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## NETWORK INTERACTION IN THE TOURIST AND RECREATIONAL SPHERE

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### ABSTRACT

This article addresses questions on the formation of network structures in the tourism and recreational sphere because most prospective forms of interaction occur during the creation of a regional tourism product. The importance of networks in the solution of questions on the spatial localization of the tourist offer is noted, network designs in formation of tourism products are considered and the need to create substantially flexible networks for development of tourism that takes into account the available resources and the solution to the solution to the issue of redistribution of tourist streams are defined.

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## 1. INTRODUCTION

The question of redistribution of tourist flows is an actively discussed issue in the development of tourism in the Russian Federation and its subjects. Despite the adopted concepts, strategies and development programs for tourism regionally, tourist activity has a fragmentary character and develops extremely slowly. Space localization of the tourist sentence in certain territories of the Russian Federation that managed to implement projects within the federal target program ‘Development of Internal and Entrance Tourism in the Russian Federation in 2011–2018’ does not speak on tourism development in general in the Russian Federation.

Among the basic reasons constraining regional tourism development are the backwardness of infrastructure, lack of effective policies to advance tourism products and tourist destinations, inefficient organization, and management of tourist activities and lack of a qualitative interesting and traditional product.

Regional administrations should provide statistical data on inbound tourism flows, which are difficult to provide due to certain reasons. The spatial distribution of tourists in the territory of the Russian Federation has yet to be determined and thus, discussing the diversification of a tourism product would seem premature, although all premises focus on expanding the tourist sentence by considering the cultural and historical heritage, tourism and recreational capacity of the country.

Considerable experience in organizing effective tourist activities in numerous regions has already been accumulated. Correctly designed tourist clusters (Altai Krai, Krasnodar Krai, the Yaroslavl region, the Vologda region, the Ryazan region and certain others) indicate the efficiency and attractiveness of these activities and have become points of growth for regional economies of territories.

Through tourism activities, certain regions in search of direction have switched actively to the organization and holding of large-scale events in the territories and the inclusion of territorial branding (including the Belgorod region) in the regional system. However, the lack of the concept of advancement into foreign markets constrains real tourism flow to regions of the Russian Federation.

## 2. METHOD

Tourism belongs to the industry with a set of interrelations and interdependence between participants of the market. Therefore, the foremost concerns are the formation of steady interactions among all participants, an integrated approach and the system solution of issues of tourism development.

According to the World Tourism Organisation, 10 to 20 chains work during a visitor's seven-day stay in a remote tourist center. Approximately 30 to 50 firms, including transport companies, means of placement, excursion bureaus, insurance companies, gift shops, currency exchange points, taxis and so on are involved [1].

Considering the number of firms that participate directly or indirectly in the creation of a tourism product and the general impressions on the region as a tourist destination, organization by the tourist of activities that can yield considerable multiplicative effect at the level of regional economies and act as a catalyst for economic development is at the forefront. Simultaneously, the main vector of development needs to be directed to external market segments and external consumers to mobilize the resources of the territory.

Research indicates that a problem in developing a travel business as a source of competitiveness in a region is the lack of steady interactions between participants and the coherence of actions when forming a regional tourism product.

Current trends in economy and management give the defining role in this interaction to network designs that importance amplifies. Saturation of the rarefied regional economy causes a segmentation of the network formations with high binding functions and acts as a new stage of sustainable development of the territory.

The network form of business arose from the transformational and innovative processes in the economy, the globalization of information exchange and the need for rapid decision-making.

A. Marshall [2] considered the network interaction of economic agents and allocated network externalities that result from this interaction. This research [2] formed the basis for the cluster approach as a network form of organization.

Network principles of interaction in business have been discussed considerably by theorists. Questions on the formation and development of network structures have been addressed in studies by foreign and Russian scientists. The questions concerning the formation of networks and the management of network interaction growth are also interesting.

A broad understanding of network structures can be defined as any system from the elements (tops or knots) and communications between them, which are defined as edges or arches in a system [3].

