

Neuromarketing Approach to Assessing Tourism Products

Madina Smykova

*“Management and marketing of
tourism in Kazakhstan” Laboratory
Almaty Management University
Almaty, Kazakhstan
mraisovna@mail.ru*

Aiman Kazybaeva

*“Marketing” Educational Program
Almaty Management University
Almaty, Kazakhstan
kairat_phd@mail.ru*

Boris Tkhorikov

*Department of Management and
Marketing
Belgorod State National Research
University
Belgorod, Russia
tkhorikov@bsu.edu.ru*

Abstract—The article presents the possibilities and features of using neuromarketing research in the evaluation of tourism products. Initially, the role and importance of the neuromarketing approach in tourism and its advantages over classical research methods were defined. It has been shown that conducting neuromarketing research during the formation of a tourist product will make it possible to obtain an objective picture of consumer preferences. At the same time, it is advisable to find analytical focus through morphological analysis before conducting neuromarketing research, and to evaluate more accurately. Using morphological analysis, reference points were selected, for which it is advisable to conduct a deeper neuromarketing analysis in the future. Special attention is paid to theoretical calculations concerning the issues of neuromarketing research. Currently, there are some issues that have been investigated on pricing and advertising in the tourism sector. In particular, the conducted studies by foreign authors on the analysis of unconscious factors that impact on advertising when choosing hotels on the basis of electroencephalography. Most of the research is fragmentary, so there is a need to study the most significant issues in the field of tourism. The algorithm for conducting neuromarketing research depends not only on the types of tourist products, but also on how information is presented.

Keywords—*neuromarketing research, tourist product, tourism, morphological analysis, tour.*

I. INTRODUCTION

Changes in the external environment due to crises and pandemics have a significant impact on the further development and transformation of the tourism sector. The future of the tourism market in the Republic of Kazakhstan is justified by the presence of picturesque nature, monuments and historical treasures, and all this will provide opportunities despite the high competition in the global tourism market. At present, new approaches to the development and formation of both the tourism sector and tourist products are required. One of these approaches is the use of neuromarketing research, which will determine the unconscious needs in the development of tourist products [18].

Neuromarketing is a type of research that involves an interdisciplinary approach that provides a comprehensive and more objective picture of consumer behavior. The use of neuromarketing tools in tourism will expand the range of

understanding of consumer needs, their desires and way of thinking when creating tourist products. Neuromarketing in Kazakhstan is in its infancy, so the issues of its study and adaptation to tourist activities are being updated.

II. THE PURPOSE OF THE STUDY

The purpose of the study: to determine the possibilities and directions of application of neuromarketing technologies in the field of tourism.

III. RESEARCH OBJECTIVE

Research objective: assessment of the possibilities of neuromarketing research in tourism, analysis of optimal variants of neuromarketing research when evaluating tourist products, selection of objects of neuromarketing research.

IV. METHODS AND ORGANIZATION OF RESEARCH

Methods and organization of research: analysis of scientific and educational literature, articles on the research problem, marketing research in the form of morphological analysis, which allows you to determine behavioral features and priorities in the formation of a tourist product.

V. RESEARCH RESULTS

Neuromarketing as a field of science has a variety of definitions, but all interpretations emphasize that it is a symbiosis of marketing, psychology, neurobiology, neurophysics and other scientific fields [17].

The founders of neuromarketing theory currently include David Lewis (2015), Martin Lindstrom (2009), and Douglas van Praet (2014). Among the scientists engaged in research on the use of neuromarketing in the tourism sector, it is necessary to distinguish foreign scientists Hakan boza, Aitug Arslanb, Erdogan Kots (2016), Khramov and Likhanov (2016), Praet van (2014), Kiselev (2018), in the Kazakh works of Akynov (2018), Ilyas and Muzdubekov (2019), and others. It should be noted that in Kazakhstan there is no conceptual in-depth scientific research on the possibilities of using neuromarketing to develop new types of tourism.

