

DOI: <https://doi.org/10.34069/AI/2022.57.09.6>

How to Cite:

Khairtudinova, O. (2022). Ecosystem of tourist business in the context of regional tourism and hospitality industry development. *Amazonia Investiga*, 11(57), 56-63. <https://doi.org/10.34069/AI/2022.57.09.6>

Ecosystem of tourist business in the context of regional tourism and hospitality industry development

Экосистема туристического бизнеса в контексте развития региональной индустрии туризма и гостеприимства

Received: October 1, 2022

Accepted: November 2, 2022

Written by:

Olga Khairtudinova¹²<https://orcid.org/0000-0001-6028-8358>

RSCI Author ID: 736920

WoS Researcher ID: T-8054-2017

Abstract

The evolution and problems of the definition of such notions as “business ecosystem”, “business ecosystem model” and “business platform” in the scientific environment are overviewed and analyzed in this paper. Different strategies of the management of business ecosystem models are considered and conclusions about their efficiency at different development stages are formulated. In the paper, the particular attention is paid to digital platforms as a tool of management and development of business ecosystems in modern realities, the key cases of ecosystem business models in Russian economy are analyzed. The authors consider the digital platform creation as a perspective approach to the transition to the concept “Tourism 4.0” in the Republic of Bashkortostan. However, there are different opinions regarding the practicability of the realization of regional tourist platforms in comparison with the federal ones. The paper presents the overview of the main arguments of the parties of this discussion. As a result of the conducted research, the author formulated the conclusions on the perspective of creating cross-functional and multi-platform solutions for the realization of federal and regional platforms. That is, the construction of platforms based on the principle of mutual integration and realization of different but supporting functions, which would serve the whole chain of creation, promotion and realization of tourist product and realization of accompanying touristic services, will allow implementing not the competitive development environment but the ecosystem cooperation environment. Such principle is

Аннотация

В данной статье рассматриваются и анализируются эволюция и проблемы определения таких понятий, как “бизнес-экосистема”, “модель бизнес-экосистемы” и “бизнес-платформа” в научной среде. Рассмотрены различные стратегии управления моделями бизнес-экосистемы и сформулированы выводы об их эффективности на разных этапах развития. В статье особое внимание уделяется цифровым платформам как инструменту управления и развития бизнес-экосистем в современных реалиях, анализируются ключевые кейсы экосистемных бизнес-моделей в российской экономике. Авторы рассматривают создание цифровой платформы как перспективный подход к переходу к концепции “Туризм 4.0” в Республике Башкортостан. Однако существуют разные мнения относительно целесообразности реализации региональных туристических платформ по сравнению с федеральными. В статье представлен обзор основных аргументов сторон этой дискуссии. В результате проведенного исследования автором сформулированы выводы о перспективности создания кросс-функциональных и мультиплатформенных решений для реализации федеральных и региональных платформ. То есть построение платформ, основанных на принципе взаимной интеграции и реализации различных, но поддерживающих функций, которые обслуживали бы всю цепочку создания, продвижения и реализации туристского продукта и реализации сопутствующих

¹² Senior lecturer, Department of Tourism, Hotel and Restaurant Services, Ufa State Petroleum Technological University, Russian Federation.



relevant from the point of the broad-scale and deep mechanism of data aggregation, for building up effective development strategies at entrepreneurial, regional and federal levels.

Keywords: tourism industry, digitalization, business ecosystem, platform economy, regional tourism, digital platform.

Introduction

Today, the tourism and hospitality industry in Russia reaches the new heights of development, which was influenced by a number of factors from the beginning of COVID-19 pandemic. It is known that Russians felt how their favorable international format is suffering. The internal tourist format does not always meet the needs of demanding tourists but it is much more predictable. Under current conditions, it is reasonable to take measures for the rest in Russia to become more attractive and comfortable for tourists with different interests, needs, preferences and financial possibilities. It is easy to see that the topic of Russian tourism is on everyone's lips. Great creative efforts are required from regions, especially from those, which have been satisfied with a little for decades not making a claim for large tourist flows but, at the same time, possessing rich tourist resources. The Republic of Bashkortostan is one of them.

