

AN INNOVATIVE APPROACH TO MEASURING THE TOURISM COMPETITIVENESS OF BOSNIA AND HERZEGOVINA USING THE INTEGRATED (DWYER & KIM) MODEL

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ABSTRACT

Competitiveness is a generally accepted concept that emerges in all social and economic spheres, so understanding competitiveness in the sphere of tourism is also essential for destinations to attract a significantly larger number of tourists and increase tourism expenditure. The aim of the research in this paper is related to the verification of the applicability of the Integrated Competitiveness Model, which was created by Larry Dwyer & Lee Kim. In order to demonstrate the applicability of the Integrated Competitiveness Model using the example of Bosnia and Herzegovina, the paper established a clear methodological framework based on a questionnaire as the main research instrument, which was interpreted by applying a Likert scale, and the responses were analyzed using measures of descriptive statistics. The statistical processing of the collected responses indicates the successful applicability of the Integrated Model, according to which Bosnia and Herzegovina is a moderately competitive destination. A particular significance of the model is its precise suggestion of the multidimensionality and interdependence of competitiveness determinants, highlighting those that need improvement. The research, which utilized an innovative approach through a survey questionnaire, achieved representativeness through careful sample selection, encompassing not only tourists but also representatives of the tourism industry, resulting in original conclusions.

Keywords: *tourism, competitiveness, Bosnia and Herzegovina*

1. INTRODUCTORY CONSIDERATIONS ON COMPETITIVENESS IN TOURISM

By exploring the origins of the competitiveness phenomenon, it can be concluded that the initial foundations of the concept of competitiveness were given by Adam Smith (in "The Wealth of Nations" in 1776) through the introduction of the concept of absolute advantage, and later by David Ricardo through the introduction of the concept of comparative advantage (Siddiqui, 2017), both advocating for exports and limiting imports to stimulate national competitiveness and employment. Research on comparative advantages in tourism based on Ricardo's approach led to results indicating that those "with natural resources increase a country's relative or comparative advantage in exporting tourism services" (Toit et al., 2010). Following them, the first significant conclusions about competitiveness were drawn by Michael Porter (around 1980)

through the concept of national competitive advantage - the Diamond of Competitiveness, which has broad applicability. Unlike defining national and corporate-level competitiveness, slightly more sophisticated definitions apply to tourism competitiveness.

Referring to Murphy, Kunst states that tourism competitiveness is isolated from the principles of transparency, inclusivity and exclusivity, so it can be separately observed because it represents a form of aggregate supply composed of a large number of participants offering their specific products (Kunst, 2009). It is this aggregate nature that ensures the simulation of a large number of tourism value chains that guarantee unique experiential moments for tourists. The term experience economy, first explained by Pin and Gilmor, can initially serve to explain competitiveness in tourism because destinations should differ primarily in offering high-quality and personalized experiences (Pin & Gilmor, 2013).

Hassan states that tourism competitiveness is “the destination’s ability to create and integrate value-added products that sustain its resource” (Hassan, 2000).

Dwyer and Kim analyze competitiveness in terms of the interactivity of all sources of destination competitiveness, suggesting that this competitiveness is the goal to achieve a higher level of competitiveness, i.e. national and regional superiority (Dwyer & Kim, 2003).

When analyzing the competitiveness of a tourist destination, Heath emphasizes that it is in a significant correlational relationship with human capital, a competitiveness tool that other analysts have largely overlooked (Heath, 2002).

The competitiveness of the tourism sector determines the strength of each destination, and its ability to attract visitors and generate wealth (Guaita et al., 2020).

Krugman significantly contributes to the theoretical clarification of competitiveness issue, especially competitiveness within the framework of integration processes. His theory simplifies the achievement of competitiveness at the international level through economies of scale and monopolistic competitiveness, which requires freedom of entry and exit from the market, as well as differentiation of tourism products (Host & Zaninović, 2018) his theory is also applicable to tourism competitiveness.

Mihalič particularly emphasizes the importance of the environmental component, which appears in most models as a factor or sub-factor and suggests a more thorough inclusion of environmental determinants in the destination competitiveness model (Mihalič, 2013).

Poon believes that the path to leadership and competitive position of the destination can be ensured through four key principles. First of all, the author emphasizes the importance of sustainable development and environmental preservation, then appeals to governments to include tourism as one of the leading economic sectors. Strengthening distribution channels enables greater transparency and mobility of tourism offerings, while strengthening the private sector provides a good foundation for involving various interest groups in tourism development (Poon, 1993).

Mariam, Singh et al., exploring the local population’s perception of tourism development, which is crucial for creating a competitive advantage, conclude that the local population believes that major players take the benefits of tourism, while ordinary people do not benefit much from tourism development. The same authors conclude that government development activities are often more focused on tourists than on the local population (Mariam et al., 2024).

An indicator of the state of competitiveness is certainly the level of foreign investments. In order for the destination to be interesting for investors, it is necessary to have infrastructural and administrative conditions, as well as credible domestic companies that would be a reliable partner for foreign investors and facilitate their investment activities (Ratković & Šoć, 2015). In the absence of these conditions, more apartments and cottages are built, and less hotels, which

creates less competitiveness.

