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# THE USE OF CLUSTER ANALYSIS TOOLS IN SUBSTANTIATING MANAGERIAL DECISIONS FOR THE FORMATION OF LOCAL STRATEGIES FOR THE DEVELOPMENT OF TOURISM SERVICES MARKETS

G. Gorina, G. Bohatyryova, O. Nikolaichuk, S. Revutska

#### ABSTRACT

The necessity of taking into account spatial polarization as an objective condition for the adaptation of managerial decisions to manage the development of local markets of tourist services has been substantiated. Clustering of the regional markets of tourist services in Ukraine was carried out according to the indicators of the functioning of the subjects of tourist activity (the number of tour operators and travel agents, the number of travel packages sold by tour operators and travel agents, the cost of travel packages sold by tour operators and travel agents, the number of collective accommodation facilities, the number of persons in collective accommodation facilities). The calculations made it possible to identify 6 clusters of local markets of tourist services in Ukraine, formed at a threshold distance of 2, namely: Cluster 1 – Kyiv city; Cluster 2 – Odesa and Zaporizhzhia regions; Cluster 3 – Lviv, Dnipropetrovsk and Kyiv regions; Cluster 4 – Kharkiv, Kyiv, Mykolaiv, Kherson and Donetsk regions; Cluster 5 – Poltava, Cherkasy, Zakarpattia, Khmelnytskyi and Volyn regions; Cluster 6 – Chernivtsi, Ternopil, Luhansk, Chernihiv, Kirovohrad, Zhytomyr, Sumy, Rivne and Vinnytsia regions.

A model of authentic management of the development of the Ukrainian tourist services market has been developed, which involves the use of specific blocks of managerial decisions of authentic management and accounting for the authenticity of cultural and historical resources of local markets of tourism services, asymmetry of infrastructural and socio-economic development of markets, spatial polarization of the location of climatic and recreational factors of development local tourism markets allows for the formation of competitive advantages through the use of specific tourism determinants of local tourism markets.

#### **KEYWORDS**

Cluster analysis, managerial decisions, development management, local development strategies, regional tourism markets, tourism.

### 6.1 SPATIAL POLARIZATION AS AN OBJECTIVE CONDITION FOR THE ADOPTION OF MANAGERIAL DECISIONS TO MANAGE THE DEVELOPMENT OF LOCAL MARKETS FOR TOURISM SERVICES

Local markets for tourism services are characterized by uneven development caused by differences in the distribution of natural resources, climatic characteristics of regions, cultural and historical conditions, uneven distribution of transport, communication, resort and entertainment infrastructure, asymmetry in the distribution of recreational resources, and the like. In this regard, the polarization aspects of spatial development, the growth of disproportions and asymmetries in the "Center-periphery" system of the tourism market is a prerequisite for the adoption of managerial decisions on the development of local tourism markets. All this emphasizes the need to apply differentiated specific models and concepts for the formation and management of the development of local markets for tourism services, taking into account different approaches and mechanisms for achieving general goals, objectives and expected effects.

Conducting a cluster analysis of the national market of tourism services based on the grouping of regional markets according to the performance indicators of the subjects of tourism activities should become the basis for substantiating managerial decisions for the formation of local strategies and concepts for the development of markets, including authentic ones, aimed at ensuring sustainable, permanent development in crisis conditions.

Agreeing with the opinion of Bocharova, Y. G. that «at the present stage of development of the world economy and international economic relations, one of the most important tasks for any country is to create and maintain conditions for the development of competition» [1], it should be noted that Ukraine has sufficient natural, climatic, historical and cultural resources for development competitive tourism industry of the state. At the same time, the uneven development of the tourist services market is caused by differences in the distribution of natural resources, climatic characteristics of regions, cultural and historical conditioning, disproportion in the location of transport, communication, resort and entertainment infrastructure, asymmetry in the distribution of recreational resources, and the like. In this regard, the polarizing aspects of spatial development are a prerequisite for the adoption of managerial decisions for the development of local markets for tourism services.

Based on the analysis of the works of a number of regionalist scientists: Krugman, P. R. [2], Richardson, H. W. [3], Hirshman, A. O. [4], Friedmann, J. [5], two main types of territorial organization of economic space are distinguished: the core is more developed («Center») and the «periphery» closely related to it. Within the framework of the national market of tourist services, the «center» is a local market, region, district, destination, where national tourist flows, directed inbound tourist flows are generated and concentrated, natural, recreational, cultural and historical resources are concentrated, tourist and related infrastructure is being located hotel and restaurant chains and consortia, national ones are created, rational standards of service and creation of an integrated tourist product are formed, which, in the process of spatial diffusion, spread to the peripheral local markets of tourist services.

Thus, the main manifestation of the polarization of the tourism market is the formation of a hierarchical economic space according to the «Center-Periphery» model. The country's tourist market, on the one hand, occupies a certain place in the polarized hierarchical structure of the world tourist space, and on the other hand, in terms of its internal structure and architectonics, it constitutes a similar spatial-polarization system, the main elements of which are local markets.

The starting points for the formation of the national market of tourist services according to the «Center-Periphery» model are as follows:

- 1. The position of local tourist markets in the national tourist space, basically, determines the dynamics of their development the remoteness of the market from the centers of tourism development slows down their formation.
- 2. The remoteness of the local tourist market from the «center» in the hierarchical structure of the tourist space is determined not so much by the geographical gap as by the tightness of ties with other internal and external systems (economic, administrative, social, etc.).
- 3. Tourism centers are local markets for tourism services, on the basis of which the main volume of tourist demand is formed, tourist infrastructure is concentrated, tourist flows are concentrated, the main innovations in the field of tourism are generated and mastered, advanced standards are created for creating an integrated tourist product and serving tourists as a result of the process spatial diffusion extends to peripheral destinations and tourism markets.
- 4. Natural and recreational determinants of the development of the tourist services market are only the basis for its formation, while its competitiveness and place in the hierarchical structure of the national tourist market are determined by factors of an innovative and investment nature.

