Czech regions, Porter's model of the five forces of competition will be used. According to this model, the market share and profit level of accommodation facilities are determined by how effectively they counteract the five competitive forces:

- rivalry between sellers within the industry;
- the attractiveness of substitute products;
- the possibility of new competitors entering the industry;
- the influence of suppliers;
- the ability of consumers to dictate their terms.

The model of Porter's five forces of competition of the tourism industry in the Czech regions is shown in Figure 2.

It is important to research competitors, i.e., those with whom travel agencies have to compete for consumers and resources. Competitors in the Czech tourism industry include regions that offer tourism services in a given tourism market. They sell the same services and target the same market segments and are located in different territories. However, the competitive environment is formed not only by intra-industry competitors offering similar tourism services and selling them on the same market. The subjects of the competitive environment are also those regions that can enter the tourism market and those that offer a substitute tourism product. In today's competitive environment, the sale of tourism services is challenging. The Czech market is saturated with substitute tourist products, which are much worse in terms of quality and service and, accordingly, cheaper than tourism services.

Thus, the study of the competitiveness of the tourism industry in the Czech regions, using Porter's model of the five forces of competition, has identified a significant level of competition among the regions and a minor influence of substitute services from neighbouring regions in the tourism industry outside the country.

The competitive environment of the tourism industry in the Czech regions is presented in Table 1.

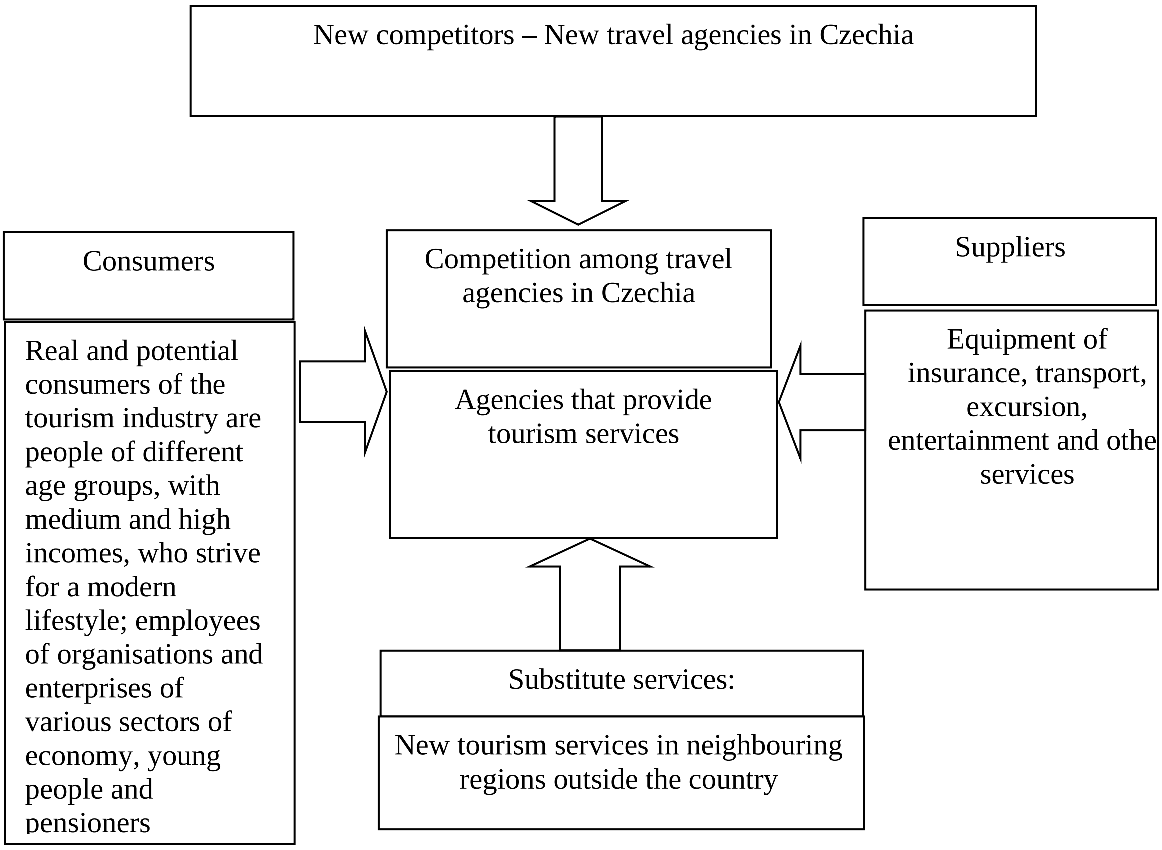

Fig 2. – Porter's model of the five forces of competition in the tourism industry of the Czech regions

Source: compiled on the basis of research results

As a rule, commercial success in the domestic and foreign markets is achieved by a tourism entity that comprehensively and systematically studies its competitors and offers consumers a competitive tourism product. Moreover, it is crucial to develop and adhere to a certain market strategy and tactics, taking into account all the factors that affect the level and degree of competition.

Tab. 1 – Indicators of the tourism industry in the Czech regions

Czech regions	Attendance at mass accommodation facilities, 2023		Number of visitors, 2023 Number of arrivals by regions	Number of domestic and foreign visitors by regions, 2022		Net bed utilisation – territorial comparison 2022*	Average length of stay in days, 2023	Number of visitors to tourist attractions: museums, galleries, cultural monuments, 2021	Gross value added of tourism by Czech regions in 2021*, million CZK	Number of employed in tourism by Czech regions in 2021*
	Domestic tourism	Inbound tourism		Number of arrivals by regions	Number of stays by regions 2022					
In total			**19424164**	**19424164**	**50599312**	**33,0**	**3,62**	**9754329**	**84803**	
Prague, the capital	355295	992232	5984803	5984803	13398104	45,9	3,20	1783739	25 133	54 363
Hradec Králové region	262420	84876	1157837	1157837	2781158	26,9	4,64	341597	4 096	10 137
South Moravian region	188123	104930	1464864	1464864	43542	27,6	2,76	704297	9 853	24 698
Karlovy Vary region	117316	149008	840789	840789	2149493	29,0	4,81	239026	2 684	9 483
Liberec region	192874	49255	1157837	1157837	4354260	38,3	4,30	205213	2 684	7 383
Moravian-Silesian region	166212	36347	580023	580023	1525125	22,7	3,75	444482	6 402	18 929
South Bohemia region	142634	50733	1113981	1113981	3358522	27,6	3,81	442192	4 841	12 547
Central Bohemia region	147103	41258	1468600	1468600	4581929	29,7	3,16	629198	8 464	20 910
Pilsen region	96123	54036	503879	503879	1355950	28,6	3,48	259211	4 002	9 777
Olomouc region	122642	22139	642986	642986	1550443	24,2	4,22	344092	3 641	10 089
Zlín region	107487	22009	1990371	1990371	4042898	28,3	3,66	577813	3 492	9 583
Vysočina region	89282	14051	722842	722842	2291497	26,3	3,16	242337	2 687	7 363
Pardubice region	79214	12063	802061	802061	2263338	32,5	3,62	231586	2 927	8 152
Ústí nad Labem region	61492	29134	993183	993183	2724248	28,8	3,58	209546	3 897	11 820

*data as of 2023; i.d., individual (confidential) data

Source: CzechTourism (2023a, b,c); CSU, (2023 а,в,c,d.e); ZSU on culture in the CR (2021)

Table 2 shows the competitive positions of the Czech regions. It also calculates the share of the tourism market in each region.