The changes in the state of competitiveness, which are monitored by the World Economic Forum Report, are especially visible in the most competitive countries, namely for the pillars: ICT readiness, price competitiveness and air transport infrastructure (Gabor et al., 2024).

The essence of success in modelling destination competitiveness lies in the appropriate selection of determinants that shape the final goals. Traditional competitiveness models primarily focus on quantitative benefits, such as economic ones. However, practice has shown that environmental competitiveness and the satisfaction of the local population are much more significant (Stanišić et al., 2023). That is precisely why the Integrated Model was chosen as a platform for researching the competitiveness of Bosnia and Herzegovina in this study, as its ultimate goal is the satisfaction of the population of the receptive destination.

2. CURRENT STUDIES USING THE INTEGRATED (DWYER & KIM) MODEL

2. 1. APPLICATION OF THE INTEGRATED (DWYER & KIM) MODEL

The application of the Integrated Competitiveness Model enables a clear systematization of indicators and sub-indicators, the analysis of which provides insights into attributes that are significant, but not sufficiently developed or managed correctly (Berdo, 2021). Although the model is primarily focused on identifying attributes and sub-attributes that define destination competitiveness, its significance lies in its main goal of achieving socio-economic prosperity, rather than just economic competitiveness in terms of increasing the number of tourist arrivals and tourism revenue (Dwyer & Kim, 2003). The integrated model identifies and links certain variables of national competitiveness and the main elements of destination competitiveness. The integrated model is based on the research efforts of Dwyer & Kim, who addressed the issue of destination competitiveness in Australia (Dwyer) and Korea (Kim). The model was initially created using the example of Australia and Korea by Dwyer & Kim, and later by other authors: in Slovenia (Gomezelj & Mihalič, 2008), Southeast Serbia (Mihalič, Milutinović et al., 2011) and Serbia in general (Armenski et al., 2012), Egypt (Abdou & Wafik, 2022), etc. The possibility of implementing the model to other destinations and the ease of measuring indicators were demonstrated by Mihalič & Dwyer, 2010. The research carried out by these authors has a significant scientific contribution, especially due to the use of Importance-Performance Analysis (IPA), which can provide priority ordering and strategy adjustments (Dwyer et al., 2012). The goal of modern experience-oriented tourism increasingly focuses on competitiveness rather than comparative advantages (Fernando & Long, 2012). Guided (by this fact, most studies on competitiveness in tourism analyze physical indicators such as the number of overnight stays, the number of arrivals, generated revenue, contribution to gross domestic product, and the like. Based on this, a superficial comparative analysis is obtained. This is precisely why the Integrated Model is of great importance, since it is multidisciplinary and combines six different categories with a large number of sub-indicators (Stankova & Vasenska, 2017). However, not all factors analyzed by the model are equally important for the success of a destination. Some of them are not even applicable to every destination.

The particular significance of this model lies in the systematization of indicators into six groups within which macro and microeconomic elements of a destination's competitiveness are analyzed. This provides a more objective view of the status of inherited and created resources, general infrastructure, location conditions, demand conditions and quality of management (Faur & Ban, 2020).

2. 2. DETERMINANTS OF THE INTEGRATED (DWYER & KIM) COMPETITIVENESS MODEL

The Integrated model was created as a kind of modification of earlier models, where certain categories were found to be unsubstantiated in practice. This model indicates that market connections are perceived as an integral part of resources and supporting factors, which then imply interdependence among destinations. The model explicitly emphasizes that competitiveness is not the ultimate goal but rather the national and regional prosperity of a destination under study. *Image, brand and dedication* to tourists are highlighted as significant factors in tourist demand. The model makes a clear distinction between supporting factors and resources and situational factors related to the microenvironment (Dwyer, L., & Kim, C.W., 2003). The first group of indicators is shaped by natural and cultural resources, which are often the main motive for travel. In the context of the second category, the focus is on destination management skills (Mrkaić Ateljević, 2020). This category has five determinants. Situational conditions are qualifiers that mitigate the negative impacts of other factors, and define the limits and potentials of the destination's development. A particular advantage of the model is evident in recognizing determinants that were previously significantly neglected, such as *demand and shopping*. Demand, especially domestic demand and its internationalization, is the basis for understanding competitiveness. In discussing demand as a primary indicator of competitiveness, it is worth mentioning that it is closely related to three things: *awareness, perception and preference* (Azzopardi & Nash, 2017). Awareness is generated by marketing activities, whereby the tourist creates an image of the destination. That image generates perception, and a decision to visit the destination depends on the match between perception and preferences. Therefore, demand is closely linked to these elements; if there is a match between perception and taste of tourists, the visit will be made, that is, demand will increase. In addition, through supporting factors and resources, the degree of integration of the local population into the tourism flows of the destination is analyzed. The integration of the local population usually brings special benefits in terms of creating additional opportunities for work and life (Yaja, Kumar, Mamung & Roy, 2024). By researching all the aforementioned categories, insights into the status of indicators used to specifically measure destination competitiveness and economic prosperity are gained.

