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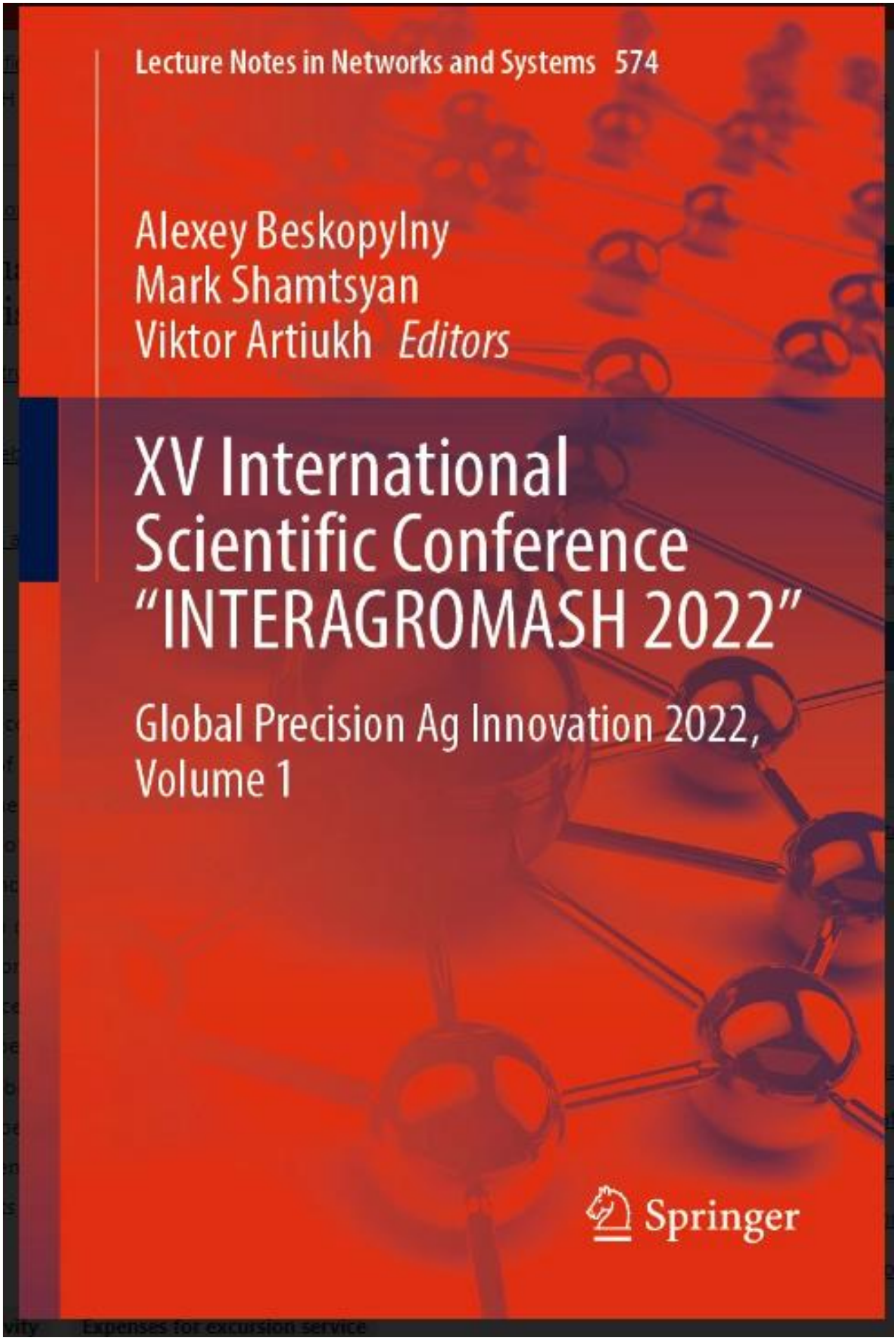

Lecture Notes in Networks and Systems

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THE EFFICIENCY EVALUATION OF PROVIDING EXCURSION SERVICES IN THE TOURIST ACTIVITY OF UKRAINE

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Abstract:

It has been proved the significance of excursion services in the system of tourist activity of Ukraine. It has been proposed to conduct research based on the impact on the environment of the excursion services provision of three indicators: effective one - income from excursion activities and two factor ones - the cost of excursion services and the cost of tour buses.