Tab. 2 – Competitive positions of Czech regions

Czech regions	Price level	Service quality	Range of services	Competitive position	Market share, %
Number of visitors, 2023					
Prague, the capital	High	High	Significant	Very high	35,6
Hradec Králové region	High	High	Significant	Very high	9,2
South Moravian region	High	High	Significant	Very high	7,73
Liberec region	High	High	Significant	High	6,39
Karlovy Vary region	High	High	Significant	Very high	6,23
Moravian-Silesian region	Average	High	Significant	High	5,34
South Bohemia region	Average	High	Significant	Very high	5,1
Central Bohemia region	Average	High	Significant	High	4,97
Pilsen region	Average	High	Average	High	3,96
Olomouc region	Average	High	Narrow	High	3,82
Zlín region	Low	High	Average	High	3,41
Vysočina region	Low	High	Average	Very high	2,73
Pardubice region	Low	High	Average	High	2,41
Ústí nad Labem region	Low	High	Narrow	Average	2,39
Gross value added of tourism by Czech regions in 2021					

Prague, the capital	High	High	Significant	Very high	29,63
South Moravian region	High	High	Significant	Very high	11,62
Central Bohemia region	High	High	Significant	High	10
Moravian-Silesian region	High	High	Significant	High	7,55
South Bohemia region	Average	High	Average	High	5,71
Hradec Králové region	Average	High	Average	High	4,83
Pilsen region	Average	High	Average	High	4,72
Ústí nad Labem region	Average	High	Average	High	4,59
Olomouc region	Average	High	Average	High	4,29
Zlín region	Average	High	Average	High	4,12
Pardubice region	Average	High	Narrow	High	3,45
Vysočina region	Low	High	Narrow	High	3,17
Karlovy Vary region	Low	High	Narrow	High	3,16
Liberec region	Low	High	Narrow	High	3,16

Source: Own processing from the conducted research

The rational construction of the ABC analysis of the Czech regions by the indicator of gross value added of tourism in Czechia implies comprehensive satisfaction of consumer demand within the selected segment of the consumer market. The implementation of this principle implies forming an assortment of tourism services due to the complexity of their consumption within certain consumer complexes or micro-complexes. This principle of forming the range of tourist services allows for consumers' greater convenience, facilitates the process of familiarisation with the services offered for sale, reduces the time spent on providing services, and promotes "impulse purchases."

There are groups of services that generate the highest turnover or profit (the most liquid services). In French-speaking countries, the terms "80:20 rule" (80% of profits are generated by 20% of tourism services) and "Pareto principle" are used. In German-speaking countries, the ABC analysis is used.

ABC analysis is one of the variants of mathematical and statistical methods of analysis used to study the frequency of certain economic phenomena and facts. In fact, ABC analysis is based on the concentration and grouping of economic indicators. It is based on the assumption that a part of the aggregate accounts for the majority of the value in a region.

The scope of ABC analysis covers all functions of the Czech tourism industry. Without it, it is impossible to imagine strategic and project planning, market analysis, assortment planning, revenue management, human resources and employee compensation policies, marketing, sales, logistics, and analysis of the business activities of regional travel agencies.

ABC analysis is a method that groups or divides the existing population according to certain criteria. As a rule, two criteria are taken into account. In other words, ABC analysis is a tool for determining the proportion of certain groups in a population. It is a relatively simple method. Because it allows processing a large amount of data, one can draw important conclusions. It is used to classify and divide populations into 3 groups: A, B, and C, according to the selected criteria. This classification shows a ranking that allows highlighting the main points that are important enough to make management decisions.

There is a significant number of recommendations for establishing a rational boundary between the classes. In fact, this boundary depends on the industry, market and specifics of the tourism industry in the regions. For example, when classifying regional tourism services by their profitability, the following distribution is most often appropriate:

– Class A – 20% of services that generate 80% of profit;
– Class B – 30% of services that bring 15% of profit;
– Class C – 50% of services that produce 5% of profit.

Table 3 shows the ABC analysis of the Czech regions in terms of gross tourism value added.

Tab. 3 – ABC analysis of Czech regions by gross tourism value added

Czech regions	Market shar (%) by indicator of gross tourism value added by Czech regions in 2021, in millions of Czech crowns	% of turnover	% that grows as a result	Group	Number of positions
Prague, the capital	29,63	30	29,63	A	8
South Moravian region	11,62	12	41,25		
Central Bohemia region	10	10	51,25		
Moravian-Silesian region	7,55	8	58,8		
South Bohemia region	5,71	6	64,51		
Hradec Králové region	4,83	5	69,34		
Pilsen region	4,72	5	74,06		
Ústí nad Labem region	4,59	4	78,65		
Olomouc region	4,29	4	82,94	B	3
Zlín region	4,12	4	87,06		
Pardubice region	3,45	3	90,51		
Vysočina region	3,17	3	93,68	C	3
Karlovy Vary region	3,16	3	96,84		
Liberec region	3,16	3	100		
In total:	100	100			