3. RESEARCH METHODOLOGY

3. 1. DATA COLLECTION AND DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

The Integrated Destination Competitiveness Model was used for researching the competitiveness of Bosnia and Herzegovina as a tourist destination due to its proven operability in other destinations, with little or no modifications. Namely, after confirming its validity in the case of Australia-Korea, the model was appropriately utilized for analyzing the competitiveness of Slovenia, Serbia and for analyzing the challenges of destination competitiveness in Serbia. The final assessment of the competitiveness of Bosnia and Herzegovina according to the model was based on the first five categories of the model.

A methodological approach to research is necessary in order for the research to acquire a scientific, strategic and implementation character. The basic steps that are an indispensable part of the methodological approach are: defining the research problem and objectives, determining the data source, sampling, data collection, data analysis and, finally, the interpretation of the results. The objectives of the research arise from the defined problem which in this paper refers to the level of competitiveness in tourism in Bosnia and Herzegovina.

The following can be singled out as priority research questions to be answered:

- What is the average rating of the competitiveness of tourism in Bosnia and Herzegovina?
- Which group of competitiveness indicators has the best/worst score?

The data were collected on the basis of a questionnaire distributed in two ways: via email using the Google Forms survey tool and in person to the respondents' addresses. The method of stratified sampling was used to select respondents, considering that the respondents came from different strata. The strata consisted of students, employees in relevant institutions and hotel companies throughout Bosnia and Herzegovina, and representatives of the tourism industry who further distributed the questionnaires to tourists. Since the survey was designed to be anonymous, there is no insight into who provided the feedback, only into the official number of responses received. The research was conducted during the summer season of 2023, when the first group of questionnaires was sent out.

The survey was carried out via Google Forms, through which 215 questionnaires were delivered, but a total of 60 responses were received, which is 27.9% of the number sent. A portion of the surveys delivered in person, not included in the number above, amounted to 75 valid responses. Therefore, the total number of responses (online and in person) is 135. In terms of percentage, online responses account for 44.44% of the total responses received, while personally delivered questionnaires account for 55.55%. The socio-demographic analysis of the respondents is shown in the following charts. It refers to gender, age, education and field of employment.

Chart 1. Gender of respondents

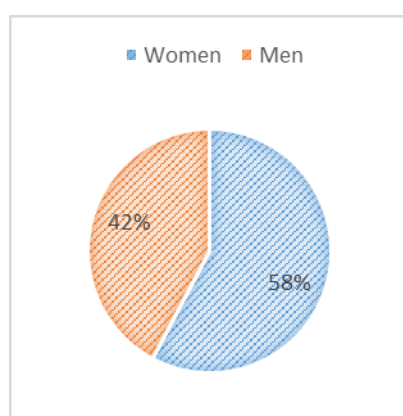
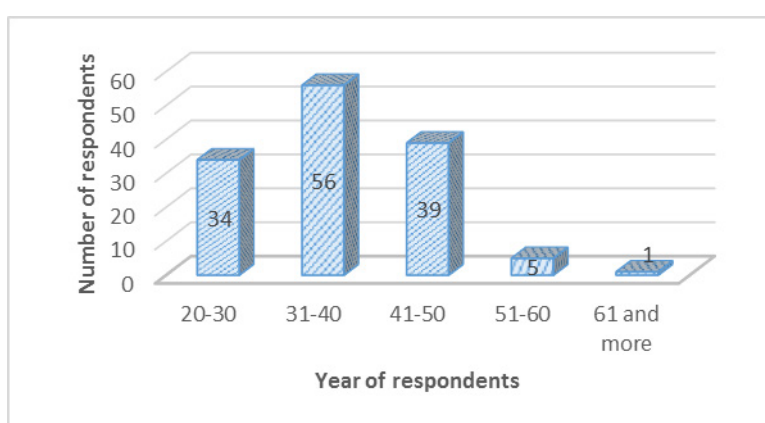


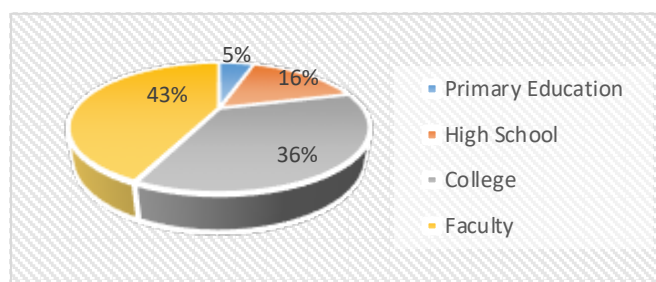
Chart 2: Age of respondents



Source: Authors' creation, based on the survey from 2023

The total sample of respondents includes 135 participants, with 78 being female and 57 male. Regarding the age structure of the respondents, the age groups are divided into 5 groups, with the dominant age group of 30-40 years, comprising a total of 56 respondents. The majority of respondents have completed college, followed by higher education, indicating that 79% of the selected sample consists of highly educated respondents. The majority of the respondents are employed in state bodies, tourism organizations and the hotel sector, which supports the fact that the sample is fully representative and adapted to the field of research.