In [4], the network is considered as a system of formal and informal contracts that serves the steady relationship of the formally independent organisations that pool together their resources to save on costs and risks and to form the additional competencies required for the creation of value realisation of the joint purposes of participants.

The main reasons for the introduction of market subjects in the network forms of interaction are to decrease in transactional expenses, distribution of risks, receipt of economic benefits, an association of resources and key competencies to achieve a high level of competitiveness of products and services.

M. Castells [5] stated that the network arises from the creation of economic firms around global structures of capital, management, and information that provide access to technological abilities and knowledge and form the basis of productivity and competitiveness.

Networks represent a flexible structure that allows the companies entering it to compete among themselves, to attract new partners and to organize and coordinate the activities of the members. Network structures unite two opposite principles, competition and cooperation [6].

A key prerequisite for the stability of the network model is the dependence of an individual participant in the network on the resources controlled by other participants and the possibility of combining the resources for the purpose of achieving the synergetic effect.

The basic organisational principles of the network organisations are a uniform purpose, independent membership, voluntary coherence, presence of several leaders and plurality of levels of interaction [7].

A. Yu. Alexandrova [1] specified that the network organisation of business is based on three main principles:

1) 'everything is connected with everything', 2) a large number of participants and 3) a sizeable number of communications between them. Communications exist not in the form of teams and control over their performance, but rather have economic character and act in the form of flows of orders.

In M.S. Oborin's work [8], three types of network structures of business models are attributed to M.Yu. Sheresheva [7]:

- 1) A set of firms approximately identical by the sizes, legally independent and support each other's stable development.
- 2) A network structure based on the large organisation that integrates firms of smaller size around itself.
- 3) A set of uniform branch subjects around which economic agents of the accompanying industries concentrate.

The typology and classification of network structures is a subject for research as a 'basic' division of networks on intra- and interorganisational acts. If the intra-organisational network is

considered within the same legal borders, then inter-organizational network formations are an interaction of economic subjects where knots of the network are independent participants of the market whose actions are consolidated to achieve common goals.

Certain authors who have considered the intercompany networks, categorise them as follows [4]: strategic alliances, which as a rule include the large companies characterised by stability and closed because of the absence of internal competition in the network; networks of creation of value, which are defined as stable polycentric networks with a closed entrance and competition between participants; focal supply networks, where the dominant role is held by one partner; dynamic focal networks, which differ from the previous networks in terms of lack of stability and virtual organisations, which are small- and medium-sized companies that consolidate efforts for achievement of the goals within the uniform virtual platform. Moreover, network designs can be open or closed, vertical or horizontal, local, international or global.

Every year, the number of supporters of a network grows because firms and other actors whose activities contribute to the achievement of the common goals of the network can be knots of business networks.

The work [9] considers the prospects of development of the model of network interaction of business communities and non-profit organisations to which certain functions are assigned. Simultaneously, a section of knots of business networks certainly pursues commercial purposes, and network interaction is considered as a source of competitive advantage.

The development of network forms in tourism and the management of network interactions are new areas of study for researchers. In the service economy, the creation of interorganisational networks must serve as a call to the approaches of the economy of expenses and as a factor for the creation of value.

A certain layer of works where authors attribute networks to the creation of value [1, 4, 10] already exists and these studies emphasise the need for concentration of efforts for joint creation of value and coordination of the corresponding strategy of all participants in the network.

### 3. RESULTS

For the tourist and recreational sphere, the network of creation of value is fundamental. Value for the consumer is created through a combination of different resources in the network interactions of companies. Value from the position of the consumer plays a key role when forming an impression regarding a tourism product. If a certain chain of creation of value ‘drops out’, then a reflection occurs in the final product, thereby reducing the value and creating a negative impression on a tourism product and a tourist destination in general.