Source: Own processing from the conducted research

This classification shows the following:
– 33.33% of all regional positions (Group A) receive 80% of the gross turnover (group A includes the following regions: Prague, the capital, South Moravian region, Central Bohemia region, Moravian-Silesian region, South Bohemia region, Hradec Králové region, Pilsen region, Ústí nad Labem region);
– the next 33.33% of regions (group B) account for 15% of the turnover (group B includes the following regions: Olomouc region, Zlín region, Pardubice region);
– 33.33% (group C) of other regions account for only 5% of the turnover (group C includes Vysočina region, Karlovy Vary region, Liberec region).
The demand for tourism services in the regions of Group A is the highest, and therefore the regions should concentrate on this activity. Group C is recommended to be left for more complete customer service within the existing consumer complexes of the regions.
Thus, the result of the ABC analysis, which covers all functions of the tourism industry in the Czech regions, is a proposal to strengthen the position of the powerful Group A regions in the Czech tourism market by reducing the cost of prices for tourism services, through various services by type, season, purpose of travel, in order to generate profit, and most importantly, to secure regular customers for this group of tourism services. This group of travel services is in high demand among consumers and accounts for 80% of turnover.
The regions that offer a much wider range of tourism services and more developed facilities have a competitive advantage. Therefore, tourism services need to be improved and new facilities introduced in order to compete at a high level in this Czech tourism market.
A map of strategic groups of the tourism industry in the Czech regions is used to assess the market positions of competing regions. A strategic group is a set of competing regions with approximately the same competitive strategies and market position or united by the following features: facilities offered, price/quality ratio, distribution channels, methods of attracting customers, technologies used, level of service and technical support. Developing a strategic group map is a tool for assessing and comparing market positions of competing regions. The strategic group map is used to analyse the competitive environment and identify competitors with similar strategies.

The main characteristics by which tourism industry data can be combined into one strategic group area follows:
– region size – relatively large, medium and small regions;
– market share – regions that have the same market share;
– geographical spread of operations – grouping based on similarity of operations in the markets;
– product characteristics – regions are grouped due to similarity in terms of price level and breadth of product range;
– operational coverage – regions (tourism enterprises) can be grouped into one or another strategic group.

In order to map strategic groups, it is necessary to identify two features that can be used to characterise regions in the tourism industry and draw a two-dimensional graph. Then, it is necessary to group the known regions that are closest to each other in terms of characteristics.

When building a strategic grouping map, the following rules should be followed: the main variables along the coordinate axes should not correlate with each other, these variables should reflect significant differences between competitors, they should be discrete, and the areas of the regions should reflect their relative share of sales in the industry. It is essential to study the behaviour of the closest competitors. The use of the concept of strategic groups allows an organisation to draw up a "picture" of the industry in which it operates by setting a certain system of coordinates and development benchmarks.

A range of distinctive characteristics of the tourism industry in the regions used to map the strategic groups of the tourism industry in the Czech regions are shown in Table 4.

Tab. 4 – Characteristics of the regions for mapping the strategic groups of the tourism industry in the Czech regions

Regions	Number of visitors, 2023			Gross value added of tourism by Czech regions in 2021		
	nsignificant	Significant	Large	Low	Average	High
Prague, the capital			++			++
Hradec Králové region			++		++	
South Moravian region			++			++
Karlovy Vary region			++	++		
Liberec region			++	++		
Moravian-Silesian region		++			++	
South Bohemia region		++			++	
Central Bohemia region		++				++
Pilsen region		++			++	
Olomouc region		++			++	
Zlín region		++			++	
Vysočina region	++			++		
Pardubice region	++			++		
Ústí nad Labem region	++				++	

Source: Own processing from the conducted research

The map of the strategic groups of the tourism industry in the Czech regions is shown in Figure 3.

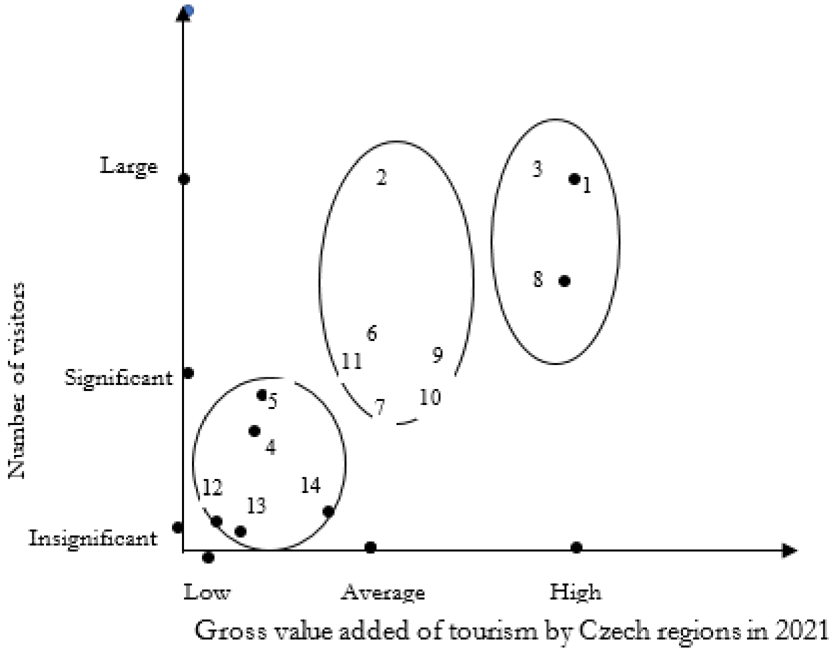

Fig 3. – Map of strategic groups of the tourism industry in the Czech regions

Source: Own processing from the conducted research

The map shows three groups (the size of the circle on the map corresponds to the market share of each group):
1) The first group is the industry leaders: Prague, the capital, South Moravian region, and Central Bohemia region. The combined market share is about 30%. The competitive position is quite strong: the region offers a wide range of services and generates solid profits due to high selling prices.
(1 – Prague, the capital, 3 – South Moravian region, 8 – Central Bohemia region).
2) The second group includes large regions (Hradec Králové region, Moravian-Silesian region, South Bohemia region, Pilsen region, Olomouc region, Zlín region) offering a wide range of tourism services and providing them at relatively high prices.
(2 - Hradec Králové Region, 6 - Moravian-Silesian Region, 7- South Bohemia region, 9 - Pilsen region, 10 - Olomouc region, 11 - Zlín region).
This group of regions competes in the market with the representatives of the first group, and in the future, it is striving to take the place of leaders.
3) The third group includes more "regional" service producers: Karlovy Vary region, Liberec region, Vysočina region, Pardubice region, Ústí nad Labem region, which often work to cover market shortages.
(4 - Karlovy Vary region, 5 - Liberec region, 12 - Vysočina region, 13 - Pardubice region, 14 - Ústí nad Labem region).

The price level for tourism services varies significantly depending on the region where the consumer is located. The level of competition within this strategic group is the most intense in the industry.

