

RESEARCH PAPER

Marketing Management of the Regional Ecotourism Infrastructure

Liudmyla Bezuhla¹, Iryna Koshkalda^{2*}, Iryna Perevozova³, Serhii Kasian⁴ & Hrechanyk Nataliia⁵

Received 21 November 2021; Revised 5 December 2021; Accepted 25 December 2021;
© Iran University of Science and Technology 2022

ABSTRACT

Tourists are getting more aware of the environment. To determine the effectiveness of eco-tourism infrastructure management, the motivation and segmentation of demand for eco-tourism have been analysed referring to functional theory. The empirical analysis was conducted in the Dnipro, Zaporizhzhia, and Kherson regions. 382 surveys were obtained by random sampling. To make the data analysis, factor analysis and non-hierarchical segmentation were conducted. The results show several eco-tourism motivation aspects such as self-development, interpersonal relationships, defence functions, personal relationships building, natural reward and gratitude. We have identified three eco-tourists' segments based on their motives related to nature, reward, and escape. Characteristics of other different segments have also been specified. This study will help government agencies and businesses improve travel content and make their marketing plans more effective. The research has shown that in most cases, the success of any project is in cooperation between NGOs, locals, authorities, and the private sector. The optimal level of local participation is determined by the specifics and scale of each project, which may focus on individual villages or several communities that experience any impact of tourism. The economic essence of the concept of tourism motivation has been improved, which is defined as a set of needs that affect a person in the process of participation in tourism activities and are key factors of the decision-making process. Considering the most important motivations of eco-tourists in the region, three groups of motives have been identified: cultural and outreach activities, proximity to nature, health and rehabilitation measures.

KEYWORDS: *Marketing management; tourism motivation; eco-tourism infrastructure; decision-making; eco-tourists.*

1. Introduction

The national economy is characterized by the growth of crisis trends and phenomena. Under modern conditions of national economic development, the process of regions' differentiation according to the level of their social and economic development is intensifying, which requires significant efforts of the state to solve emerging problems. The state policy, in general, should be aimed at creating appropriate conditions for human life and development as the highest value.

Tourists are expecting meaningful experiences from the available eco-tourism infrastructure, in particular, connecting with local communities, studying the eco-system, and participating in natural resource conservation. As far as eco-tourism zones are rather effective in protecting the environment and promoting education, recreation, and job creation, they have become important areas. To identify the niche markets for various eco-tourism goods and services, market segmentation is largely applied. Behavioral theories such as motivation or recreational specialization were the basis for its development. Demand segmentation has been examined in-depth, as it is broadly considered the main criterion for tourist demand segmentation.

As the Dnipropetrovsk and Zaporizhzhia regions have always been industrial, the tourism sector is underdeveloped there and in modern reality, it is at the stage of the creation and implementation of

* Corresponding author: *Iryna Koshkalda*
bezuha.ls@nmu.one

1. *Dnipro University of Technology, Ukraine.*
2. *Dokuchayev Kharkiv National Agrarian University, Ukraine.*
3. *Ivano-Frankivsk National Technical Oil and Gas University, Ukraine.*
4. *Dnipro University of Technology, Ukraine.*
5. *Vasyl Stefanyk Precarpathian National University, Ukraine.*

eco-tourism recreation and the formation of a healthy lifestyle. The Kherson region is represented by slightly greater opportunities for ecological recreation, given that the region is washed by the Black Sea in the South, there is a desert in the region – Oleshky Sands (dunes), the region also includes the Dnipro floodplains, a pink lake and much more. Eco-tourism trips in these regions are not professionally organized and commercial activities are just emerging.

The motivation of using the services of eco-tourism infrastructure is a basic concept in studying the tourist behavior during their travel, which determines various aspects of eco-tourism, such as the motives for travel, the choice of a particular destination, and general travel enjoyment. Thus, knowing the motives for choosing a particular destination and the desire to enjoy the eco-tourism infrastructure services represents an important primary source of information that may help refine the tourists' experience and satisfaction from the travel. Tourists' motivations and preferences may vary according to different eco-tourism destinations. Thus, eco-tourism infrastructure management planning should begin with a study of tourist behavior. In eco-tourism, the motivation-based segmentation of tourists is the most reliable method of comprehending various groups traveling to protected areas. Eco-tourists are not a homogeneous group as they differ greatly in their profiles, motivations, and behaviors.

There is, however, a lack of information on the segments of eco-tourism infrastructure, which hinders the effectiveness of the promotion of specifically targeted programs. Despite this fact, managers use segmentation to effectively commercialize the destinations. There are also important benefits from market segmentation in eco-tourism, as operators around the world are under clear pressure to ensure that consumers get the experience they expect.