It has been substantiated the necessity of using the method analysis of the operating, which allowed to build a line of technical efficiency, to identify areas of technically efficient and technically inefficient for the implementation of excursion activities. It has been proved that now in most regions of Ukraine, as a result of providing excursion services, the income is not enough to cover the costs of excursion services and / or excursion buses. As a result of graphic design to improve the conditions for the operating environment, it has been proposed to assess the effectiveness in three areas: possibility of achieving efficiency, prospects of increasing efficiency and inefficiency. It has been also proved now the inability of the state to improve providing excursion services system; however, the areas in which excursion activity development testifies to prospects in the future are revealed.

***Keywords*:**

Excursion services, tourist activity, expenses for excursion service, expenses for excursion buses, income from excursion activity, efficiency of rendering excursion services, method of the operating environment analysis.

Introduction

Today, Ukraine lags far behind the countries with developed tourism in terms of the level of development and efficiency of providing tourist services. However, it has the necessary potential - good geographical location, transport links, significant historical and cultural heritage, favorable natural and climatic conditions, labor resources. It is necessary to intensify tourism activities and create a strong tourism industry that will be able to meet domestic and external demand for tourism services. Improving the efficiency of providing excursion services in tourism is an important area of socio-economic development of most countries, which is also relevant for Ukraine.

The key role in the development of tourism in Ukraine belongs to the efficiency of excursion services. Especially relevant is the study of the impact on the environment of the provision of excursion services of three indicators: effective one - income from excursion activities and two other factor indicators- the cost of excursion services and the cost of excursion buses.

Literature Review

The regional aspect of the efficiency of excursion services is covered in the works of scientists from different countries. So,Dritsakis N. (2004). studied the impact of tourism on the long-term economic growth of Greece by analyzing the causal links of real gross domestic product, real effective exchange rate and income from international tourism. The research used a model of multidimensional automatic regression. Calculations have shown that there is a strong causal link between revenues from international tourism and economic growth. Scientists such as Saarinen J., Rogerson CM, Hall CM (2017), Vujko, A., Gajic, T. (2014) and Khodadadi M. (2016) studied the development of excursion services in different regions of the world, planning activities and external and internal factors that affect them. The experience of other countries in the development of tourism, highlighted in the works of these scientists is valuable for Ukraine in order to improve the efficiency of excursion services.

Romanyuk A. and Gareev R. (2020) investigated the indicators system for assessing the effectiveness of regions in the field of tourism services and identifying ways to improve the effectiveness assessment of tourism entities. Scientists present the main factors by which it is proposed to assess the attractiveness of the tourist destination.

Pidgirna V. and Filipchuk N. (2020) considered the study of the peculiarities of the functioning of the market of tourist services in Ukraine and the impact of the level of income of the population on the development of the tourism industry. Using the method of systematic analysis, scientists have proven that there is a close relationship between the level of consumer income and the level of profit of the tourist enterprise, which affects the formation of gross domestic product.

In the last decade, the tourist movement in Ukraine has shown various trends - from increasing to decreasing the number of visits. This was due to economic reasons (global financial crisis), as well as social and political reasons (annexation of Crimea, military aggression in eastern Ukraine). Therefore, a significant number of scientific works, in particular such scientists as: Kiptenko V. et al., Are devoted to the

problematic moments of tourism development in Ukraine. (2017), Iarmolenko S., Tokarchuk O. (2014), Horban, H., Petrovska, I., Kucher, A., Diuk, A. (2020), Kovalchuk Yu., Furman I., Humenyuk H. and Kucher A. (2020). Ulyanchenko O. et al. (2020) and Shvedun V. (2019). explored the possibilities and ways to use the international experience of organizing ecological tourism (rural green tourism) today in Ukraine. The authors noted that ecological tourism is developing dynamically and has accumulated valuable experience necessary for the development of this type of tourism in Ukraine.

At the same time, despite the significant amount of research in the field of tourism, the problem of evaluating the effectiveness of the provision of excursion services in tourism remains insufficiently solved.