The influence of competitors is the most important factor in the external environment. Today, there are many travel agencies of different levels in Czechia, so in order to compete with each other, they need to constantly look for opportunities to improve the range and quality of services, and to apply new forms and methods of service. As consumers of tourism services are mainly people seeking rest, recreation, and a change of impressions, the more consumers trust

travel agencies in the tourism industry, the better its financial performance will be. The economic situation in foreign countries is also an important factor: the better it is, the more people can travel abroad, including to Czechia. This will lead to an increase in the number of foreign visitors and contribute to the development of the Czech tourism industry.
Therefore, the results of building a strategic map of the tourism industry of the Czech regions include a recommendation to strengthen advertising activities for the identified regions, which will increase the turnover of funds in the tourism industry of the Czech regions.
Further research is required to analyse the competitive advantages of the Czech tourism industry and to find alternatives for doing business in the global tourism market.
The next stage of competitors' possible actions includes the following actions: analysing competitors' strategies; identifying the competitors' strengths and weaknesses; assessing their competitive capabilities; and forecasting their immediate actions. A well-established collection of information about a competitor allows anticipating their actions, prepare countermeasures and incorporate them into the region's action plan. In order to ensure the competitiveness of the industry, each region must monitor and predict the competitors' actions.
The analysis of the Czech tourism industry competitiveness by regions is based on the indicators (factors) that determine the success of their functioning. The ranking of regions is determined by calculating their final score based on the assessment results. Therefore, it is possible to predict that the tourism industry and its competitors are satisfied with their position in the market; most likely they will not change their strategy, but will make only minor changes to it.
The analysis of actions of competing regions of the Czech tourism industry is carried out in the following areas:
– global scale of competition;
– strategic intentions: to oust the current industry leader from its position;
– the goal of achieving a certain market share: expansion through internal growth or retention of the existing market share (growth rate is equal to the growth rate of the industry);
– competitive position: the region is trying to change its position in the market (to strengthen its position);
– a combination of offensive and defensive strategies;
– strategic intentions: to be among the industry leaders;
– competitive position: the region is well protected and able to maintain its position in the market.
The forecast of the next steps of competing regions in the tourism industry is as follows: the leading Czech tourism regions are likely to take some new strategic steps, while all other regions that are satisfied with their current position will seek to maintain their strategy and may only make some changes to it.
The threat of potential new competitors entering the tourism market is insignificant. Its unlikeliness is determined by the strength of existing barriers and the level of effort required to overcome them. For the tourism industry, the provision of modern, wide-ranging tourism services is characterised by the impossibility of saving through economies of scale. The need for capital to enter the market is medium, as is the level of profit.
The impact of substitute services is insignificant. Substitute services may include new services of the tourism industry in neighbouring regions outside the country.

Suppliers in the tourism industry are related industries, without which tourism development is impossible: food industry, souvenir production, services of insurance companies, recreation and entertainment companies, communication services, transport, etc.

5 DISCUSSION

Thus, the result of the study is an analysis of numerous approaches and best practices to improve the tourism industry competitiveness in the regions:

- based on the development of tourism competitiveness indices by taking into account internal and external factors and including quantitative and qualitative methods suitable for tourist destinations (Tleuberdinova et al., (2022);
- through the development of a conceptual model of continuous user perception of the impact on tourist destinations, which is based on four studies: the life cycle of an individual traveller, success, continued entry and the impact of travel and tourism on destinations (Phaosathianphan and Leelasantitham (2022);
- by creating a system of assessment indices for integrated competitiveness using the TOPSIS entropy weight, in terms of resources, economic and environmental benefits (Zhang et. al. (2023);
- by preventing the downsizing of mature industries by stimulating growth in new high-tech sectors of the economy (Man et al. (1997);
- through geographical concentration of firms to increase productivity, innovation and exports (Psofogiorgos and Metaxas, (2015);
- by creating an industry structure and shaping the nature of competitive interaction within the industry (Porter, (2008), Porter and Ketels, (2003), Porter, (1990), Porter, (1998a), Porter, (1998b), Porter, (2000), Porter, (2004);
- through the intensive use of social media and information from regional tourism authorities about regional tourism products (Putra et al. (2023);
- through the rational use of available resources, among which, in addition to natural and cultural resources, the availability of tourist accommodation facilities is important (Krukowska and Swieca (2018)); Stanisic, et al. (2022); Pantovic et al. (2022);
- with the help of the impact of the regional innovation system on the travel competitiveness (Romão and Nijkamp, (2019);
- by the most used indicator of travel and tourism competitiveness index (TTCI) (Kunst and Ivandić, (2021);
- on the basis of an innovative and new MCDM model based on the integration of FUCOM (Full Consistency Method) and fuzzy MARCOS (Measuring Alternatives and Ranking According to Compromise Solution) methods (Mijajlović et al., (2020);
- by analysing the differences in financial ratios, using the test of statistical significance (Costa, V. & Costa, C. (2019);
- with evolutionary tourist flows based on adapting conditional β-convergence to the tourism sector (De la Peña et al., (2019);
- with documentary bibliographic and newspaper research supported by databases such as Redalyc, Scielo, Dialnet, Scopus, repositories of university institutions and official, national and international institutions for the last 5 years;
- principal component analysis, DP2 distance method, target programming, data coverage analysis, and boundary calculation (Leon, et al. (2022);
- by ensuring a high level of security, which is characteristic of image places of worship (Gavurova, et al. (2023b);
- by introducing innovations in tourism products (Cruz et al. (2023); Moreno-Izquierdo, et al. (2018); But, (2023c);
- development of environmental strategies (Tothova, et al. 2022) and strategies that take into account the political stability of the destination and government support (Moradi, et al. 2023);
- cluster approach (Kolveková, et al. (2019); Huggins and Izushi, (2011); Portolan, (2019);
- maximizing the use of cultural and creative tourism, taking into account tourism prices (Radjenovic, et al. (2020); Radukica, et al. (2023).

