

## Potential of Virtual Organizing of Tourism Business System Actors

Rimante Hopeniene, Ginta Railiene, Egle Kazlauskiene

Kaunas University of Technology

K. Donelaicio str. 20, LT 44239 Kaunas, rimante.hopeniene@ktu.lt, ginta.railiene@ktu.lt, egle.kazlauskiene@ktu.lt

*The process of economic, political and social globalization changes business environment and conditions the structural changes of national and industrial business systems. It induces tourism business system actors to create national, regional, and place networks of business companies. The new organizational and management paradigms in the context of tourism industry and destinations change the attitude towards the nature of organizations' relationships.*

*Agile competition and fast development of information and communication technologies have the capacity to modify the traditional time-space interaction and form different modern organizational structures of business systems. The analysis of scientific literature shows that actors of business system integrate into different partnership networks as clusters, networks, virtual organization and others. Virtual organizing of tourism business system actors could be defined as a dynamic collaborative network of tourism stakeholders (private and public organizations) able to combine their own capabilities and resources that could be proposed as integrated value-added services to satisfy consumer needs in tourism destination.*

*The scientific problem of this research is to ascertain what structure of relationships among tourism business system actors guarantees their successful use of virtual organizing potential of tourism business system increasing the competitiveness of network partners and enabling the exploration of new market opportunities. The aim of the paper: to evaluate the potential of virtual organizing of tourism business system actors. Methods of the research: reviewing, evaluation and systematic analysis of scientific literature; mixed method research design, panel expert interview; Klüber's Wheel of Virtual Organizing model.*

*Various aspects of business system and explanation of virtual organizing features of business system are discussed. According to the empirical research, the virtual organizing of tourism business system actors appears, but it is not sufficient for distinguishing the features of virtual business system. Closer collaboration and the utilization of ICTs would enable tourism business system actors to expand their supply and to enhance their competitiveness.*

Keywords: *tourism business system, virtual organizing potential, organizational virtualness, cooperative relationships, tour operators and travel agencies.*

### Introduction

Volatile business environment determines changes of companies' activity organization, structure and management. Therefore hierarchical structures are changed into flexible

ones. This makes preconditions for companies to combine competencies and resources, to exchange knowledge and information (Hopeniene et al., 2009). A central feature of these challenges is the recognition by most scholars and business executives that building relationships with other companies is essential to compete effectively in the turbulent and rapidly changing competitive era confronting developed world economies (Cravens, Piercy, 1994; Grundey, 2008).

Tourism industry faces hard competition, that obligates tour operators and travel agencies to create new and improve offered value-added services, composed of components supplied by a number of different organizations, to maximally adjust them to individual consumer needs and specific interests. Buhalis (2000) argued that tourism enterprises formed networks to become more competitive vis-à-vis other networks of enterprises. It could be emphasized, that the creation and delivery of tourism products is based on the partnerships between a range of organizations, including: transportation, catering, accommodation, entertainment and cultural heritage. Thus, companies strengthen their partnership in order to maintain the market. The growing influence of information and communication technologies (ICTs) and global competition require understanding of the complexities of interactions with multiple stakeholders along global tourism supply and distribution chain (Walker et al., 1999, Afsarmanesh, Camarinha-Matos, 2000; Davidaviciene, 2008). According to Snieska (2008), the use of information technologies in business processes is conditioned not only by difference in transactions among organizations, but by difference in functions executed by intermediaries as well. These causes condition the variety of forms of intermediation services (appearance of new intermediation services as well) necessary to minimize transaction costs. Business system actors can either integrate their resources with others, form networks to exploit market opportunities, or link their organizational systems in partnerships with other local and international tourism companies. ICTs empower networking throughout the industry and also improve the interactivity between tourism production and distribution partners, supporting a closer cooperation towards the provision of wide ranging products (Buhalis, O'Connor, 2005; Grundey, 2008). Taking advantage of the characteristics of virtual reality, organizations will be forced to adapt their product constantly to satisfy tourism demand, use information extensively, develop partnerships, and outsource a significant amount of functions in order to achieve economies of scope (Buhalis, O'Connor, 2005). Malhotra (2000), Camarinha-Matos, Afsarmanesh (2002),

Braun (2005) state that the dominating form of business system becomes a virtual organization in the twenty-first century.

It is important to highlight that a *virtual organization* is the partnership network, which is the background of today's dynamic environment. Small and medium enterprises (SMEs) in particular are increasingly forced to adopt new organizational forms in order to stay competitive in the local and global markets. The virtualization of the value chain through increasingly intensive, extensive and flexible interorganizational cooperation is seen as being central to their strategic response (Goldman et al., 1995; Sieber, Franke, 1998; Suter, 1999; Savrina et al, 2008). Moreover, the transition from industrial to knowledge based competition is increasingly shaping the way in which companies act (Suter, 1999).

**The novelty of the study.** The appearance and existence of business systems is mostly analyzed in national and industry context as clusters, networks, and other forms of partnership. But there is lack of scientific researches in service industry, especially in tourism. The authors of the study propose that the evaluation of virtual organizing of tourism business system actors allows emphasizing the opportunities of tourism business system actors to expand their supply and enhance their competitiveness.

Thus the *scientific problem* of this paper is to ascertain what structure of relationships among tourism business system actors guarantees their successful use of virtual organizing potential of tourism business system actors increasing the competitiveness of network partners and enabling the exploration of new market opportunities.

**The aim of paper:** to evaluate the potential of virtual organizing of tourism business system actors.

**Methods of the research** are as follows: reviewing, evaluation and systematic analysis of scientific literature; research employing the panel expert interview; synthesis of findings from theoretical literature and empirical research, explained with Klüber's Wheel of Virtual Organizing model. On the theoretical level this paper starts with a review and analysis of scientific literature on various aspects of business system and explanation of virtual organization as one of the business system's organizational forms. Mixed method research design helped to identify the potential of virtual organizing of tourism business system actors in Lithuania.

### **The new paradigms in the context of tourism business system**

Literature on business networks, clusters and other forms of partnership attempts to explain the organization and functioning of industry using broad theoretical approach of the business system. According to Perry (1999), Morgan (2007), the competitiveness of firms, an industry or a region depends on a national business system. The national business system approach begins from the idea that different forms of capitalism institutionalize particular economic rules of the game that shape the strategies, structures and competitiveness of firms (Morgan, 2007). Organizations built their strategies and structures through engaging with these rules of the game that were

common in the particular society. This gave them particular capabilities; some of which were capable of being leverage to good effect in international competition.

Perry (1999) states that the case for networking is a strategy for economic success and it has been customary to think of entrepreneurship as an individual endeavor, but business performance is increasingly dependent on collective rather than individual action. It can be stated that there are *two main approaches to a business system*. Tamasevicius (1999) and Jefremov (2001) paid their particular attention to a business system at *the enterprise level*; Perry (1999), Whitley (1999), Morgan (2007), Jucevicius (2007), Valiukonyte, Parkkonen (2006, 2008) – *at national level*. These two approaches are complementary and useful for understanding business system concept. Business systems are particular forms of economic organization that have become established and reproduced in certain institutional and cultural contexts. *A business system consists of actors* (or elements of the system): (1) firms (private and public, big and small, etc.), (2) organizations (labor unions, industrial associations), (3) public authorities (regulation, departments), which are collaborating or competing within, and interacting with different institutions in national and cultural environment. Businesses are formed and operate in a specific environment where a wide variety of institutions interact.

When analysing enterprises' integration into international business systems, Jefremov (2001) and Tamasevicius (2000) noted, that development of enterprises depends on industry, local/global markets or macroenvironment conditions. When assessing the competitiveness of tourism industry or region where tourism is being developed, the competitiveness factors analyzed by Ronomanskaite (2004), Navickas, Malakauskaite (2009) and regional competitiveness index discussed by Snieska, Bruneckaite (2009) are important. Regional competitiveness index and tourism industry competitiveness factors measurement enables to evaluate the tourist destination competitiveness and make appropriate decisions for contemporary tourism business system development and creation of preconditions for its competitiveness in the global economy.

