



Research Article

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Effects of ICT in Albanian Tourism Business

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DOI: <https://doi.org/10.36941/ajis-2020-0129>

Abstract

The digitalisation in the manufacturing and industrial sectors has been fast 'exported' in tourism industry as well. The technological revolution has highly affected both the supplier and the consumer of tourism products and services. There is recently an increasing attention from the industry and academia in order to highlight the challenges of ICT use in tourism and the drivers of "smart tourism" in world level. Our study joins these efforts with the goal to observe the use of information and communication technologies in Albanian tourism and detect the elements of smart tourism in it. The survey and interviews with a sample of experienced medium size tourism companies were used to assess the expansion of ICT in their overall activity. The data collected and processed did enable to point out the penetration of digital technologies in Albanian tourism. Further on, some features of smart tourism are highlighted and some drivers of digitalization in Albanian tourism are brought to the attention of stakeholder groups.

Keywords: Digital transformation, ICT in tourism, social media, smart tourism, drivers of technological advancement

1. Introduction

The spreading of internet has been very influential in all economic sectors and it could not leave out the tourism industry. The Internet has contributed to the enormous dissemination of information, making everything reachable 'by a click', enabling the demanders and suppliers to collaborate out of physical contact. In the digital age everything related to technology, automation and communication is considered "...4.0" and it seems to happen everywhere. People talk and write on "Marketing 4.0", on "Industry 4.0", on "Tourism 4.0"; even in the process of education they are talking about "Education 4.0". There is a technological component that increasingly weighs in our modern society and allows us to automate processes, build procedures in order to use more information and hopefully ensures their security.

The use and correlation of a large amount of information in the shortest possible time, practically in real time, has changed human behavior, the process of decision-making and consequently the social existence. Moreover, this is happening very fast anywhere. The digital world has enfolded the tourism market too, from information to products and to the consumers as well.

As Friedman (2017) portrays the accelerations occurring in this new century, the world is not only changing rapidly, but is completely transforming its shape. "It is starting to function differently, and this re-modeling is developing at a faster pace than the one with which we, our leaders, our institutions,

our societies and our ethical choices can adapt” (Friedman, 2017). This intensity of change has made the tourist products much more massive, almost “essential” products, increasing considerably the part of the population that could enjoy them.

A few figures and facts in global or even European level would be sufficient to illustrate that tourism has seen continued expansion over time. The UNWTO reports 1,401 million international tourist arrivals and a total of 1,451 billion USD receipts in 2018 (UNWTO, 2019). Europe has 51% of the tourist arrivals share (710 million) and 39% of receipts share (USD 570 billion) during that period.

The European Union has seen an evolution of tourism, statistically expressed in form of the occupancy of collective tourist accommodation, referring to the number of arrivals (at accommodation establishments) and the number of nights spent by residents and non-residents (Eurostat, 2019). This last indicator is pointed out in figure 1.