The systematization of the existing theoretical apparatus, taking into account the current trends in heterogeneity, unevenness, differentiation and polarization of the tourist space, makes it possible to single out models for the development of local markets for tourist services based on the patterns of interaction between the core and the periphery. It is proposed to determine the main characteristics of the models using the following features that determine the typical properties of their formation and development: the intensity of market growth, the intensity of tourist flows, the concentration of tourist demand, the innovativeness of tourism development, involvement in the world tourism market, the contribution of tourism to the socio-economic development of the state, diversification tourist offer, development of new tourist and recreational zones, transnationalization of the tourist business (**Table 6.1**).

Spatial polarization of the tourist services market at any level is formed under the influence of objective and subjective factors, which directly or indirectly affect trends towards sustainable development or polarization. Under the influence of leading factors, poles (centers) are formed, which extend their influence to the periphery, leveling or increasing disparities in the level of market development.

The global crisis caused by the coronavirus pandemic has radically changed the travel industry around the world, and Ukraine is no exception.

Tourism is one of those sectors of the global economy that has suffered more due to the imposed restrictions on movement.

Local features of the development of tourist services markets, strengthened by the coronavirus pandemic and quarantine restrictions, require the development and implementation of adequate managerial solutions of the Development Department at the local level.

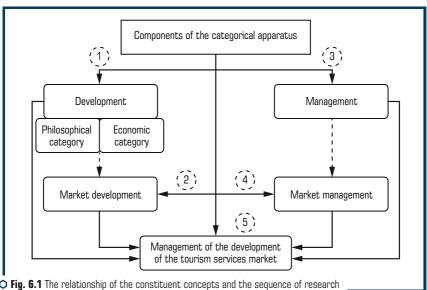
• Table 6.1 Models of spatial-polarization development of local markets for tourism services [6–8]

Sign of the proposal	«Center» model	«Semi-periphery» model	«Advanced pe- riphery» model	«Deep periphery» model
Market growth rate	Slow intensi- ty, maintains established market proportions	High intensity, uneven, unstable development	Moderate intensity of growth of the tourism market with the support of the state	Low intensity, tour- ism development is enclave
Intensity of tourist flows	High intensity, simultaneous generation and direction	High intensity of foreign tourist exchanges	Moderate intensity, accelerated growth in inbound tourism	Low intensity
Concentration of tourist demand	High concentration of tourist demand	Moderate concentration of tourist demand	Moderate concentration of tourist demand	Tourism demand is elite
Innovativeness of tourism develop- ment	Generating innovations	Diffusion of innovations	Diffusion of innovations	Slow diffusion of innovations
Engagement in the global travel market	Membership in in- ternational tourism organizations, inter- national multilateral cooperation	Membership in in- ternational tourism organizations, inter- national multilateral cooperation	Membership in re- gional organizations, promotion of bilat- eral cooperation	Insignificant
Contribution of tourism to the socio-economic development of the state	Significant contri- bution of tourism to GDP, high employment in the tourism sector	Insignificant, but it is a highly profitable sector of the economy	Significant impact on the economy and is seen as an important source of foreign exchange earnings	Minor
Diversification of the tourist offer	High diversification of the tourist offer	A wide range of products that meet international standards	Limited diversification of the tourist offer	Monodiversified tourist offer
Development of new tourist and recreational zones	Gradually decreasing	Increasing the rate of development of tourist and recre- ational zones	Slow or almost nonexistent	Almost absent
Transnationalization of the tourism business	Leading role of tourist TNCs, inter- national hotel and restaurant chains	Expansion of the presence of TNK, international hotel and restaurant chains	Insignificant trans- nationalization of business, attraction of foreign capital for infrastructure development	Single presence of TNCs and interna- tional networks in the market

The fragmentation and inconsistency of the approaches of scientists to the methodological foundations and categorical apparatus of researching the process of managing the development of the tourism services market hinder the ability of business entities to introduce comprehensive approaches to improving their activities, introduce the latest mechanisms, strategies and management concepts, encourages systematization and critical analysis of the existing apparatus.

In this regard, the clarification of the conceptual-categorical apparatus of the study of the management of the development of the tourist services market is of high importance.

Since the term «management of the development of the tourist services market» is a complex concept, the key elements of which are «development», «market development», «management», «market management», and as a result «management of the development of the tourism services market», its identification is logical conduct through the analysis of these components. The sequence of research of the concepts considered to reveal the content of the corresponding conceptual apparatus is shown in **Fig. 6.1**.



Q Fig. 6.1 The relationship of the constituent concepts and the sequence of research of the term «management of the development of the tourism services market» [8]

The study of the etymology of the concept of "management" made it possible to form the author's vision of the conceptual construction of "market management", which in general form should be considered as a purposeful process, which manifests itself in a set of interrelated, interdependent, coordinated actions aimed at improving and streamlining the system of economic ties and relations that are developing in the process of production, circulation and distribution of goods

and services, as well as the movement of funds, the creation of mechanisms for the implementation of entrepreneurial activities.

In turn, «market development management» is a complex of purposeful management actions aimed at achieving permanent, competitive, optimal market functioning in a changing external environment and the multidimensional impact of the determinants of its development.

Thus, the analysis of the constituent components of the multi-aspect concept of «management of the development of the market for tourism services», the key elements of which were the terms «market», «market of tourism services», «development», «market development», «management», «market management», «market development management» allowed to identify this category as a set of targeted management actions aimed at achieving permanent, competitive, optimal functioning of an integrated system for transforming natural and recreational resources into cash in the process of economic relations between tourism business entities regarding the production, sale and consumption of tourism products and services in the context of a changing external environment and the multidimensional impact of historically established basic and current innovative determinants.

The need to take into account the spatial and polarization determinants of the development of local markets for tourism services is justified by their increased influence on the activities of the subjects of the tourism industry, the policy of state and local authorities in the field of tourism, purchasing power and consumer preferences, and the like. Factors of the formation of the spatial polarization of the tourist services market have a direct impact on the spatial structure of the tourist system, cause and intensify its polarization.