Kubrak et al., (2007) state that the old models of designing organizational structures do not correspond the situation in organizations ready for restructurization, reorganization and even reconceptualization, because they have been designed for the traditional business environment that greatly differs from the modern one. The flexibility and speed that result from business system can be very important in building a competitive advantage. Companies' integration into a business system and development of network relationships contribute to the reduction of transactions costs, to avoidance or diminishing dependence on resources, to acquisition of experience and knowledge, to implementing an innovation strategy and assumption of different organizational forms: clusters, strategic alliances, joint ventures, long-term buyer-supplier partnerships, virtual organisations and similarly networks of collaborative relationships (Bagdoniene, Hopeniene, 2006).

Realisation of tourism aims depends on cooperation and partnership in tourism business system, which is the subsystem of national business systems. Owing to the complexity of the tourism product most private and public

organizations in a tourism destination are interdependent. Being competitors they also have to work together on creating the overall quality of the total tourism product (Grängsjö, 2003; Savrina et al, 2008). Analysing cooperation among competitors, Lydeka and Adomavicius (2007) stressed that creating successful alliances or other forms of collaboration, in part, can be attributed to differences between three strategic viewpoints that dominate in the world of business strategy: competitive paradigm, cooperative paradigm, syncretic paradigm. According to the authors, managers subscribing to cooperative or syncretic paradigms could benefit from cooperation altogether.

In a tourism industry it is usually difficult to separate cooperation from competition, because they both work to achieve optimal exploitation of public and private resources, safeguarding environment and developing human resources, spreading information for consumers (Bagdoniene, Hopeniene, 2006). The relationships with various tourism stakeholders, diffusion of the system of information technologies which travel services are supplied with result in a new business system's organizational form, called a *virtual organization*.

According to Ndou and Petti (2006) dynamic-complex approaches to management of tourism organizations need to create new thinking, that sees the whole as much more than the sum of parts, as a product of its interactions. Virtual organizing of tourism business system building is not only a major new source of competitive advantage for any tourism enterprises, but a crucial asset for tourism business survival and an essential global and, indeed, regional management requirement (Braun, 2005). It is well known that tourism is composed of complex products, including different syndicated parts offered by very heterogeneous actors. Ndou and Petti (2006) state, that a tourism system's competitiveness depends on how its constituting parts interact, interrelate to deliver the best value for money for its tourists. The new organizational and management paradigms in the context of a tourism business system have increasingly focused on integration and cooperation between different entrepreneurs and organizations as groups of organizations cluster together to leverage for development of innovations and competitiveness advantages for an individual enterprise as well as for a state.

### **The features of a virtual organizing of tourism business system**

Due to dynamic environment, small and medium tourism enterprises are increasingly forced to adopt new organizational forms in order to stay competitive (Suter, 1999). The emergence of virtual organizing of business systems through increasingly intensive, extensive and flexible interorganizational cooperation is seen as a central strategic response for small and medium tourism enterprises (Goldman et al., 1995; Sieber, 1998, Suter, 1999).

Collaboration among autonomous and geographically disperse enterprises is a process that is clearly facilitated by the advances in computer networks and related technologies (Hopeniene et al., 2009). According to Afsarmanesh and Camarinha-Matos (2000), Damaskopoulos et al. (2008) innovative uses of ICT enables a 'de-spatialization' of

economic activity, and at the same time, offer new opportunities for codifying information, which may enhance learning and innovative activity.

A growing number of collaboration networks, including the virtual factory as agile manufacturing system (Jain et al., 2001), virtual company (Goldman et al., 1995), imaginary organization (Gummesson, 1999), entrepreneurial networks (Buhalis, Molinaroli, 2003), organizations anywhere at any time, the structure of which is net type or virtual (Kubrak et al., 2007), cluster forms as extended and dynamic clustering (Damaskopoulos et al., 2008) as well as other organizational forms, are emerging. All new organizational forms of business systems are possible because information and communication technologies have the capacity to modify the traditional time-space interaction.

The concept of the virtual organization as the business system's organizational form is still relatively new organizational and management paradigms. The virtual organization has been variously defined as "a temporary network or coalition of independent companies" (Black, Edwards, 2006; Dimitrakos et al., 2004), "an opportunistic alliance of core competencies" (Goldman et al., 1995), "an alliance of separate firms" (Shekhar, 2006), dynamic cooperation network (Mendes, 2008), smart organizations (Afsarmanesh, Camarinha-Matos, 2000) and so on. Kubrak et al., (2007) state, that a modern organizational structure is the amalgamation of several business units, where people and work processes are closely related in order to reach common results and mutual advantage.

The concept of a virtual organization is explained from network structure position and, according to Goldman et al. (1995), a virtual organization tends to be non-hierarchical and decentralized. A set of common characterizing elements can be found in various definitions. Katzy (1998) argued that virtual organizations are frequently restructured, sustained to capture the value of a market opportunity and dissolved again to give way for the creation of a next virtual operation from the network of independent partners. The main reason for integration to a virtual organization is the core competencies, which are the most tangible, value-added activities that distinguish one company from its competitors and provide access to a variety of markets and opportunities. Jägers et al. (1998) noted that participants of a virtual organization are geographically dispersed and dependent on electronic communication (and ICTs infrastructure) for the coordination of their activities. It creates a unit where organization boundaries are blurred. The virtual organizational structure is enabled by an information infrastructure made up of continually improving information and communication technology. Many different information technologies can be integrated to form an information infrastructure that can support the management of virtual organizations (Stradera et al., 1998).

Different authors and researchers have identified and described various characteristics of a virtual organization on the ground of two views (Table 1).

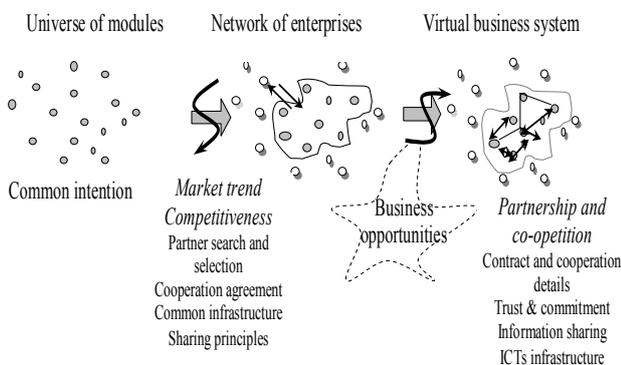
The institutional view represents the features of organizations that differentiate virtual organizations from other organizational forms: temporary network of independent companies linked by information technologies to share skills, costs and market success (Jägers et al., 1998; Keinänen, Oinas-Kukkonen, 2001).

Table 1

**Characteristics of virtual organization: two different views**

Institutional view	Functional view
Network of legally independent units	Learning and adaptive orientation
Geographical dispersion	Value-adding business processes
Flat hierarchies	Common business purpose
Blurred boundaries/boundary crossing	Virtualness as a strategic characteristic of organization
Less formal relations	Flexibility and temporality
Shared risks, resources, knowledge	Changing partnering
Information Technology	Participant equality
Based on trust	

The network has no or a very flat temporary hierarchy focusing on functionality along the value chain. Cooperation is based on trust and on the aim that each company contributes only what it regards as its core competencies (Sieber, 1998, Keinänen, Oinas-Kukkonen, 2001). The functional view of virtual organization is based on two fundamental assertions that virtualness is a strategic characteristic and can be achieved by making incremental improvements to the existing business logic; using information technology enables effective virtual organizing (Keinänen, Oinas-Kukkonen, 2001).



**Figure 1.** Formation of dynamic virtual business systems

Source: the authors, according to Saabeel et al., 2002; Camarinha-Matos, Afsarmanesh, 2002

Saabeel et al. (2002), Dimitrakos et al. (2004) stress that the parties forming a virtual organization are typically a part of a larger enterprise network of which a selection of partners is made. This phenomenon is known as “network activation” in virtual organization modelling theory (see Saabeel et al., 2002).