It is substantiated that tourism competitiveness is important for regions to attract tourists and stay ahead of competing regions by providing high-quality, innovative tourism services and attractions, while ensuring efficient but sustainable use of available resources.
The provision of quality tourism services is also important for increasing the tourism industry competitiveness, which depends on the tourism workers' language skills and their professionalism. For every tourist, smart travel technologies are important, which depend on collecting data they receive from media platforms that use intelligent personal travel assistants such as Google Assistant, Apple Siri, Microsoft Cortana, Amazon Alexa and Samsung Bixby. Members of society demand products and services that are the result of innovative and informed decision-making. Scientists have shown that the best ratings are given to regions with large cities that have multifaceted tourism, as well as marine and mountain tourist areas with cultural attractions (Grassini, et al., 2023).
The study from the perspective of economic and environmental advantage resources by Zhang et al. (2023) indicates that the competitiveness of the level of regional economic development has the greatest impact on the comprehensive tourism competitiveness, which is classified into four types: advanced development, marginal dependence, improved optimisation, and lagging development.
A different approach to improving regional competitiveness has led to the development of new guidelines, such as the new theory of "economic geography" and "regional economics." Researchers have emphasised the importance of the geographical location of tourism firms, which increases productivity, innovation and exports (Psofogiorgos & Metaxas, 2015).
Porter's well-known theory (2008) focuses on understanding and being able to cope with competition while taking into account four competitive forces: customers, suppliers, potential entrants and substitute products. The extended rivalry that results from all five forces determines the industry structure of an industry and shapes the nature of competitive interactions within the industry.
There are various ways to gain a competitive advantage. Based on the collected and processed statistical data, the regional structure of the proposed tourist accommodation facilities and their occupancy rates were determined. In general, the highest concentration of tourist accommodation facilities is observed in the regions with high natural and cultural value (Krukowska and Swieca, (2018); Stanisic, et al. (2022); Pantovic et al. (2022).
In brief, the targeted proposals of scientific approaches to identifying the main problems and prospects for developing the tourism industry and increasing its competitiveness through optimisation of knowledge, innovation, high resource tourism potential of the regions, concentration and location of tourism services in the territory, and high potential of innovative tourism development strategies (But, et al., 2023a), as well as strategies of smart specialisation in European regions and opportunities for cross-border regional cooperation, are likely to confirm the research. The results of the study can help the Czech regions' authorities to understand the situation of the tourism industry in the regions in order to use their existing advantages and eliminate the shortcomings, thus improving their business.

6 CONCLUSION

The tourism industry competitiveness in the Czech regions was analysed. The study involved 13 regions of Czechia and the capital city of Prague. The main practical directions for improving the competitive environment among the Czech regions were identified by using the following methods: Porter's model of the five forces of competition, ABC analysis, and building a strategic map.

The assessment of the tourism industry competitiveness in the Czech regions shows that the Czech regions are able to provide quality tourism services in terms of such indicators as pricing, gross value added of tourism, the number of visitors by regions, attendance of mass accommodation facilities, the number of domestic and foreign tourists by regions, the average length of tourists' stay in days, the number of visitors to tourist attractions, e.g., museums, galleries, and cultural monuments, and the number of people employed in tourism by the Czech regions.

The results of the analysis of the competitiveness of the tourism industry in the Czech regions, using Porter's model, revealed a significant level of competition among the regions and a minor influence of substitute services from neighbouring regions in the tourism industry outside the country.

The results of the ABC analysis, which covers all functions of the tourism industry in the Czech regions, show that the highest demand for tourism services is in the regions of group A, namely: Hl. Praha, Jihomoravský region, Středočeský region, Moravskoslezský region, Jihočeský region, Královéhradecký region, Plzeňský region, Ústecký region. They account for 80% of the gross turnover. The demand for tourism services in the regions of this group is the highest. Therefore, it is proposed that these regions concentrate on their core business, strengthen their market positions by reducing the cost of prices for tourist services, by offering different services by type, season, purpose of travel, in order to make a profit, and most importantly, to secure regular customers for this group of tourist services.

Group B, which accounts for 15% of the turnover, includes: Olomouc region, Zlín region, Pardubice region. These regions are recommended to strengthen their positions in the Czech tourism market.

Group C with 5% of the gross defense includes the Vysočina region, Karlovy Vary and Liberecký region. Group C is recommended to be retained for more complete customer service within the existing consumer complexes in the following regions.

The strategic map analysis identified competitors with similar strategies. The leaders are the regions of the first group: Hl. m. Praha, Jihomoravský region, Středočeský region. The competitive position of these regions is quite high, with a combined market share of about 30 percent. These regions provide a wide range of tourist services, while earning a solid profit due to high selling prices.

The large regions of group 2, which offer a wide range of tourist services and provide them at relatively high prices, include: Královéhradecký region, Moravskoslezský region, Jihočeský region, Plzeňský region, Olomoucký region, Zlínský region. It has been determined that this group of regions competes in the market with representatives of the first group, and in the future seeks to take the place of leaders.

The third group of "regional" service producers includes Karlovarský region, Liberecký region, region Vysočina, Pardubický region, and Ústecký region. These regions are recommended to intensify their advertising activities and improve their tourist attractiveness, which will increase cash flow in the tourism industry.

The original contribution of this study is defined in three aspects: (i) the result of the study of the tourism industry competitiveness in the Czech regions, using Porter's model of the five forces of competition, has identified a significant level of competition among the regions and a minor influence of substitute services from the neighbouring tourism industry regions outside the country; (ii) the use of ABC analysis, which covers all functions of the tourism industry of the Czech regions, resulted in strengthening the positions of some regions in the Czech tourism market, and there is a proposal to strengthen the positions of powerful regions in the Czech tourism market by reducing the prices for tourism services; (iii) based on the results of building a strategic map of the tourism industry of the Czech regions, it is recommended to strengthen advertising activities for certain regions, which will increase the turnover of funds in the tourism industry of the Czech regions.

To sum up, the above conclusions emphasise that the available resources of the regions are the main driving force for increasing competitiveness and the basis for sustainable development of the tourism industry in the Czech regions.

