

Cluster Approach to Regional Development of the Tourism Industry in the Context of Digitalization

Margarita Albertovna Kazaryan¹; Anna Albertovna Kazaryan²; Pavel Nikolaevich Sharonin³;
Liliya Leonidovna Dukhovnaya⁴; Irina Vladimirovna Sharova⁵

¹The Russian Presidential Academy of National Economy and Public Administration, Moscow, Russia.

²The Russian Presidential Academy of National Economy and Public Administration, Moscow, Russia.

³Moscow Polytechnic University, Moscow, Russia.

⁴Russian State University of Tourism and Service, Cherkizovo, Moscow Region, Russia.

⁵Plekhanov Russian University of Economics, Moscow, Russia.

Abstract

The study is devoted to the formation of a cluster approach to the regional development of the tourism industry in the context of digitalization. The main characteristic of a tourist cluster is its ability to adapt quickly, therefore, to provide the subjects of the regional tourism cluster with the opportunity to exchange information among themselves in the language of common standards, compare the effectiveness of their work with the work of other participants, and learn from the best representatives of the cluster and external companies, it is advisable to develop a SCOR model that sets the language for describing the relationships between the supply chains participants. It is proposed to introduce complex automated systems that concentrate in themselves a set of organizational, regime, technical and other capabilities aimed at achieving a sufficient level of economic efficiency and safety of doing tourist business in the context of digitalization.

Key-words: Cluster, Region, Development, Tourism, Digitalization, Marketing, Entrepreneurship.

1. Introduction.

Tourism cluster management is a management model, the task of which is to combine the efforts of each of the cluster entities to achieve common goals. During the creation of a regional tourism cluster, the concept of managing it, the criteria for selecting leaders, the process of their training, the use of initiative groups to address quality improvement issues and the processes

necessary to support the activities of management personnel are described. When developing a strategy, development and sustainability are characterized as the main directions.

The competitiveness of the final tourist product will depend on the management capable of bringing the product to the market. Under these conditions, the main struggle has recently shifted from price competition to innovation competition. Therefore, for the successful implementation of the strategy, it is necessary to rationally organize work to stay ahead in innovative industries. This strategy differs significantly from the one that was carried out in previous eras when it was based on minimizing costs.

The study of issues related to the regulation of the tourism sector was reflected in the works of N.A. Balyuk [1], E.N. Zlakomanova [2], I.V. Mukhomorova [3], M.S. Oborin [4], M.M. Omarov [5], E.V. Yarotskaya [6] and others. However, there are currently no clear determinants of the cluster approach to the regional development of the tourism industry.

2. Methods.

The theoretical and methodological basis of the study is: an abstract-logical method, methods of induction, deduction, analysis, synthesis, and systematization used to substantiate approaches to determining the features of the functioning of clusters in the tourism sector.

The information base of the study is the statistical data of state bodies, legislative and regulatory documents regulating the functioning of the cluster approach in the tourism sector, and the results of scientific research [7, 9, 11].

In the course of the study, it is planned to determine the features of the interaction of participants in the tourism cluster and ways to promote tourism services, as well as consider a balanced scorecard for the tourism cluster.

3. Results.

At the present stage, it is necessary to implement the tasks of strategic management in the entrepreneurial structures of the tourism industry based on the existing methods of the balanced scorecard, ensuring the development of target tasks for strategic development, and reorientation of strategic goals into indicators of medium-term management. In this case, the indicators of a balanced system can be formed depending on the strategic goals of a particular business entity. They represent

a balance between external reporting data for owners and customers and the internal characteristics of the most powerful business processes.

It is better to use the balanced scorecard system as a tool for assessing the effectiveness of the activities of the subjects of the tourism industry and, on its basis, find out the main factors that led to losses. It is also possible to assess those indicators that are directly related to financial calculations: the level of qualifications of employees or feedback from tourists about the quality of services received.

To build a balanced scorecard, it is necessary to decompose the concept of an organization into detailed strategic objectives that will indicate specific strategic segments. Integration of individual tasks allows to find out the cause-and-effect relationships between them in such a way that the complete list of tasks reflects the strategy of the business entity. Our proposed balanced scorecard for the tourism cluster includes strategic directions, goals and indicators (Table 1).

The most acceptable ratio of the number of indicators to the objectives of each segment of the strategic program is considered to be the following ratio: finance – 4-5 indicators; clients – 4-5 indicators; internal business processes – 8-10 indicators; training and development – 4-5 indicators. The set of indicators must be changed in accordance with the new goals of the tourism cluster, the changing factors of the external and internal environment.

To achieve the set strategic goals, most tour operators train employees, invent new forms of interaction with clients, but in fact, only a few of them can effectively manage these processes.