The offered research is rather important as the interest in the eco-tourism industry sustainability and the effectiveness of eco-tourism infrastructure management is growing. Furthermore, we should determine the factors that affect the behavior of consumers of eco-tourism infrastructure. Eco-tourism should bring an educational experience for tourists, as well as economic, socio-cultural, and ecological sustainability for the destination. Eco-tourism infrastructure is considered a way to contribute to local living resources and culture, as well as to environment preservation. Besides, the research significance is proved by the fact that tourists

acknowledge the environment's importance and are more motivated to travel to the sights and be involved in environmentally-related events.

2. Literature Review

Many works of leading Ukrainian and foreign scientists consider eco-tourism infrastructure management from theoretical, scientific, methodological, and practical perspectives.

The issues of ecological tourism under the conditions of sustainable development were considered by Martha Honey [2], Cristina Barbu, Mihail Negulescu, Irina Catalina Barbu [11], Elena Mondino, Thomas Beery [14], Leena Kärkkäinen, Tuula Packalen, Heikki Hamunen [16], Mariana Petrova, Nadiya Dekhtyar, Oleksii Klok, Olha Loseva [17] and Olena Stryzhak [18]. Solly Matshonisa Seeletse (2015) states that eco-tourism management is a tourism practice associated with visiting delicate, original, and moderately untouched natural areas, which is designed as niche tourism. Eco-tourism classically includes trips to places where flora, fauna, and cultural heritage are the main attractions. Eco-tourism is a perfect prospect for the economic strengthening of local communities [7].

According to Nicole Coviello, Heidi Winklhofer, and Karla Hamilton (2006), tourism infrastructure is a set of devices and institutions that form the material and organizational basis for tourism development, which consists of four main elements, such as accommodation, food and beverages, associated premises, and means of communication [6].

Singh, Archana, Gordhan K. Saini, and Satyajit Majumdar (2015) emphasize that the structure of tourist infrastructure consists of the following elements:

- typical tourism infrastructure (accommodation facilities, service facilities, tourist information, trails);
- para-touristic infrastructure (vehicles, roads, and transport points);
- local objects – communal and public transport (objects of trade and service);
- related facilities (sports, recreation, and entertainment) [8].

Diana Foris, Adriana Florescu, Tiberiu Foris, and Sorin Barabas (2020) are approving that "Destination management organizations have a key role to play in the governance of tourism destinations, in managing destination networks and in ensuring good cooperation between stakeholders" [9].

Iryna Koshkalda, Liudmyla Bezuhla, Halyna Apelt, Olena Kovalova, Viktoriia Samsonova [4],

Serhiy Kalchenko, Andrii Hutorov, Liudmyla Bezuhla, Olena Leushina, Tetiana Popova, Oleksandr Dorokhov [5], Andrea de la Hoz-Correa, Francisco Muñoz-Leiva, and Márta Bakucz [10] considered ecological tourism from the standpoint of the interaction of small and medium businesses in the field of green tourism.

Economic scholars, such as Iryna Koshkalda, Liudmyla Bezuhla, Olena Nihatova, Tetiana Ilchenko [1], Conejo Francisco, Ben Wooliscroft [12], Henryk Dzwigol [3] have considered the features of the application of the brand of territories in the marketing system of business process management.

Correia Antonia, Metin Kozak, Joao Faria Ferradeira [13], Iryna Koshkalda, Oleksandr Kniaz, Alona Rysnyanska, Viktoriya Velieva [15] consider tourist motivation as the main result of tourist activity, which leads to the satisfaction of tourists with the chosen destination, trip, services received, and overall recreation.

Due to the eco-tourists segmentation by motivation, tourism providers can create the necessary goods and services in the target markets. Thus, segmenting of the demand for the eco-tourism infrastructure in the region is significant for groups of cost-effective tourists to be determined and analyzed. It is of particular significance in the environmental realm, as the issues of environmental sustainability are urgent. For environmental sustainability and economic viability to be balanced, the groups of most beneficial tourists should be attracted.

To achieve the goal, the demand segmentation according to the eco-tourism motivation was analyzed to provide tourism marketers with the information for effective marketing strategies of eco-tourism infrastructure management.

3. Materials and Methods

In eco-tourism, demand segmentation, which makes up the market, is based on the representation of a subgroup of people with various particular needs and preferences. The segmentation assesses a key criterion to determine a customer group, the way the resources should be targeted and used more effectively, and how different competitive strategies should be effectively assessed. When considering motivation as a research element of eco-tourism market segmentation, the segmentation strategy can be applied to determine a particular group of tourists, offer better travel packages, enhance benefits for tourism policy development, eco-tourism infrastructure development, and make more

effective marketing planning. This strategy can also be used by eco-tourism service providers to assess new eco-tourism product capabilities. The highly satisfied groups of tourists preferred eco-tourism.