References

1. Băbăț, A.-F., et al. (2023). Tourism and travel competitiveness index: From theoretical definition to practical analysis in Romania. *Sustainability*, *15*(13), 10157. https://doi.org/10.3390/su151310157
2. Basle, N. (2023). Evaluating gastronomic destination competitiveness through upscale gastronomy. *Sustainability*, *15*(14), 11157. https://doi.org/10.3390/su151411157
3. Bednárová, Ľ., Kiseľáková, D., & Onuferová, E. (2018). Competitiveness analysis of tourism in the European Union and in the Slovakia. *Geojournal of Tourism and Geosites*, *23*(3), 759-771. https://doi.org/10.30892/gtg.23312-326
4. Bertocchi, D., Camatti, N., Salmasi, L. & van der Borg, J. (2023). Assessing the tourism sustainability of EU regions at the NUTS-2 level with a composite and regionalised indicator. *Journal of Sustainable Tourism*, *31*(7), 1738-1755.
5. Bezkhlibna, A. P. (2023). *Management of competitiveness of coastal regions: Theory, methodology, practice*. FOP Mokshanov.
6. Bezkhlibna, A., But, T., & Nikonenko, S. Assessment of tourism industry clustering potential. *Scientific Papers of the University of Pardubice*, Series D44. 17-28. https://hdl.handle.net/10195/71485
7. Bolaky, B. (2012). Tourism competitiveness in the Caribbean. *Cepal Review*, *104*, 55-76. https://repositorio.cepal.org/bitstream/handle/11362/11503/104055076I_en.pdf?sequence=1&isAllowed=y
8. Boleloucka, E. & Wright, A. Spa destinations in the Czech Republic: An empirical evaluation. *International Journal of Spa and Wellness*, *3*(2-3), 117-144.
9. Brelik, A. & Grinberga-Zalite, G. (2019). Tourism competitiveness of Poland compared with other European countries. *International Scientific Conference on Economic Science for Rural Development*, *50*, 37-43. https://doi.org/10.22616/ESRD.2019.004
10. But, T. (2023c). Methodological approaches to assessing the SMART-specialization relevance to the tourism industry. *Management and Entrepreneurship: Trends of Development*, *3*(25), 82-93. doi: https://doi.org/10.26661/2522-1566/2023-3/25-07
11. But T., Mamotenko D., Lnenicka L., Pulina T. & Židová V. (2023a). A Conceptual Model for Creating Smart Cities in Czechia Based on Smart Specialization. *Scientific Papers of the University of Pardubice, Series D*: Faculty of Economics and Administration. 31(2). 1736. https://doi.org/10.46585/sp31021736
12. But, T., Lnenicka, L., & Pulina T., (2024). Substantiating the directions of health tourism development in Czechia. *National Accounting Review*, *6*(1), 50–74. https://doi.org/10.3934/NAR.2024003
13. But, T., Zaytseva, V., & Hres-Yevreinova S. (2018). Assessment of the competitiveness of tourist cluster of Zaporizhzhia region. In A. Pawlik & K. Shaposhnykov (Eds.), *Strategies for economic development: The experience of Poland and the prospects of Ukraine* (pp. 61-74). Baltija Publishing.

https://dspace.nuft.edu.ua/server/api/core/bitstreams/4aefb160-7ab0-4f16-ac8a-0ce99c33145b/content

14. Burda, T., Zidova, V., & But, T. (2023). Optimising public transport to increase tourist flows. *Economics and Management*, *26*(4), 167–186. https://doi.org/10.15240/tul/001/2023-4-011
15. Costa, V. & Costa, C. (2019). Competitiveness and business performance in the Portuguese hotel industry. *Proceedings of the International Conference on Tourism Research*, 28-36. https://www.proquest.com/openview/27b22438c3dc379a98978d735438eb47/1?pq-origsite=gscholar&cbl=4451210
16. Crnjar, K. (2018). Human capital capabilities for sustainable competitive advantage in tourism industry. *KnE Social Sciences*, *3*(10), 145–156. https://doi.org/10.18502/kss.v3i10.3535
17. Cruz, E. C., Toledo, R. Y., Ramos, E.C., & Betancourt García, M.E. (2023). Touristic product innovation through complex adaptive systems for generating competitive advantages in Cuba | La innovación de productos turísticos mediante sistemas adaptativos complejos para la generación de ventajas competitivas en Cuba. *Cultura de los Cuidados*, *26*, 28-55. https://doi.org/10.14198/INTURI.22549
18. CSU. (2023a). Tourism satellite account. https://www.czso.cz/csu/czso/satelitni_ucet_cestovniho_ruchu
19. CSU. (2023b). Data from online accommodation platforms. https://www.czso.cz/csu/czso/data-z-on-line-ubytovacich-platforem
20. CSU. (2023c). Tourism - Q3 2022. https://www.czso.cz/csu/czso/cri/cestovni-ruch-3-ctvrtleti-2022.
21. CSU. (2023d). Tourism - Q1 2023. https://www.czso.cz/csu/czso/cri/cestovni-ruch-1-ctvrtleti-2023
22. CSU. (2023e). Net use of beds 2019 – 2022. https://tourdata.cz/data/hromadna-ubytovaci-zarizeni/ciste-vyuziti-luzek-2019-2022-q/
23. CTK. (2023). Last year, the Czech Republic's income from tourism increased by CZK 51 billion to CZK 118 billion. https://www.ceskenoviny.cz/zpravy/2339803
24. Czech Statistical Office (2023). Statistiky. https://www.czso.cz/csu/czso/statistiky
25. Czech Television (2023).Tourism is slowly returning to pre-Covid numbers. Czechs are increasingly choosing to vacation in their own country. https://ct24.ceskatelevize.cz/domaci/3572576-cestovni-ruch-se-pomalu-vraci-k-predcovidovym-cislum-cesi-stale-casteji-voli
26. Czech Tourism. (2023a). Tourism revenues reached 118 billion last year and continue to grow. https://www.czechtourism.cz/cs-CZ/cad0e3b7-2b0f-4676-bd44-5e425ccaac1e/article/prijmy-z-cestovniho-ruchu-loni-dosahly-uz-118-mili
27. Czech Tourism. (2023b). Tourism intensity 2022. https://tourdata.cz/data/intenzita-cestovniho-ruchu-2022/
28. Czech Tourism, (2023c). There were 71% more tourists last year, but less than before the pandemic. Czechs traveled the most in the Czech Republic. https://www.czechtourism.cz/cs-CZ/b95dca8f-9d9f-45f1-851c-41fc520a435a/article/turistu-bylo-loni-mezirocne-o-71-vic-mene-ale-nez