The entities in the universe of such networks share some broad characteristics, e.g. belonging to the same economy or market sector, and their participation in the network indicates disposition to work together taking the advantages from the future market opportunities (Figure 1).

According to Camarinha-Matos, Afsarmanesh (2002), formation of a dynamic virtual business system requires an appropriate “breeding” or “nesting” environment (e.g.

regional tourism industry cluster) in order to guarantee basic requirements such as: (1) trust building, (2) common infrastructure and agreed upon business practice, (3) a sense of community and some sense of stability. Virtual business system’s actors can provide services and thus participate as a single entity in the creation of recursive structures with multiple layers of “virtual” value-added service providers. Actorship and structure of virtual business systems may evolve over time to accommodate changes in requirements or to adapt to new opportunities in the business environment (Dimitrakos et al., 2004). Actors of virtual business system collaborate towards a common objective, share competencies, ICTs infrastructure and capabilities of different independent partners. It could be stated that all actors of virtual business system have their own (partly overlapping, partly conflicting) interests. If their own objectives no longer align with the goal of the system, they can resolve to go out of this network. A specific kind of a dynamic virtual business system is the capability to unite when the business opportunity is emerging. A virtual business system may be embedded in a larger network of corporations, from which certain actors are recruited to deliver the required performances.

Virtual tourism business system could be defined as a dynamic collaborative network of tourism stakeholders (private and public organizations) able to combine own capabilities and resources that could be proposed as integrated value-added services to satisfy consumer needs in tourism destination. At the regional or national level the tourism business system is the nexus between the state tourism organizations, the regional tourism organizations, and the local council and tourism operators. In order to ensure the successful collaboration among tourism business system stakeholders, according Susniene and Vanagas (2007), it is very important to keep in mind the interest harmonization, satisfying stakeholders’ expectations and needs, because people and organizations are apt to keep relationships when the latter correspond to their interests.

Actors of a tourism business system having virtual organizing potential are able to rapidly form functionally and technologically diversified but interdependent tourism organizations and adapt to changing conditions, provide good intuitive approaches to face the challenges of turbulent markets. The formation of any collaborative coalition depends on its actors sharing some common (or compatible) goals, possessing some level of mutual trust, having established common (interoperable) IT infrastructures, and having agreed on some common (business) practices and values. According to Afsarmanesh and Camarinha-Matos (2005), achieving of these conditions is a prerequisite for agility and integrability in a virtual business system as a collaborative network. Collaboration of tourism business system’s actors provides access to innovation, new markets and technologies, and connects different competencies into a consistent product.

## Research methodology

Tourism distributors as the main actors of a tourism business system combine the supply of primary services companies belonging to this system and present the

collection (combination) of tourism services as total tourism experience to customers. In order to accomplish this, tourism distributors contract and keep different (collaborative and competitive) relationships not only among themselves, but also with other actors of tourism business system.

This research focuses on the evaluation of relationship among the tour operators and travel agencies as collaborators and competitors to identify their potential of virtual organizing. In order to research the potential of virtual organizing of tourism business system actors the *mixed method research design* was applied. It encompasses the qualitative and quantitative research methods, their application technique and data. The priority is given to qualitative aspects of the research, but the results are disclosed in qualitative and quantitative manner in interpretation stage.

Interorganizational relationships of tourism business system actors changes according to business environment, customers preferences etc. Relationships of tourism business system actors are at homeostasis – relationships are fixed at a certain time, but they change at the same time as new organizations striving to integrate into the system emerge. Therefore *the panel expert interview* is one of the most suitable methods of research as it allows to disclose the evolution of attitudes and opinions of certain experts (Tidikis, 2003). This method is combined with expert valuation method, which according to Tidikis (2003) allows to evaluate both qualitative and quantitative parameters of state or process of research object.

Respondent selection is one of the key criteria determining validity of the research. The experts were chosen according to three criteria: 1) the experience in the area of outgoing tourism – professionals having not less than 10 years of the experience of the work in the area of outgoing tourism were chosen to participate in the survey; 2) competence of expert that is witnessed by hierarchical position in an organisation; according to this requirement, the top-level managers were chosen; 3) self-evaluation of an expert. Having explained the aim of the research, potential experts themselves evaluated their possibilities to provide the research with valuable information.

The research object is Lithuanian tour operators and travel agencies as travel distribution sector in tourism industry. Most of the company owners surveyed were from Kaunas and Vilnius. Necessary information about potential experts was collected by means of a telephone survey. The research was made twice. In first case there were 37 (in the second – 39) respondents who corresponded given criteria and 24 (in second – 20) of them refused to participate in the research because of the lack of time as well as confidentiality of any information about relationships of tour operators and travel agencies.

Systematized qualitative research data allowed to calculate the congruity index  $s_j$  for congruence of different opinions of group experts (Beseliov, Gurvic, 1980).

$$s_j = 1 - \frac{k}{k-1} \frac{(\sum_j f_{ij})^2 - \sum_j f_{ij}^2}{(\sum_j f_{ij})^2} \quad (1)$$

Evaluation scale of investigative attribute  $k$  is not less than 3. The nearer the index to 1, the more experts' opinions

coincide ( $0 \leq s_j \leq 1$ ). Evaluation scale of investigative attributes was measured on 45 items as the criteria of the virtual organizing of business systems.

The adapted Klüber's (1998) "wheel of virtual organizing" model was used to identify the virtualness of tour operators and travel agencies as one of the major actors of tourism business system. According to Klüber (1998), this criteria specific model is used to describe the current situation of virtual organizing. It should also represent possible development paths along the dimensions, which could be used to identify new objectives, strategies, and actions. If these already exist, then identifying any deviation from the profile can help to prioritize the necessary actions to reduce this. Furthermore, the model should provide some foundation for an analysis of the consistency of the current situation – or the future status – and to help better understand interdependencies between the different dimensions. The basic structure of analysis consists of four areas, which are organized as quadrants of a circle. The analysis can be conducted as a consistency check of the status quo and a desirable future state as well as a comparison between both (Klüber, 1998). Figure 2 gives an overview of the view of the model, which was adapted by the authors of this paper referring to Klüber (1998).

The basic structure of the analysis consists of four areas, which are organized as quadrants of a circle:

- Quadrant 1 – *human resources and information & communication technologies potentials*;
- Quadrant 2 – *focus on strategy*;
- Quadrant 3 – *intensity of co-operation*;
- Quadrant 4 – *form of co-ordination*.

The quadrants' criteria and their evaluation demonstrate the existing status quo of tourism business system actors. Relative meaning of quadrant's vectors is obtained by calculating media of experts' opinions, and the final result of the vector measurement is obtained by using the programme SPSS.

The final results of the vectors are pointed on *Exploitation of HR & ICTs Potentials, Cooperation & Virtual organization (VO) potential, Co-operation Intensity, Non-hierarchical Co-ordination* axes respectively. The analysis of the status quo is complete when the current position in the wheel is determined. To aid the visualization of the results the area from the center to the positions of the vectors is filled with grey.

Depending on the (weighted) average of the positions of the vectors, the position of the black first level vector is determined and the four points of the black vectors are connected and filled with transparent grey (see Figure 2). A possible further step would be an analysis of any planned future development plans, inconsistencies and major deviations. This could lead to the identification and implementation of new action paths.