One of the current trends in the development of the tourist services market is the transition from historically established basic determinants (factors of «first nature») to innovative (factors of «second nature»). Thus, the advantageous recreational and geographical position, the availability of natural and cultural resources, favorable climatic conditions are only the basis, a prerequisite for the development of tourism. While the competitiveness of the local tourism market is made up of innovative factors:

- developed tourism infrastructure;
- modern innovative technologies for the creation and promotion of a diversified tourist product;
- encouraging investment in the development of the tourism industry;
- availability of research structures on tourism issues;
- an effective system of training tourist personnel;
- the presence of transnational tourist corporations;
- the application of modern standards in the field of safety for the implementation of tourist activities, the ability to quickly adapt to the fast external environment, and the like.

The presence of a heterogeneous spatial structure and hierarchical structure of the tourist services market in Ukraine testifies to the need to form an effective local tourism policy, to adapt managerial decisions to manage the development of local markets of tourist services, and to apply authentic management of their development.

### 6.2 CLUSTERING REGIONAL TOURISM MARKETS IN UKRAINE AS A PREREQUISITE FOR SUBSTANTIATING MANAGERIAL DECISIONS ON THEIR DEVELOPMENT

The high degree of regional differentiation of the tourist services markets in Ukraine makes it ineffective to use unified approaches in substantiating managerial decisions for the local development of tourist services markets. Ensuring the achievement of the strategic goals of state policy in the field of tourism is possible through the development and implementation of optimal specific models of local assistance to the development of business processes in the tourism industry. In this regard, the question of identifying clusters of local markets of tourist services in Ukraine similar to the trends and indicators of tourism activity becomes relevant. The use of cluster analysis and profiling of each selected segment serve as an information and analytical basis for substantiating managerial decisions on the formation of a local strategy for the development of tourist services markets.

A detailed review of works on the use of cluster analysis and clustering methods in the studies of domestic and foreign scientists devoted to the study of the tourism industry was carried out in the work «Clustering regional markets of tourism services by indicators of the functioning of tourism entities» [9], which allows to conclude that this econometric approach. Golovkova, L. S., Yuhnovska, Y. O. [10] propose an algorithm for the formation and development of the region's tourism industry based on a cluster approach, insist that the structure of the region's tourism cluster should be based on enterprises (organizations, firms) that are geographically close, tourism infrastructure, local labor markets and a tourism product that is the geographical and historical component of the region. The question of the influence of the clustering of the tourism sector on the formation of a regional image, the spread of clustering processes through the promotion of the image of the territory was raised in the work of Kolyadenko, S. V. [11]. General trends in the development of national and cross-border recreational and tourist clusters as an effective tool for interregional and international cooperation are investigated by Andrusiak, N. S [12]. Ocheretin, D. V. [13] carried out a cluster analysis of tourist flows in the context of the regions of Ukraine, the task of which is to find such groups of objects in the sample and allows to identify the place of each region in the tourist flow. Chernega, O. B., Gorina, G. O., Romanukha, O. M., Bohatyryova, G. A., Nikolenko, K. V. [14] carried out zoning of the territory of Ukraine for the development of cultural and educational tourism, which is based on the calculation of average statistical data on the number of museums by region, analysis of their visits and the volume of tourist streams. Ivanova, N. [15] develops mathematical models for the authentication of regions in relation to the state of their economic security using discriminant analysis, and the clustering of a region is an indicator of the grouping. Okhrimenko, A. H. [16] substantiates the relevance and need for the development of tourism clusters at the regional level, emphasizes their advantages and importance. A number of domestic scientists, using the methods of cluster analysis and clustering in their research, focus in their works on certain regions of Ukraine. Thus, Parfinenko, A., Bosenko, K. [17] investigate the potential of tourist clustering in the Podolsk region of Ukraine, Romaniv, P. V. [18] studies the cluster model for managing tourist activities in the Lviv region, and also analyzes the role of cluster formations in the economic development of regions.

Cluster analysis and clustering methods are widely used by foreign scientists in the study of tourism activities at all economic levels of its implementation. Navarro Chávez, J. C., Zamora Torres, A. I., Cano Torres, M. [19] focus on the analysis of 14 factors of tourism competitiveness for 20 countries participating in the Asia-Pacific Economic Cooperation Forum. The authors analyze the secondary data of the Travel and Tourism Competitiveness Index, creating clusters, using multidimensional scaling methods to identify effective determinants of the competitiveness of destinations. Yalcınkaya, T., Güzel, T. [20] focus on a global overview of tourism clusters. The authors propose a definition of a tourist cluster, describing the functioning of its network system, provide a classification of tourist clusters. Koľveková, G., Liptáková, E., Štrba, L'., Kršák, B., Sidor, C., Cehlár, M. et. al. [21] explore 54 regions of Central and Eastern Europe (Czech Republic, Slovakia, Hungary, Poland, Estonia, Lithuania, Latvia, Slovenia, Romania and Bulgaria), clusters them according to the indicators used by the European Statistical Agency (Eurostat) to assess tourism. As a result of cluster analysis, six clusters were identified, consisting of regions with similar statistical characteristics of indicators. Lascu, D.-N., Manrai, L. A., Manrai, A. K., Gan, A. [22] identify the characteristics of the most attractive tourist destinations in Spain, using a two-stage cluster analysis to establish the relative importance of natural and cultural factors for target consumers. Ramires, A., Brandão, F., Sousa, A. C. [23] segmenting international tourists visiting the World Heritage City of Porto based on their travel motives associated with specific destination attributes, as well as their satisfaction with the travel experience. Iswandhani, N., Muhajir, M. [24] use the K-means method to conduct a cluster analysis of a tourist destination in a special region of Yogyakarta using a spatial approach and analysis of social networks. The results of this study were the determination of the top 10 most popular destinations in Yogyakarta, the construction of a map of the distribution of tourist destinations based on html, consisting of 121 tourist destinations and forms 3 clusters. Rodríquez, J., Semanjski, I., Gautama, S., Van de Weghe, N., Ochoa, D. [25] to develop and implement a hierarchical approach for clustering geolocalized smartphone data to identify significant market segments related to tourism. Application of the proposed approach on the example of the province of Zeeland in the Netherlands made it possible to identify two main clusters and four sub-clusters, which were interpreted on the basis of their spatial-temporal models and the frequency of their visits in the region. So, the content analysis of modern domestic and foreign studies on the diagnosis of tourism activity has made it possible to confirm the hypothesis about the widespread use of methods of multivariate statistical analysis, in particular, cluster analysis.

