**3.10. MANAGEMENT OF ACTIVITIES OF ENTERPRISES OF THE TOURISM INDUSTRY ON THE BASIS OF MODERN INFORMATIONAL TECHNOLOGIES**

A socially oriented market economy contributes to creating conditions for leisure and recreation of the population. Satisfaction of recreational, cognitive, spiritual and other needs of people through their movement in the social space by promoting tourism development [1].

Today, tourism is one of the most profitable branches of the world economy. In many countries it is the tourism industry is the main source of income of the state. Tourist activity is not only the attraction and effective use of recreational resources. The development of tourism at the regional level promotes the effective use of production, scientific and technical, socio-cultural, and environmental potential of a particular territory. So, the tourism industry acts a catalyst for regional economic development [2].

National tourism industry is in the stage of becoming. The number of Ukrainian citizens who traveled abroad has a tendency to increase. One of the factors for this phenomenon is functioning visa-free regime with the EU, which came into force in May 2017. Today, in the conditions of the rapid development of information technologies on the Internet there is a huge amount of available information, which allows ordinary people to independently order a trip, buy tickets for flights, track profitable offers, in the system on-line to make payments for travel services, which partly leads to the elimination of intermediaries in the market of tourist services.

At the same time, the analysis of tourist stream shows that during the years 2000-2017 there were negative trends in the development of tourism, namely, there was a decline in the "Incoming tourist stream".

At the same time, the analysis of tourist stream shows that during the years 2000-2017 there were negative trends in the development of tourism, namely, there was a decline in the Incoming tourist stream. In 2017, the number of citizens of Ukraine serviced by tour operators and travel agents was: 2365424 legal entities and 401397 physical persons; foreign citizens - 38563 legal entities, 1042 individuals [3].

During the specified period also decreased the number of subjects of tourism activity. Thus, in 2011, their number was 4157 (of which 2165 legal entities, 1992 - physical l persons), in 2017 their number decreased by 16.5% to 3469 (1743 legal entities, 1726 individuals).

The reasons for this downward trend are:

1) military actions, annexation of territories of the Autonomous Republic of Crimea, the city of Sevastopol, as well as territories in Donetsk and Lugansk regions;

*Table 1*. Number of tourists serviced by tour operators and travel agents[4]

| Category of tourists | 2011 | 2015 | 2016 | 2017 | 2017 by 2011, % |
|---|---|---|---|---|---|
| serviced by legal entities | | | | | |
| Citizen of Ukraine | 1441157 | 1800277 | 2216323 | 2365424 | 164,1 |
| Foreigners | 287185 | 14550 | 33784 | 38563 | 13,4 |
| serviced by physical persons | | | | | |
| Citizen of Ukraine | 109912 | 204140 | 298212 | 401397 | 365,2 |
| Foreigners | 2229 | 609 | 1287 | 1042 | 46,7 |

[1] Kryveha, L.D., Holovashenko O.V. Turyzm: problemy vdoskonalennia pravovoho rehuliuvannia v Ukraini [Tourism: Problems of Improving Legal Regulation in Ukraine]. web.znu.edu.ua. Retrieved from : http://web.znu.edu.ua/herald/issues/archive/articles/2754.pdf.

[2] Panukhnyk O. (2015): Innovatsiinyi potentsial rehionalnoho rozvytku turyzmu ta rekreatsii iz zaluchenniam molodizhnoho resursu: peredumovy formuvannia ta vektornist upravlinnia [Innovative potential of regional development of tourism and recreation with attraction of youth resource: preconditions of formation and vectoriality of management]. Halytskyi ekonomichnyi visnyk - Halytskyi ekonomic Bulletin, No. 2, pp. 5-12. Retrieved from : http://nbuv.gov.ua/UJRN/gev_2015_2_3.

[3] Statystychnyi zbirnyk «Turystychna diialnist v Ukraini u 2017 rotsi» [Statistical collection "Tourist activity in Ukraine in 2017"]. (n.d.). Kyiv : State Statistical Service of Ukraine, p. 90.

[4] Sait derzhavnoi sluzhby statystyky Ukrainy [The site of the State Statistics Service of Ukraine]. ukrstat.gov.ua. Retrieved from http://www.ukrstat.gov.ua/operativ/operativ2007/tyr/tyr_u/potoki2006_u.htm.