### **Research and evaluation of virtual organizing potential of tourism business system actors**

Following the brief overview of respondents' demographical data, all of the respondents were working in tourism industry at least for 10 years. Some have been working for over 15 years. An average among respondents is 12 years. It is safe to say that all the respondents have tremendous

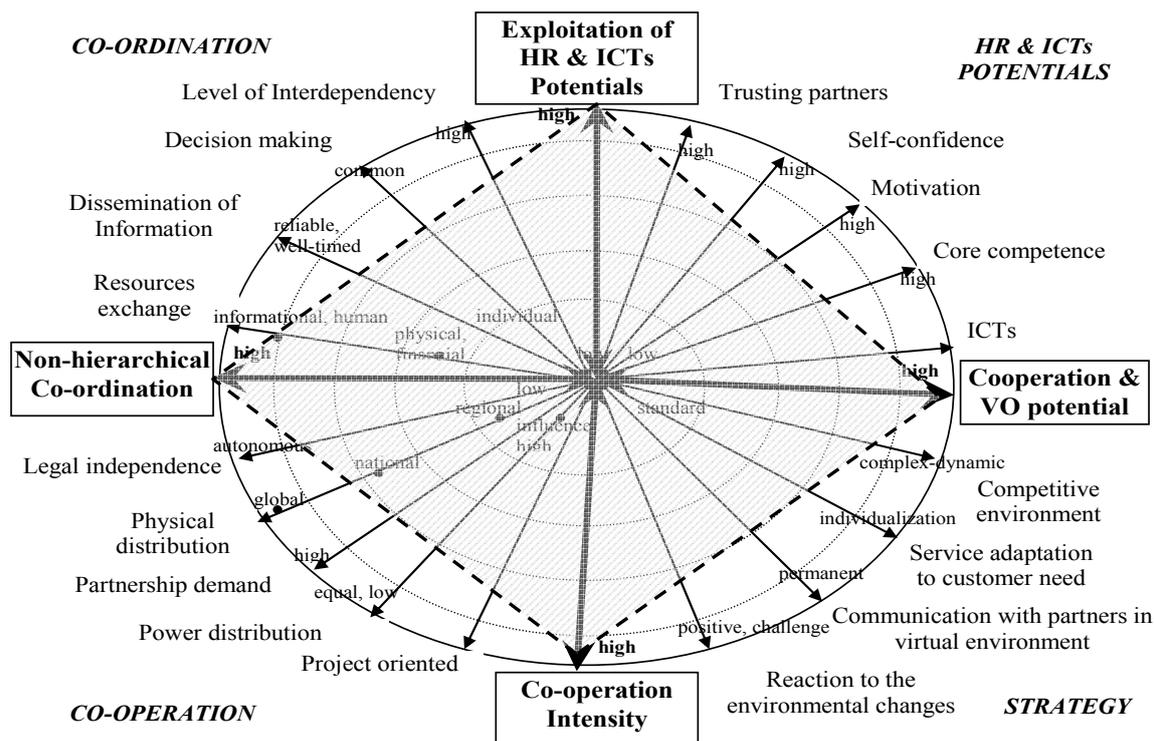


Figure 2. The wheel for virtual organizing of business system

Source: the authors, according to Klüber, 1998

industry understanding and practical experience. The results are analyzed from first case (1st) and second case (2nd) surveys.

The basic structure of the analysis consists of four areas which are organized as quadrants of a circle. Referring to the methodology of the Klüber's model of a virtual organizing, average values of experts' opinions revealing common meaning of the criteria within each quadrant were measured (see Figure 3).

Common average value of the axes of the **first quadrant Human resources and information and communication technologies potentials** is 4.11 and 4.12 out of 5 possible points. The experts agree that, in order to integrate into a virtual business system, unique and exclusive competencies as well as resources, which would grant a competitive advantage for its members, have to be at disposal (1st  $s_j=0.38$ ; 2nd  $s_j=0.52$ ). It is necessary to point out that human resources as well as information and communication technologies are one of the main media in participating within a virtual business system because the functioning of the system is impossible without these factors. As the experts state, information provision is an essential condition to provide a qualitative service, and provision with ICTs – to keep relationships with foreign and Lithuanian partners. The experts of both groups assume that in this respect Lithuanian tour operators keep pace with colleagues of Western countries (1st  $s_j=0.65$ ; 2nd  $s_j=0.43$ ). Every day tour operators of Lithuania together with travel agencies exchange renewed information about flights, vacant places at hotels, trip routes, etc. Thus, the organizations creating a tourism product have all necessary information about services offered by their partners, changes of services, special offers, etc.

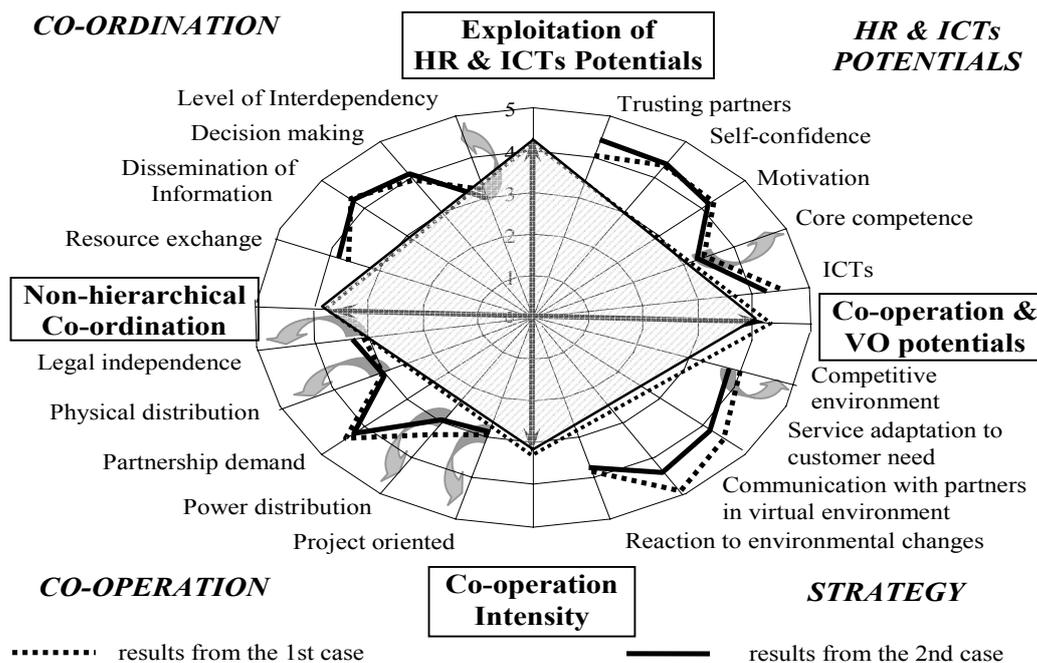
The experts assume that the Internet access to their data also shows the trust of foreign partners. Consequently cooperation in collecting, processing and using information in order to take decisions is an important factor in retaining competitive advantage in the tourism market.

All experts state that the relationships of most Lithuanian tour operators and travel agencies are steady and their cooperation is based on mutual interest and trust (1st  $s_j=0.48$ ; 2nd  $s_j=0.51$ ). According to the opinion of the respondents-experts, the enterprises providing services of a travel organization distinguish in high level of trust in partners (1st average value 4.08 points; 2nd – 4.43) and in themselves (1st average value 4.33 points; 2nd – 4.4), as they have acquired necessary information and use common communication technologies (1st average value 4.55 points; 2nd – 4.28). The lack of core competencies decreases the potential of human resources (1st average value 3.4 point; 2nd – 3.3); that conditions the lack of motivation for cooperation (Figure 3).

**The second quadrant** of the criteria of a virtual business system – **Co-operation & VO Potential** – discloses the strategical position in respect of cooperation with partners and the ability to work virtually by employing core competencies of partners within virtual teams.

The evaluation of the criteria of this quadrant reveals whether the direction of the activity of the participants belonging to a tourism business system correspond the principles of a virtual business system activity.

The common average value of quadrant's criteria defining *the strategy of the activity* of business system participants and *the potential of a virtual organization* makes 4.32 and 4.11 points (Figure 3). Valuations of second



**Figure 3.** The assessment of the basic features of virtual organizing of tourism business system actors

quadrant differ and were higher in the first case, meaning that initially the cooperation and partnerships were close in order to develop business and to stand the competitive tension. Competition was valued as stronger (1st  $s_j=0.43$ ; 2nd  $s_j=0.67$ ) and reaction from organizations was faster, especially in the case of reaction to customers' needs (1st  $s_j=0.39$ ; 2nd  $s_j=0.40$ ) and communication with partners in virtual environment (1st  $s_j=0.39$ ; 2nd  $s_j=0.46$ ). In the second case the valuations of cooperation and virtual organizing are lower, because the experts do not envisage the danger of the emergence of new foreign competitors into Lithuanian outbound tourism market.