According to the demand segmentation in eco-tourism, we find it possible to define an eco-tourist as a motivated tourist with only the nature-related behavior and eco-tourism training criteria. There are three groups of such tourists. The first is the so-called “tough” eco-tourists, those who have shown a great bias in favor of the conservation and sustainability of natural resources. They prefer small groups for traveling. Such eco-tourists were physically active and enjoyed challenging activities without sufficient eco-tourism infrastructure, as well as they were experienced in planning trips.

The second group consisted of “soft” eco-tourists that valued eco-tourism but preferred more traditional vacations. They also liked planning multiple short trips. “Soft” eco-tourists were not very physically active. They demanded comfort and quality service, as well as developed eco-tourism infrastructure. The final group included “structured” eco-tourists, who were in many ways similar to both “tough” and “soft” eco-tourists. They preferred multi-purpose travel and premium services, therefore needed a developed eco-tourism infrastructure.

Considering the above-mentioned facts and to improve the management of eco-tourism infrastructure, we state the following concepts, which require more careful analysis:

Concept 1 (C1). Motivations are different in various eco-tourism segments.

Concept 2 (C2). Tourists vary by gender in the eco-tourism motivation segmentation.

Concept 3 (C3). Eco-tourism segments with a higher motivation level get higher satisfaction with eco-tourism loyalty.

4. Results and Discussion

The empirical analysis was conducted in the Dnipro, Zaporizhzhia, and Kherson regions. These three regions have been selected for the natural and cultural characteristics of their eco-tourism destinations. They have a wide variety of eco-tourism activities and territorial proximity. The participants were domestic and international tourists who visited one of the three study areas in Ukraine. The questionnaire consisted of three parts and included items on socio-demographic aspects and characteristics of the visit, motivation, and satisfaction.

The measurement elements developed for this

study were based on several previous studies on tourism motivation. The first part of the questionnaire contained closed-ended questions, which focused on information about respondents and their socio-demographic characteristics. The questionnaire focused on questions concerning the age group of respondents, nationality, gender, as well as what professional field they belong to, who finances the trip, how many people travel better for a comfortable stay, and how often they visit tourist attractions.

The motivational component of the respondent was studied in the second part of the questionnaire. Using the five-point Liqueur scale, a list of questions was developed, in which the answer was given in the form of points, namely from one (few) to five (many).

The level of visitors' satisfaction with ecotourism infrastructure and their return, as well as their recommendation to the tourist center was considered in the third part of the questionnaire. The Likert scale was also used in this part of the questionnaire.

Based on the first draft of the questionnaire and through preliminary testing of 30 surveys, the final format was created. The pre-test study served to validate the questions and improve their understanding. The final version of the questionnaire sought maximum clarity of questions without expanding the interviews of respondents. The distribution of surveys was carried out by the method of simple random sampling in protected areas, where all tourists were with the same probability of choosing the territory of eco-tourism.

The surveys were held from January to July 2019 among visitors in the above-mentioned regions. The survey was conducted in recreation and catering sites of eco-tourism areas. The period for completing the survey was when the visitors were having rest after their eco-tourism activities [19]. 440 visitors were interviewed, 86.8% of whom provided their detailed answers. The survey took from 10 to 15 minutes.

The sample size was 382 respondents, where the level of trust was 95% with an error of 5%.

Alpha-Cronbach's index – 0.96 was calculated, which is close to 1. This indicates a useful index for the scale. The obtained data were analyzed in two stages: first, factor analysis was performed to identify plans that constitute variation. This, in turn, gave a complete picture of the most important motives for such plans. In the previous segmentation of the input data, factor analysis was the preference. Data variability was used to facilitate their interpretation.

Kaiser's criterion was chosen to calculate factors where coefficients with values greater than 1 were used. The Kaiser-Meyer-Olkin index (KMO) and the sphericity criterion were used to determine the feasibility of the factor analysis calculation.

The Alpha-Cronbach's index was used to determine the level of reliability of the measurement scale. At another stage, the method of grouping elements K was used. The analysis used in the studies included analysis of variance (ANOVA) and statistical analysis of Brown-Forsythe and Welch (Brown-Forsythe and Welch Statistics).

Finally, the chi-square test was used to examine differences between groups in terms of socio-demographic variables, satisfaction with ecotourism infrastructure, and the intentions to return to the destination. The collected data were organized, grouped, and statistically analyzed using SPSS 22.0 for Windows.

To achieve the goal of this study, factor analysis was performed, which allowed identifying six motivational dimensions. The analysis of the main components was used to reduce the data. The Varimax rotation method was used to obtain a clearer interpretation of the factors so that each factor had either a very high or a low load factor. The factors taken into account in the Kaiser criteria were variables with eigenvalues greater than 1.00. Six factors were part of the solution and represented 72.53% of the total variance. The KMO (Kaiser – Meyer – Olkin) index was 0.959, so it was very suitable for factor analysis. Bartlett's sphericity test was also significant (<0.05), so factor analysis was used (Table 1).