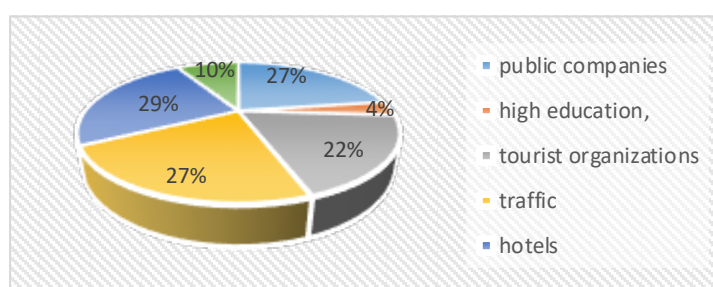
Chart 3. Education of respondents



Source: Authors' creation, based on the survey from 2023

The highest response rate of respondents was achieved in the sector of accommodation facilities and state bodies, while the lowest number of respondents came from the student stratum.

Chart 4. Area of employment of respondents



Source: Authors' creation, based on the survey from 2023

3. 2. A RESEARCH INSTRUMENT

For the purposes of data collection, a survey questionnaire was used as a research instrument, comprising five categories of questions derived from the context of the original Integrated Competitiveness Model: 1. *Natural and Cultural Resources*, 2. *Created Resources*, 3. *Supporting Factors*, 4. *Destination Management*, 5. *Situational Conditions*. Responses to questions involve assessing the status using a Likert scale of 1-5. Ratings are defined as follows:

1. Extremely non-competitive (lowest rating);
2. Non-competitive;
3. Moderately competitive;
4. Competitive;
5. Extremely competitive (highest rating).

Based on the ratings of the indicators, the arithmetic mean of grouped data on a scale of 1-5 was calculated. Since 5 is the highest rating, indicators with the highest arithmetic mean of responses actually implied the highest ratings. The arithmetic mean of grouped data μ was calculated for each indicator separately, using Excel, based on the following formula (Lovrić et al., 2006):

$$X\mu = \frac{\sum f_i x_i}{\sum f_i} \quad (1)$$

x_i – values of features, f_i – frequencies.

Afterwards, in the analysis, the standard deviation of grouped data was calculated for the selected indicators to obtain a more comprehensive view of the absolute variability of respondents' answers. It represents the average deviation of all individual data from their arithmetic mean. It is calculated based on the formula (Lovrić et al., 2006):

$\sigma = \sqrt{\text{VAR}}$; where VAR is the variance of grouped data calculated as follows:

$$\text{VAR} = \frac{\sum f_i x_i^2}{\sum f_i} - \mu^2 \quad (2)$$

After the statistical processing, only the parameters with the highest ratings (arithmetic means), along with their standard deviation and consequently variance, will be interpreted. Then, the paper will present a table showing the arithmetic means of all five groups. Based on the analysis of this table, conclusions will be drawn regarding the fields in which Bosnia and Herzegovina is the most competitive. From each group, one indicator with the highest arithmetic mean will be explained, using a table containing data on the frequency of responses and percentages.

4. RESEARCH RESULTS

4.1. ANALYSIS OF THE FIRST GROUP OF INDICATORS - NATURAL AND CULTURAL RESOURCES

Natural and Cultural Resources are taken as the starting group of indicators that define the attractiveness of a tourist destination according to the Integrated Model. For the purposes of examining the possibility of implementing the Integrated Competitiveness Model in the tourist destination of Bosnia and Herzegovina, this category included seven indicators, representing a slight modification compared to the original Integrated Model by Dwyer & Kim. The following table presents the indicators from the first group with their corresponding arithmetic means, after which only the indicator with the highest rating is considered.

Table 1. Natural and Cultural Resources

Indicators	AM
1.1. Climate suitability for tourism development	3.65
1.2. Cleanliness and sanitation in the destination	3.12
1.3. Untouched nature, natural wonders, landscapes	4.43
1.4. Flora and fauna	4.04
1.5. Cultural and historical landmarks	3.70
1.6. Architectural and artistic features	3.16
1.7. Culture and tradition (culinary diversity, folklore, traditional customs)	3.19

Source: Authors' creation, based on the survey from 2023

Among the indicators in the first group of indicators, the indicator "Untouched nature, natural wonders and landscapes" has the highest arithmetic mean. When evaluating this indicator, respondents provided varying responses, ranging from 2 (minimum) to 5 (maximum). The average rating of respondents for this question is 4.43, which indicates a high level of competitiveness. The next step involves calculating the standard deviation, according to the aforementioned formula. The following table illustrates the procedure for calculating the standard deviation and serves as an example for all subsequent indicators, so it will not be presented individually for subsequent calculations.

Table 2: Calculation of the standard deviation for the indicator "Untouched nature"

Rating xi	Number of responses fi	xi * fi	fi * xi ²
1	0	0	0
2	4	8	16
3	11	33	99
4	42	168	672
5	78	390	1950
Total:	135	599	2737

Source: Authors' creation, based on the survey from 2023

The arithmetic mean according to the formula 1) is 4.437037.