Overall evaluation of this quadrant is high enough in comparison to other components of the model; it shows that it is possible to draw a premise that the strategy of business system participants' activity is oriented to the strategy of a virtual organization, and the participants have the potential to organize their business in virtual space.

According to the author's opinion, the participants of the tourism business system, who were evaluated by the experts, follow more conservative strategy by reacting to changes of the environment and cooperation. It is necessary to emphasize that the activity of a virtual business system is not long-term; this system is being oriented to only under certain challenge or new possibility of the market. Meanwhile the experts have a notion that long-term cooperation relations impart reliability and stability. The participants of a tourism business system, who were assessed, have possibilities to develop this potential and to acquire the feature characteristic for a virtual business system. The results from the second case indicate that the actors of tourism business system insufficiently cooperate in the implementation of innovations, not sufficiently seek to satisfy individual needs of customers and not enough to assess possibilities given by the market as well as competitive environment. Thus, the participants of a

tourism business system should change their viewpoint to maintenance of cooperation relations.

*The third quadrant* of the criteria of a virtual business system – *intensity of co-operation* – shows the ability of the participants of a tourism business system, who were assessed, to cooperate into new organizational structures. Thus, common average value of all criteria of the third quadrant is 3.36 and 3.28 points. This discloses rather low need of the surveyed enterprises-participants of a tourism business system to cooperate and form new organizational structures.

The group of the criteria of the cooperation structure quadrant also presents the results that are rather far from the features of a virtual business system. This determines that the actors of a tourism business system give the priority to long-term cooperation but not to the implementation of short-term projects. The experts point out that, in order to guarantee stability and the warranty that the quality of services will not change and it will be high when rendering services for customers, constant cooperation with partners as well as consolidation of the relations is necessary. One of the most important features enabling to treat the actors of a tourism business system as having the potential of organizational virtualness is participation in short-term projects and wide geographical distribution; the surveyed enterprises evaluated this low enough – slightly higher than 3 points in both cases. When evaluating power distribution among the participants of a tourism business system, it is possible to state that the amount of power in relationships is rarely symmetrical, meaning that each member has the same power. The experts' opinions coincided in considering that in Lithuania the power in the cooperation of tour operators and travel agencies depended more on the reputation of a partner (1st  $s_j=0.53$ ; 2nd  $s_j=0.54$ ). The experts did not come to one opinion whether the influence and power of foreign partners determined

what decisions were taken for common activity (1st  $s_j=0.15$ ; 2nd  $s_j=0.13$ ). During the interview, the experts mentioned that partners not always informed about their intentions clearly and openly; they could be indifferent to the needs of other partners; in order to defend their interests they threaten by breaking a contract and the like. This witnesses that disbalance of influence and power is inevitable in cooperating. The experts pointed out, however, that no Lithuanian tour operator had yet broken their activity due to unsuccessful cooperation with foreign partners. It is possible to draw a conclusion that possibilities of the participants of a tourism business system to integrate and organize virtually their activities are rather limited.

The evaluation results of the criteria of the **fourth quadrant** of a virtual business system – **form of co-ordination** – show the ability of the surveyed actors of a tourism business system and their partners to inter-coordinate the actions that are necessary for the attainment of the aims of the common activity. And this discloses one of more important features of virtual organizing. The common average value of all axes in the fourth quadrant is 3.8 and 3.83 points. This shows that slightly higher than moderate *non-hierarchical co-ordination* prevails among the actors of a tourism business system and their partners. Dissemination of timely information as well as common decision-making at the surveyed enterprises increases the mean of coordination; but distribution of resources as well as inter-dependence decreases it. The possibility to obtain missing resources is frequently indicated as one of the most important reasons of cooperation. This means that partners share their own resources. According to the opinion of the experts, Lithuanian tour operators while cooperating first of all obtain financial (Grade 1), technical (Grade 2) and human (Grade 3) resources, and provide mostly technical (Grade 1), then human (Grade 2) and financial (Grade 3) resources. Exchange of information and material resources is equivalent (in cases of receiving and providing resources the experts indicate Grade 4 and 5 correspondingly). The features of virtual organizing in light of resource sharing should first be addressed to informational and human resources as this would disclose that actors have the unique competences.

The experts stated, that the actors of a tourism business system and their partners are on the average able to inter-coordinate the aims of their common activity, i.e. they disseminate the information among themselves rather easily and fast, and are able to make decisions appropriate for them, but they exchange only the financial and material resources most frequently and are dependent on correspondent partners. According to the authors, the moderate *potential of co-ordination* is characteristic for a tourism business system.

As presented in Figure 3, the area filled with grey is unevenly distributed in respect of different quadrants in both cases, and it is rather far both from the borders of an ideal virtual organization, and from a geometric ideal of the figure – the square. When evaluating the possibilities of the surveyed tourism business system actors to organize their activities virtually, it is possible to state that the actors have high enough potential of human resources as well as information and communication technologies and that their strategy does not contradict the principles of virtual organizing. However, the actors of a tourism business

system distinguish in low potential of co-operation structure and non-hierarchical co-ordination. It is possible to state that tour operators and travel agencies represented by the experts develop unevenly: under tourism services being marketable enough and dynamic tourism market, organizations hardly use possibilities to implement new organizational forms.

## Conclusions and future research

The analysis of scientific literature of tourism business system features, organizational structures, and peculiarities of virtual organizing was made and research findings describing the potential of virtual organizing of tourism business system actors were disclosed.

The tourism business system presents exciting new challenges for tourism industry managers and academic researchers. The integration and cooperation between the different entrepreneurs and networking are in focus. Cooperation and partnership in business system could help independent organizations to develop their capabilities, to reduce risks, to enhance opportunities and to get the competitive advantage. The intensive competitive situation determinates that for one organization it is difficult to possess all skills and resources needed to gain and sustain competitive advantage. Successful partnership and cooperation of tourism business system actors strengthen the competitive advantage of tourism organisations. In order to create a tourism product that meets the needs of a customer, tourism enterprises integration to a business system as well as the business relationships realizing it are necessary.

A virtual organizing of tourism business system actors as the formation of a network of independent companies is established to share competencies, resources and provide opportunities to acquire contracts, which would be too complex, large or of too great a spatial extent for any small company or a micro firm. Tourism business system actors organizing their activities virtually are engaged in the joint production of a service product and competence to meet specific tourists' needs and interests. Integration to business system allows firms to find a balance between cooperation and competition, leading to a reduction of competitive uncertainty without stifling the incentives to innovate and invest in common tourism assets. Some key characteristics of virtual organizing, like concentration of core competencies, strong customer orientation, creation of value-adding products and temporary, dynamic networks of independent companies based on information and communication technology were presented.

The qualitative research performed is the first attempt to assess the potential of virtual organizing in tourism industry. The experts chosen for the survey represent the leading companies. However the research results do not reflect the situation of all Lithuanian tour operators and travel agencies.

The emergence of a virtual organizing of business system actors has been driven by information and communication technologies and the Internet development, that blurs geographical boundaries, promotes dynamic networks, and favours customer-centric offerings. The results of experts' survey and interview witness that permanent partnership changes episodic relationships of Lithuanian

tour operators and travel agencies cooperation with their partners. Consequently, it is possible to confirm that contemporaneous cooperative and competitive relationships are characteristic for cooperation of Lithuanian tour operators and travel agencies. Except usual partnership, the experts see greater possibilities to integrate to business system and form a virtual organization. Such possibilities are strengthened by high potential of the application of human resources as well as information and communication technologies. The surveyed actors possess the following feature characteristics of virtual organizing: trust in partners, self-confidence, and cooperation with partners in virtual environment, understanding the profit provided by cooperation as well as the high level of information dissemination. The strategies of the activity of tour operators and travel agencies represented by the experts partly correspond with principles of virtual organizing, but the lack of core competencies, disability to cooperate in short-term projects as well as the lack of the experience of human and information resources exchange decreases the level of cooperation intensity and coordination. Hence the virtual organizing of tourism business system actors is not sufficient for distinguishing the features of virtual organization.