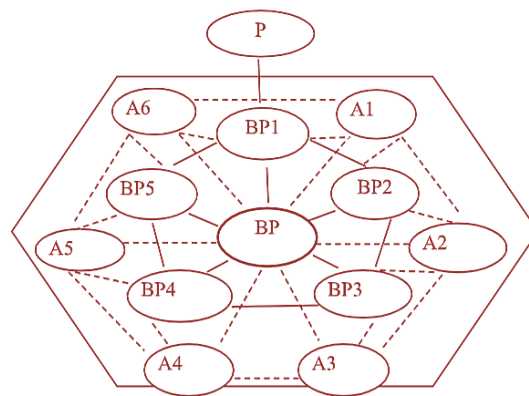
Therefore, the main objective is to form chains of creation of value in a tourist destination when forming a tourism product. This task is subject to regulations on tourist activities and tour operators who position themselves together with a specific destination and are interested in its advance.

The present study considers the formation process of a regional tourism product using the example of the Belgorod region. The development of internal and entrance tourism in the Belgorod region is being carried out according to the current legislation. Implementation of actions for the development of internal and entrance tourism in the region is being performed under the subprogramme, ‘Development of tourism, workmanship and roadside service’ of the state

programme of the Belgorod region and ‘Development of economic potential and forming of favourable enterprise climate in the Belgorod region for 2014–2020’. Priority types of tourism in the area include military and historical, rural, event, children, cultural and cognitive. Along with these types, industrial, gastronomic and business tourism are being developed actively.

According to the rating of tourist attractiveness of regions, the Belgorod region occupies an average position (the 34th place from 85) taking into account the extent of development of hotel business and infrastructure, the importance of the tourism industry and its profitability, popularity of the region in tourist relations including foreigners, existence of unique tourist resources in the information space and the potential for growth based on the attractiveness having activities that advance the tourist capacity of the region [11].

The architecture of network interaction when forming a regional tourism product is considered in Figure 1. This network design can be considered universal regardless of the territory, and thus is labeled a ‘basic’ network. Elements of the network (agents) refer to the subjects of a network that participate directly or indirectly in the formation of a regional tourism product. However, the network’s subsystems can already change depending on the resources, infrastructure and other components, and the level of the relationship and interdependence between elements of the network can define the efficiency of the network in general.



**Figure 1:** ‘Basic’ network design of formation of a regional tourism product

Figure 1 depicts the network model where BP is the basic main enterprise (regional tour operators); BP1, BP2, BP3, and BP4 are the basic enterprises at the second level of the network (travel agents, transport companies, dining and means of placement enterprises); A1–A6 enterprises are economic agents of the accompanying industries with different degrees of dependence on the participation in production and realisation of network services (the enterprises that focus on show business and rest, attraction, excursion bureaus, insurance companies, finance companies, media, the information companies, etc.) and structures (departments) responsible for the development of tourism at the regional level.

The tourism product is formed by a tour operator who acts as the basic elements of the structure or the ‘knot’ of the network. The interrelation of the consumer with services is carried out through travel agents who form the second level of the network. Industry enterprises that render services in the formation of a tourism product are also part of the second level of the network. These two levels of the presented network form respectively, the main and providing infrastructure components in the formation of a regional tourism product. The enterprises in the third level of the network are agents of

auxiliary infrastructure.

Integration of the different levels of subjects forms the vertical communication between participants of the network, and a 'soft' form of integration assumes association on a corporate basis, which makes maintaining independence possible.

This network is open and the allocation of numerous leading enterprises at the level of the basic enterprises is possible, the majority of which participate actively in the formation of a regional tourism product. These enterprises and the tour operator can also establish a stable connection. For example, in a segment of hotel services by such enterprises, hotel complexes include, 'Kontinental', 'Amaks Congress Hotel', 'Aurora' and the Europe Park Hotel. Given such interaction, resources and specific opportunities unite and separate services into the integrated tourism product of several economic agents, each of which concentrates on certain actions.