Of particular interest for this study is the work of Hakan Boz, Aitug Arslanb and erdoğan Kotz on the neuromarketing aspect of pricing psychology in tourism (2017).

Also interesting methodological approach of the study of subliminal advertising when choosing hotels on the basis of electroencephalography (EEG) was studied livey Hsu Yen Chun Chen. Their research aims to understand how hotel videos, with a built-in subconscious message, affect consumers ' choice of hotels, and their brain activity is measured and collected while watching the video. The results of the study show that participants ' choice of hotels will significantly depend on subconscious stimuli. Meanwhile, neurobiological data reveal significant differences between two (theta and beta) of the participants ' five brainwave ranges when they viewed a hotel video with and without a subliminal message [12].

Among the scientists who are engaged in research on the problems of tourism development, it is necessary to distinguish: Kotler (2013), Lewis (2000), Walker (2001), Brymer (2010), Janjugazova (2005), etc.

At the same time, we can emphasize that using neuromarketing in applied activities, it primarily allows you to identify neuromarketing incentives for marketing stimuli, such as advertising, product concept and features, price, etc. In the process of neuromarketing research, the reaction of consumers is determined using the consumer's sensory organs, namely touch, sight, taste, and smell. Neuromarketing assessment is more objective because it uses the results of consumer responses and allows for a deeper understanding of the motivations or incentives when making a purchase decision [9].

The transformation of the tourism sector and the changes associated with the pandemic emphasize the feasibility of developing new tourism products and adjusting existing ones to take into account the neuromarketing research being conducted.

Neuromarketing technologies are aimed at forming a balanced model of tourism development in the post-pandemic period.

The neuromarketing approach will determine which travel products are attractive given the current market situation. At the moment, the task is to implement the process of integrating neuromarketing research in the tourism sector, which leaves a number of issues related to the development of agreed concepts, methods, and tools.

Testing of neuromarketing research will provide a complete picture for tourists, determine the trajectory of tourism development and the possibility of creating new tourist products.

The main tool of the methodology is neuromarketing research with the use of special equipment adapted to the peculiarities of tourist activity. it can be used to determine the most attractive types of tourist products, taking into account the influence of consumer preferences, tourist behavior, their desires, and motives for making purchases [6].

It should be noted that with the help of neuromarketing, you can understand in which directions to use this approach. At the same time, there are several main areas of research, namely:

- identification of consumer reactions to various historical sites and natural resources;

- determining the attitude of consumers to the type and design of the hotel;
- emotional perception of tours and tourist routes;
- reaction to advertising and other marketing stimuli.

Neuromarketing research when making decisions about purchasing tourist products will focus on the following important elements:

- expectations;
- experience;
- emotions;
- the perception of signals;
- evaluation of information [3].

The presented elements depend on the type of personality and perception of features, motivations, preferences, and commitment. At the same time, for the tourism sector and taking into account the types of tourist products, it is possible to determine in which direction it is appropriate to conduct neuromarketing research. Let's consider the main types of tourist products and their features (table 1).

TABLE I. TYPES OF TOURIST PRODUCTS AND THEIR FEATURES

Types of travel products	Types	Directions of neuromarketing research
1. Excursion (educational)	Historical, archaeological, cultural and educational, natural.	Assessment of the perception of recreation places, landmarks, and natural resources
2. Beach tour	Sea, cruise, river, lake.	Unconscious reactions to water resources, beaches, hotel design
3. Extreme	Hang Gliding; paragliding; skydiving; hot air balloon rides; flying sports planes	Study the brain's response to a variety of extreme situations
4. Health and Wellness	Spa, Wellness (preservation and promotion of health), health and Wellness, Spa tours.	Assessment of unconscious processes for various treatment and relaxation options
5. Mountain tours	Skiing, mountaineering, trekking, rock climbing	Assessment of priority places, routes
6. Water tourism products	Rafting, surfing, wakeboarding or water skiing, diving	Evaluation of options for tourism products with the use of natural resources

When classifying types of tourism, it is important to understand the reasons for making a decision to buy a tourist product and consumer preferences.