Another drawback of the research is evident in the application of the model of a virtual organizing as a tool. This modified Klüber's (1998) model is more like an effort to identify quantitative conditions as well as to compare subjective qualitative data and possessed information to the ideal being striven for.

During the nearest decade the competition would be greater and tour operators and travel agencies will cooperate with more partners, and relationships will be more various and intensive. We think that virtual organizing of tourism business system actors is useful to co-produce the tourism products which increase the competitiveness of tourism destinations. Closer collaboration and the utilization of information and communication technology would enable tourism business system actors to expand their supply and to enhance their competitiveness of both individual tourism firms and destinations as a total. The development of virtual organizing of tourism business system actors is useful for improving Lithuanian tourism destinations competitiveness in particular.

## References

1. Afsarmanesh, H., & Camarinha-Matos, L. M. (2005). A Framework for management of virtual organization breeding environments. In: *Collaborative Networks and their Breeding Environments*. L. M. Camarinha-Matos, H. Afsarmanesh, Ed.s Springer, Boston, 35-48.
2. Afsarmanesh, H., & Camarinha-Matos, L. M. (2000). Future smart-organizations: a virtual tourism enterprise. Proceedings of the 1<sup>st</sup> International Conference on Web Information System Engineering. Hong Kong, China, (1), 456-461.
3. Bagdoniene, L., & Hopeniene, R. (2006). Cooperation and partnership as competitiveness opportunity: the case of Lithuanian tourism business system. *Socialiniai mokslai-Social sciences*, 4(54), 32-41.
4. Beseliov, S. D., & Gurvic, F. G. (1980). *Matematiko-statistines metody ekspertnich ocenok*, Maskva: Statistika.
5. Black, J. A., & Edwards, S. (2000). Emergence of virtual or network organizations: fad or feature. *Journal of Organizational Change Management*, 13(6), 567-576.
6. Braun, P. (2005). Creating value to tourism products through tourism networks and clusters: uncovering destination value chains. Paper presented at the *OECD & Korea Conference on Global Tourism Growth: A Challenge for SMEs*, Gwangju, Korea, 2-11.
7. Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management*(21), 97-116.
8. Buhalis, D., & Molinaroli, E. (2003). Entrepreneurial networks and supply communities in the Italian eTourism. *Information Technology & Tourism*(5), 175-184.
9. Buhalis, D., & O'Connor, P. (2005). Information Communication Technology Revolutionizing Tourism. *Tourism Recreation Research*(30), 7-16.
10. Camarinha-Matos, M., & Afsarmanesh, H. (2002). Dynamic virtual organizations, or not so dynamic? Marik, V., Camarinha-Matos, M., Afsarmanesh, H. Eds. *Knowledge and Technology Integration in Production and Services– Balancing Knowledge and Technology in Product and Service Life Cycle: Fifth IEEE/IFIP International Conference on Information Technology for Balanced Automation Systems in Manufacturing and Services* Springer, 111-124.
11. Cravens, D. W., & Piercy, N. F. (1994). Relationship marketing and collaborative networks in service organizations. *International Journal of Service Industry Management*, 5(5), 39-53.
12. Damaskopoulos, T., Gatautis, R., & Vitkauskaitė, E. (2008) Extended and dynamic clustering of SMEs. *Inzinerine Ekonomika-Engineering Economics*(1), 11-21.
13. Davidaviciene, V. (2008) Change management decisions in the information age. *Journal of Business Economics and Management*, 9(4), 299-307.
14. Dimitrakos, T., Golby, D., & Kearney, P. (2004). Towards a trust and contract management framework for dynamic virtual organizations. *eAdoption and the Knowledge Economy: eChallenges*, IOS Press, 1199-1207.
15. Goldman, S. L., Nagel, R. N., & Preiss, K. (1995) *Agile competitors and virtual organizations: Strategies for enriching the costumers*. NY: Van Nostrand Reinhold.
16. Grängsjö, Y. F. (2003). Destination networking. Co-operation in peripheral surroundings. *International Journal of Physical Distribution & Logistics Management*, 5(33), 427-448.
17. Grundey, D. (2008). Managing sustainable tourism in Lithuania: Dream or reality? *Technological and Economic Development of Economy*, 14(2), 118-129.
18. Gummesson, E. (1999). *Total Relationship Marketing: from 4Ps to 30Rs*. Oxford: Butterworth Heinemann.
19. Hopeniene, R., Railiene, G., & Kazlauskienė, E. (2009). *Emergence of Virtual Tourism Business System: empirical findings. Economics and management - 2009: 14-osios tarptautinės mokslinės konferencijos pranešimų medžiaga* [Elektroninis išteklius]. Kaunas, 780-787.
20. Jägers, H., Jansen, W., & Steenbakkens, W. (1998). Characteristics of Virtual Organizations. P. Sieber, J. Griese (Eds.), *Organizational Virtualness Proceedings of*