Tab. 1. Factor analysis of motivational variables in eco-tourism

Elements	Load	Eigenvalue	Explained variance %	The Cronbach's alpha index
Self-development		13,967	45,05	0,945
To have a sense of self-confidence	0,763			
To get a new outlook	0,754			
To know what I am capable of	0,746			
To feel inner harmony / peace	0,69			
To be independent	0,689			
To understand more about myself	0,676			
To think of the old good times I had in the past	0,659			
To get to know myself better	0,647			
Interpersonal relationships		2,559	8,38	0,914
To connect with family and friends who live elsewhere	0,768			
To strengthen relationships with the family	0,747			
To remember the time of parents	0,702			
To reflect on the memories of the past	0,651			
To feel myself part of nature	0,634			
To follow current events	0,545			
To join the social discussion	0,504			
Building personal relationships		2,112	6,81	0,888
To meet new people	0,776			
To learn locals	0,742			
To meet people with similar interests	0,726			
To experience different cultures	0,602			
Be with others if I need them	0,583			
Escape		1,518	4,90	0,876
To get away from daily stress	0,864			
To escape from the daily routine	0,789			
To get away from the crowd	0,777			
To avoid interpersonal stress	0,718			
Rewards		1,165	3,76	0,786
To have peasant memories	0,724			
To discover the unknown	0,695			
To develop personal interests	0,677			
To try new things	0,676			
To entertain	0,661			
Nature		1,127	3,64	0,888
To be close to nature	0,872			
To understand nature better	0,82			
Total calculated variance				72,53
The Cronbach's alpha index (total)	0,959			

Source: calculated by the authors

Our study found that the first factor called “self-development” was the most significant and had the explained variance (45.05%) of the total estimated variance. This first factor was related to such motivations as to have a sense of self-confidence, to get a new outlook, to know your capabilities, to feel harmony and inner peace, to be independent, to gain self-understanding, to think about good times spent in the past, and to be able to know yourself better.

The second factor was called “interpersonal

relationships”, which accounted for 8.38% explained variance of the total variance. This factor was related to issues that characterize family ties, feelings of belonging, memories, and friendly relations. The third factor was characterized by the construction of personal relationships, which include acquaintances and meetings.

Escape (avoidance) is the fourth factor that covered the issue of avoiding stressful situations and daily routine. The fifth factor was called

"reward", which outlined issues related to pleasant memories, development of personal interests, and entertainment. The last analyzed factor is the sixth one, which was responsible for the factor of "nature" and included elements of proximity to outdoor recreation. This factor had the least explained variance (3.64%) of the total estimated variance.

Thus, to create the conditions of demand, we conducted a K-digit analysis of the segmentation of visitor preferences. According to the criterion of maximizing the variance between typologies and minimizing the variance, it turned out that the optimal solution of this criterion formed three conglomerates.

F-statistics ANOVA allows noting that the

compared means are not equal, but the availability of differences is not so important; it is based on the fulfillment of two assumptions: normality and homoscedasticity. To know if one average value differs from another, it is necessary to use several special comparisons. As the critical level associated with Levene statistics was less than 0.05, the use of the Brown-Forsythe and Welch test was necessary. Because the critical level of the two statistics was less than 0.05, we can reject the concept of equality of values and conclude that the values of the motivational variables of the three conglomerates were not equal. In contrast to the significant differences between the different values, the Games – Howell test was used (Table 2).

Tab. 2. Characteristics of segments based on motivational variables (K-values)

Variables	Segment 1	Segment 2	Segment 3	Subsequent analysis
To be close to nature	4,8	4,3	4,1	All, but 2–3
To understand nature better	4,8	4,3	3,9	All
To try new things	4,8	4,2	3,8	All
To discover the unknown	4,8	4,2	3,6	All
To develop own interests	4,7	3,8	3,3	All
To have pleasant memories	4,8	4,1	3,6	All
To entertain	4,8	4,3	4,1	All, but 2–3
To experience new cultures	4,8	4,0	3,1	All
To meet new people	4,6	3,7	2,6	All
To meet people with similar interests	4,6	3,4	2,3	All
To get to know locals	4,6	3,5	2,5	All
Be with others if I need them	4,4	3,0	1,9	All
To get to know myself better	4,6	3,4	1,9	All
To understand more about myself	4,6	3,3	1,8	All
To get a new outlook	4,6	3,6	2,0	All
To think of the old good times I had in the past	4,6	3,3	1,9	All
To know what I am capable of	4,7	3,4	1,9	All
To have a sense of self-confidence	4,7	3,4	1,8	All
To feel inner harmony / peace	4,8	3,9	2,8	All
To be independent	4,6	3,4	2,0	All
To remember parents' times	4,4	3,1	1,5	All
To connect with family and friends who live elsewhere	4,3	3,3	1,6	All
To feel a sense of belonging	4,4	3,0	1,6	All
To strengthen relationships with the family	4,6	3,3	2,2	All
To reflect on the memories of the past	4,5	3,1	1,9	All
To avoid interpersonal stress	4,8	3,8	3,4	All
To get away from the crowd	4,8	3,9	3,3	All
To get away from daily stress	4,8	4,1	3,7	All
To escape from the daily routine	4,8	4,3	3,9	All
To join the social discussion	4,4	3,3	2,2	All
To follow current events	4,5	3,2	2,2	All