The variance according to the formula 2) is 0.58, based on which the square root of the variance yields the standard deviation (SD) $\sigma = \sqrt{\text{VAR}}$, which is 0.76.

Based on these results, the following table can be created. In addition to the arithmetic mean and standard deviation, the table also includes the percentage distribution of responses.

Table 3. Untouched nature, natural wonders and landscapes of Bosnia and Herzegovina

Rating	Frequency of responses	Percentage %	AS	SD
1	0	-	4.43	0.766
2	4	2.96		
3	11	8.14		
4	42	31.11		
5	78	57.7		
Total	135	100 %		

Source: Authors' creation, based on the survey from 2023

The majority of respondents believe that Bosnia and Herzegovina is extremely competitive in this field, with a total percentage of 57.7%, which supports the fact that Bosnia and Herzegovina has potential for the tourism valorization of its natural resources.

4. 2. ANALYSIS OF THE SECOND GROUP OF INDICATORS – CREATED RESOURCES

The second group of tourism competitiveness indicators consists of a total of 18 indicators that are essential for exploring the complete resource base within a destination (Mrkaić Ateljević, 2020). The following table presents the indicators from the second group with their corresponding arithmetic means, after which only the indicator with the highest rating is considered.

Table 4. Created Resources

Created Resources	AM
2.1. Quality and diversity of accommodation	3.19
2.2. Quality and diversity of food	4.12
2.3. Quality of local transport in Bosnia and Herzegovina and airports	2.06
2.4. MICE tourism facilities in Bosnia and Herzegovina	2.89
2.5. Availability of tourist information	3.17
2.6. Offer and diversity of events (sports, festivals...)	2.92
2.7. Offer and quality of entertainment in Bosnia and Herzegovina (theatres, galleries, cinemas)	2.99
2.8. Offer and quality of nightlife in Bosnia and Herzegovina	3.36
2.9. Amusement and theme parks	2.48
2.10. Water sports (swimming, sailing, fishing...)	3.06
2.11. Winter sports (skiing, snowboarding...)	3.78
2.12. Adventure/adrenaline activities	3.11
2.13. Outdoor activities (camping, hiking, climbing...)	3.95
2.14. Health tourism (spa and wellness tourism)	3.28
2.15. Recreation facilities (parks, equestrian centers)	2.83
2.16. Shopping and quality of goods	2.81
2.17. Quality/price ratio within the tourist destination	3.17
2.18. Quality of shopping facilities	2.85

Source: Authors' creation, based on the survey from 2023

Among the indicators in the second group, the indicator “Quality and diversity of food” has the highest arithmetic mean of 4.12, while the indicator “Outdoor activities” has a slightly lower score of 3.95. This indicates that Bosnia and Herzegovina is competitive in these fields.

Table 5. Quality and diversity of food

Rating	Frequency of responses	Percentage %	AM	SD
1	0	-----	4.12	0.80
2	5	3.7		
3	20	14.81		
4	63	46.66		
5	47	34.81		
Total	135	100 %		

Source: Authors' creation, based on the survey from 2023

Responses to this question range from 2 to 5, with the majority of respondents giving ratings of 4 (*competitive*) and 5 (*extremely competitive*). Bosnia and Herzegovina received a strong rating (4.12) in the gastronomy sector. Given that this rating is actually the highest among the indicators – *Created Resources*, it is clear that according to respondents' ratings, Bosnia and Herzegovina holds a moderately significant competitive position in the field of created resources.

4. 3. ANALYSIS OF THE THIRD GROUP OF INDICATORS - SUPPORTING FACTORS AND RESOURCES

The third group of tourism competitiveness indicators consists of a total of 13 indicators that define the accompanying services and resources without which the tourism market is not complete. The following table presents the indicators from the third group with their corresponding arithmetic means, after which only the indicator with the highest rating is considered. In this case, the indicator – Hospitality of the local population, which is of crucial importance for establishing and maintaining communication with tourists at the destination, has by far the highest rating

Table 6. Supporting Factors and Resources

Supporting Factors and Resources	AM
3.1. Availability of medical services for tourists	2.53
3.2. Availability of financial institutions and exchange offices	3.42
3.3. Availability of telecommunication services for tourists (post, Wi-Fi...)	3.2
3.4. Quality of general infrastructure (transport, electricity, waste management...)	2.46
3.5. Maintenance of connections with emitting markets (ethnic, religious, sports...)	2.89
3.6. Level of foreign investments in the tourism industry of Bosnia and Herzegovina	2.30
3.7. Hospitality of the local population	4.37
3.8. Resident support for tourism	3.2
3.9. Level of achieved standards in tourism	2.62
3.10. Quality of programs for monitoring tourist satisfaction	2.53
3.11. Behavior of customs/immigration officials/embassies	3.04
3.12. Awareness of tourism employees about the importance of service quality	3.14
3.13. Distance, accessibility and ease of travel to Bosnia and Herzegovina	2.62

Source: Authors' creation, based on the survey from 2023

In addition to the hospitality of the local population, the survey results indicate that Bosnia and Herzegovina also achieves solid competitiveness in terms of the number of financial institutions that facilitate the stay of tourists at the destination, and that employees in the tourism sector have moderate awareness of the importance of service quality.