1. Methodology

The article is based on the materials of the State Statistics Service of Ukraine for 2019, which allowed the use of data on income from sightseeing activities, the cost of sightseeing services and the cost of sightseeing buses. The basis of the study is a modification of the method of analysis of the operating environment, which allowed to build a line of technical efficiency. As a component element when using the method of analysis of the operating environment is the method of coefficients - the calculation of the coefficients of coverage of income from excursion activities, the cost of excursion services and the cost of excursion buses.

Coverage occurred if these ratios were in the range from 0 to 1, ie income is greater than costs. If the coefficients are greater than 1, then the coverage was not carried out, because in this case the income was not enough to cover the costs of tour services and / or the cost of tour buses.

2. Results and discussion

Excursion activities are one of the important components in the provision of tourist services. Based on this, the cost of excursion services should be considered in the context of their coverage by income from this activity.

The costs of sightseeing buses should be considered separately, as they are a separate component that does not relate to the cost of sightseeing activities, but belongs to transport services. The specifics of excursion activities are characterized by operational uniformity regardless of the characteristics of the country, the contingent of employees, customers, and excursions do not require large investments and are considered in the context of tourism costs.

Table 1 shows two costs indicators - for excursion services (X1) and excursion buses (X2), and the resultant indicator is the income from excursion activities (Y). The presence of one performance indicator and two factor ones is sufficient for the analysis of activities through the use of non-parametric limit methods of benchmarking as individual entities and entire regions of the state, regardless of industries and activities [1; 2; 3; 4; 5; 6; 7; 8].

It should be noted that there is no correlation between the cost of excursion services and excursion buses, and therefore it is acceptable to use the method of analysis of the operating environment [9] as a universal non-parametric method to assess excursion activities by identifying technical efficiency.

Table 1

Results activity of subjects of tourist activity on rendering of excursion services on regions of Ukraine in 2019

Position	Region	Excursion service costs, UAH thousand (X_1)	Expenses for sightseeing buses, thousand UAH (X_2)	Income from excursion activities, thousand UAH (Y)
1	Vinnytska	27,0	2667,2	81,6
2	Volynska	-	597,0	370,0
3	Dnipropetrovska	192,8	542,8	662,3
4	Donetska	3,7	290,0	31,4
5	Zhytomyrska	41,2	435,3	66,9
6	Transcarpathian	425,7	495,0	835,0
7	Zaporizhya	236,5	701,6	857,7
8	Ivano-Frankivska	624,8	632,9	2657,3
9	Kyivska	9416,6	6753,0	8248,7
10	Kirovograd	-	-	261,4
11	Luhanska	-	-	-
12	Lvivska	2223,1	77190,3	7913,1
13	Mykolayivska	-	-	62,0
14	Odesska	702,7	921,6	9248,9
15	Poltavska	289,0	561,5	1514,1
16	Rivnenska	-	59,9	260,2
17	Sumska	-	-	380,3
18	Ternopilska	2,5	646,9	480,3
19	Kharkivska	144,6	2525,5	966,0
20	Khersonska	93,5	738,6	348,4
21	Khmelnytska	80,5	2059,9	3014,6
22	Cherkaska	195,6	927,3	1465,9
23	Chernivetska	-	2434,3	21,7
24	Chernihivska	-	-	-
25	City of Kyiv	221539,8	25532,2	73903,2

Based on the lack of data on Volyn, Kirovohrad, Luhansk, Mykolaiv, Rivne, Sumy, Chernivtsi, Chernihiv regions, these regions fall out of the analysis. Since the costs of excursion services provide a clear focus on excursions during tourist activities, and the costs of excursion buses are a component of the costs of transport services, it can be argued that there is a certain dependence of the cost of buses on the cost of excursion services.

In this case, the coverage coefficients of the income from excursion activities of the costs of excursion services (X1 / Y) will be on the abscissa axis, and the costs coverage of excursion buses (X2 / Y) will be on ordinate. The calculation of these coefficients is presented in table 2.