If the relationship between the basic enterprises of the network is operated quietly, then communications with other economic agents can be broken off or arise incidentally, resulting in the instability of the network. Thus, communications of the first order are the strongest and communications of the second order are weak or absent.

The lack of partnership and cooperation of agents in the network leads to a break in the communications in the network, which in turn will cause its integrity to be broken and the decrease in the value of the network that is '... pernicious for a tourist production system and regional development' [Alexandrova, 2014]. Furthermore, to achieve a competitive advantage, each economic agent must optimize their own chain of added value and the external chains that connect the agent with suppliers and consumers.

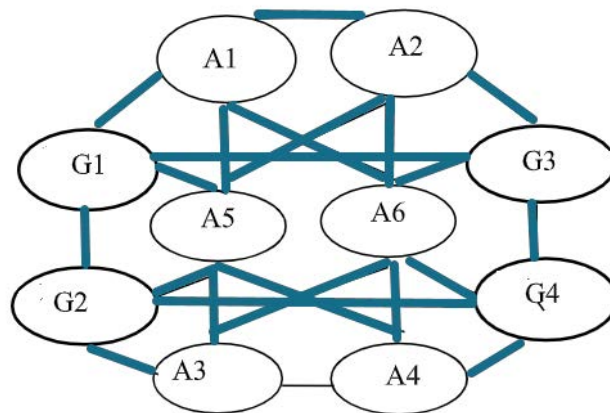
Modern realities indicate that the main vector in the development of the tourism sector of the territory is set by information technologies and their active use. Therefore, special attention should be given to the virtual platforms that unite various economic agents that cooperate within the uniform information environment. These virtual platforms offer the opportunity for active interaction with the consumers of the services (tourist) and their producer. Attempts at the creation of such resources are made in numerous regions including the Belgorod region. Figure 1 illustrates that all elements of the network must be closed in a common information space that gives a chance for the consumer of tourism services (P in Figure 1) to obtain all necessary information on any agent of the network. Network interactions in the virtual environment open up new opportunities for the competent advance of domestic tourism products, the involvement of tourists and the development of the industry in general.

In the formation of a regional tourism product and the creation of a network form of interaction, the special part is assigned to placement infrastructure. Hotels and other means of placement are one of the main elements in network formation of a tourism product.

Hotel services in the network presented in Figure 1 can be presented as a separate network based on the condition of the existence of partner communications between the enterprises of the hotel industry in the region and the close interaction of agents of the network. This network can be considered as local.

Hotel complexes, such as 'Kontinental', 'Amaks Congress Hotel', 'Aurora' and the Europe Park Hotel (G1, G2, G3 and G4 in Figure 2) as the basic enterprises of this network and the enterprises of a hotel segment, which dominate the segment and have been mentioned earlier, are identified. These subjects of the network interact actively among themselves, with tour operators and other enterprise

agents rendering the related services of A1–A6 (transport, excursion service, dining, conference, exhibition, and congress industry, etc.). In this arrangement of roles, which developed in the network where several main enterprises can be identified, a network design emerged based on the oligopoly of hotel services in the region.



**Figure 2:** Network design on the formation of hotel services with the dominant participation of several hotels

The specified hotels most participate actively in the formation of a tourism product, have a steady partnership with regional tour operators and now dictate the price policy in the region. Unfortunately, the small hotel enterprises that could participate in the formation of a regional tourism product are not involved here, offering hotel services in another price segment, thereby promoting price differentiation of a tourism product.