Source: calculated by the authors

Our study found that the first group included visitors highly motivated to motivational

variables. Thus, this group was classified as "numerous motives". This group was also

connected to the six previously found measurements. The second group included visitors with strong motivations related to nature, fun, new experiences, learning the unknown, creating good memories, escaping from everyday life and daily stress. Thus, this group was classified as "reward and escape". This group was also related to nature, reward, and escape. The third group included visitors with strong motivation in terms of nature. Thus, it was

classified as "nature". These results allowed confirming concept C1 – motivation is different in different segments of eco-tourism.

Furthermore, the connection of segments with other variables has been analyzed. To find the relationship of the three segments with socio-demographic variables, the chi-square criterion was calculated to search for variables that were relevant for the analysis (Table 3).

Tab. 3. Relationship of three segments with socio-demographic variables (chi-square)

Socio-demographic variables	Segment 1	Segment 2	Segment 3	Total	The chi-square criterion
Gender					12,593, p < 0,05
Men	46,5%	32,5%	54,2%	42,6%	
Women	53,5%	67,5%	45,8%	57,4%	
Total	100,0%	100,0%	100,0%	100,0%	
Age					23,147, p < 0,05
<20 years	15,0%	8,3%	10,4%	11,1%	
20–29 years	50,4%	70,1%	60,4%	61,1%	
30–39 years	20,5%	17,2%	21,9%	19,5%	
40–49 years	6,3%	2,5%	1,0%	3,4%	
50–59 years	4,7%	0,6%	6,3%	3,4%	
> 59 years	3,1%	1,3%	-	1,6%	
Total	100,0%	100,0%	100,0%	100,0%	
Education					13,921, p < 0,05
Elementary	0,8%	0,6%		0,5%	
Secondary	25,2%	13,4%	10,4%	16,6%	
University	66,9%	82,2%	82,3%	77,1%	
Master's / PhD / Doctorate	7,1%	3,8%	7,3%	5,8%	
Total	100,0%	100,0%	100,0%	100,0%	
Professional activity					31,341, p < 0,05
Student	45,7%	67,5%	61,5%	58,7%	
Researcher / scientist	1,6%	1,3%	2,1%	1,6%	
Entrepreneur / business owner	4,7%	10,2%	9,4%	8,2%	
Private employee	19,7%	10,2%	11,5%	13,7%	
Civil servant	14,2%	6,4%	7,3%	9,2%	
House work	4,7%	1,3%	2,1%	2,6%	
Unemployed	5,5%	2,5%	3,1%	3,7%	
Retired	0,8%	0,6%	1,0%	0,8%	
Informal worker	1,6%	-	-	0,5%	
Others	1,6%	-	2,1%	1,1%	
Total	100,0%	100,0%	100,0%	100,0%	

Source: calculated by the authors

Our study showed that women dominated in choosing the first segment (numerous motives). The age of the respondents is mostly from 20 to 29 years old. People with higher and secondary education were 66.9% and 25.2% of respondents in this segment, respectively.

In terms of professional activity, the category of students covered the highest percentage - 45.7%, while the lowest percentage was gained by the category of retirees - 0.8%.

"Reward and Escape" is the second segment, which is characterized by a high percentage of

visitors aged 20 to 29 (70.1%). Thus, this segment contains the highest percentage of young people relative to other segments. Besides, this segment has a high percentage of people with a university education (82.2%), and the majority are students (67.5%). The third segment (nature) typically includes more men (54.2%) than women (45.8%) and this segment had its highest percentage of men relative to other segments. Like in other segments, members of this segment are usually between the ages of 20 and 29 (60.4%) and a high percentage of people are with university education (82.30%) or students

(61.5%). These results confirmed concept C2 – there is a gender difference in the segmentation by motivation in eco-tourism.

Satisfaction and the intention to return to the destination in three segments have been further analysed. To establish a relationship between the three segments and satisfaction and the intention to return, the chi-square criterion was defined, which allows finding the variables most relevant for the analysis. To measure satisfaction and the intention to return, a five-point Likert scale was used, where 1 was “a little” and 5 was “much” (Table 4).