Table 7. Hospitality of the local population

Rating	Frequency of responses	Percentage %	AM	SD
1	0	-	4.37	0.68
2	0	-		
3	16	11.85%		
4	53	39.25%		
5	66	48.88		
Total	135	100		

Source: Authors' creation, based on the survey from 2023

Responses to this question range from 3 to 5, and the majority of respondents, 48.8%, believe that Bosnia and Herzegovina is extremely competitive in terms of the attitude towards tourists.

4. 4. ANALYSIS OF THE FOURTH GROUP OF INDICATORS – DESTINATION MANAGEMENT

The fourth group of indicators encompasses a total of 15 indicators that evaluate the destination's status in the field of management, ranging from the collaboration between the Tourism Organization of the Republic of Srpska and the Tourism Association of the Federation of Bosnia and Herzegovina to indicators that evaluate the legal framework for the development of sustainable tourism in the country.

Table 8. Destination Management

Destination Management	AM
4.1. Collaboration between the Tourism Organization of the Republic of Srpska and the Tourism Association of the Federation of Bosnia and Herzegovina	2.56
4.2. Collaboration between local tourism organizations and the economy	2.83
4.3. Reputation of tourism organizations and associations in Bosnia and Herzegovina	2.97
4.4. Image of Bosnia and Herzegovina as a tourist destination	2.77
4.5. Awareness of competitive tourist destinations by local managers	2.84
4.6. Community support for specific events and manifestations	2.91
4.7. Existing vision for the development of tourism in Bosnia and Herzegovina	3.02
4.8. Integration of tourism development into overall economic development	2.75
4.9. Commitment of the public sector to the education of personnel in tourism	2.99
4.10. Commitment of the private sector to the education of personnel in tourism	2.85
4.11. Training and education of the workforce according to tourists' needs	2.63
4.12. Public sector attitude towards sustainable tourism development	2.55
4.13. Private sector attitude towards sustainable tourism development	2.60
4.14. Research on the impact of tourism on the environment	2.54
4.15. Presence of laws and regulations that protect the environment and cultural heritage	2.63

Source: Authors' creation, based on the survey from 2023

This group of indicators was evaluated by respondents with very low ratings, with the highest rating given to the indicator "Existing vision for the development of tourism in Bosnia and Herzegovina" with an arithmetic mean of 3.02 (moderately competitive). In general, the status of these indicators is concerning, so according to the survey results, more attention should be paid to implementing management activities at the destination level. Particularly concerning is the poor collaboration among tourism industry bodies between the two entities, as without joint action and solidarity, great results at the state level cannot be expected.

Table 9. Existing vision for tourism development

Rating	Frequency of responses	Percentage %	AM	SD
1	10	7.40	3.02	1.06
2	31	22.96		
3	54	40		
4	26	19.25		
5	14	10.37		
Total	135	100	3.02	1.06

Source: Authors' creation, based on the survey from 2023

The respondents' opinions regarding this indicator differ, as the majority of respondents, 22.96%, rated this indicator as non-competitive, while 19.25% believe that Bosnia and Herzegovina is competitive when it comes to the existing vision for tourism development. Ratings range from 1 to 5, with a standard deviation of responses of 1.06.

4. 5. ANALYSIS OF THE FIFTH GROUP OF INDICATORS - SITUATIONAL CONDITIONS

This group of indicators comprises 16 indicators that represent the basis of the analysis of situational conditions and aim to establish the relationship between the constituent elements of the destination and its environment. These indicators range from economic, social-cultural, to partnership conditions, government incentives, etc.

Table 10. Situational Conditions

Situational Conditions	AM
5.1. Distance of emitting markets from the destination	2.82
5.2. Level of safety for tourists in Bosnia and Herzegovina	3.57
5.3. Connections between tourism companies and companies from other sectors	3.20
5.4. Application of information and communication technology in market occurrence	2.83
5.5. Ethical business practices of tourism industry companies	2.92
5.6. Level of innovation in business operations	2.51
5.7. Efficiency of management in tourism organizations and tourism industry companies	2.80
5.8. Level of cooperation (membership in associations, clusters, agreements...)	2.93
5.9. Government policy provides a good context for tourism development	2.57
5.10. Quality of the legal and regulatory environment	2.62
5.11. Political stability	2.69
5.12. Investors' interest in investing in the tourism of Bosnia and Herzegovina	2.59
5.13. Accommodation prices in most destinations in Bosnia and Herzegovina	3.56
5.14. Prices of destination travel packages	3.33
5.15. Prices of goods in retail	3.13
5.16. Exchange rate	3.56

Source: Authors' creation, based on the survey from 2023

The majority of indicators in the fifth group received poor ratings, ranging from non-competitive to moderately competitive (2-3). The indicator with the highest arithmetic mean is "Level of safety for tourists in Bosnia and Herzegovina" of 3.57, which is highly significant considering frequent terrorist disturbances or other forms of insecurity affecting the global tourist scene, leading tourists to reconsider visiting a destination. Similarly rated are the indicators "Exchange rate" and "Accommodation prices". The lowest rating in this group is for the indicator "Level of innovation in tourism", as well as "Government policy", indicating the need for strategic government support in addressing innovation challenges.