2) insufficient development of the tourism market infrastructure: unsatisfactory state of communication, especially road, often the inconsistency of conditions in the accommodation establishments of tourists and vacationers;

3) recreation zones, cultural and architectural monuments of Ukraine require reconstruction and bringing to a proper condition;

4) insufficient use of the latest information technologies in the tourism sector, namely: low level of information and communication infrastructure development; absence of tourism profile databases in separate regions of the country; limited information and advertising of tourist products in the interregional, national and international markets; imperfection of the mechanism of information exchange of business entities in the field of tourism and the environment through the Internet; low level of development of virtual tourist enterprises and centers; absence of the state electronic system of provision of subjects of tourist activity by operative information on demand, supply, prices, tariffs.

In spite of the above problems, in 2017, the trend of increasing the number of Incoming tourists in Ukraine after the double fall of the index in 2014 continued (Table 2). On the first place among the countries, according to the data of the State Border Guard Service of Ukraine, tourists from Moldova, on the second - Belarus, on the third - Russia. The number of tourists from Turkey, as well as Israel, has increased [1].

*Table 2*. Distribution of Incoming tourists serviced by tour operators and travel agents for the purpose of travel and tourism

| Purpose of the trip / kind of tourism | 2011 | 2015 | 2016 | 2017 | 2017 by 2011, % |
|---|---|---|---|---|---|
| Legal entities - all Of these, in order to: | 1099 12 | 1455 0 | 3378 4 | 3856 3 | 35,1 |
| service, business, training | 3669 | 2195 | 2331 | 4736 | 129,1 |
| rest | 8059 1 | 9782 | 2549 6 | 2998 5 | 37,2 |
| treatment | 1554 4 | 2427 | 5913 | 3009 | 19,4 |
| sports tourism | 6031 | - | 3 | 225 | 3,73 |
| specialized tourism | 342 | 81 | - | 258 | 75,4 |
| other | 3735 | 65 | 41 | 350 | 9,4 |
| Children aged 0-17 | 7024 | 46 | 267 | 320 | 4,6 |
| Individuals - all Of these, in order to: | 2229 | 609 | 1287 | 1042 | 46,7 |
| service, business, training | 112 | 14 | 30 | 24 | 24,1 |
| rest | 1689 | 186 | 861 | 409 | 24,2 |
| treatment | 218 | 409 | 396 | 609 | 279,4 |
| sports tourism | - | - | - | - | - |
| specialized tourism | 209 | - | - | - | - |
| other | 1 | - | - | - | - |
| Children aged 0-17 | 286 | 28 | 5 | 33 | 11,5 |

Tourist companies of Ukraine now operate in a more competitive environment and are forced to improve their range of services, to conduct a more flexible pricing policy. A clear evidence of the increase in the stream of Ukrainians in the Schengen Area is the aggravation in recent years of competition for customers between air carriers in Ukraine. As a result, the number of

[1] Chastka turyzmu v svitovomu VVP torik stanovyla ponad 10% [The share of tourism in world GDP last year was more than 10%]. (n.d.). www.ukrinform.ua. Retrieved from : https://www.ukrinform.ua/rubric-tourism/2431133-castka-turizmu-v-svitovomu-vvp-torik-stanovila-ponad-10.html.

tourists serviced by tour operators and travel agents in 2017 increased by 25,6820 compared to 2016.

In an environment of globalization, the effective development of tourism requires the use of modern management methods based on information technology and international communication systems. Thus, an important element management mechanism and regulation of tourism is to develop the information component that can provide its innovative development, information resources as a basis for decision-making.

Promotion of tourism activity and formation of a positive international image of the country should facilitate the placement of ordered information in the network of scientific and advertising character with the use of bibliographic electronic resources. The formation of such resources requires careful analysis of the spiritual, aesthetic, socio-cultural needs of different categories of internal and external tourists. Information placed on websites must comply with international standards of information. This direction of work is impossible without state support and appropriate quality control, because such information resources are the basis of "e-tourism".

One of the directions that will contribute to the dynamic development of the tourism industry in Ukraine and will allow local tourist companies to compete on the world market is the use of modern automation and information technologies.

World Tourism is a global computerized business related to providing tourist services. Tourist services are characterized by various features, in particular, complexity and variety (both from the point of view of the produce and the consumer), lack of material expression, variability and information saturation. These characteristics actualize the need for the use of information technology in the sphere of tourism.

In developed countries, there is now a rapid development of information technology and the continuous implementation of them in the relationship "seller-buyer".