Tab. 4. Satisfaction and the intention to return to the destination in three segments (chi-square criterion)

Variables	Segment 1	Segment 2	Segment 3	Total	Chi-square criterion
Satisfaction					
1	0,8%	0,6%		0,5%	
2	0,8%	1,3%		0,8%	
3	5,5%	14,6%	25,0%	14,2%	39,631,
4	35,4%	55,4%	40,6%	45,0%	p <0,05
5	57,5%	28,0%	34,4%	39,5%	
Total	100,0%	100,0%	100,0%	100,0%	
The intention to return					
1	0,6%			0,3%	
2	1,6%	0,6%	7,3%	2,6%	
3	5,5%	18,5%	18,8%	14,2%	39,067,
4	25,2%	40,1%	28,1%	32,1%	p <0,05
5	67,7%	40,1%	45,8%	50,8%	
Total	100,0%	100,0%	100,0%	100,0%	

Source: calculated by the authors

Our study found that the first segment (numerous motives) had a high percentage of very satisfied people (57.5%) and this was the segment with the highest level of satisfaction relative to other segments. It also had the highest level of intention to return to the destination (67.7%) compared to other segments. The second segment (reward and escape) was characterized by a high percentage of satisfied people (55.0%) and a significant percentage of members who had a high level of intention to return to their destination (40.1%). The third segment (nature) is characterized by a moderate percentage of satisfied members (40.6%) and a moderate percentage of those who intended to return to the destination (45.8%), which was higher than the second segment but lower than the first one [23]. The obtained results provide grounds for the confirmation of concept C3: ecotourism segments with a higher level of motivation have a higher level of satisfaction with the loyalty to ecotourism.

Thus, the segmentation of demand in eco-tourism allows differentiating vacationers according to their motivation preferences, where the main dimension was gaining self-confidence, self-development, and independence as an individual in society.

The second dimension is interpersonal relationships and self-protection. It was related to the motives of visitors to strengthen relationships with their family members. The third dimension is building personal relationships involving visitors motivated to meet new people. The fourth dimension is escape, which motivates visitors to escape from everyday life, as many tourists were motivated to travel to avoid their daily routine and stress. The fifth dimension is the reward for visitors motivated by the desire to have fun and experience something new. The sixth dimension is gratitude to nature, which was associated with motivating visitors to appreciate nature. It often turns out that the value of the natural environment is mostly the best motivation for

eco-tourists. It was self-development that encouraged visitors to return to tourist centers. As for the segmentation of demand, the research found a segment of “numerous motives” with high motivation in all motivational variables in eco-tourism.

The “nature” segment is related to the care for the environment and appreciation of natural landscapes. We can conclude that there is eco-tourism when visitors are interested only in nature. In this research, the third segment – “reward and escape” – has also been found. Therefore, we recommend adopting some products and services related to entertainment, learning the unknown, and escaping the routine.

For tourism and leisure managers, market segmentation can be used to provide tools and services, planning, marketing, and communication for more profitable and effective management.

The information on visitor segmentation can be useful for creating startup projects to commercialize ecotourism destinations, products, and services.

Eco-tourists can be divided into three groups according to their motivations. First, there are groups of motives that are high in all motivational variables; thus, the range of goods and services should be adapted to tourists seeking to practice or participate in all eco-tourism activities. Second, there is a group of visitors who have a strong motivation to spend time outdoors to observe the flora and fauna. Third, there are groups with high motivation for “rewards” and “escapes” who are also associated with outdoor recreation, entertainment, and escape from daily routine. For example, the majority of respondents in the segment “numerous motives” are young people with higher and / or secondary education with a significant proportion of women. The “rewards” and “escape” segments include young people, usually students, and, compared to other segments, with the highest share of those with higher education.

In terms of satisfaction, the “numerous motives” segment had the highest percentage of satisfied people and the highest percentage of people with a high level of intention to return to the destination compared to other segments. Therefore, the research shows that segments with a higher level of motivation have a higher level of satisfaction and the intention to return to the place of eco-tourism.

To total, we can state that the motivation preferences of visitors (tourists) are not homogeneous. They differ by gender differences,

education, employment, and other factors. This study will help government agencies and private companies improve their travel offerings and develop more effective marketing plans.

According to the results of this study, tourism managers may also be able to adapt their proposals based on motivations and socio-demographic variables of demand segments, which will increase the level of satisfaction with eco-tourism infrastructure and tourists' interest in returning to the discovered eco-tourism areas.

Practically, in each case, the possibility of involving the local population in the development of eco-tourism is limited. Such restrictions may be due to local features and limited funding, or the need to organize the reception of tourists as quickly as possible, as the involvement of locals requires more funding and makes the process of tourism development longer than when it is managed from outside the area. People are easier to involve in a project if they can operate through a certain institution (especially in cases when a large region needs to be covered).

In some cases, broad public participation in decision-making can constrain local authorities. On the other hand, sometimes, influential local institutions may prioritize only income generation and/or job creation, leaving behind the need for long-term environmental action. The slowdown in the process may also be due to difficulties in reaching consensus between individual social groups.