The presented types and varieties of tourism are grouped based on the purpose of travel, the resources used, and the types of sports and entertainment events held [16].

As a result of the analysis, the emphasis is placed on possible options for conducting neuromarketing research. They are General and limited, but the possibilities of neuromarketing are more diverse, it all depends on the goal and objectives of the study.

However, if you select the objects of neuromarketing research, they can be divided into three groups and the approaches to research will differ. Let's consider the main

research objects and the expected result from the neuromarketing research (figure 1).

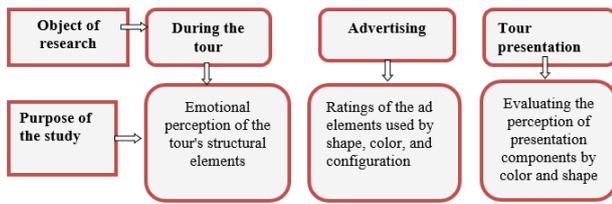


Fig. 1. Directions of neuromarketing research on the objects of analysis

In general, the results of analysis using neuromarketing are more accurate, exclude subjectivism, because they are recorded using special equipment. The main goal of neuromarketing research on types of tourism is to increase the level of tourists' confidence in the offered tourist products, increase tour attendance and frequency of use [16].

Before conducting neuromarketing research, to pinpoint what you need to focus on when organizing and conducting tourist trips, you can conduct a morphological analysis. Morphological analysis will allow you to select different combinations of tourist products and choose the most attractive types of tourism from the tourist's point of view.

To evaluate the tour product, a classic excursion tour was selected, the analysis of which was carried out using morphological analysis and as a result, the most significant indicators and characteristics of the excursion tour were determined [4]. When evaluating the main characteristics of the excursion product, a survey of middle-aged consumers with average income indicators who prefer sightseeing trips was conducted. Experts in the field of tourism in the number of 9 people, including representatives of the Kazakhstan Tourism Association and managers of travel companies, were involved in the study. The results of the morphological analysis are presented in table 2.

TABLE II. EVALUATION OF ALTERNATIVE OPTIONS WHEN CREATING A TOURIST PRODUCT

		Alternative solution		
Characteristics of the tourist product		Possible solution		
Components of the problem	Objects of the tour	Historical sight	Natural wealth	Combined natural and historical resources
	Hotel type	Classic (convenience and comfort)	Camping (minimum basic set of services)	Hostel (cheap accommodation)
	Location	By the sea (different formats of water resources)	In the mountains	In the forest
	Image of the region	Famous	Touristic	Unknown, wild
	Mode of transport	Air transport	Railway	Car (bus)
	Animation	Sports	Entertaining	Combined

The selected trajectory shows consumer preferences for each parameter of the tourist product.

The analysis made it possible to identify in which areas it is advisable to conduct research:

1. Use of various objects of the tour and conduct neuromarketing research in the given direction, paying attention primarily to the combination of tours, namely including both natural and historical and archaeological sites, taking into account their attractiveness.

2. Assessment of the hotel type using neuromarketing research, taking into account quality indicators such as the design of the room Fund and the hotel, the variety and representation of the menu, convenience and comfort in the provision of basic and additional services;

3. The choice of mode of transport depends on the location of the recreation center and therefore, for long distances, air transport is used, but most often a tourist needs several types of transport. Therefore, it is advisable to use neuromarketing to investigate which types of transport are most relevant, under which conditions, to determine their design solutions, approaches to price indicators, and other factors.

4. When conducting neuromarketing research of animation events, you need to take into account the target audience and select a set of animation tracks that can be combined and combined, in particular sports and entertainment events.