Taking into account the local specifics of the development of the tourism industry should not be based only on the administrative-territorial division of the country. Local markets of tourist services in Ukraine with similar trends in tourism may not be related to territorial or administrative grounds. The use of cluster analysis tools to identify groups of regions with similar trends in the development of tourism entities is the optimal econometric approach in substantiating managerial decisions for the formation of local strategies for the development of tourism services markets.

As objects of the sample, 24 regions of Ukraine and the Kyiv city were proposed, the signs for which the groupings were carried out in 2020 are: the number of tour operators and travel agents, the number of travel packages sold by tour operators and travel agents, the cost of travel packages sold by tour operators and travel agents, the number of tourists served tour operators and travel agents, the number of collective accommodation facilities, the number of persons in the collective accommodation facilities. Output statistical data for the cluster analysis of regional tourism markets are shown in **Table 6.2**. Preliminary standardization of the initial data in order to eliminate disagreements in the units of measurement of indicators was carried out according to the formula:

$$Z = \frac{\left(x - \mu\right)}{\delta},\tag{6.1}$$

where Z – value of the standard normalized distribution;

x – value of the output distribution;

 $\mu$  – average value of the output distribution;

 $\sigma$  – standard deviation of the original distribution.

The dendogram of the hierarchical clustering of regional markets for tourism services was built in the STATISTICA 12 software product by sequentially combining into a cluster, first close, and then more and more distant from each other objects. The Ward method was chosen as the clustering algorithm, and the Euclidean distance was chosen as a measure of distance. The matrix of Euclidean distances for the objects under consideration (regional markets of tourist services) is provided in **Table 6.3**.

To determine the enlarged number of clusters, it is advisable to choose a threshold distance of 2 and higher, while for a more detailed and fundamental analysis of the tourist services market, which is necessary for the development of local development strategies, it is advisable to choose a threshold distance of 1 or lower, which will make it possible to determine the optimal composition of clusters by performance indicators subjects of regional markets of tourist services. The constructed dendrogram is shown in **Fig. 6.2**.

With a threshold distance of 2, 6 clusters are formed on the Ukrainian tourist services market.

Cluster 1 - Kyiv city, which, according to all indicators of the functioning of tourism entities (the number of tourism entities, the number of staff members of tourism entities, income from the provision of tourism services, the number of tourists served with travel vouchers) takes the first place.

Cluster 2 is formed by the Odesa and Zaporizhzhia regions.

Cluster 3 includes Lviv, Dnipropetrovsk and Kyiv regions.

Cluster 4 unites Kharkiv, Ivano-Frankivsk, Mykolaiv, Kherson and Donetsk regions.

Cluster 5 includes Poltava, Cherkassy, Zakarpattia, Khmelnytskyi and Volyn regions.

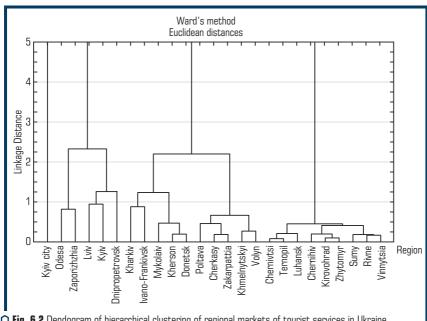
The most numerous is Cluster 6, which accumulates Chernivtsi, Ternopil, Luhansk, Chernihiv, Kirovohrad, Zhytomyr, Sumy, Rivne and Vinnytsia regions (**Table 6.4**).

• Table 6.2 Output statistical data for the cluster analysis of regional tourism markets in Ukraine, 2020

Region	Number of tour operators and travel agents, units	Number of travel packages sold by tour operators and travel agents, units	The cost of travel packages sold by tour operators and travel agents, thousand UAH	Number of tourists served by tour operators and travel agents, people	Number of collective accom-modation facilities, units	Number of persons staying in collective accommodation facilities, units
Vinnytsia	79	12,098	12,177	24,275	10	23,499
Volyn	70	4,401	4,471	8,872	36	28,323
Dnipropetrovsk	431	36,603	37,034	73,637	87	151,077
Donetsk	82	9,328	9,410	18,738	65	73,285
Zhytomyr	59	5,031	5,090	10,121	16	17,719
Zakarpattia	72	7,188	7,260	14,448	48	47,266
Zaporizhzhia	147	19,019	19,166	38,185	119	92,794
Ivano-Frankivsk	104	56,767	56,871	113,638	50	123,876
Kyiv	220	21,307	21,527	42,834	80	189,169
Kirovohrad	57	3,918	3,975	7,893	20	19,266
Luhansk	37	1,769	1,806	3,575	7	6,600
Lviv	265	69,155	69,420	138,575	111	229,963
Mykolaiv	89	5,741	5,830	11,571	83	72,898
Odesa	194	18,405	18,599	37,004	147	138,618
Poltava	124	8,512	8,636	17,148	43	87,745
Rivne	102	8,268	8,370	16,638	13	12,779
Sumy	85	7,334	7,419	14,753	17	27,160
Ternopil	65	3,168	3,233	6,401	13	15,609
Kharkiv	234	24,854	25,088	49,942	66	80,153
Kherson	54	6,928	6,982	13,910	70	66,506
Khmelnytskyi	63	5,893	5,956	11,849	28	49,591
Cherkasy	99	8,739	8,838	17,577	43	52,433
Chernivtsi	55	4,259	4,314	8,573	11	11,024
Chernihiv	57	6,754	6,811	13,565	22	34,354
Kyiv city	1,023	1,062,591	1,063,614	2,126,205	132	566,876

Source: compiled by the authors based on data from [26, 27]

• Table 6.3 Matrix of Euclidean distances for regional markets of tourist services in Ukraine



O Fig. 6.2 Dendogram of hierarchical clustering of regional markets of tourist services in Ukraine Source: compiled by the authors

It should also be noted that when the regional markets of tourist services were combined into clusters, according to the indicators of the functioning of the subjects of tourist activity, the geographical feature was not taken into account, only the economic indicators of their activity were applied.