Table 2

The coverage coefficients by the income from excursion activity of expenses for excursion service and excursion buses

Position	Region	X_1 / Y	X_2 / Y
1	Vinnytska	0,33	32,69
3	Dnipropetrovska	0,29	0,82
4	Donetska	0,12	9,23
5	Zhytomyrska	0,62	6,51
6	Transcarpathian	0,51	0,59
7	Zaporizhya	0,27	0,82
8	Ivano-Frankivska	0,23	0,24
9	Kyivska	1,14	0,82
12	Lvivska	0,28	9,75
14	Odesska	0,07	0,10
15	Poltavska	0,19	0,37
18	Ternopilska	0,005	1,35
19	Kharkivska	0,15	2,61
20	Khersonska	0,27	2,12
21	Khmelnytska	0,03	0,68
22	Cherkaska	0,13	0,63
25	City of Kyiv	3,00	0,34

Income from excursion activities only in the case of two regions does not cover maintenance costs - Kyiv region (1.14) and Kyiv (3.00). At the same time, the cost of sightseeing buses is covered in Dnipropetrovsk, Zakarpattia, Zaporizhia, Ivano-Frankivsk, Kyiv, Odesa, Poltava, Khmelnytsky, Cherkasy regions and Kyiv.

Thus, service costs and buses were covered by the income from excursion activities only in 8 regions of Ukraine: Dnipropetrovsk, Zakarpattia, Ivano-Frankivsk, Zaporizhia, Odesa, Poltava, Khmelnytsky and Cherkasy regions. Given that Ukraine includes 25 oblasts (annexed Crimea and Sevastopol are not included), the presence of only 8 regions, that cover all costs, indicates the underdevelopment of excursion services, lack of proper infrastructure and underestimation of the prospects of this type of service.

At the same time, the availability of these areas allows us using the method analysis of the operating environment not only to assess the effectiveness of excursion services in 2019, but also to identify prospects for increasing the efficiency of excursion services (Fig. 1).

Line 21-14-18 - a line of technical efficiency from the excursion services provision.

Area 21-14-18 - the ability to achieve efficiency from the excursion services provision.

Line 21-8 - the line of minimum efficiency from the excursion services provision.

Area 21-0-8-14 - the prospect of increasing efficiency from the excursion services provision.

Area 21--$6^1$6-3-7 - inefficiency from the excursion services provision.

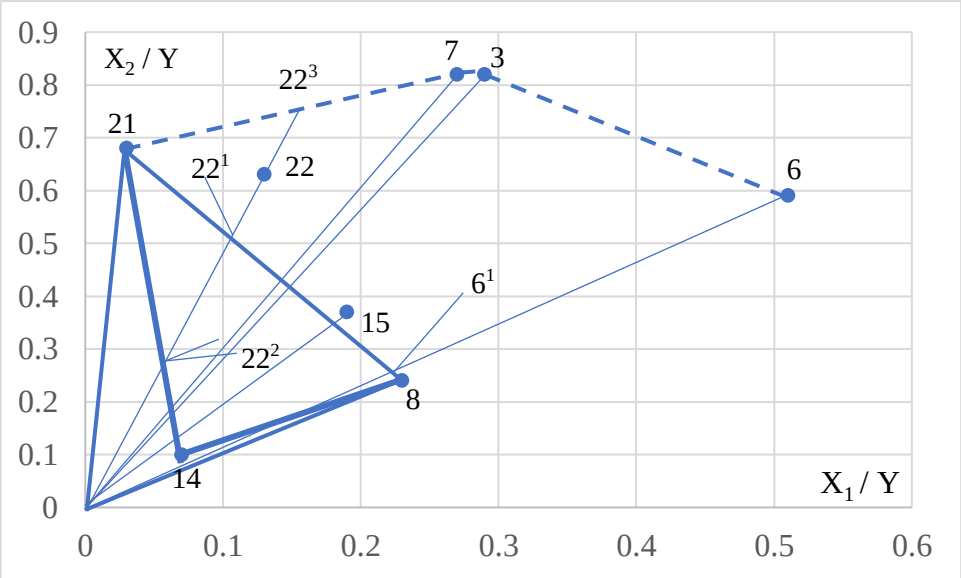

Fig. 1. Methods for evaluating the effectiveness of excursion services in 2019 in the regions of Ukraine by the method analysis of the operating environment

Positions 3 (Dnipropetrovsk region), 6 (Zakarpattia region), 7 (Zaporizhia region), 15 (Poltava region), 22 (Cherkasy region) are technically inefficient regions. Projections of positions (for example 221, 222, 223) allow to estimate efficiency of excursion services rendering.