The project team of the Department of Tourism, Hotel and Restaurant Services of Ufa State Petroleum Technological University considers the issue of the practicability of creating one of the tools of regional tourism development under current conditions – tourist business ecosystem in Bashkiria. The investigation is carried out in the frameworks of research project “Tourist-information ecosystem of user services “Yal” in strategic project “New life environment” of the strategic development program of Ufa State Petroleum Technological University.

Business press comments periodically that such initiatives are futureless because regional digital resources will not be able to compete with acting and developing federal digital resources (Korolev, 2020). But the final conclusion can be made after analyzing the nature of the concept “business ecosystem” or business ecological system. This is one of the most discussable terms in the theory of modeling business processes.

туристических услуг, позволит реализовать не конкурентную среду развития, а среду экосистемного сотрудничества. Такой принцип актуален с точки зрения широкомасштабного и глубокого механизма агрегирования данных для построения эффективных стратегий развития на предпринимательском, региональном и федеральном уровнях.

Ключевые слова: индустрия туризма, цифровизация, бизнес-экосистема, платформенная экономика, региональный туризм, цифровая платформа.

There are a lot of opinions about the essence of this phenomenon, therefore, it is reasonable to discuss it from the basic principles.

In this regard, the objective of the present research is to analyze such notions as “business ecosystem” and “platform”, as well as the development perspectives of these phenomena in Russian tourist industry. The following issues were analyzed during the research to reach the stated objective: origin of the terms and evolution of interpreting the notions, development of digital platforms in Russian business, specifics of development and expansion of platform services in Russian and regional tourism. The paper begins with the section devoted to the fundamentals of applying ecosystem approach in economy. After that the research methodology is described followed by the description of the analysis results of the current state of ecosystem approach and digital platform development in Russian entrepreneurship, including the tourism and hospitality industry, taking into account the existing barriers and drivers. As a result of the analysis carried out, the author answered the question whether it is necessary to apply ecosystem approach to develop the tourist industry in the Republic of Bashkortostan.

Theoretical aspects of ecosystem approach in economics

The notion “ecology” (Greek οίκος – home, native land and λόγος – science) was introduced into the scholarly discourse by German biologist Ernst Haeckel in 1866 and since then this term, understood as “science about interactions of live organisms and their communities between themselves and habitat”, has been steadily linked with biology.

The term “ecological system” is younger – it was for the first time used by English botanist Arthur

Tansley in 1935, bringing ecology to a higher level based on the fact that system approach allows investigating the aggregate of organisms and habitat conditions in the self-regulation mode (Nazarenko, 2007; Mirkin & Naumova, 2011). At the beginning, this term was also studied only by the biological science. But with time, it also became relevant outside it.

In 1993 the representative of Harvard Business School James F. Moore published the article “Predators and Prey: A New Ecology of Competition”, in which he compared the mutual evolution inside natural and social systems, bearing in mind that in both of them interconnected participants are developing in the mutual cycle. Moore used the notion “ecosystem”, for the first time giving it an economic sense: “In order to extend the system approach to the strategy, I suggest considering a company not as a representative of one industry but as a part of the business ecosystem covering many industries. In the business ecosystem the companies develop opportunities around the innovation: they are working together on a competitive basis in order to support new products, satisfy needs of the clients and, eventually, introduce another round of innovations” (Moore, 1993). In other words, if the natural ecosystem unites live habitants of some habitat (for example, lake or taiga) interacting both with each other and the habitat, then in business, according to Moore’s theory, “the habitants” of ecosystem are the representatives of entrepreneurial world (a top company and other companies: suppliers, commodity flow channels, etc.), interacting on a competitive basis to complete the common innovative business task, as well as consumers.