• Table 6.4 Output statistical data for the cluster analysis of regional tourism markets in Ukraine, 2020

Threshold distance – 2			
Cluster	Cluster union level	Sample objects	
Cluster 1	_	Kyiv city	
Cluster 2	0.8190739	Regions: Odesa, Zaporizhzhia	
Cluster 3	1.260179	Regions: Lviv, Dnipropetrovsk, Kyiv	
Cluster 4	1.237030	Regions: Kharkiv, Ivano-Frankivsk, Mykolaiv, Kherson, Donetsk	
Cluster 5	0.6664612	Regions: Poltava, Cherkasy, Zakarpattia, Khmelnytsky, Volyn	
Cluster 6	0.4530085	Regions: Chernivtsi, Ternopil, Luhansk, Chernihiv, Kirovohrad, Zhytomyr, Sumy, Rivne, Vinnytsia	
Source: com	oiled by the authors		

### 6.3 MODEL OF AUTHENTIC MANAGEMENT OF THE DEVELOPMENT OF LOCAL MARKETS OF TOURIST SERVICES IN UKRAINE

In the context of globalization and integration of the tourism industry of Ukraine into the world tourism space, the issue of effective and competitive management of the development of local markets as components of a complex multi-level system of the national market of tourist services becomes extremely urgent.

The spatial polarization of the socio-economic development of local tourism markets, the authentic features of their cultural and historical potential, the peculiarities of the spiritual and religious values of the multinational composition of the population, the differences in the natural and climatic conditions of the formation of tourism markets give rise to the need to apply differentiated specific models and concepts of the formation and management of their development, taking into account various approaches and mechanisms for achieving general goals, objectives and expected effects.

Managing the development of local tourism markets through authentic management will allow the use of national cultural identities as a competitive advantage while encouraging both foreign and domestic tourists. Moreover, the positioning of the local tourist market as an authentic destination should be based on the development of a positive attitude towards representatives of other nations and cultures; desire to learn about the culture and customs of peoples, reducing negative perceptions and stereotypes in relation to other peoples and cultures; spreading understanding, respect and tolerance for the culture of other peoples; increasing self-esteem of local residents and their perception of world living standards; psychological satisfaction from interaction with representatives of other cultures (**Fig. 6.3**).

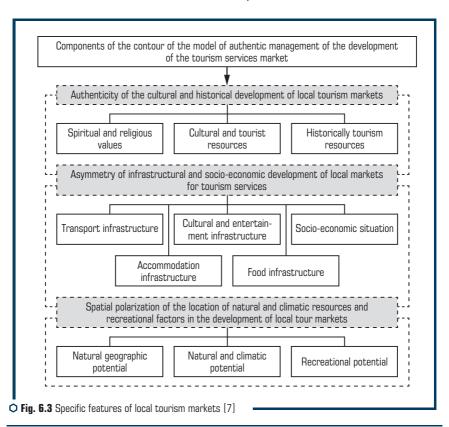
It is proposed to implement the model on the basis of taking into account the specific features of local markets for tourism services, namely: the authenticity of the cultural and historical resources of local markets for tourism services (spiritual and religious values, cultural and tourist resources, historical and tourist resources), the asymmetry of infrastructural and socio-economic development markets (transport infrastructure, infrastructure of accommodation facilities, cultural and entertainment infrastructure, food infrastructure, socio-economic situation), spatial polarization of the location of natural-climatic and recreational factors for the development of local tourism markets (natural-geographical potential, natural-climatic potential and recreational potential) (Fig. 6.3).

The synthetic interaction of these features forms the outline framework of the model, determines the integrated components of ensuring competitive advantages and destructive determinants of the formation of local tourism markets.

The model of authentic management of the development of the tourism services market should be based on and take into account as much as possible:

- 1) the regional specifics of the development of tourism business entities and related industries;
- 2) principles of rational use and protection of tourist and recreational resources of local markets, preservation of objects of national cultural heritage;

- 3) advanced European and world achievements and developments in the systematic management of the quality of tourism services, the provision of tourism services, the creation of an integrated tourism product;
- 4) mechanisms of interaction and regulation of powers of central and local executive authorities, local governments, subjects of tourism activities, scientific institutions and educational institutions;
- 5) mechanisms to ensure maximum safety of tourists, protection of their rights and interests during travel;
- 6) the needs of local markets in the professional training of specialists in the field of tourism, in particular, hotel, restaurant, cultural and entertainment and other types of activities;
- 7) strategic prospects for the development of industries and types of economic activities adjacent to tourism, which are of a strategic nature for the study area;
- 8) comprehensive theoretical and methodological, analytical, sociological studies of the local tourism business, the market of tourism services, subjects of tourism activities.



Taking into account the authenticity of the cultural and historical development of local markets for tourist services presupposes the management's orientation towards spiritual and religious values and cultural and historical tourist resources of a certain territorial space. In this regard, the development of local programs for the development of tourism should be based on the existing cultural, value, spiritual, moral and religious guidelines of society, the unique, cultural and traditional heritage of the local community. Compliance with the authentic component in the management and formation of local markets for tourist services will ensure the preservation of unique cultural ethnic groups, on the one hand, and serve as a tool to encourage tourists motivated by the desire to learn the cultural heritage, historical descendants and ethnographic value of certain regions of the country.