Table 11. Level of safety in tourism

Rating	Frequency of responses	Percentage %	AM	SD
1	0	-	3.56	0.55
2	0	-		
3	63	46.66		
4	68	50.37		
5	4	2.96		
Total	135	100		

Source: Authors' creation, based on the survey from 2023

More than half of the respondents rated the level of safety in Bosnia and Herzegovina as competitive, while 46.66% of them consider safety to be at a moderately competitive level (3). The standard deviation of this indicator is 0.55.

5. DISCUSSION ON THE RESULTS OBTAINED

5.1. THE STATE OF COMPETITIVENESS OF TOURISM IN BOSNIA AND HERZEGOVINA

Based on all the indicators interpreted so far, a table has been created comprising the arithmetic means of five groups of competitiveness indicators and the minimum and maximum ratings that each competitiveness factor received, i.e. the indicators within it.

Table 12. Competitiveness factors for Bosnia and Herzegovina

Factors	Number of respondents	Rating		Arithmetic mean (A.M.)
		Min	Max	
Natural and Cultural Resources	135	3.12	4.43	3.61
Created Resources	135	2.06	4.12	3.11
Supporting Factors and Resources	135	2.46	4.37	2.95
Destination Management	135	2.54	3.02	2.76
Situational Conditions	135	2.51	3.57	2.97

Source: Authors' creation, based on the survey from 2023

Based on the data presented in the table, the following conclusions can be drawn, which provide answers to the previously posed research questions:

1. Ratings for the first competitiveness factor, Natural and Cultural Resources (total of 7 indicators), range from 3.12 to a maximum of 4.43. The arithmetic mean of all indicators in this factor is 3.61, indicating moderate competitiveness. This indicates moderate competitiveness. This group of indicators has the best average rating.
2. Ratings for the second competitiveness factor, Created Resources (total of 18 indicators) range from 2.06 as the minimum rating to 4.12 as the maximum rating. The arithmetic mean of this factor is 3.11. indicating moderate competitiveness.
3. Ratings for the third competitiveness factor, Supporting Factors and Resources, range from 2.46 to 4.37. The arithmetic mean of this factor is 2.95. It can be said that Bosnia and Herzegovina has marginal competitiveness (almost 3) when it comes to indicators that support and enhance the level of tourist services (infrastructure, availability, resident support for tourism, etc.).
4. Ratings for the fourth competitiveness factor, Destination Management (total of 15 indicators) range from 2.54 to a maximum of 3.02. The arithmetic mean of this competitiveness factor is 2.76. Accordingly, it can be concluded that Bosnia and Herzegovina is not competitive in the field of destination management.

5. Ratings for the fifth competitiveness factor, Situational Conditions (total of 16 indicators) range from 2.51 to a maximum of 3.57. The arithmetic mean of this factor is 2.97, indicating that according to respondents, Bosnia and Herzegovina has marginal competitiveness in terms of fulfilling situational conditions.

Based on the arithmetic means of the five competitiveness factors, an overall average value can be obtained, indicating the state of competitiveness of tourism in Bosnia and Herzegovina. The following table shows the overall average rating of the competitiveness of tourism in Bosnia and Herzegovina, which represents the answer to the first research question.

Table 13. Overall average competitiveness rating of Bosnia and Herzegovina

Factors	Arithmetic mean (A.M.)
1. Natural and Cultural Resources	3.61
2. Created Resources	3.11
3. Supporting Factors and Resources	2.95
4. Destination Management	2.76
5. Situational Conditions	2.97
Arithmetic mean of all factors	3.08

Source: Authors' creation, based on the survey from 2023

According to the respondents' answers, it can be concluded that the implementation of the Integrated Competitiveness Model in the case of Bosnia and Herzegovina is successful. Testing the competitiveness of the five factors defined in the research resulted in a final average rating of 3.08. Therefore, Bosnia and Herzegovina is a moderately competitive destination, suggesting significant potential for modification and enhancement of all individual indicators, especially those within Destination Management (2.76). Bosnia and Herzegovina is a country rich in natural and cultural resources, as evidenced by the highest rating for that competitiveness factor. It is important to note once again that the respondents belonged to various strata: travel agencies, local and regional organizations, ministries, hotel companies, and higher education institutions.

The main limiting factor of the Integrated Model of Competitiveness is that the factors are the same for all groups of respondents. In this way, different interest groups can assess the development and importance of individual indicators differently. In addition, the lack of a reference point with which to compare the destination can be cited as a limiting factor of this research. The indicators were rated using a Likert scale (by which they received ratings in the range of 1-5), but without comparing the same indicators with other destinations, a reliable picture of competitiveness cannot be obtained. In future research, it would not be a bad idea to select respondents according to their experience in tourism, so that the attitude of those with more experience would be more respected.