Let us point out that Moore reasoned about the system approach to the company strategy and illustrated his reasoning with the experience of real companies, which had been actually building up ecosystems long before his publication and, apparently, not using the term “business ecosystem”, and, moreover, differently. Thus, Moore compared the strategies of such companies as Apple and Tandy, since 1970-s having launched the products based on microprocessors (the innovation of that time) onto the market, which were later converted into personal computers.

Obviously, Apple controlled its own basic developments, including software of the operation system, at the same time, the company stimulated cooperation with independent developers to write software for their computers.

The company also supported business relations with computer stores, educational institutions and independent magazines.

Tandy, on the contrary, had the principle of concentration of all business processes inside the company. The company purchased everything for computers (from programming languages to word processors), it dealt with teaching, sold the equipment through its own store chain and did not cooperate with independent magazines.

At the beginning, judging by the volume of sales, Tandy’s strategy looked more effective, but with time Apple’s sales indicators raised much higher that can be considered as a result of realizing the strategy implying the access of other participants to its business and, hence, providing partners with new growth opportunities and bringing talents to light.

Moore considered that both companies built up ecosystems, only Tandy controlled the ecosystem more tightly (Moore, 1993).

Another interesting model of the late 1970-s is mentioned in the publication. First, Digital Research developed the operation system CP/M compatible with any hardware, which gave the impulse to the development of the variety of small manufacturers of personal computers, and then Micropro developed a powerful word processor for any computers with the operation system CP/M, thus, still more stimulating the demand for these computers produced by small manufacturers. It would seem that it was the time of boom for the latter but they found themselves involved in the competitive struggle with each other, which resulted in price control, low profitability and lack of the possibility to thoroughly deal with the implementation of promotion programs. Having analyzed this experience, Moore stated that at the stage of forming the business ecosystem the correct assessment of the consumers’ needs is a necessary but insufficient step: “The leader of the business ecosystem must appear who is able to initiate the process of fast, continuous improvement, which attracts the whole business community” (Moore, 1993). This is the quality initially possessed by Apple and Tandy and which the ecosystem being formed, whose launch was conditioned by Digital Research’s development, was lacking.

Thus, in 1990-s James F. Moore formed the initial vision of the concept “business ecosystem”. But only the initial one, since in Moore’s theory, with all its consistency and

harmony, the effect of incompleteness was objectively observed, first of all, due to the fact that economic processes at different times rely on different technological capabilities, at the managerial level as well. We will return to this issue later but before that we will touch upon another important moment.

As pointed out by Ya.S. Matkovskaya who studied publications on the topic, the researchers have not reached the common ground regarding the nature of business ecosystems yet. The discrepancies are mainly connected with the fact that in the initial exposition the differences of ecosystems from other forms of cooperation and integration are not quite clear. Matkovskaya suggested her own approach to understanding the problem. First of all, she underlined that business models with ecosystematicity features are based on the system properties and should have the appropriate qualities. The participants' composition is important in the system. The author referred the initiator ("core"), orchestrator, partners and consumers to such, as applicable to business ecosystem model (Matkovskaya, 2021). Remembering the unregulated experience of companies placing the bet on the operation system CP/M, as described by Moore, we can agree that the lack of regulation is impossible in a system. We can also remind that A. Tansley revealed the self-regulation mode in a natural ecosystem, and the nature itself is the regulator. In an economic ecosystem the processes are organized artificially. Consequently, the mechanism imitating the self-regulation mode should be created artificially. The element called the orchestrator takes on this role.

Here we return to the issue about technological capabilities of business organization. Ya.S. Matkovskaya designated "the platform owner" as the orchestrator (Matkovskaya, 2021). A platform is a polysemic word. It is obvious that, in this case, we are talking about a digital platform. It should be indicated that this notion is understood differently. In numerous definitions, the authors call the software environment, information system, business model, enterprise, set of interconnected software and hardware, etc. as the determinative component. On the other hand, the explanations regarding the designation of platforms, as a rule, do not contradict each other. In different definitions the designation is explained as follows: provision of either "mutually beneficial interactions between third party manufacturers and consumers", or "direct interaction and execution of transactions between several groups of third party users", or