Among the leading universities that are actively engaged in issues of information technologies in tourism, are:
• Bournemouth University (England);
 • University of Lugano (Switzerland);
 • University of Central Sweden;
• Hong Kong Polytechnic University (China);
• University of Central Florida (USA).

The following forms of using the Internet: the communication and advertising, promotion of tourist services; Marketing researches; electronic presentations; electronic international exhibitions and fairs; electronic booking and reservation systems; independent formation of the tour; Electronic catalogs of tourist products by directions and countries; quick access to receiving weather information, prices, tariffs, availability of transport; electronic payments; online tourism and more. At the same time, the Internet serves at the same time the most massive and almost the cheapest means of disseminating information and providing feedback.

Tourist firms can use various Internet resources for advertising: electronic bulletin boards on popular pages, commercial teleconferences; special sections for advertising on Web-sites and Web-portals. An effective way of advertising is to use the capabilities of search engines.

Thanks to the Internet, consumers can decide on travel services and, upon request, receive an answer in real time. Today, hotels are creating their own Internet servers, which enables potential customers to get acquainted with hotel information and book a room in advance.

Increasing the popularity of hotels contributes to the use of their technologies "Smart House", which enables economically to use energy resources, water, etc. and minimize the negative impact on the natural environment.

Innovative business card is the website of hotels, so their interface should be simple and convenient, and support is around the clock. On website, potential customers can see general information about the hotel, surrounding historical and cultural places, view photos of rooms, places of living and rest, and sometimes - get an on-line tour of the hotel.

High efficiency in the promotion of hotel services in the market have Internet marketing communications: contextual advertising, e-mail marketing, e-coupons, e-loyalty programs, forums, blogs, pages in social networks, viral advertising and more.

Especially popular today is the Internet, computer reservation systems of hotel services, car rentals, excursions or cruises and more. System on-line booking saves time and resources to travel agents located in different time zones. On the tourism market Ukraine operate global distribution reservation system «Amadeus», «Galileo», «Sabre», «Worldspan», whereby travel agencies can access the database providers of tourist services in any country.

For the effective operation of hotel reservations, the hotel's website should provide detailed information, including photos and description of rooms, their price category, as well as a list of additional services that potential customers from around the world can receive. The centralized sales system creates opportunities for storing information in the electronic personal office of the hotel, from which it can manage sales through all channels.

Processing of hotel reservation orders through its own website is done by the reservation service of the hotel. Standard requests are processed by an automated control system and preliminary confirmations are sent in response. After making preliminary guarantees from the client (prepayment, guarantee letter, etc.), the hotel finally confirms the reservation of the place and changes the status of the number on the website. Orders placed on the hotel website must be removed systematically and have priority when booking. However, because of poor security of financial settlement in our country service online reservation today underdeveloped. Therefore, hotels often make discounts for customers who reserve place in this way.

When booking hotel reservations from different sources, hotels have the opportunity to attract more consumers of different categories. However, in order to process booking information on time and efficiently, it is necessary to develop convenient unified forms of electronic documents and establish a system for their rapid processing. The creation of an electronic document should be preceded by a detailed analysis of the tourist information presented in the open information space and the study of consumer inquiries contained therein.

In the period of the information society, effective management of the hotel business is impossible without the electronic administration of hotel services, which allows for quick access to information about the services of the company, as well as to process customer orders in a timely manner. Automated control system (ACS) allows you to accumulate data and automate planning processes, accounting for management of all are directions of the tourism company. The introduction of electronic documents creates opportunities for automated documentation processing, integration of the hotel into a single information space. All this contributes to the acceleration of document circulation in the tourism segment, improving the quality of hotel services and improving the competitiveness of the hotel business as a whole [1].

When connecting ACS to the global Internet, the tour operator has the opportunity to analyze trends and interactions in the market, to bring in line with the market conditions for the implementation of its own packages of services, that is, to quickly adjust the marketing and pricing policy.

Effective functioning of tourist sites requires the competent use of marketing policy tools: media, banners, contextual advertising, distribution of site bulletins by e-mail to interested organizations, use of search engines, provision of feedback, etc.

A promising form of the relationship between tourism business with potential customers is the use of Cookie-files that allow WEB-servers to identify users. Cookie-files used in advertising, for example, provide an opportunity to determine the reaction of the consumer to advertising and in general its effectiveness.