Table 1 Balanced scorecard for the tourism cluster

Component	Strategic directions	Strategic objectives	Indicators
Finance	Income growth	Use of available tangible assets Leadership in cost reduction Profitability	Net profit (compared to competitors) Increased sales (versus industry) Income and profit from the sale of additional tourism services
Clients	Satisfied customer	Continuous satisfaction of the needs of the target client	Segment share of selected key markets
		Building a mutually beneficial relationship with the client	Increase in gross profit Customer survey Customer satisfaction
Business processes	Strengthening market position	Development of a new service	Customer acceptance rate of a new tourism service The cost of creating a tourism product in comparison with competitors
Education and development	Motivated and trained staff	An atmosphere of activity Key competencies Access to strategic information	Employee survey results Personal results Strategic competence Availability of strategic information

Such management is possible when using a system of balanced indicators, which reflects the balance between various aspects of the business entity's activities and allows to choose the most correct ways of functioning and development.

The process of introducing a balanced scorecard is also quite complicated because this system is more focused on the analysis of non-financial indicators. They cannot be obtained from financial statements; it is necessary to introduce a separate system for collecting and processing data. Therefore, to create a balanced scorecard, while avoiding significant financial costs, one should be guided by the basic principles:

- use the maximum number of those indicators that were used by the heads of departments in their daily work prior to the implementation of the system. More often, the created system of balanced indicators involves the use of performance indicators for which information has not been collected previously.

- maintain a balance between the resulting and leading indicators. The resulting performance indicators allow assessing the result that the travel company has already achieved while leading indicators allow determining how the activities of the travel company correspond to the market situation.

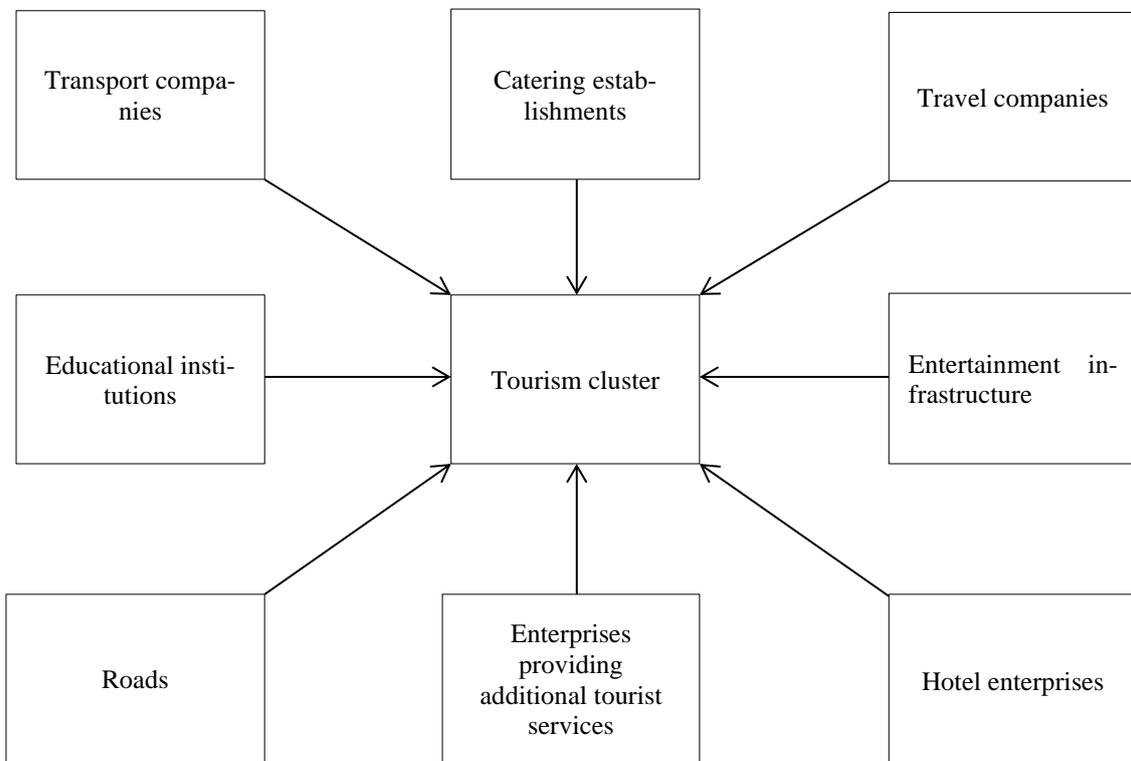
Thus, with the help of the proposed indicators of effective management of the activities of the subjects of the regional tourist cluster, it is possible to carry out operational control over its functioning. This will allow making timely and high-quality management decisions for the further development of the tourism industry in the region.