"execution of interrelation functions between market participants", or "facilitating exchanges between two or more interdependent groups of participants", etc. (Niyazova, Garin & Zlydnev, 2021). Here is an example of extensive definition of a digital program: this is "a digital form of organizing interactions between suppliers and consumers to minimize transaction expenditures when seeking partners, goods, services, executing payments, signing contracts, controlling fulfilled arrangements, evaluating reputation of sectorial participants, etc." (Styrin, Dmitrieva & Sinyatullina, 2019). In the frameworks of the investigation topic it is important to single out the relevant feature of the digital platform as applicable to ecosystem concept, therefore, having summarized the abovementioned, we will claim that a digital platform is, first of all, the tool for establishing the interaction between users interested in each other.

Research methods

The present research is an overview in the frameworks of the selected topic and is based on objectiveness and systematicity principles. The objectiveness principle conditioned the use of only reliable facts and data presented in professional sources and scientific literature. The principle of consistency is based on taking into consideration in the context of the study of the socio-political and economic situation in the country and the region, technological trends in the development of the service sector and creative industries.

The indicated principles were realized with the help of general scientific empirical research methods: data collection from scientific and professional sources, analysis, synthesis and comparison of the information obtained. The use of these methods allowed conducting complex research of the factors under the influence of which the ecosystem approach in tourist industry is currently being developed in Russia and Republic of Bashkortostan. To answer the research question about the origin of the terms and evolution of interpreting the notices, scientific papers were studied and analyzed, which are the theoretical basis of the ecosystem approach in economics and the interpretation of key provisions under the conditions of the Russian market. In the analysis of the development of digital platforms in Russia, scientific works of Russian scientists on the trends in the development of digital platforms and professional thematic digests from industry leaders in Russia were used. The study and

analysis of the specifics of development and expansion of platform services in Russian and regional tourism was carried out on the basis of scientific articles by Russian scientists on the prospects of digitalization and ecosystem development in the tourism and hospitality industry, as well as thematic articles from periodicals with comments from industry experts to form an idea of the diversity of opinions and the availability of professional discussion about the immediate prospects.

Results and Discussion

Evolution of digital platforms in Russia

Digital platforms have been blended in many spheres of activity. Social networks and messengers (VK, Tik Tok, WhatsApp, etc.) have been widely spread and have transformed the arrangement of communications. The methods and mechanisms of trade realization of E-commerce platform, i.e. electronic commerce, are actively changing (Alibaba, Wildberries, Ozon, etc.). The sharing platforms (Uber, Avito, etc.) provide users with “anywhere access to assets instead of the need to possess them” (Geliskhanov, Yudina & Babkin, 2018).

Let us return to Ya. S. Matkovskaya’s publication where the differences in business ecosystem from other forms of cooperation and integration are explained. The author, having provided “platform owner” with orchestrator’s functions, did not only underline the importance of development of digital technologies but also singled out one of the distinctive features of business ecosystem model – minimized bureaucracy shortening the “time-to-market” period (speed of commercialization of innovations) (Matkovskaya, 2021), and we cannot help but agree with it. As we see, the today’s understanding about business ecosystems has changed from the times when James F. Moore stated his opinion. He paid attention to the system role of the control factor but could not relate it with digital platforms, which were developed several years later.

Let us also point out that the evolution of ecosystem models is going on, the understanding of ecosystem participants is also changing. In particular, in cases when the ecosystem’s aim is to optimize the transaction (deal) from the point of supply and demand, the digital platform owner can function not only as the orchestrator but also as the core (Matkovskaya, 2021).

Let us point out another important moment. A business ecosystem can be built up for the sake of meeting one or several needs, to rely on one platform or set of platforms. In the evolution process, large ecosystems emerged working to satisfy multiple human needs (Bank of Russia, 2021). With such approach a human, when solving any everyday problem, gets an opportunity to use the unified access system.