29. De la Peña, M. R., Núñez-Serrano, J. A., Turrión, J., & Velázquez, F. J. (2019). A new tool for the analysis of the international competitiveness of tourist destinations based on performance. *Journal of Travel Research*, 58(2), 207-223. https://doi.org/10.1177/0047287517746012
30. Dempere, J., & Modugu, K. (2023). Explanatory power of the tourist destination competitiveness index on the control of the first wave of COVID-19. *European Journal of Management and Business Economics*. *32*(3), 296-319.
31. Fattore, M., Pelagatti M., & Vittadini, G. 2011. A least squares approach to latent variables extraction in formative-reflective models. *Computational Statistics & Data Analysis*. https://doi.org/10.1016/j.csda.2017.11.006
32. Fernandez, J.A.S., Azevedo, P.S., Martin, J.M.M., & Martin, J.A.R. (2020). Determinants of tourism destination competitiveness in the countries most visited by international tourists: Proposal of a synthetic index. *Tourism Management Perspectives, 33*. https://doi.org/10.1016/j.tmp.2019.100582
33. Gabor, M.R., Kardos, M., Cristache N., Nadtade M., & Petrariu I. (2021). Dynamic analysis of tourism competitiveness of the European countries based on discriminant statistical analysis. *Economic Computation and Economic Cybernetics Studies and Research*, *55*(3), 103-118. https://doi.org/10.24818/18423264/55.3.21.07
34. Gavurova, B., Rigelsky, M. & Mikeska, M. (2023a). Relationships between road transport indicators and expenditure of visitors in the context of European countries' tourism competitiveness. *Equilibrium*, 18(2), 393-418. https://doi.org/10.24136/eq.2023.012
35. Gavurova, B., Skare M., Belas J., Rigelsky M. & Ivankova V. (2023b). The relationship between destination image and destination safety during technological and social changes COVID-19 pandemic. *Technological Forecasting and Social Change*, *191*. https://doi.org/10.1016/j.techfore.2023.122488
36. Grancay, M. (2020). COVID-19 and central European tourism: The competitiveness of Slovak tourist guides. *Central European Business Review*, *9*(5), 81-98. doi: 10.18267/j.cebr.259.
37. Grassini, L., Magrini, A. & Conti, E. (2023). Formative-reflective scheme for the assessment of tourism destination competitiveness: An analysis of Italian municipalities. *Quality and Quantity*, *57*(4), 3523-3548. https://doi.org/10.1007/s11135-022-01519-1
38. Guo, S. Z., Jiang, Y., & Long, W. (2019). Urban tourism competitiveness evaluation system and its application: Comparison and analysis of regression and classification methods. *7th International conference on information technology and quantitative management: Information technology and quantitative management based on artificial intelligence*, *162* (pp. 429-437). https://doi.org/10.1016/j.procs.2019.12.007
39. Huggins, R., & Izushi, H. (2011). *Competition, competitive advantage, and clusters: The ideas of Michael Porter*. Oxford Academic. https://doi.org/10.1093/acprof:oso/9780199578030.001.0001
40. Koerner, B., Sushartami, W., & Spencer, D. M. (2013). An assessment of tourism policies and planning in Indonesia. *Tourism Recreation Research*, 1-12. https://doi.org/10.1080/02508281.2023.2214030
41. Kolveková, G., Liptakova E., Strba L., Krsak B., Sibor C., Cehlar M., Khouri S., Behun

M. (2019). Regional tourism clustering based on the three Ps of the sustainability services marketing matrix: An example of Central and Eastern European countries. *Sustainability, 11*(2). https://doi.org/10.3390/su11020400

42. Krukowska, R., & Swieca, A. (2018). Tourism function as an element of regional competitiveness. Polish *Journal of Sport and Tourism*, 25(2), 32-43. https://doi.org/10.2478/pjst-2018-0012
43. Kunst, I., & Ivandić, N. (2021). The viability of the travel and tourism competitiveness index as a reliable measure of destination competitiveness: The case of the Mediterranean region. *European Journal of Tourism Research*, *27*(1). https://doi.org/10.54055/ejtr.v27i.2124
44. Leon, V.E.P., Guerrero, F.M., & Caballero, R. (2022). Tourism competitiveness measurement: A perspective from Central America and Caribbean destinations. *Tourism Review*, *77*(6), 1401-1417. https://doi.org/10.1108/TR-03-2022-0119
45. Long, Y., & Qi, X. (2023). Regional tourism cooperation mechanism. *Journal of Urban Planning and Development*, *149*(3). doi: 10.1061/JUPDDM.UPENG-4336.
46. Luo, Z., Wang F., Pan H., Li L., Dai M. (2022). Evaluation and improvement strategy of tourism industrial park competitiveness from the perspective of new urbanization: Case study of the Suining Tourism Industrial Park. *Journal of Urban Planning and Development*, *148*(4). https://doi.org/10.1061/(ASCE)UP.1943-5444.0000865
47. Man A.P., Bosch F.S.J. & Elfring T. (1997). Porter on national and regional competitive advantage. Perspectives on Strategy. pp. 45–49. Kluwer Academic Publishers. https://link.springer.com/chapter/10.1007/978-1-4615-6179-8_6
48. Mijajlović, M., et al. (2020). Determining the competitiveness of spa-centers in order to achieve sustainability using a fuzzy multi-criteria decision-making model. *Sustainability*, *12*(20), 1-17. https://doi.org/10.3390/su12208584
49. Moradi, E., Ehsani, M., Saffari, M. & Norouzi Seyed Hosseini, R. (2023). How can destination competitiveness play an essential role in small island sports tourism development? Integrated ISM-MICMAC modelling of key factors. *Journal of Hospitality and Tourism Insights*, *6*(3), 1222–1252. https://doi.org/10.1108/JHTI-03-2022-0118
50. Moreno-Izquierdo, L., Ramon-Rodriguez, A., & Such-Devesa, M. J. (2018). The challenge of long-term tourism competitiveness in the age of innovation: Spain as a case study. *Journal of Regional Research*, *42*, 13-34. https://www.redalyc.org/journal/289/28966251002/html/
51. Nugra-Betancourth, M., Illescas-Espinoza, W., Cuadros Garcia, P., & Sancho López, C. S. (2023). Hotel management in the canton of Machala, Ecuador: Competitive dynamics and tourism performance indicators. *Revista Venezolana de Gerencia*, *29*(103), 1256-1273. https://doi.org/10.52080/rvgluz.28.103.21
52. Nyanga, C., Pansiri, J. & Chatibura, D. (2020). Enhancing competitiveness in the tourism industry through the use of business intelligence: A literature review. *Journal of Tourism Futures*, *6*(2), 139-151.
53. Pantovic, D., Boskovic, N., & Petrovic, T. (2022). Measuring convergence in tourism competitiveness of natural and cultural resources: A case of the Balkans and Eastern Europe. *Ekonomicky casopis*, *70*(9-10), 703-722. https://doi.org/10.31577/ekoncas.2022.09-10.02