In most cases, the success of any project requires cooperation between NGOs, locals, authorities, and the private sector. The optimal level of local participation is determined by the specifics and scale of each project, which may focus on individual villages that experience any impact of tourism or several communities. The choice of the optimal approach depends on the specific socio-economic conditions, cultural features, and resources of the region.

5. Conclusion

Information resources, being a basis for the regulation entities of regional eco-tourism development to make innovative managerial decisions, form the information component of the innovative potential of such development. Eco-tourists can be divided into three groups according to their motivations. First, there are several groups of high motives in all motivational variables. Thus, the range of goods and services should be adapted to the tourists seeking to practice or participate in all eco-tourism activities. Second, there is a group of visitors who have a strong motivation to spend time outdoors

to observe the flora and fauna. Third, there are groups with high motivation for "rewards" and "escape", which are also associated with outdoor recreation, entertainment, and escape from daily routine. To sum it up, we can say that the motivational preferences of visitors (tourists) are not homogeneous being different by gender differences, education, employment, and other factors.

The research has shown that in most cases, the success of any project is in cooperation between NGOs, locals, authorities, and the private sector. The optimal level of local participation is determined by the specifics and scale of each project, which may focus on individual villages or several communities that experience any impact of tourism. The choice of the optimal approach depends on the specific socio-economic conditions, cultural features, and resources of the region.

References

- [1] Iryna Koshkalda, Liudmyla Bezuhla, Olena Nihatova and Tetiana Ilchenko, "Brand as a marketing tool for growth in organic sales: Evidence from Ukraine", *International Journal of Technology Management & Sustainable Development*, Vol. 1, No. 3, (2020), pp. 297-316.
Doi:[10.1386/tmsd_00028_1](https://doi.org/10.1386/tmsd_00028_1)
- [2] Martha Honey, *Eco-tourism and Sustainable Development: Who Owns Paradise?* 2nd ed. Washington DC: Island Press, (2008).
- [3] Henryk Dzwigol, "Innovation in Marketing Research: Quantitative and Qualitative Analysis", *Marketing and Management of Innovations*, No. 1, (2020), pp. 128-135.
Doi:[10.21272/mmi.2020.1-10](https://doi.org/10.21272/mmi.2020.1-10).
- [4] Iryna Koshkalda, Liudmyla Bezuhla, Halyna Apelt, Olena Kovalova and Viktoriia Samsonova, "Agreement of the Interests of Green Tourism Business Participants in Sustainable Development", *Solid State Technology*, Online Vol. 63, No. 5, (2020), pp. 5844-5867.
- [5] Serhiy Kalchenko, Andrii Hutorov, Liudmyla Bezuhla, Olena Leushina, Tetiana Popova and al., "Managing the socio-economic development of small forms of green tourism", *Bulletin of the Transilvania University of Braşov*, Vol. 14, No. 1, (2021), pp. 141-152.
Doi:[10.31926/but.fwiafe.2021.14.63.1.13](https://doi.org/10.31926/but.fwiafe.2021.14.63.1.13)
- [6] Nicole Coviello, Heidi Winklhofer and Karla Hamilton, "Marketing Practices and Performance of Small Service Firms: An Examination in the Tourism Accommodation Sector", *Journal of Service Research*, Print Vol. 9, No. 1, (2006), pp. 38-58.
Doi:[10.1177/1094670506289533](https://doi.org/10.1177/1094670506289533)
- [7] Solly Matshonisa Seeletse, "Local development through eco-tourism in South Africa: opportunities for botanical gardens, game reserves and national parks", *Environmental Economics*, Vol. 6, No. 4, (2015), pp. 175-179.
- [8] Archana Singh, Gordhan K. Saini and Satyajit Majumdar, "Application of Social Marketing in Social Entrepreneurship", *Social Marketing Quarterly*, Vol. 21, No. 3, (2015), pp. 152-172.
Doi:[10.1177/1524500415595208](https://doi.org/10.1177/1524500415595208)
- [9] Diana Foris, Adriana Florescu, Tiberiu Foris and Sorin Barabas, "Improving the Management of Tourist Destinations: A New Approach to Strategic Management at the DMO Level by Integrating Lean Techniques", *Sustainability*, Vol. 12, No. 23, (2020).
Doi:[3390/su122310201](https://doi.org/10.3390/su122310201)
- [10] Andrea de la Hoz-Correa, Francisco Muñoz-Leiva and Márta Bakucz, "Past themes and future trends in medical tourism research: A co-word analysis", *Tourism Management*, Vol. 65, (2018), pp. 200-211.
Doi:[10.1016/j.tourman.2017.10.001](https://doi.org/10.1016/j.tourman.2017.10.001)
- [11] Cristina Barbu, Mihail Negulescu and Irina Catalina Barbu, "A theoretical study between the two environmental management systems: eco management audit scheme-emas - and ISO 14000", *Journal of Environmental Management and Tourism*, Vol. 3, No. 2, (2012), pp. 59-69.
- [12] Francisco Conejo and Ben Wooliscroft, "Brands Defined as Semiotic Marketing