Taking into account the asymmetry of the infrastructural and socio-economic development of local markets for tourism services, namely: transport, cultural and entertainment infrastructure, infrastructure of accommodation facilities, food, the socio-economic situation of the region in management will ensure the development of programs, concepts and strategies that take into account urgent needs and the potential for their solution, relying on the resources and factors of a certain territorial economic space.

Taking into account the spatial polarization of the location of natural, climatic and recreational factors in managing the development of local tourism markets is a key factor in the formation of a tourism business based on characteristic types of tourism, namely: recreational and health-improving, mountain, water (underwater), rural exotic, adventure, hunting, ecological (green), etc.

Determination of the sufficiency of the provision of the territorial space with natural, climatic and recreational factors for the development of tourism is the primary task of the initial stage of the formation of the tourism market. Depending on what type of tourism is planned to be developed in a certain territory, an assessment of its provision with certain necessary resources and factors is carried out. So, at the first stage, it is advisable to assess the availability of natural-climatic, recreational and cultural-historical resources, the second stage is characterized by the study of the quality of infrastructural support, the final third — by the diagnosis of the socio-economic situation.

The conceptual content of the model is provided by the integrated relationship of its main components: the goal, which is manifested in ensuring the sustainable, competitive development of local markets for tourism services, tasks, functions, principles, involved subjects, control units, the expected effects of its implementation (**Fig. 6.4**). The model of authentic management of the development of the tourist services market is designed to perform the following functions: organizational and managerial, analytical and diagnostic, predictive, information and resource, innovation and technological, communication. Among the main tasks of the model of authentic management of the development of the tourist services market, the following are identified:

- 1) improving the institutional support for the development of local tourism markets, strengthening the interaction of national and local government authorities, creating a local authority for regulating tourism, managing its development (management, tourism department as part of regional state administrations, local tourism administrations);
  - 2) development of tourist and related infrastructure of Ukrainian cities;

- 3) restoration of abandoned tourist sites, their inclusion in excursion service programs by attracting national and foreign investors, the use of public-private partnerships.
- 4) inclusion in the tourism industry of non-traditional for tourism in Ukraine destinations industrial, agricultural, environmental regions, did not fully use the existing recreational potential, affected the fragmented nature of the development of the tourism business or its complete absence;
- 5) dissemination of information about the tourism brand of local destinations, raising the awareness of the population about the tourist attractions of Ukraine, which will allow reorienting outbound tourist flows to flows within the state, supporting the domestic sector of tourism and resorts;
- 6) increasing the interest of citizens in the cultural heritage, history and modernity of their native land, country will provide not only a socio-economic effect, but also a patriotic and educational function to contribute to the revival of spirituality, morality, national consciousness, culture, respect for the native land and state.

The organizational and managerial function is expressed in the creation of a single management space capable of ensuring the integrity of the management system of the market, the effectiveness of the relationship of its components, coordination and interconnection of the subjects of tourism activities, to achieve the most optimal conditions for the rational organization, coordination and management of the development of the tourism services market.

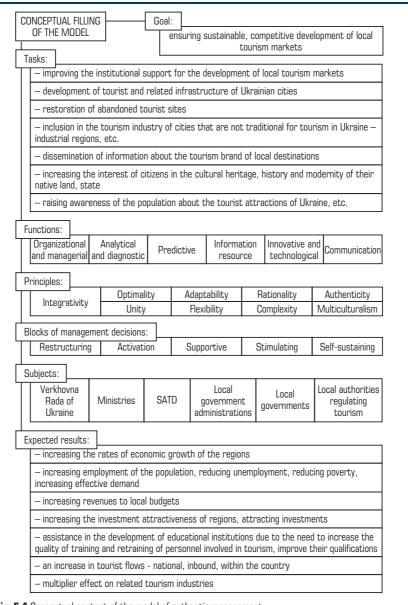
The analytical and diagnostic function is manifested in the collection and analysis of information on the efficiency of management of the tourism services market, identification of existing positive and negative trends, existing threats, assessment of compliance with certain vectors of market formation, and determination of the reasons for deviations from the conceptual and strategic programs of its development.

The predictive function predicts the development of the market in the future, showing regular trends, rink-forming factors and specific properties of each stage of its formation; forms strategic development goals and defines conceptual guidelines for management activities.

The information resource function involves the mobilization and redistribution of material, financial, informational, intellectual, human resources; provision of regulatory, informational, methodological, consulting, financial and credit support.

The innovative and technological function involves the generalization of advanced European and world management experience, modern technologies and mechanisms for creating an integrated tourism product, standards of tourist service, ensuring the spread of acquired progressive technological and organizational practices in order to stimulate, provide support for the activities of the subjects of local markets of tourism services, its permanent competitive development.

The communication function acts as an integrating component that unites the role of management and communication, ensures the exchange of information and feedback, the management of communication processes occurring between the subjects of the tourism services market, allows to achieve consistency of interests, cooperation on an equal footing, alignment of differences in initial awareness, maintain sustainable production-business connections.



**Q Fig. 6.4** Conceptual content of the model of authentic management of the development of the tourism services market [8]

An important research task of modeling the authentic management of the development of the tourist services market is to determine the continuum of principles, the main of which are the principles: integrability, the optimal combination of centralization and decentralization of management, adaptability, rationality, unity, flexibility, complexity, authenticity and multiculturalism.

The principle of integrativity substantiates the expediency of combining the interaction of all elements of the market system, in turn generates a new quality of the spatial and economic development of the region, an increase in the synergistic effect.

The principle of the optimal combination of centralization and decentralization of management presupposes a clear regulation of the powers of state authorities and local authorities that regulate tourism in the formation and management of the development of local markets for tourism services.

The principle of adaptability is manifested in the ability of the local tourism market to adapt to changes in internal and external circumstances, the emergence of destructive factors and negative trends in the national tourism market without deteriorating the performance and stability of its functioning.