The advantages of this model are that it can serve as a basis for defining advantages and disadvantages in the functioning of the destination and that it has a comprehensive approach to competitiveness research. Earlier models also analyzed competitiveness, but this model has significant implications for the understanding of tourism because the ultimate goal is not economic profit, but sustainability and overall well-being in the destination.

5. 2. COMPARISON OF THE OBTAINED RATINGS OF THE INTEGRATED COMPETITIVENESS MODEL WITH THE TTCI RATINGS

Since the inception of measuring tourism competitiveness by the World Economic Forum, which has been shaped through the Travel & Tourism Competitiveness Index - TTCI, Bosnia and Herzegovina has also been included. However, its position in the ranking and ratings by categories do not show continuous growth trends but depend on the overall situation and exter-

nal conditions of development. It is interesting to note that in the period 2007-2021, Bosnia and Herzegovina had its best position in 2013 - 90th place on the ranking list out of 140 countries and in 2021 when it took the 95th position. Indeed, the best placement was not expected for those years, considering that 2013 was marked by the end of the global economic crisis, while 2021 was marked by the destructive effects of the COVID pandemic on the economy and global health. The TTCI classification comprises four main sub-indices with 14 pillars and over 90 individual indicators distributed among different pillars. The number of analyzed economies is not the same every year, but it has been 140 in recent years. The ratings defining the average status of individual indicators range from 1 to 7. Observing the tourism record-breaking year 2019, Bosnia and Herzegovina ranked 105th with an average total rating of 3.3. During the same period, there was a growth of the average rating by 5.2% compared to 2017 (WTTCI, 2020). However, achieved growth in the average rating does not necessarily mean growth compared to the regional and global ratings. Namely, compared to the average regional TTCI rating in 2019, there was a decrease of 23%, and a decrease of 14.7% compared to the global TTCI rating.

Table 14. Position of Bosnia and Herzegovina in the period 2007-2019

Report/year	TTCI-2007	TTCI-2008	TTCI-2009	TTCI-2011	TTCI-2013	TTCI-2015	TTCI-2017	TTCI-2019
Number of countries	124	130	133	139	140	141	136	140
Position of BiH	104	105	107	97	90	-	113	105
Rating of BiH	3.51	3.45	3.44	3.63	3.78	-	3.12	3.30

Source: Authors creation based on World bank report

As can be seen in the table, Bosnia and Herzegovina had its lowest ranking in 2017 with 113th place and an average rating of 3.12. Table 13 shows the average rating of tourism competitiveness obtained through research methods analyzing a carefully selected sample based on the Integrated Competitiveness Model, which is 3.08 in 2023, while the rating according to the TTCI methodology is close to this and ranges from 3.12 to 3.78 for the period 2007-2019. Based on this, it can be concluded that the research is largely compatible with the results of the TTCI analysis conducted by the World Economic Forum. Significant differences were observed in the field of natural and cultural resources, which according to the research have an integrated rating of 3.61, while according to the TTCI, they were rated worst in 2019 (natural resources - 1.7 and cultural resources - 1.8). The reason for this is the different target groups of respondents; in Bosnia and Herzegovina, respondents were residents and non-residents from the nearby region, so they are familiar with cultural and natural resources. For the purposes of TTCI indicator analysis, the focus is on cultural and natural resources with global recognition, often considering UNESCO lists. This means that these pillars are not used to attract international tourists and indicate their inadequate valorization.

6. CONCLUSION

The results of this research can have significant implications for the tourism industry and the academic community involved in studying tourism competitiveness. Although most models used to investigate competitiveness in tourism confirm that visitor satisfaction and the number of repeat visits are the best measures for competitiveness analysis, the Integrated Model nonetheless provides specific indicators evaluated by tourists or residents of the destination. The aim of this research is to identify the best and worst-rated indicators, which will significantly contribute to better organization and strategic management. The indicators rated the highest include the *Hospitality of the local population* and *Diversity of food*. A limiting factor of this model may be its focus on narrowly sampled units, as the respondents were either residents or tourists who

were surveyed during the visit.

Based on the analysis, it is concluded that Bosnia and Herzegovina has non-competitive and moderately competitive indicators, while a higher level of competitiveness as the average value of the set of indicators has not been achieved. Advantages and strengths in the development of tourism are represented by two categories: Natural and Cultural Resources and Created Resources, with a note that the rating for natural and cultural resources is based on tourists' enthusiasm rather than the general recognition of the category. Namely, to achieve general recognition of natural and cultural resources, more institutional efforts are needed to promote them and include them on official lists (e.g., UNESCO list). Regarding created resources, the research results suggest that significant efforts should be made to improve the quality of local transport, airport transport and the availability of entertainment and thematic content. As limiting factors for tourism development, a low level of innovation in tourism and a lack of research initiatives in the tourism industry can be identified. In addition, considering the results obtained, it is necessary to increase the level of capital investment in the tourism sector, as it has been in the range of up to 2% of total investments for years.

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