54. Phaosathianphan, N., & Leelasantitham, A. (2022). An intelligent travel technology assessment model for destination impacts of tourist adoption. *Tourism Management Perspectives*, *40*. https://doi.org/10.1016/j.tmp.2021.100882
55. Pol, M., Rutkowska, M., & Tutaj, J. (2023). Added value on a day in the pandemic in tourist attractions in the Polish–Czech borderland as a green economy initiative. *Sustainability*, *15*(4), 2911. https://doi.org/10.3390/su15042911
56. Porter, M. (2012). Regional competitiveness: The role of clusters. Harvard Business School Toronto Region Economic Summit. https://www.hbs.edu/ris/Publication%20Files/20120329%20-%20Toronto%20Region%20Economic%20Summit%20-%20FINAL%20FINAL%20FINAL_c3059a37-134d-40e0-9ec0-be73bb30ab4a.pdf
57. Porter, M. (1990). *The competitive advantage of nations*. Free Press.
58. Porter, M. (1998a). *On competition*. Harvard Business School Press.
59. Porter, M. (1998b). Location, clusters and the new economics of competition. *Business Economics*, *33*, 7–17.
60. Porter, M. (2000). Location, competition and economic development. *Economic Development Quarterly*, *14*, 23-32.
61. Porter, M. (2008). The five competitive forces that shape strategy. *Harvard Business Review*, 86-104. https://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy
62. Porter, M. E. (2004). Building the microeconomic foundations of prosperity: Findings from the business competitiveness index. World Competitiveness Report, 2005. https://www.hbs.edu/ris/Publication%2520Files/BCI_Chapter_adf284c6-3d8b-483e-9f29-a5242e9c5999.pdf
63. Porter, M., & Ketels, C. (2003). UK competitiveness: Moving to the next stage. DTI Economics Paper 3, Harvard Business School. https://www.hbs.edu/ris/Publication%20Files/file14771_83b42e5a-7e88-49be-9d33-2fc7585a87d9.pdf
64. Portolan, A. (2019). The competitiveness of the Republic of Croatia on the European Union tourism market. *5th international scientific conference ToSEE - Tourism in Southern and Eastern Europe 2019 - Creating innovative tourism experiences: The way to extend the tourist season*, 5, 581-595. https://tosee.fthm.hr/images/proceedings/2019/40_Portolan.pdf
65. Prychepa I., et al. (2022). Information model of the assessment of tourism sector competitiveness in the context of European integration policy. *Informatyka, Automatyka, Pomiary w Gospodarce i Ochronie Srodowiska*, *12*(4), 47-52. https://doi.org/10.35784/iapgos.3250
66. Psofogiorgos, N. A., & Metaxas, T. (2015). Porter vs Krugman: History, analysis and critique of regional competitiveness. MPRA Paper No. 68151. https://mpra.ub.uni-muenchen.de/68151/
67. Putra, F. K. K., Putra, M. K., & Novianti, S. (2023). Tourism and travel competitiveness index: From theoretical definition to practical analysis in Romania. *Journal of Ethnic Foods*, *10*(1). https://doi.org/10.1186/s42779-023-00189-0
68. Radio Prague International (2023). In 2022, the Czech Republic’s tourism income reached 5 billion euros. https://ruski.radio.cz/v-2022-godu-dohod-cheshskoy-respubliki-

ot-turizma-dostig-5-mlrd-evro-8777826
69. Radjenovic, M., Draskovic, M., & Pupavac, J. (2020). Analysis of the southeastern European countries' cultural and creative tourism competitiveness. *Transformations in Business & Economics*, *19*(2), 259-270.
70. Radukica, S., Jovanovica S., Petrovic R.M., Kostic Z., Ilica I. (2023). Relationship between price competitiveness, tourist arrivals, and tourism receipts in European countries. *Serbian Journal of Management*, *18*(1), 153-165. https://doi.org/10.5937/sjm18-34886
71. Romão, J., & Nijkamp, P. (2019). Impacts of innovation, productivity and specialization on tourism competitiveness–A spatial econometric analysis on European regions. *Current Issues in Tourism*, *22*(10), 1150-1169. https://doi.org/10.1080/13683500.2017.1366434
72. Sáblíková, H. (2023). The role of cultural life in a small town in eastern Bohemia, and its potential development of cultural tourism. *Land*, *12*(4). https://doi.org/10.3390/land12040751
73. Sanchez-Rivero, M., & Rodriguez-Rangel, M. C. (2022). Competitive benchmarking of tourism resources and products in Extremadura as factors of competitiveness by identifying strengths and convergences of Spanish regions in the period 2010-2018. *Land*, *11*(1). https://doi.org/10.3390/land11010018
74. Sarancha, M. A. (2020). Assessing competitiveness of the Baltic states in tourism. *Baltic Region*, *12*(3), 147-166. https://doi.org/10.5922/2079-8555-2020-3-9
75. Sedláček, M., Suchánek, P., Špalek, J., & Štamfestová, P. (2011). Relationship between quality and performance: Tourism companies in the Czech Republic. *Review of Economic Perspectives*, *11*(4), 195-222. https://doi.org/10.2478/v10135-011-0013-z
76. Smaje, K., & Zemmel, R. (2024). Ten unsung digital and AI ideas shaping business. McKinsey Digital. https://www.mckinsey.com/~/media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/ten%20unsung%20digital%20and%20ai%20ideas%20shaping%20business/ten-unsung-digital-and-ai-ideas-shaping-business.pdf?shouldIndex=false
77. Stanisic, T., Milicevic, S., & Krstic, B. (2022). Natural resources in function of sustainable and competitive tourism development of the EU countries. *Problemy ekorozwoju*, *17*(1), 64-70. https://doi.org/10.35784/pe.2022.1.06
78. Tleuberdinova, A., Salauatova, D., & Pratt, S. (2022). Assessing tourism destination competitiveness: The case of Kazakhstan. *Journal of Policy Research in Tourism, Leisure and Events*, *16*(2). https://doi.org/10.1080/19407963.2022.2027954
79. Tothova, K., et al. (2022). Proactive environmental strategies and their impact on hotel competitiveness during crisis: The case of the Czech hotel industry. *Journal of Competitiveness*, *14*(2), 156–173. https://doi.org/10.7441/joc.2022.02.09
80. Vasquez, C. L., Picon, C., & Aleman, E. G. (2021). Analysis of the T&T industry competitiveness index for Colombia, Ecuador, and Peru for the period 2007-2019. *Advances in Tourism, Technology and Systems*, *208*, 152-158. https://doi.org/10.1007/978-981-33-4256-9_14
81. Vasquez, C. L., & Llorach, C. (2021). Competitiveness of the travel and tourism industry in Latin America. *International conference on tourism, technology and systems*, *208*, 144-151. https://doi.org/10.1007/978-981-33-4256-9_13

82. Zhang, S., Chi, L., Zhang, T., & Wang, Y. (2023). Optimization of tourism management based on regional tourism competitiveness evaluation: Evidence from Ningxia Hui Autonomous Region, China. *Sustainability*, *15*(15). https://doi.org/10.3390/su15129591
83. ZSU on culture in the CR (2021). Basic statistical data on culture in the Czech Republic 2021. Cultural heritage. Museums and galleries by regions of the Czech Republic. 17. https://www.statistikakultury.cz/wp-content/uploads/2022/11/ZSU1_2021_Kulturni_dedictvi.pdf

Contact information

Associate Professor Tetiana But, Ph.D.
University of Hradec Kralove
Faculty of Computer Science and Management
Department of Recreation and Tourism
Czech Republic
E-mail: tetiana.but@uhk.cz
ORCID: 0000-0001-9403-4698