To provide the subjects of the regional tourism cluster with the opportunity to exchange information among themselves in the language of common standards, compare the effectiveness of their work with the work of other participants, and learn from the best representatives of the cluster and external companies, it is advisable to propose the development of a SCOR model. Such a model sets a language for describing the relationships between participants in supply chains, contains a library of typical business functions and business processes for managing them.

The SCOR model can be developed to better analyze, plan, and design supply chains. It integrates business process reengineering, benchmarking and best practices, captures the current state of processes and establishes how the processes should look in the future. It allows to describe and create a basis for planning, monitoring and improving supply chains for both global projects and the specific purposes of a particular travel company.

To develop such a model for a regional tourism cluster, the following elements are required: a standard description of supply chain management processes; standardization of relationships between business processes; standard metrics that allow to measure and compare performance indicators of processes; management practices that help achieve the best results. The SCOR model of a tourism cluster should be aimed at: managing relations with consumers of tourism services; management of material and nonmaterial flows going from suppliers to consumers; supplier relationship management. Practice has shown that the tourist cluster includes travel companies, entertainment infrastructure, educational institutions, catering establishments, transport companies, etc. (Figure 1).

Figure 1 - Tourism cluster structure



The information technology revolution that has taken place in society has changed the nature and methods of doing business. Information systems are considered as a necessary means of ensuring the technological process, modeling, monitoring and forecasting environmental, economic and innovation processes at the enterprises of the tourism cluster. Productive automated information and technology guidance is the most important step in increasing profitability and improving the quality of tourism services.

For the successful operation of the tourism cluster, it is necessary to use a constant flow of timely information to make important management decisions to achieve the expected end result – making a profit. In this regard, there is a need for the ability to collect information and process it; therefore, the development of information technologies in tourism should become a priority.

The use of information technology is also a prerequisite for the successful promotion of a tourist product to the national and international service market. In these conditions, the tourism industry requires the use of systems that, in a short period, can provide information about the availability of vehicles, ensure quick reservations, and resolve several issues at the time of providing tourist services.

They cover management information systems, global booking systems, multimedia and integrated communication networks. One of the latest technologies is the use of an electronic directory-catalog, the functions of which include the selection of a tourist product, automated agencies, and ordering.

The high efficiency of the catalog is due to the extremely high volume of information on web pages, which is presented by various multimedia methods using text, photo, sound, video and other means. Advertising on the Internet is available without restriction at any time of the day to a wide range of consumers. In addition, for prompt and correct control, in-depth analysis of the state of affairs, speed and completeness of the provision of services to clients, it is imperative to introduce an authorized management system. In conditions of fierce competition and a market economy, no tourist cluster can fully develop and effectively promote without such modern systems. For such clusters, the introduction of automated control systems is necessary for successful development, especially when it comes to complex integrated systems.

Due to the digitalization of the processes of functioning of systems, interconnection is achieved between the various structures of the tourism cluster, which significantly increases the efficiency of labor. In general, with the use of digital systems, the tourist cluster becomes more manageable. Managers, having received real indicators of the current situation and forecasts for the future, can make correct and timely decisions.

Along with management functions, the systems provide additional opportunities to improve the quality of the provision of tourist services to clients. The system allows considering various wishes and preferences of the consumer of tourist services and stores data on each client, which

makes the process of providing services for them hassle-free. In general, an automated control system can be considered as an integrated set of subsystems such as financial management, material flows, service, personnel, sales, marketing, analysis of financial flows, and working capital of a tourist cluster.

Professional office programs claim to fully automate the business processes of tourist clusters. Their effectiveness is due to a whole range of coordinated measures to revise the existing methods and procedures of work, retrain personnel, develop and transform an information technology strategy. Therefore, first of all, the heads of tourist business structures must realize that for wider use of computer technologies in the future, it is necessary to improve the level of qualifications of employees. This will lead to an increase in the quality of customer service, and allow managers to quickly and more accurately arrange the tour, provide a diversified range of tourist services, improve the level of development of marketing planning, and increase the competitiveness of services in the market.

4. Discussion.

The reliability of the presented approaches is confirmed by the fact that the active use of profit optimization systems has become an important trend in the development of tourist clusters [8, 10, 12]. Tourist clusters that actively use such systems gain a significant competitive advantage and achieve a significant increase in income. This system works in real time, analyzes the information received from the tourist cluster management system (reservations, seasonal fluctuations, dynamics of previous periods), considers the specifics of market segments and carries out a reconstruction of pricing and tariff management.

The recommendations concern both the strategy of the commercial policy of the tourist cluster in the medium and long term, and the daily actions of its structures. Under these conditions, automated control systems operate both in individual travel companies and in the entire tourism cluster, which are equipped with powerful tools for preserving and managing correspondence between various structures.