- Systems”, *Journal of Macromarketing*, Vol. 35, No. 3, (2015), pp. 287-301.
Doi:[10.1177/0276146714531147](https://doi.org/10.1177/0276146714531147)
- [13] Antonia Correia, Metin Kozak and Joao Faria Ferradeira. “From tourist motivations to tourist satisfaction”, *International Journal of Culture, Tourism and Hospitality Research*, Vol. 7, No. 4, (2013), pp. 411-424.
Doi:[10.1108 / IJCTHR-05-2012-0022](https://doi.org/10.1108/IJCTHR-05-2012-0022)
- [14] Elena Mondino and Thomas Beery, “Ecotourism as a learning tool for sustainable development. The case of Monviso Transboundary Biosphere Reserve, Italy”, *Journal of Ecotourism*, Vol. 18, No. 2, (2019), pp. 107-121.
Doi:[10.1080/14724049.2018.1462371](https://doi.org/10.1080/14724049.2018.1462371)
- [15] Iryna Koshkalda, Oleksandr Kniaz, Alona Rymasnyanska and Viktoriya Velieva, “Motivation mechanism for stimulating the labor potential”, *Research in World Economy*. Vol. 11, No. 4, (2020), pp. 53-61.
Doi:[10.5430/rwe.v11n4p53](https://doi.org/10.5430/rwe.v11n4p53)
- [16] Leena Kärkkäinen, Tuula Packalen and Heikki Hamunen, “Indicators of the criteria for good participation in ecotourism planning at local level: A Nordic case study”, *Tourism Planning & Development*, Vol. 10, No. 4, (2013), pp. 451-466.
Doi:[10.1080 / 21568316.2013.781057](https://doi.org/10.1080 / 21568316.2013.781057)
- [17] Marina Petrova, Nadiya Dekhtyar, Oleksii Klok and Olha Loseva, “Regional tourism infrastructure development in the state strategies”, *Problems and Perspectives in Management*, Vol. 16, No. 4, (2013), pp. 259-274.
Doi:[10.21511/ppm.16\(4\).2018.22](https://doi.org/10.21511/ppm.16(4).2018.22)
- [18] Olena Stryzhak, “Assessment of the relationship between the tourism sector development and other sectors of economy”, *Economics of Development*, Vol. 18, No. 2, (2019), pp. 10-18.
Doi:[10.21511/ed.18\(2\).2019.02](https://doi.org/10.21511/ed.18(2).2019.02)
- [19] Oleh Mandryk, Nataliia Moskalchuk, Liudmyla Arkhypova, Mykola Prykhodko and Olena Pobigun, “Prospects of environmentally safe use of renewable energy sources in the sustainable tourism development of the Carpathian region of Ukraine”, in *Proceedings of the The International Conference on Sustainable Futures: Environmental, Technological, Social and Economic Matters (ICSEF 2020)*, Vol. 166, (2020), published by EDP Sciences.
Doi:[10.1051/e3sconf/202016604005](https://doi.org/10.1051/e3sconf/202016604005)
- [20] Nazariy P, Viktoria B, Ivanna D, Vasyl F. Assessment of Efficiency of the Use of Natural Resources Capacity by Territorial Communities in Conditions of Administrative -Territorial Reform in Ukraine. *IJIEPR*. Vol. 31, No. 4, (2020), pp. 499 -510.
- [21] Hamidihesarsorkh A., Papi A., Bonyadi Naeini A., Jabarzadeh A. Discovering groups of key potential customers in social networks: A multi-objective optimization model. *IJIEPR*. Vol. 28, No. 1, (2017); pp. 85-95.
Doi: [10.22068/ijiepr.28.1.85](https://doi.org/10.22068/ijiepr.28.1.85)
- [22] Hosseini Y, Fazlollahtabar H, Talebi Ashoori M. Outsourcing Marketing Plans for Small and Medium Enterprises using Knowledge Sharing Process Case study: Tehran Wood and Furniture Companies. *IJIEPR*. Vol. 33, No. 2, (2021), pp. 1 -18.
DOI:[10.22068/ijiepr.1161](https://doi.org/10.22068/ijiepr.1161)
- [23] Carvache-Franco SM., Segarra-Oña M., Carrascosa López C. (2019). Segmentation by Motivation in Ecotourism: Application to Protected Areas in Guayas, Ecuador. *Sustainability*. 11(1):1-19
DOI:[10.3390/su11010240](https://doi.org/10.3390/su11010240)

Follow This Article at The Following Site:

Bezuhla L, Koshkalda I, Perevozova I, Kasian S, Hrechanyk N. Marketing Management of the Regional Ecotourism Infrastructure. *IJIEPR*. 2022; 33 (1) :1-11
URL: <http://ijiepr.iust.ac.ir/article-1-1370-en.html>