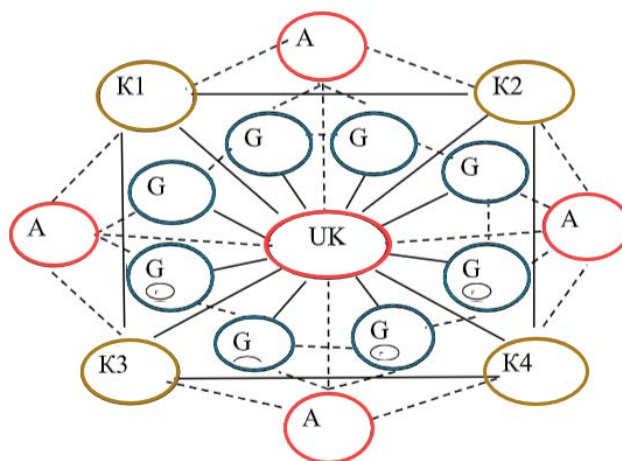
Among the presented hotels, the AMAKS Congress Hotel is included in the AMAKS Hotels & Resorts hotel chain. This network unites hotels and sanatoria in 20 cities of Russia and the Republic of Belarus and therefore is no longer local, forming instead an international network based on the most popular hotels of a class with three stars and uniform standards.

In addition to a comfortable stay, AMAKS hotels offer guests conference services and different types of entertainment and leisure. At hotels of the company, 11 entertainment centers operate, providing more than two thousand seats, 28 restaurants, and 13 billiards clubs. In addition, a part of the AMAKS network is its own AMAKS travel tour operator and a personnel school called AMAKS Hotels University.

The network has a common goal that combines resources and key competencies. The high intensity of interaction and the organisation of network processes allows AMAKS Hotels & Resorts to present a qualitatively competitive product.

This network is a mixed type of network that unites several activities, where the main type and the first level of the network is the activity of hotels. The second direction that develops network activity is resort activity (K1–Kt). These enterprises form the main infrastructure of the network. The management company acts directly as the network centre.

The agents of A present in the drawing form the third level of the network and include auxiliary and provision infrastructure of network elements (tour operator of AMAKS travel and transport services) and the provision of belonging (personnel school).



**Figure 3:** Scheme of interaction in AMAKS Hotels & Resorts hotel chain.

The advantages of the hotels entering a network include the following:

- standardisation of services, service, and quality;
- adaptation of personnel, training and introduced regulations;
- network sales reservation of services of the hotel and network marketing, advertising and advance;
- recognition of a brand and status;
- occupancy and income of one hotel room are higher;
- uniform customer base and a system of loyalty for guests;
- network opportunities of the tariff policy of the hotel and
- implementation of tested new technologies. [12]

In a case where the company or the individual reserves at a hotel of the international chain, they become clients of this hotel and global clients of the hotel corporation. At a high level, problems of service, quality of work of the hotel staff and ability to communicate with the guests are addressed in network hotels, in the general opinion of numerous experts, whereas independent hotels lag behind.

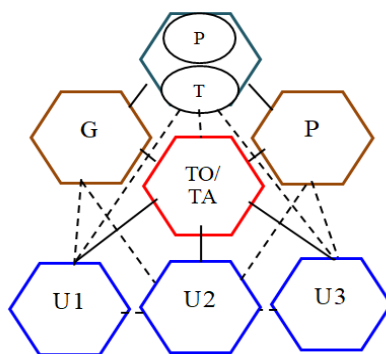
When forming tourist flows, an important role is played by the transport component. Regional transportation can develop actively when given the chance to move within the country. The number of passengers at Russian airports is increasing. The transport component is a dominant factor in the development of business and industrial tourism.

The Belgorod region, despite the closure of the border with Ukraine, remains one of investment-attractive regions of the Russian Federation. Among the areas of interest in the region are the advanced agri-industrial complex and the iron ore industry along with the business purposes that contribute to the development of business and industrial tourism.

When forming the architecture of a network of business and industrial tourism in the knots of the network, considering a transport component and industry enterprise is possible. Belgorod has a high-level international airport (in 2017, 468.8 thousand people were transported) and a large railway junction.

Figure 4 illustrates the network model of business tourism and knots of the network. First, the industrial enterprise is an object involving the tourist with business purposes. Second, the developed transport infrastructure is presented via the network of transport connections between the Belgorod region and other regions of the country. When forming a tourism product, it should enable the tourists to use services of the means of placement and food (P in Figure 4) and additional services (U1, U2, U3) at the same time. The role of the tour operator or travel agent in this network may be minor.