Modern digital control systems operate not only in a local network, but also have the ability to connect to work on the global Internet. This is especially important when it comes to the cooperation

of actions of the subjects of the regional tourism cluster because the faster each of them gets access to information, the more efficiently the necessary current decisions are made.

The advantages of such technologies are that this process allows for a flexible marketing and pricing policy while achieving maximum profitability from each received application or proposal. Thanks to this, a focused travel company has the opportunity to create a highly effective sales strategy, which is based on the analysis of trends and interactions in the market, to control the conditions for the sale of its service packages, bringing them in line with the market conditions in any geographic region.

The automation of the management of the tourism cluster is closely related to the system for collecting and analyzing external current information. These processes are complex and cover all aspects of the functioning of the tourist cluster. The system for collecting external current information provides the subjects of the cluster with data on the latest developments in the tourism services market. Tourist clusters, which have a sufficiently high level of organization, develop and implement additional measures that will ensure an increase in the quality and quantity of received external operational information.

5. Conclusion

To sum up, the main characteristic of a tourist cluster is its ability to adapt quickly, therefore, to provide the subjects of the regional tourism cluster with the opportunity to exchange information among themselves in the language of common standards, compare the effectiveness of their work with the work of other participants, and learn from the best representatives of the cluster and external companies, it is advisable to develop a SCOR model that sets the language to describe the relationship between participants in supply chains, contains a library of typical business functions and business processes.

In addition, it is necessary to develop and implement complex automated systems that concentrate in themselves a set of organizational, regime, technical and other capabilities aimed at achieving a sufficient level of economic efficiency and safety of the tourism business. The advantages of implementing an automated digital control system into the practical activity of the tourist cluster are to reduce the time frame of the operating cycle, timely adjust the list of provided tourist services and reduce resource costs.

References

- Balyuk N.A., Kuprina L.E., Los' M.A. *Features of the Formation of an Effective Tourism Cluster as an Element of the Regional Economy* // The Humanities and socio-economic sciences. 2020. № 2 (111). p-p. 94-97. (In Russian)
- Zlakomanova E.N. *Economic Essence of Tourism and Recreation Cluster and Its Role in Regional Economy* // Moscow Journal. 2020. № 4. p-p. 24. (In Russian)
- Mukhomorova I.V., *Management of Regional Tourism Development in Modern Economic Conditions* // Modern Economy Success. 2021. № 1. p-p. 213-216. (In Russian)
- Oborin M.S. *Network Interaction a Tool for Effective Management of Economic Stability of the Regional Market of Historical and Cultural Tourism* // Moscow University Bulletin. Series 21. Public Administration. 2020. № 1. p-p. 57-74. (In Russian)
- Omarov M.M., Omarova N.Yu. Russian and Foreign Experience of Innovative Development of Regional Tourism: *Quality of Development of Tourist Infra-Structure* // Izvestia MAAO. 2020. № 48. p-p. 90-93. (In Russian)
- Yarotskaya E.V. *Creation of Territorial Tourism and Recreational Clusters as a Factor of Increasing the Efficiency of Land Management in Rural Areas* // Regional Economy. South of Russia. 2020. Vol. 8. № 1. p-p. 191-201. (In Russian)
- Agamirova Ek.V., Agamirova El.V., Lebedeva O.Ye., Lebedev K.A., Ilkevich S.V. *Methodology of estimation of quality of tourist product* // Quality - Access to Success. - 2017. - Vol. 18. - № 157. - P. 82-84.
- Lukiyanchuk I.N., Panasenko S.V., Kazantseva S.Yu., Lebedev K.A., Lebedeva O.Ye. *Development of online retailing logistics flows in a globalized digital economy* // Revista Inclusiones. - 2020. - Vol. 7. - № S2-1. - P. 407-416.
- Malyugina N.M., Polyakova R.I., Fedorova E.A., Tretyak E.B., Shadskaja I.G. *The specifics of discourse modeling in intercultural communication* // Revista Inclusiones. - 2020. - Vol 7. - № 4. - P. 486.
- Ogloblina E.V., Seredina M.I., Altunina J.O., Kodolov V.A. Lebedev K. A. *Socio-economic consequences of digital development of the economy* // Revista Inclusiones. - 2020. - Vol. 7. - No. Especial - Julio / Septiembre. - P. 421-430.
- Reznikova, O.S., Ganieva, A.K., Verna, V.V., Korolenko, J.N., Shelygov, A.V. *Determinants of the Russian Labor Market Model* // Revista Inclusiones. – 2020. - Vol 7. - Número Especial. – P. 260-267.
- Zavalko N.A., Kozhina V.O., Zhakevich A.G., Matyunina O.E., Lebedeva O.Ye. *Methodical approaches to rating the quality of financial control at the enterprise* // Quality - Access to Success. - 2017. - Vol. 18. - № 161. - P. 69-72.