- the VoNet - Workshop*, University of Bern Simowa Verlag, Bern.
21. Jain, N. F., Aye, K. M., & Luo, M. (2001). Virtual factory: an integrated approach to manufacturing systems modeling. *International Journal of Operations & Production Management*(21), 94-608.
  22. Jefremov, V. S. (2001). *Strategiškeskoje planirovanije v biznes sistemach*. M.: Izdatelstvo Finpress.
  23. Jucevičius, R. (2007). *Nacionalinė verslo sistema – atsakas į naujus iššūkius*. Sud. LR Ūkio ministerija, Ekonominių tyrimų centras. Lietuvos ekonomika Europoje ir globalioje erdvėje. V: Standartų spaustuvė. 223-241.
  24. Katzy, B. R. (1998). *Design and Implementation of Virtual Organizations*. Proceedings of the 31st Annual Hawaii International Conference on System Sciences(4), 142-151.
  25. Keinänen, K., & Oinas-Kukkonen, H. (2001). Virtual organizing as a strategic approach to stay competitive - A Conceptual Analysis and Case Study. Ed. Y. Malhotra. *Knowledge management and business model innovation*. USA: IGI Publishing Hershey, PA, 135 – 152.
  26. Klüber, R. A. (1998). Framework for virtual organizing. Proceedings of the VoNet - Workshop, 93-106. Available from Internet: <http://www.ejov.org>.
  27. Kubrak, A., Koval, K., Kavaliauskas, V., & Sakalas, A. (2007). Organizational structure forming problems in modern industrial enterprise. *Inzinerine Ekonomika-Engineering Economics*(1), 103-109.
  28. Lydeka, Z., & Adomavicius, B. (2007). Cooperation among the Competitors in International Cargo Transportation Sector: Key Factors to Success. *Inzinerine Ekonomika-Engineering Economics*(1), 80-90.
  29. Malhotra, Y. (2000). *Knowledge Management and Virtual Organizations*. Hershey: PA, Idea Group Publishing.
  30. Mendes, C. J. (2008). The Development of Knowledge and Information networks in Tourism Destination. In C. Camison, D. Paslacios, F. Garrigos, C. Deverce. (Eds) *Connectivity and Knowledge Management in Virtual organizations. Networking and Developing Interactive Communications*. Idea Group Inc (IGI). 183-204.
  31. Morgan, D. (2007). National business systems research: progress and prospects. *Scandinavian Journal of Management*(23), 127-145.
  32. Navickas, V., & Malakauskaite, A. (2009). The Possibilities for the Identification and Evaluation of Tourism Sector Competitiveness Factors. *Inzinerine Ekonomika-Engineering Economics*(1), 37-44.
  33. Perry, M. (1999). *Small Business and Network Economies*. London: Routledge.
  34. Ronomanskaite, A. (2004). *Šalies turizmo pramonės konkurencingumas*. Daktaro disertacija: socialiniai mokslai, ekonomika (04 S). KTU: Kaunas.
  35. Saabeel, W., Verduijn, T. M., Hagdorn, L., & Kumar, K. (2002). A Model of Virtual Organisation: A Structure and Process Perspective. *Electronic Journal of Organizational Virtualness*, 4(1), 115-132.
  36. Savrina, B., Grundey, D., & Berzina, K. (2008). Cooperation - the form of sustainable tourism industry in Latvia. *Technological and Economic Development of Economy*, 14(2), 151-161.
  37. Shekhar, S. (2006). Understanding the virtuality of virtual organizations. *Leadership & Organization Development Journal*, 27(6), 465-483.
  38. Sieber, P., & Franke, U. (1998). Virtual Organizations: Static and Dynamic Viewpoints. *Virtual-Organization. Net - the Newsletter*, 1(2), 1-8.
  39. Snieska, V. (2008). Research into International Competitiveness in 2000–2008. *Inzinerine Ekonomika-Engineering Economics*(4), 29-41.
  40. Stradera, T. J., Linb, F. R., & Shawc, M. J. (1998). Information infrastructure for electronic virtual organization management. *Decision Support Systems*(23), 75–94.
  41. Susniene, D., & Vanagas, P. (2007). Means for Satisfaction of Stakeholders' Needs and Interests. *Inzinerine Ekonomika-Engineering Economics*(5), 24-28.
  42. Suter, B. (1999). The VEGA Cooperation Platform: Providing Real Support for Virtual Enterprises. *Electronic Journal of Virtualness*, Special Issue, 1(1), 171-189.
  43. Tamaševičius, V. (2001). Integration of companies into international business system. *Ekonomika ir vadyba*, 2(5), 92-99.
  44. Tidikis, R. (2003). *Socialinių mokslų tyrimų metodologija*. Vilnius: LTU.
  45. Valiukonyte, D., & Parkkonen, V. (2006). Theoretical insights into the notion of business systems and its relation to other concepts of collaboration. *Socialiniai mokslai-Social Science*, 4(54), 20-31.
  46. Valiukonyte, D., & Parkkonen, V. (2008). Conceptual framework for the analysis of business systems: national perspective. *Economics and management - 2008: 13-osios tarptautinės mokslinės konferencijos pranešimų medžiaga* [Elektroninis išteklius]. Kaunas, 729-738.
  47. Walker, P. A., Greiner, R., McDonald, D., & Lyne, V. (1999). The Tourism Futures Simulator: a systems thinking approach. *Environmental Modeling & Software*(14), 59–67.
  48. Whitley, R. (1999). *Divergent capitalisms: the social structuring and change of business systems*. Oxford: Oxford University Press.

Rimantė Hopenienė, Ginta Railienė, Eglė Kazlauskienė

#### **Turizmo verslo sistemos dalyvių virtualaus organizavimosi potencialas**

Santrauka

Šiuolaikinė verslo aplinka sąlygoja radikalius verslo įmonių veiklos, struktūros ir valdymo pokyčius, o spartus technologijų, žinių ir ekonomikos vystymasis turi įtakos savitų bendradarbiavimo tarp įvairių ekonominių veikėjų formų atsiradimui. Nykstant įmonių hierarchinėms struktūroms, kuriasi hibridiniai ir lankstūs verslo tinklai, kurie įvardijami kaip organizacijos be sienų, virtualios organizacijos, antrepreneriniai tinklai.

Siekiant sustiprinti konkurencines pozicijas rinkoje, efektyviai panaudoti turimus išteklius, užtikrinti vykdomos veiklos pelningumą bei tinkamą vartotojų poreikių patenkinimą, turizmo paslaugas teikiančioms įmonėms labai svarbu racionaliai pasirinkti partnerius ir užmegzti tarporganizacinius ryšius tiek vietiniu, tiek ir tarptautiniu mastu. Pati turizmo verslo specifika neleidžia teikti turizmo paslaugų atskiroms įmonėms veikiant izoliuotai. Todėl turizmo organizacijos jungiasi į verslo

sistemas, siekiamos didesnės ekonominės naudos. Organizacijoms sudėtinga turėti visas veiklas vykdyti būtinas kompetencijas, todėl jos, bendradarbiaudamos ir palaikydamos ryšius su kitomis organizacijomis, sujungia kompetencijas ir išteklius, keičiasi žiniomis ir informacija, lengviau integruojasi į naujas rinkas.

Straipsnyje nagrinėjama *mokslinė problema* – kokia turizmo verslo sistemos dalyvių ryšių struktūra reikalinga siekiant įgyti ir išnaudoti virtualaus organizavimo potencialą. *Straipsnio tikslas* – ištirti turizmo verslo sistemos virtualaus organizavimo lygį ir potencialo panaudojimo galimybes. Tikslui pasiekti taikoma sisteminė mokslinė literatūros analizė, mišrių metodų dizainas, panelinis ekspertų interviu, ekspertinio vertinimo metodas. Tyrimo rezultatų analizė atliekama remiantis modifikuotu Klüber (1998) virtualaus organizavimo modeliu.

Mokslininkai nagrinėja naujų verslo sistemų formavimąsi, formas, funkcionavimą, bendradarbiavimą, konkurenciją (Perry, 1999; Jefremov, 2001; Whitley, 1999; Tamaševičius, 2001; Jucevičius, 2007; Valiukonytė, Parkonnen, 2006, 2008; Morgan, 2007). Verslo sistemos įgyja įvairias formas: klasterių, aljansų, konsorciūmų, organizacinių tinklų, virtualių organizacijų ir kt. Pasak Whitley (1999), tarporganizaciniai ryšiai yra verslo sistemos funkcionavimo pagrindas. Įmonių jungimasis į verslo sistemas ir tarporganizacinių ryšių palaikymas padeda sumažinti sandorių sąnaudas, išvengti arba sumažinti priklausomybę nuo išteklių, įgyti patirties ir žinių, įdiegti inovacijas.

Lietuvos kelionių organizatorių bendradarbiavimui ir ryšiams tirti pasirinktas kokybinis – ekspertų – tyrimas, kuris geriau nei kiekybinis padeda nustatyti turizmo verslo sistemos dalyvių ryšius ir jų įtaką bendradarbiavimui. Kelionių organizatorių ir agentūrų virtualaus organizavimo potencialo tyrimui atlikti ekspertai atrinkti pagal tris kriterijus: patirtį išvežamojo turizmo srityje (ne mažiau nei 5m.), kompetenciją (aukščiausios grandies vadovai), eksperto savęs įvertinimą (galimybes suteikti tyrimui vertingą informaciją). Skirtingų grupių ekspertų nuomonių sutapimui aptarti apskaičiuojamas sutapimo indeksas  $s_j$  (Bešelio ir Gurvič, 1980). Išanalizavus gautus duomenis, skaičiuoti ekspertų nuomonių sutapimai pateiktais klausimais. Kadangi turizmo verslo sistemos dalyvių ryšiams būdinga homeostazė, kai ryšiai tarsi ir fiksuoti konkrečiu momentu, bet tuo pat metu ir kinta, tyrimo rezultatams reprezentuoti atliktas panelinis ekspertų interviu. Šis kokybinis tyrimo metodas leido įvertinti, kaip kito ekspertų nuomonė ir patirtis parėjus 2 metams po pirmojo interviu.