The principle of rationality presupposes a balance of production capacities and production volumes of products, the provision of tourist services at an appropriate quality.

The principle of unity implies the need to consider the national market of tourist services as an integral system, which consists of different quality, at the same time collegial elements — local markets of tourist services, which are interrelated, interacting components of one whole. In the authentic management of the development of the tourist services market, the principle of unity is complemented by the need to take into account national characteristics and complement their ethnic traditions of the regions.

The principle of flexibility determines the ability of the local market of tourist services to self-regulation, change the priority directions of development, the ability of its potential to return to a state of balance after adaptation to negative environmental factors, emerging unforeseen destabilizing factors and development determinants.

The principle of complexity presupposes the holistic use of the natural resource, recreational potential of the local tourism market, the rational attraction of labor resources, the activation of economic ties between the subjects of the tourism business, the creation of an end-to-end infrastructure of the tourism market, which takes into account the production and social potential of the territory.

The principle of authenticity provides for taking into account the cultural, religious, ethnic specificity, which has a significant impact on the spiritual development of society, the worldview of people, the development of art in the territory of a particular region or ethnic group; building a socio-cultural construct that takes into account the uniqueness of traditions, customs, cultural heritage, as well as the peculiarities of business etiquette of doing business and the culture of communication.

The principle of multiculturalism provides for the formation of a tolerant attitude towards cultural characteristics and differences; awareness of the importance of intercultural interaction; popularization of the cultural space of individual regions, familiarization with which contributes to the expansion of the worldview of the individual, generates respect for the circle of cultures and

civilizations; encourages the bilingual development of the nation, the awareness of individuals and society as a whole that they are carriers and representatives not only of their native, but with most interconnected cultures.

The choice and application of certain managerial decisions for authentic management of the development of the tourism services market is based on the type, model of the local market, taking into account the presence of market-forming and destructive factors, the stage of market formation and current trends in its development. The proposed list of managerial decisions in the model of authentic management of the development of the tourism services market has not been exhausted. Within each block of managerial decisions, sub-blocks can be created to target the features and properties of local markets.

It is proposed to apply the restructuring block of managerial decisions for tourism markets at the stage of modernization, which are characterized by ineffective management, unproductive use of the natural, climatic and recreational potential, low quality of infrastructure support for the tourism business, limited internal activity and the lack of inbound tourist flows. In the process of restructuring, a purposeful change or significant improvement of the market management system is carried out, the development of a qualitatively new institutional support for the development of the tourism services market, the development and implementation of a strategy for the effective, environmental, sustainable use of climatic and recreational potential, the development of a mechanism for spatial and infrastructural support of the tourism business or significant optimization of the existing infrastructure.

The activation block of managerial decisions is used for tourism markets at the initial stage or the stage of modernization, which are characterized by restrained development, characterized by consistently low tourist flows within the market or their gradual decrease, the absence or sporadic nature of entry, low seasonal employment of the population in the tourism industry, and a decrease in revenues to local budgets from the tourism industry with a sufficiently high-quality tourism logistics, satisfactory actual availability of tourist infrastructure facilities, the presence of local authorities regulating tourism.

The supporting block of managerial decisions is used for tourism markets at the stage of consolidation, natural-recreational and socio-economic potential, which cannot be exceeded by the true scale of growth. The use of the appropriate block of managerial decisions is aimed at ensuring the acceleration of the development rate of the local tourism market, which are manifested in a gradual increase in domestic tourist flows and a stable dynamics of inbound, stable employment of the population in the tourism and related industries, the shares of tourism receipts in local budgets have been preserved. The effectiveness of the local Administration and the quality of institutional support for the functioning of the tourist services market is assessed as quite high.

A stimulating block of managerial decisions is used for tourism markets at the accumulative and consolidation stages. Management of the socio-economic, organizational, recreational, innovative and investment development of the local market of tourist services is carried out by local authorities, relying on the availability of climatic, cultural, historical, economic, social resources

and production factors. State support is provided in the introduced gradations of the system of benefits, preferential vacations, easing tax policy, attracting tourism business entities to fulfill government orders for the supply of services, helping to increase the competitiveness of domestic tourism enterprises in the international tourism market, stimulating domestic local tourism by subsidizing part of the cost or full financing tourist and related services for low-income groups of the local population and the like.

It is advisable to use a self-sustaining block of managerial decisions for local tourism markets with high efficiency of local authorities, building management and regulation in the field of tourism, relying on active resources. These markets are characterized by a stable, gradually increasing intensity of domestic tourist flows, a developed tourist infrastructure, optimal institutional support for business, and efficient tourism logistics. Development management should be aimed at developing bilateral and multilateral international cooperation, attracting foreign investment, using modern channels for disseminating and disseminating information about the uniqueness and authenticity of tourist and recreational market resources in foreign countries, introducing modern technologies to encourage and attract foreign tourists, etc.

One of the variable methodological techniques for determining the optimal block of managerial decisions for authentic management of the development of the tourism services market is the matrix method, the basis of which is a two-factor matrix. The vertical axis of the matrix is formed by the proposed stages of development of the tourist services market (initial stage, cumulative stage, stage of consolidation and modernization), the horizontal axis is the model of its spatial and polarization development («Deep Periphery» model, «Advanced Periphery» model, «Semi-periphery» model, «Center» model). The congruence of the constituent components of both axes on the matrix field makes it possible to determine the necessary control unit inherent in a particular model at a particular stage in the development of the tourist services market (**Fig. 6.5**).

n and tourist et	Modernization stage	Restructuring	Activation	Supporting	Supporting
matio of the mark	Consolidation stage	Stimulating	Supporting	Stimulating	Self-sustaining
of fo nent vices	Accumulative stage	Activation / Stimulating	Stimulating	Stimulating	Self-sustaining
Stages developr ser	Initial stage	Restructuring / Activation	Restructuring / Activation	Activation	Supporting
		«Deep Periphery» model	«Advanced Periphery» model	«Semi-periphery» model	«Center» model
	Models of spatially polarization formation and development of tourist services markets				

O Fig. 6.5 Two-factor matrix of attribution of relevant blocks of managerial decisions of authentic management of the development of local markets for tourism services [8]

At the same time, it should be emphasized that the determination of the optimal block of managerial decisions should be based on taking into account the characteristics and development trends of a particular local market, taking into account the influence of internal and external factors and forecast indicators of its development. The proposed matrix method is designed to ensure the selection of a common block of managerial decisions for its further adaptation to a specific market.