In this regard, the experience of PJSC “Sberbank” is demonstrative. Using the strategy of establishing companies from scratch and merging players of financial and nonfinancial markets, Sber has built up the ecosystem where, apart from the initial financial segment, a number of segments of nonfinancial business have been developed: 1) e-commerce (marketplaces SberMarket, SberLogistika, Samokat), 2) health, including telemedicine, online medical appointment booking or calling a doctor (service Sberzdorovie), 3) entertainment (online cinema Okko and other services), 4) FoodTech&Mobility, i.e. services of ready-to-eat food delivery, taxi and car sharing (Delivery Club, Citymobil, etc.), 5) B2B-services for legal entities (cloud service SberCloud to store and process information, Bi.Zone company rendering services for protecting personal and commercial data, etc.), 6) other nonfinancial services: job hunting, real estate transactions, virtual mobile operator services, etc. (Rabota dlya vas (work for you), DomClick, Sberdevices, etc.). The user gets access to the whole diversity of offers through the unified access system Sber ID (Sberbank, 2021).

But there are only a few giants like this in Russia. Apart from Sberbank, they include Yandex, Mail.ru, MTS (Serov, 2021).

There is no need to build up the ecosystem on such a large scale. It can be built up around a certain basic need, for example, need in real estate. When forming such system, it is important to wisely cover the range of required products and services, and these are not only the services for selecting and purchasing the real estate but also mortgage, design, repair works, cleaning, etc. (Bank of Russia, 2021).

Current state of development of tourist platforms in Russia

Having formed the vision of the business ecosystem essence, we move to detailing the problem in the sphere of tourism and hospitality, which is based on interterritorial interaction and, obviously, cannot ignore digital technologies

opening ample opportunities both for business representatives and consumers (Morant-Martínez, 2019).

In recent years, tourists got used to services providing booking processes of travel tickets (AviaSales, Avia.tutu, etc.) and accommodation (Booking.com, AirBnB, Ostrovok.ru, etc.), search for excursion offers (Tripster.ru, Sputnik8, WeAtlas.com, etc.) and so on. At the same time, we now hear the proposals to create a national tourist and hotel ecosystem in Russia. In particular, in 2020 M.A. Morozov and N.S. Morozova gave voice for digitizing state services, i.e. to create a unified digital ecosystem of the state “instead of isolated separate information systems of federal departments, regional authorities and state services” and combine it with the national ecosystem of tourism and hospitality with different business proposals under terms of public-private partnership (Morozov & Morozova, 2020). The idea is clear as not only the services of transportation, accommodation, meals, entertainment, etc. are in demand in tourist and hotel sphere but also state services. Moreover, even then the Chairperson of the Committee on Social Policy of the Federation Council I.Yu. Svyatenko declared, “The government sees the need in unified digital tourist contour” (it was said about Russpass project). At the same time, Rostourism promoted the tourist website Russia. Travel (Korolev, 2020).

The situation became complicated in 2022 when a number of habitual foreign services left Russia (Booking.com, AirBnB, etc.). In business mass media we came across the opinion that 1) there is no point in letting them back to our market (“nobody will entrust again the data of Russian citizens to unreliable partners”), 2) there is no need to try duplicating the services, which left but it is better to create something that was created in no state of the world – own digital tourist ecosystem (this is “a difficult but quite realistic task”) (Golovina, 2022).

The endeavors in system tourist industry are realized. The service Russpass is being adapted to new conditions. In summer 2022 Russpass launched the project “We are opening Russia together” with SberStrakhovanie – Sber’s daughter company (Vedomosti, 2022). From the information website, Russia.travel has been converted into the interactive digital platform (Interfax-Tourism, 2022). Other participants of the service market are getting more active. For instance, a part of online platform Ozon, the service Ozon Travel, which has been rendering

the services of booking travel tickets for several years, has later started rendering insurance services, and in April 2022 declared about launching the hotel booking service “in the short term” (Chupanova, 2022). The services of booking travel tickets and accommodation are provided by the resource Yandex Puteshestvia. As we see, the process is going on, though there is room for improvement. Some experts affirm that digital tourism, despite the solutions for b2c-segment having emerged long ago, are still “in embryonic stage”, since all projects are concentrated on the limited number of one and the same functions (Solvyyova, 2022).