Remiantis Klüber virtualaus organizavimo potencialo įvertinimo modelio metodika, apskaičiuoti ekspertų nuomonių vidutiniai įverčiai, atskleidžiantys bendrą kiekvieno kvadranto kriterijų reikšmę. Bendras pirmojo kvadrato – *žmogiškųjų išteklių ir informacinių bei komunikacinių technologijų potencialas* – ašių vidutinis įvertis yra 4,11 ir 4,12 balo iš 5 galimų. Ekspertų nuomonės sutapo, kad siekiant integruotis į turizmo verslo sistemą, panaudojant virtualaus organizavimo bruožus, turi būti disponuojama unikaliomis ir išskirtinėmis kompetencijomis bei ištekliais, kurie suteiktų jos nariams konkurencinį pranašumą ( $s_j = 0,38$ ;  $s_j = 0,52$ ). Reikia atkreipti dėmesį į tai, kad žmogiškieji ištekliai ir informacinės bei komunikacinės technologijos yra vienos iš pagrindinių priemonių dalyvaujant virtualioje verslo sistemoje, nes be šių veiksmų sistemos funkcionavimas yra neįmanomas. Ekspertų nuomone, kelionių organizavimo ir agentavimo paslaugas teikiančios įmonės pasižymi aukštu pasitikėjimo lygiu partneriais (vidutinis įvertis 4,08 ir 4,43 balo) ir savimi (vidutinis įvertis 4,33 ir 4,4 balo), įvaldę reikiamas informacines ir komunikacines technologijas (vidutinis įvertis 4,55 ir 4,28 balo). Šių žmogiškųjų išteklių potencialą mažina šerđinių kompetencijų trūkumas (vidutinis įvertis 3,4 ir 3,3 balo), o tai ir lemia motyvacijos bendradarbiauti stoką.

*Antrasis* virtualios verslo sistemos kriterijų kvadrantas – *kooperacija ir virtualios organizacijos potencialas* – atskleidžia tiek gebėjimo dirbti virtualiai, tiek kooperacijos su partneriais strateginę poziciją, panaudojant partnerių šerđines kompetencijas virtualiose komandose. Šio kvadranto kriterijų vertinimas parodo, ar turizmo verslo sistemai priklausančių dalyvių veiklos kryptis atitinka virtualios verslo sistemos veiklos principus. Bendras kvadranto kriterijų, apibūdinančių verslo sistemos dalyvių veiklos strategiją bei virtualios organizacijos potencialą, vidurkių vidutinis įvertis yra 4,32 ir 4,11 balo.

Šis įvertinimas modelyje yra pakankamai aukštas, palyginti su kitomis modelio dedamosiomis. Į jį atsižvelgiant galima daryti prielaidą, kad turizmo verslo sistemos dalyvių veiklos strategija yra orientuota į virtualios organizacijos strategiją, o dalyviai turi potencialą burtis į virtualią verslo sistemą. Autorių nuomone, ekspertų vertinti turizmo verslo sistemos dalyviai laikosi konservatyvesnės strategijos, reaguodami į aplinkos bei bendradarbiavimo pokyčius. Vertinti turizmo verslo sistemos dalyviai turi galimybių išvystyti šį potencialą ir įgyti virtualiai verslo sistemai būdingus bruožus. Pažymėtina, kad turizmo verslo sistemos dalyviai nepakankamai kooperuojasi diegiant inovacijas, nepakankamai siekia patenkinti individualius vartotojų poreikius ir nepakankamai vertina rinkos suteikiamas galimybes bei konkurencinę aplinką. Taigi turizmo verslo sistemos dalyviai turėtų keisti požiūrį į bendradarbiavimo ryšių palaikymą.

*Trečiasis* virtualios verslo sistemos kriterijų kvadrantas – *kooperavimosi intensyvumas* – parodo vertintų turizmo verslo sistemos dalyvių gebėjimą kooperuotis į naujas organizacines struktūras. Visų trečiojo kvadranto kriterijų bendras vidutinis įvertis yra 3,36 ir 3,28 balo. Tai rodo gana žemą tiriamų turizmo verslo sistemos dalyvių įmonių poreikį kooperuotis ir formuoti naujas organizacines struktūras, rezultatus, kurie dar nesiekia virtualios verslo sistemos apibūdinimo. Tai lemia, kad turizmo verslo sistemos dalyviai teikia prioritetą ilgalaikiam bendradarbiavimui, o ne trumpalaikiams projektams vykdyti. Ekspertų nuomone, siekiant užtikrinti stabilumą ir garantiją, kad paslaugų kokybė nekis ir bus aukšta teikiant paslaugas vartotojams, reikalingas nuolatinis bendradarbiavimas su partneriais ir tų ryšių įtvirtinimas. Vieni iš svarbiausių požymių, leidžiančių turizmo verslo sistemos dalyvių traktuoti kaip virtualios verslo sistemos narius, – dalyvavimas ribotą laiką trunkančiuose projektuose ir platus geografinis pasiskirstymas – tarp apklaustų įmonių yra vertinami pakankamai mažu balu (tik šiek tiek didesniu nei 3 abiem atvejais). Vertinant galios pasiskirstymą tarp turizmo verslo sistemos dalyvių, galima teigti, kad galios pasiskirstymas simetriškas, t. y. nėra lyderiaujančių pozicijų tarp dalyvių, o daugiausia įtakos kooperavimuisi turi partnerio reputacija ( $s_j = 0,53$ ;  $s_j = 0,54$ ). Galima daryti išvadą, kad turizmo verslo sistemos dalyvių galimybes integruotis ir formuoti virtualią turizmo verslo sistemą yra pakankamai ribotos.

*Ketvirtojo* virtualios verslo sistemos kvadranto – *koordinavimo forma* – kriterijų vertinimo rezultatai rodo tiriamų turizmo verslo sistemos dalyvių ir jų partnerių sugebėjimą derinti tarpusavyje veiksmus, kurie yra būtini bendros veiklos tikslams siekti. Bendras visų ketvirtojo kvadranto ašių vidutinis įvertis yra 3,8 ir 3,83 balo. Tai rodo, kad tarp turizmo verslo sistemos dalyvių ir jų partnerių vyrauja šiek tiek didesnė nei vidutinė nehierarchinė koordinacija. Savo laiku informacijos sklaida ir bendras sprendimų priėmimas tiriamose įmonėse gautą koordinacijos vidurkį didina, o išteklių pasidalijimas ir tarpusavio priklausomybė – mažina. Galimybė pasinaudoti trūkstamais ištekliais nurodoma kaip viena iš svarbiausių kooperavimosi priežasčių. Ekspertų vertinimu, turizmo verslo sistemos dalyviai ir jų partneriai vidutiniškai sugeba derinti tarpusavyje bendros veiklos tikslus, t. y. gana lengvai ir greitai skleidžia tarpusavyje informaciją, sugeba priimti palankius sprendimus vieni kitiems, tačiau dažniausiai išteklių mainai vyksta finansinių ir materialinių išteklių srityje ir yra priklausomi nuo atitinkamų partnerių. Autorių nuomone, turizmo verslo sistemai būdingas vidutinis verslo sistemos virtualaus organizavimo koordinacijos potencialas.

Apibendrinant ekspertinio tyrimo rezultatus nustatyta, kad kelionių organizavimo paslaugas teikiančios įmonės turi bruožų, rodančių jų galimybes integruotis į virtualią turizmo verslo sistemą. Pagrindiniai trūkumai, kurie mažina virtualios verslo sistemos susidarymo galimybes; nėra šerđinių kompetencijų tarp kelionių organizatorių ir agentavimo įmonių, pasyviai dalyvaujama trumpalaikiuose projektuose, kada stokojama pasitikėjimo konkurentais ir partneriais, ribotai dalijamasi ištekliais, ypač žmogiškaisiais ir informaciniais. Reikia pažymėti, jog virtualios turizmo verslo sistemos formavimas leistų ne tik pasiekti konkurencinį pranašumą, tenkinant nuolat kintančius vartotojų poreikius, bet ir skatintų paklausos augimą atitinkamų kelionės tikslo vietų atžvilgiu bei inovatyvių turizmo produktų kūrimą.

Raktažodžiai: *turizmo verslo sistema, virtualaus organizavimo potencialas, organizacinis virtualumas, bendradarbiavimo ryšiai, kelionių operatoriai ir kelionių agentūros.*

The article has been reviewed.

Received in March, 2009; accepted in June, 2009.