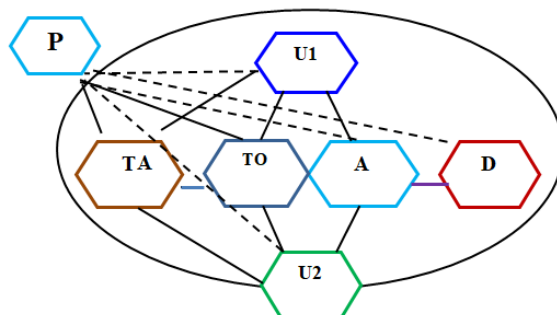


**Figure 4:** Network interaction when forming a business or industrial tourism.

The analysis showed that at the level of regions, the ‘pointed’ approach to tourist activity is often used and the development of a steady network of interactions when forming a regional tourism product at an early stage. Tour operators synchronise interests with representatives of the hospitality industry and transport companies; however, communications with other economic agents in the network are traced poorly, resulting in a lack of possible synergetic effect and a rupture in the chain of creation of value for the end-user. The most flexible infrastructures providing an interrelation of tourist processes are necessary for the development of network forms of interaction in the tourist and recreational sphere at the local level.

New forms of interaction when forming a regional tourism product is, in our opinion, the formation of a partnership of tour operators with non-profit organisations that can unite enterprises of the hotel business and the enterprises in the industry of rest and recreation. A process of registration exists at the Belgorod regional association of assistance for the development of the sphere of hospitality, rest and entertainment. The purpose of the association is to coordinate the activities of the companies engaged in travel and hotel business and consolidate efforts of the municipal authority and business community towards development of the sphere of tourism and hospitality.

Numerous functions on the formation of a complex regional tourism product and an increase in recognition of a tourist destination in the tourist space of the country can be assigned to the created association. In this case, the ‘basic’ network design on the formation of a regional tourism product is transformed into a substantially flexible structure, where, in our opinion, the created association and regional tour operator (Figure 5) can act as a knot of the network.



**Figure 5:** Network interaction in the formation of a regional tourism product where a knot of the network is the regional tour operator and regional Association of assistance for the development of the sphere of hospitality, rest and entertainment.

In Figure 5, the regional tour operator interacts closely with the association (A) when forming a tourism product and D, the department of economic development carrying out the coordination

function. The association provides a dialogue between the subjects of the tourism sector, the enterprises of allied industries entering the association and the public authorities coordinating the tourist sphere. U1 and U2 are the economic agents of the network rendering related services on the formation of a regional tourism product and not entering the association. In the network information exchange between participants of the network, the consumer of a tourist product must be provided (O).

Considering the problems connected with the backwardness of the Russian tourist market, the creation of such a network can become the catalyst for the development of internal and entrance tourism in the Belgorod region. In our opinion, the presented network is the most effective form of interaction of subjects of the tourist market in the Belgorod region. Integration of the newly established association of assistance to developing the sphere of hospitality, rest and entertainment reconstruct a flexible 'basic' network design. Formation of a steady partnership and long-term cooperation in the network between agents of the regional market can allow the creation of additional attractive and qualitative tourism products taking into account the integrated resources and capacity of the region.

Thus, the development of tourism at the level of regional economies is possible through a prism of network interaction. The formation of an increasingly flexible network structure opens new opportunities for a complete solution to the question of redistribution of tourist streams considering the available resources.

Effective management of interactions within network designs in tourism can create a new impulse for the development of regional tourism. The main reference point is the creation of value for the consumer. The impression, the emotional condition of the tourist, finally determines the consumer value of the territory and the desire to visit this or that region and can promote the distribution of a tourist stream in the territory of our country.

#### 4. DATA AND MATERIAL AVAILABILITY

All relevant information used in this study is already included in this article.

#### 5. ACKNOWLEDGMENT

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