The digitalization of regional tourist industries is an important trend. Interesting projects exist. For example, the mobile reference guide “Altai Today” with a long list of services was developed in the Republic of Altai: booking of hotels and excursions, booking of transport and tours from travel agencies, assistance in working out walking, bicycle and automobile routes linked to the map, provision of information about sights, weather, recreation facilities, prices for services, etc. (Altai Today, 2022). This is an example of individual initiative. The ideas of bigger players are implemented. Thus, several cities and regions started building up the digital ecosystem based on the information web-portal, mobile application for iOS and Android and software for interactive city panels from the company “Rusatom Infrastructural Solutions” (RIS, a part of State Corporation “Rosatom”). As it is indicated in the project presentation, the information portal is “out-of-the-box” solution, i.e. the customer specifies the brand book content and decides himself what content should be uploaded into the system (Solvyyova, 2022).

The Republic of Bashkortostan participates in Russian digital tourist projects (Russpass, Russia. Travel, etc.) but there is no regional ecosystem of tourism and hospitality in the region. There can come up the question: Why do we need it, if the information about Bashkiria is accessible for millions of visitors of major digital resources? We think we need it.

First of all, the content from the region is prepared for the large system in compliance with the parameters set up in this system. In the regional system there can be own approach to forming the list of services and, consequently, to partners’ business offers (Markelova & Khairetdinova, 2022).

Secondly, digital technologies allow the system owner to receive data necessary for creating a

more precise vision of the regional tourist market and its players, about client preferences and correspondence of the rendered services with the expected ones, about social portrait of tourists, etc. It is important not only from the point of personifying offers and quality of targeted advertising but also for timely adaptation of the environment to changing needs of the tourists and correction of the regional strategy of tourism and hospitality development. However, in the situation of the region cooperation with a large resource, the information is concentrated not in the region but with the ecosystem leader whose vision specifies the evolutionary processes of the whole system. Therefore, we do not see contradictions in combining the already existing cooperation with the work in the frameworks of the regional ecosystem of tourism and hospitality created for the abovementioned reasons based on public-private partnership.

Conclusions

Thus, it can be affirmed that with the existing state of tourism digitalization the regional tourist ecosystem of business can be considered as a perspective phenomenon. On the one hand, the region gains certain benefit from federal digital systems, for example, in view of attracting tourists, as well as revealing demand tendencies common for the country and adapting own resources to the demand. At the same time, large systems do not cover many local issues, they are not direct data suppliers who could surgically inform the region about strengths and weaknesses of providing and rendering services, expediency of embedding new services relevant for the region into the system, trends in tourist industry development perspective for the region. Russia is a large country distinguished by natural, historical and cultural, ethnic, gastronomic diversity, and there is a reason everywhere to think what resources can be developed and provided with the necessary infrastructure. And regional digitalization can help a lot here.