The proposed two-factor matrix should be a directional guideline for the selection of relevant blocks of managerial decisions for authentic management of the development of the tourism services market. In practice, it is advisable to choose the appropriate block of managerial decisions, taking into account the inherent trends in the development of the market, factors, destructors and factors of producers, the main directions and strategic vectors of the formation and development of the market.

In the organization of management of local tourism development, three main models have been identified (**Table 6.5**), the choice and application of which depends on the state strategy for the development of the tourism services market of the national economy, the degree of market development, the competitiveness of the subjects of tourism activities, the attraction of the state's tourism industry to the world tourism space, etc.

• Table 6.5 Models of state participation in the regulation and management of the development of local markets for tourism services [8]

Model name	Visualization of model	Subjects
Decentralized governance model	2 2 2 2 2	Local authorities to ensure the formation and implementation of regional policy in the field of tourism     Market entities
I Centralized Management Model	2 2 2 3 3 3	1 – Profile Ministry of Tourism 2 – local authorities to ensure the formation and implementation of regional policy in the field of tourism 3 – market entities
II Centralized Management Model	3 3 3	1 — Multidisciplinary ministry 2 — Department, structural unit of the Ministry for ensuring the formation and implementation of state policy in the field of tourism 3 — local authorities to ensure the formation and implementation of regional policy in the field of tourism 4 — market entities

The model of decentralized management of the development of local markets for tourism services assumes the absence of a central national body for the formation and implementation of state policy in the field of tourism.

Development and implementation of programs for the development of tourism, culture, leisure is carried out locally on the principles of market self-organization. The use of such a model is advisable when the tourism industry is not strategically important for the national economy or the subjects of the tourism market are able to ensure sustainable and competitive development on a national and international scale without state protection.

I model of centralized management of the development of local markets for tourism services presupposes the presence of a line ministry for tourism and related policies, which oversees the activities of local authorities. A similar model is inherent in the tourism markets of countries for which tourism is the main source of foreign currency replenishment of the budget, constitutes a significant share of revenues in GDP, and is characterized by high employment in the tourism industry. The characteristic features of the model are the definition of the tourism industry as a priority for the country, a clear distribution of powers between the relevant ministry and local authorities that ensure the formation and implementation of regional policy in the field of tourism.

Il model of centralized management of the development of local markets for tourism services presupposes the presence of a department, an independent structural unit within a multidisciplinary ministry to ensure the formation and implementation of state policy in the field of tourism, responsible for the development of tourism, and directs its activities in two directions: solving general issues of market development management tourism services and coordination of marketing activities.

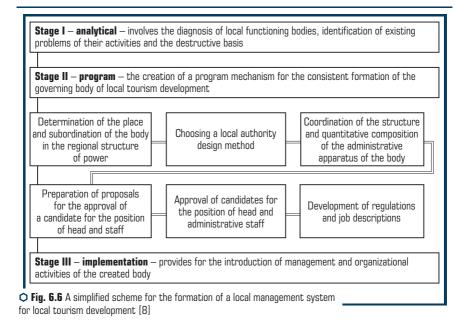
The effectiveness of the implementation of the proposed model of authentic management of the development of the tourist services market depends on a clear regulation of the powers of state authorities and local authorities, the determination of the optimal volumes of centralization and decentralization of management.

The main local subject of institutional support for the authentic management of the development of the tourism services market is the local authority that regulates tourism, which can be the administration, the department of tourism as part of regional state administrations, local tourism administrations.

The purpose of creating or improving a local governing body for local tourism development is to ensure the adoption and implementation of effective managerial decisions that can contribute to the sustainable development of economic, social and infrastructural components.

Improvement of active local authorities that regulate tourism is advisable in the case when the general goals, set objectives and target priorities of market development are not achieved, regional programs are not implemented due to subjective reasons, etc. The formation of a local management system for local tourism development is proposed to be carried out in stages (**Fig. 6.6**).

The expected results of the introduction of a model of authentic management of the development of the tourist services market is the emergence of social and economic effects.



The economic effect is manifested in:

- 1) increasing the rates of economic growth of the regions;
- 2) creating a favorable institutional and organizational climate to ensure economic conditions for the development of priority areas of tourism in the region;
  - 3) increasing revenues to local budgets;
  - 4) increasing the investment attractiveness of regions, attracting investment;
  - 5) increasing the tourist flows national, inbound, within the country;
  - 6) multiplier effect on the accompanying tourism industries;
- 7) establishment of a sustainable image of the region, the city as a tourist-attractive destination, and the like.

The social effect is manifested in:

- 1) increasing employment of the population, reducing unemployment, reducing poverty, increasing effective demand;
- 2) improvement of the existing system of research cooperation, professional training, retraining of specialists and advanced training of personnel in the tourism sector;
- 3) assistance in the development of educational institutions due to the need to increase the quality of training and retraining of personnel involved in tourism, improve their qualifications;
- achieving social satisfaction of local residents in meaningful leisure, health-improving recreation, staying in an ecologically sustainable environment.

Authentic management of local tourism markets, taking into account the specific tourism opportunities of local markets, will contribute to the development of innovative sectors of the Ukrainian tourism market, and will activate the development of non-traditional types of tourism for the state.

At the same time, the formation of innovative sectors of the tourism services market requires the development of an appropriate methodological and conceptual framework that can provide a theoretical and methodological platform for its development.

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