Initial research in the form of morphological analysis makes it possible to understand which areas can be used for final neuromarketing research. Point-based neuromarketing studies aimed at analyzing individual attributes or characteristics of a tourist product will allow you to identify unconscious behavioral factors that affect the decision-making process and attitude to the elements of the tour.

VI. CONCLUSION

Neuromarketing technologies have certain advantages over classical methods of analysis, which are associated with the fact that the most objective data is obtained, based on the unconscious needs of tourists. In General, it can be noted that in order to evaluate tourist resources or products, it is important for the consumer to determine the reaction, motives and incentives for choosing individual elements. As a result of the analysis, the following main conclusions are made:

- initially, to use neuromarketing research, to conduct a structural analysis of the types of tourism and the most significant elements of the tour;
- in order to create the most attractive tourist product, it is advisable to use neuromarketing research, which is aimed at the influence of feelings and emotions when making a purchase decision from consumers;
- before conducting neuromarketing research, it is possible to conduct an Express survey using morphological analysis, which will allow you to more accurately understand which directions and in which variant to conduct neuromarketing research;
- when conducting neuromarketing research, you need to select the most significant elements, the analysis of which will allow you to form an optimal attraction tour, while combining its individual elements.

REFERENCES

- [1] A. Kiseleva, "A new step in "managing" people is neuromarketing", Prospects for the socio-economic development of the Republic of Sakha (Yakutia) in the XXI century, 2018, pp. 15-19.
- [2] F. Kotler, D. Bowen, and D. Makenz, Marketing. Hospitality. Tourism, Moscow: Progress, 2013.
- [3] T. Kutuzova, and T. Minaeva, "Neuromarketing techniques used to enhance website communication in the tourism market", Marketing in Russia and abroad, no. 1 (105), 2015, pp. 34-41.
- [4] T. Kharitonova, and A. Sharkova, Business planning in tourism, Moscow: Dashkov and Co., 2018.
- [5] A. Khramov, and V. Likhanova, "Neuromarketing as a promising area of tourism development", Materials of the III All-Russian student scientific conference with international participation, Omsk State Transport University, 2016, pp. 19-23.
- [6] A. Traindl, Neuromarketing. Visualization of emotions, Moscow: Alpina publisher, 2016.
- [7] D. Walker, An introduction to hospitality: a tutorial, Moscow: UNITY, 2001.
- [8] A. Ilyas, and G. Muzdubekova, Neuromarketing research in the advertising activities of enterprises in Kazakhstan, 2019, pp. 540-546.
- [9] D. Van Praet, Unconscious branding. Use in marketing of the latest achievements of neurobiology, Moscow: Azbuka Atticus, 2014.
- [10] H. Boz, A. Arslan, and E. Koc, "Neuromarketing aspect of tourism pricing psychology", Tourism Management Perspectives, vol. 23, 2017, pp. 119-128.
- [11] E. Dzhandzhugazova, Marketing in the hospitality industry, textbook, manual for stud. of higher study institutions, Moscow: Publishing Center "Academy", 2005.
- [12] L. Hsu, and Y.-J. Chen, Y.-J., "Neuromarketing, subliminal advertising, and hotel selection: An EEG study", Australasian Marketing Journal (AMJ), 2020.
- [13] R. Lewis, Marketing Leadership in Hospitality: foundations and practices, New York: Van Nostrend Reinhold, 2000.
- [14] R. Brimer, Fundamentals of Management in the Hospitality Industry, Moscow: Aspect-Press, 2010.
- [15] A. Akinova, "Neuromarketing and its development in Kazakhstan", VIII International Scientific Survey of Problems of Economics, Finance and Management, 2018, pp. 16-21.
- [16] G. Leonova, Tourism business marketing, Tutorial, Donetsk: DITB, 2017.
- [17] M. Lindstrom, Buyology: A fascinating journey into the brain of the modern consumer, Moscow: Eksmo, 2009.
- [18] D. Lewis, Neuromarketing in action. How to get into the buyer's brain, Moscow: Mann, Ivanov and Ferber, 2015.