For Cherkasy region (position 22) the excursion services provision in the operating environment is measured by the segment 0-223. Based on this, the possibility of achieving efficiency - the length of the segment 221-222, the prospect of increasing efficiency - 0-222, inefficiency - 221-223. The ratio of the length of each of these segments to the length of the segment 0-223 is an indicator (as a percentage) of achieving efficiency for now (possibility based on the operating environment), achieving efficiency in the future and inefficiency from the provision of excursion services.

It should be pointed out that all lines in the operating environment, except for the line of technical efficiency (21-14-18) and the positions of inefficient areas are the result of design in the context of the strategy for the development of excursion services in Ukraine in 2019. We suggest to consider line 21-8 as a line of minimum efficiency from the excursion services provision, as it is graphically related to the technical efficiency line, depends on its configuration and allows to analyze the positions of areas where the excursion services provision is technically inefficient.

As no position is located within the area of 21-14-8, it is not profitable currently to provide excursion services in Ukraine, but the presence of the area of 21-0-8-14 suggests the prospects of increasing efficiency. Thus, the realization of this perspective

is the need to expand the environment in the regions by creating conditions for the development of excursion infrastructure.

We will analyze the results of evaluating the effectiveness of excursion services in 2019 in the regions of Ukraine (Table 3).

Table 3

The evaluating results of the excursion services effectiveness in 2019 in the regions of Ukraine

Position	Regions	Ability to achieve efficiency from the provision of excursion services,%	Prospects for increasing the efficiency of the provision of excursion services,%	Inefficiency from the provision of excursion services,%
3	Dnipropetrovska	29,1	20,2	50,7
6	Transcarpathian	11,8	29,4	58,8
7	Zaporizhya	30,3	22,4	47,3
15	Poltavska	17,4	30,2	52,4
22	Cherkaska	31,7	35,0	33,3

Positions 15 (Poltavska region) and 22 (Cherkasy region) are in the area of inefficiency from the tourist services provision, but in contrast to positions 3 (Dnepropetrovsk region), 6 (Transcarpathian region) and 7 (Zaporozhye region) are at a much shorter distance from the line minimum efficiency from the excursion services provision. Therefore, for these regions, 52.4% and 33.3% are the maximum possible inefficiency from the of excursion services provision. The real inefficiency for position 22 (Cherkasy region) is determined not by the length of the segment 0-223, but 0-22.

Thus, the inefficiency of the provision of excursion services in the Cherkasy region is 19.6%. Taking into consideration that the given inefficiency for this position should have been 33.3%, it can be concluded that in contrast to Dnipropetrovsk, Zakarpattia and Zaporizhia regions, when providing excursion services in Cherkasy region, inefficiency was reduced by 13.7%.

Similarly, for position 15 (Poltava region) - the real inefficiency is only 4.5%, i.e. inefficiency has been decreased by 47.9%. For Dnipropetrovsk, Zakarpattia and Zaporizhia oblasts, the real inefficiency coincides with the calculated inefficiency, which is given for these regions in table 3.

Conclusion

The results of the study show that excursion activities in Ukraine are inefficient in the tourist services system. In most regions of the state the income from excursion activity does not cover expenses. Only eight regions cover the costs of excursion services and the costs of excursion buses.

The use of the method analysis of the operating environment allowed to propose a method of evaluating the effectiveness of the provision of excursion services. The technical efficiency line was used as a graphical basis for building efficiency areas, prospects for efficiency and inefficiency for the five areas.

It has been proved that there are no opportunities to achieve efficiency from the excursion services provision, there is a much greater prospect of increasing inefficiency (from 33.3% to 58.8%). At the same time, the excursion activities development in Ivano-Frankivsk, Odessa and Khmelnytsky regions allows us to talk about the prospects for the development of this area of tourist services in Ukraine, in particular for Dnipropetrovsk region by 29.1%; Transcarpathian region by 11.8%; Zaporozhye region by 30.3%; Poltava region by 17.4%; Cherkasy region by 31.7%.

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