Information technology is an effective tool for marketing in tourist enterprises. Marketing information is used by tourist agencies for marketing research, development and marketing strategy implementation; formation of a nomenclature and definition of necessary volumes of tourist services; definition of pricing methods and loyalty programs; marketing communications, etc. The

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[1] Smihunova O.V. (2017): Informatyzatsiia protsesiv upravlinnia v hotelnomu biznesi [Informatization of Management Processes in the Hospitality Business]. Proceedings from Marketing Innovation in Education, Tourism, Hotel-Restaurant, Food Industry and Trade: Mizhnarodna naukovo-praktychna internet-konferentsiia, prysviachena 50-richchiu zasnuvannia KhDUKhT (3 zhovtnia 2017 roky) - An International Scientific and Practical Internet Conference devoted to the 50th anniversary of the establishment of KHDUKT. (pp. 395 - 397). Kharkiv : KhDUKhT. hduht.edu.ua. Retrieved from : http://www.hduht.edu.ua/images/hduht/nauka/conf/2017/tezi_03.10.17.pdf.

ability to track information on the status of the tourism market quickly accelerates management decisions.

Suppliers of tourist services are organizations of various spheres of activity: hotels, transport companies, insurance companies, food establishments, excursion bureau, etc. To promote their services in the tourism market, coordination of their marketing efforts is required.

Ukraine has a huge tourist potential. However, today even Ukrainians are not aware of its diversity. In the conditions of economic instability, information technologies create conditions for the establishment and development of virtual tourist firms. This is especially true for tourist entrepreneurial structures of small business, represented, in particular, in green- tourism, eco-tourism, etc.

Virtual tours, contributing to the intellectual growth of "virtual tourists", give rise to their desire to visit museums and other interesting places in reality. The virtual tourist firm is an "information system of interaction between the subjects of tourism activity through Internet technologies for creation of tourism product and its sale to consumers" [1].

Barriers to the creation and operation of such virtual organizations in Ukraine are obstructed by the absence of a legislative framework; legal and technical aspects of the work of information systems (for example, confidentiality of information, viral attacks, low level of personnel qualification), financial and, most importantly, psychological readiness of consumers to receive virtual services.

A promising form of economic integration is the creation of virtual regional associations of tourist enterprises and close to them in the sphere of business. The activity of such tourist associations involves close interaction with state authorities, various economic entities: carrying out joint activities and realization of projects of effective use of tourist and recreational resources; compatible advertising, marketing, image politics; forming a united information and analytical base on the activities of tourism enterprises, etc.

Joint efforts should promote the formation of a positive image of representatives of tourism business in the regions, increased demand for tourism services, the establishment of an investment climate, which is a prerequisite for the growth of interest of tourists in the presented tourist service [2] contributed to the development of domestic Ukrainian tourism, as well as the export of tourism services by Ukraine.

The informational saturation of the tourism industry requires the active implementation and application of information technology, which will allow it to be effectively managed. Application of modern Internet technologies creates conditions for operative communication, identification of individual needs of clients, increase of speed of service and improvement of quality of tourist services, establishment of feedback, etc.

The activities of travel agencies are impossible without a well-established work of information systems. Today, the Internet is an important tool for globalization both for the entire national economy and for tourism, in particular. The implementation of almost all major business processes in tourists companies is impossible to access the global computer network.

Enterprises of the tourism sphere need state support. "Tourist" sections on the sites of state authorities and territorial communities should encourage a potential tourist to visit a particular tourist or recreational place.

It is necessary to formulate clear legislative norms that would regulate the tourism business against the background of Ukraine's entry into the world information space.

The joint efforts of the entrepreneurial structures of the tourist business and related industries with the assistance of the state should be directed at working out a set of measures aimed

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[1] Melnychenko S.V. (2010): Informatsiini tekhnolohii v turyzmi: teoretychni ta praktychni aspekty [Information technologies in tourism: theoretical and practical aspects]. Visnyk Zaporizkoho natsionalnoho universytetu - Bulletin of the Zaporizhzhya National University, No. 2 (6), pp 129–138.

[2] Hliebova A.O., Makhovka V.M. (2015): Virtualni obiednannia yak suchasna forma pidtrymky i rozvytku innovatsiinoi diialnosti na turystychnykh pidpryiemstvakh Poltavskoho rehionu [Virtual association as a modern form of support and development of innovation activity at tourist enterprises of the Poltava region]. Proceedings from Problems of formation and development of innovation infrastructure :III Mizhnarodna naukovo-praktychna konferentsiia. (14-16 travnia 2015 r.) – III International scientific and practical conference (pp. 134 – 141). Lviv : Natsionalnyi universytet "Lvivska politekhnika".

at improving the existing system for the use of various types of information technologies and formulating the provisions of the target program of development of information technologies in the activities of enterprises of the tourism industry.