Bibliographic references

- Altai Today. (2022). Mobile reference guide of Altai Mountains. Retrieved from <https://altai.traveler.today/>
- Bank of Russia. (2021). Ecosystems: approach to regulation. Report for public consultations. Retrieved from https://cbr.ru/Content/Document/File/119960/Consultation_Paper_02042021.pdf
- Chupanova, A. (2022). Ozon aims at tourism and ecosystem. Retrieved from <https://ko.ru/articles/ozon-zamakhnulsya-naturizm-i-ekosistemu/>
- Geliskhanov, I.Z., Yudina, T.N., & Babkin, A.V. (2018). Digital platforms in economy: essence, models, development tendencies. Research and technical bulletin of Saint-Petersburg State Polytechnic University. Economic sciences, 11(6), 22–36. DOI: <https://doi.org/10.18721/JE.11602>
- Golovina, O. (2022). Without Booking and AirBnB: how to use the crisis and fill the niche in tourist business. Retrieved from <https://rb.ru/opinion/tourism-startups/>
- Interfax-Tourism. (2022, January 20). Rostourism launched, a test version of updated national portal Russia.travel. Retrieved from <https://tourism.interfax.ru/ru/news/articles/84767/>
- Korolev, N. (2020, October 9). “Rosatom” will digitize tourists. Kommersant, 185, p. 9. Retrieved from <https://www.kommersant.ru/doc/4521969/>
- Matkovskaya, Ya. S. (2021). Ecosystem business models: methodological identification problems and some methods for describing their scaling processes. Management of large-scale systems development (MLSD'2021): Proceedings of XIV International Conference (pp. 151–158). Moscow: V.A. Trapeznikov Institute of Control Sciences, Russian Academy of Sciences.
- Mirkin, B.M., & Naumova, N.G. (2011). Brief course of general ecology. P. II: Ecology of ecosystems and biosphere: textbook. Ufa: Bashkir State Pedagogical University. Retrieved from <http://учебники.информ2000.рф/ekologiya/ekologiya1/ekologiya7.pdf>
- Moore, J.F. (1993). Predators and Prey: A New Ecology of Competition. Harvard Business Review, 71(3), 75-83.
- Markelova, E.S. & Khairtdinova, O.A. (2022). Development of mobile guides as a trend in tourism digitalization. Bulletin of Ufa State Petroleum Technological University. Science, education, economics. Series: Economics, 1(39), 39-44. DOI: [10.17122/2541-8904-2022-1-39-39-44](https://doi.org/10.17122/2541-8904-2022-1-39-39-44)
- Morant-Martínez, O., Santandreu-Mascarell, C., Canós-Darós, L., & Roig, J. (2019). Ecosystem Model Proposal in the Tourism Sector to Enhance Sustainable Competitiveness. Sustainability, 11, 6652. DOI: [10.3390/su11236652](https://doi.org/10.3390/su11236652)
- Morozov, M.A., & Morozova, N.S. (2020). Concept of digital ecosystem of tourism and hospitality industry. Modern problems of

- service and tourism, 14(4), 27–36. DOI: 10.24411/1995-0411-2020-10402
- Nazarenko, O.B. (2007). Ecology: study aid. Tomsk: Tomsk Polytechnic University. Retrieved from <https://portal.tpu.ru/SHARED/k/KOSTYRE V/Tab/nazarenko.pdf>
- Niyazova, Yu.M., Garin, A.V., & Zlydnev, M.I. (2021). Digital platform as information and economic structure. *Competence*, 1, 31–36. <https://doi.org/10.24411/1993-8780-2021-10105>
- Sberbank. (2021). SBER – more than a bank. Retrieved from <https://www.sberbank.com/ru/ecs>
- Serov, N.S. (2021). Business ecosystem as a stage of company lifecycle and element of smart management. *Economics of science*, 7(2), 135–143. DOI: <https://doi.org/10.22394/2410-132X-2021-7-2-135-143>
- Solvyo, N. (2022). Regional tourism and digitalization Retrieved from <https://www.it-world.ru/it-news/reviews/186408.html>
- Styrin, E.M., Dmitrieva, N.E., & Sinyatullina, L.Kh. (2019). State digital platforms: from concept to implementation. *Issues of state and municipal management*, 4, 31–60.
- Vaganova, O., Rudenko, I., Markova, S., Smirnova, Z., & Kutepov, M. (2019). The use of educational video materials in educational process of a higher educational institution. *Amazonia Investiga*, 8(22), 216-222. Retrieved from <https://amazoniainvestiga.info/index.php/amazonia/article/view/308>
- Vedomosti. (2022, July 15). SberStrakhovanie and Russpass will help tourists to open beauties of Russia. Retrieved from https://www.vedomosti.ru/press_releases/2022/07/15/sberstrahovanie-i-russpass-pomogut-turistam-otkrit-krasoti-rossii