Tourism is a promising sector for Ukraine, capable of providing employment, combining various branches of the national economy and contributing to the economic growth of the state.

On our point of view, information systems, data banks, networks and technologies have a special role in the development of the tourism industry, being not only an important factor, but also an integral part of tourism products and services.

They contribute to increasing their accessibility; disclosure of competitive advantages at the level of enterprises in general, provide consumer awareness, therefore, the dynamics of tourist markets.

Thus, by actively using the advantages of information systems and technologies and introducing them into activities aimed at increasing the marketing and advertising of tourist industry objects, it is possible to ensure a significant increase in the level of development of the tourism sector in general.

### *References:*

1. Kryveha, L.D., Holovashenko O.V. Turyzm: problemy vdoskonalennia pravovoho rehuliuvannia v Ukraini [Tourism: Problems of Improving Legal Regulation in Ukraine]. *web.znu.edu.ua.* Retrieved from : http://web.znu.edu.ua/herald/issues/archive/articles/2754.pdf.

2. Panukhnyk, O. (2015). Innovatsiinyi potentsial rehionalnoho rozvytku turyzmu ta rekreatsii iz zaluchenniam molodizhnoho resursu: peredumovy formuvannia ta vektornist upravlinnia [Innovative potential of regional development of tourism and recreation with attraction of youth resource: preconditions of formation and vectoriality of management]. Halytskyi ekonomichnyi visnyk - Halytskyi ekonomic Bulletin, No. 2, pp. 5-12. Retrieved from : http://nbuv.gov.ua/UJRN/gev_2015_2_3.

3. Statystychnyi zbirnyk «Turystychna diialnist v Ukraini u 2017 rotsi» [Statistical collection "Tourist activity in Ukraine in 2017"]. Kyiv : State Statistical Service of Ukraine, p. 90.

4. Sait derzhavnoi sluzhby statystyky Ukrainy [The site of the State Statistics Service of Ukraine]. ukrstat.gov.ua. Retrieved from http://www.ukrstat.gov.ua/operativ/operativ2007 /tyr/tyr_u/potoki2006_u.htm.

5. Chastka turyzmu v svitovomu VVP torik stanovyla ponad 10% [The share of tourism in world GDP last year was more than 10%]. (n.d.). www.ukrinform.ua. Retrieved from : https://www.ukrinform.ua/rubric-tourism/2431133-castka-turizmu-v-svitovomu-vvp-torik-stanovila-ponad-10.html.

6. Smihunova, O.V. (2017): Informatyzatsiia protsesiv upravlinnia v hotelnomu biznesi [Informatization of Management Processes in the Hospitality Business]. Proceedings from Marketing Innovation in Education, Tourism, Hotel-Restaurant, Food Industry and Trade: Mizhnarodna naukovo-praktychna internet-konferentsiia, prysviachena 50-richchiu zasnuvannia KhDUKhT (3 zhovtnia 2017 roky) - An International Scientific and Practical Internet Conference devoted to the 50th anniversary of the establishment of KHDUKT. (pp. 395 - 397). Kharkiv : KhDUKhT. hduht.edu.ua. Retrieved from : http://www.hduht.edu.ua/images/hduht/nauka/conf/ 2017/tezi_03.10.17.pdf.

7. Melnychenko, S.V. (2010): Informatsiini tekhnolohii v turyzmi: teoretychni ta praktychni aspekty [Information technologies in tourism: theoretical and practical aspects]. Visnyk Zaporizkoho natsionalnoho universytetu - Bulletin of the Zaporizhzhya National University, No. 2 (6), pp 129–138.

8. Hliebova, A.O., Makhovka, V.M. (2015): Virtualni obiednannia yak suchasna forma pidtrymky i rozvytku innovatsiinoi diialnosti na turystychnykh pidpryiemstvakh Poltavskoho rehionu [Virtual association as a modern form of support and development of innovation activity at tourist enterprises of the Poltava region]. Proceedings from Problems of formation and development of innovation infrastructure :III Mizhnarodna naukovo-praktychna konferentsiia. (14-16 travnia 2015 r.) – III International scientific and practical conference (pp. 134 – 141). Lviv : Natsionalnyi universytet "Lvivska politekhnika".