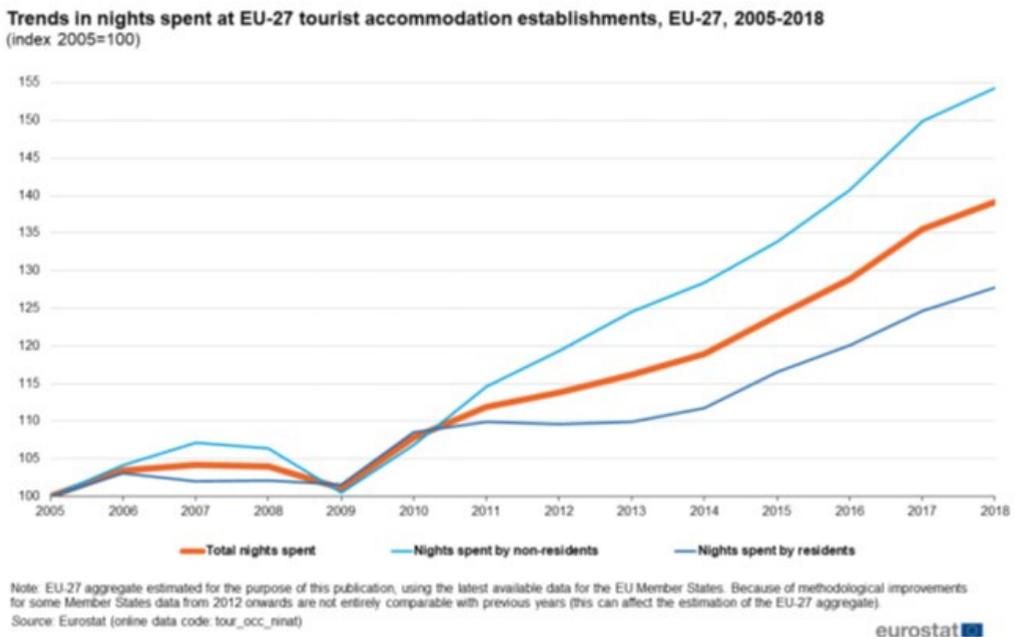


Figure 1. Changes in tourism

Source: Eurostat, 2019

Tourism has been growing faster than merchandise trade, despite occasional shocks like the actual one caused by Covid-19. The share of leisure travel has grown from 50% in 2000 to 56% in 2018 globally, according to last reports by UNTWO (2019). Expectations are still optimistic: with international tourism arrivals growing ahead of the long-term growth forecast, the threshold of 1.8 billion is now likely to be exceeded in advance of 2030 (OECD, 2020).

Digitalization has had a great impact on tourism, becoming a key element of the competitiveness for companies in this sector. It is well known and accepted that the competitive advantages of tourism products are closely related to the natural resources of different countries, but also to a number of other factors where we would single out communication. In a few decades the tourism market reached a level of digital communication where social networks actually play a dominant role in the decision-making of tourists. Tourists are increasingly connected to the internet, utilising a lot of tourism-related mobile apps, accessing real-time news, transport and online booking platforms, and utilising social networks for a wide range of tourism services.

However, as the experts of Roland Berger GmbH (2014) mention in their studies “New transforming technologies such as the Internet or mobile phones have not been successful just because they were new, but because they were also followed by a societal transformation. The Internet as a technology did not invent social networks, but social networks developed thanks to the Internet, and also enabled it to develop further.” It is highly expected to happen the same thing with other enabling technologies of Industry 4.0 (Schwab, 2016), by bringing new functionalities and changing the rules of the game for the industry players. As Porter (2001) was pointing out almost 20 years before, the key question is not whether to deploy Internet technology - companies have no choice if they want to stay competitive - but how to deploy it. The development will proceed at different rates in different industries. The pace will depend on many factors, amongst which on effective strategy in order to gain a competitive advantage.

Products in the tourism market became easily perceived on the Internet with the classic means of mass communication, consequently the Internet in tourism was massively adopted by both suppliers and consumers. From this point of view the effects of information technology in tourism are more obvious, although increased efforts are required in country, regional and global level. The results of a 2014 public consultation on the future of European tourism indicated greater dialogue is needed between the relevant digital and traditional tourism stakeholders in order to create a common understanding over digital developments and their implications for the tourism sector (OECD, 2016).

Actually the Covid-19 pandemic has acted as a catalyst for most businesses to improve their digital presence and search for new digital solutions suitable to the needs of their customers. The tourism sector is no exception, although it is among the hardest-hit of all sectors worldwide (UNWTO, 2020). Albanian tourism should benefit from the occasion and every contribution to this challenge might be helpful.

2. Research Framework

The growing importance of digital technology and social media in tourism creates challenges and opportunities for tourism enterprises. The transformations the tourism sector has gone through in last decades provide the background to start the observation.

2.1 Tourism advancement - a literature review

While analysing the current status of tourism, Adamo (2018) highlights that “Significant changes have taken place since the introduction and distribution of PCs, tablets and above all smartphones, with their applications that allow us to define current, post-Fordist tourism as “Smart Tourism”. The new phase of tourism, evolving with the speed of network connections, is characterized on one hand by greater automation, due to the computerization of processes, and on the other hand by faster connections between entities and consumers, which favors their interaction” (Adamo, 2018). Moreover, surveys show that 80% of the actions to enjoy and consume a tourist product can now be performed by a smartphone (Venini, 2018).

The tourism market itself, in search of a new equilibrium, has done one of the most important technology-oriented advancement of recent decades, encouraging interaction. Consumers (tourists) began to generate content, exchange experiences, thoughts and opinions, influencing the reputation of tourism products, as well as taking an active part in creating new ideas or products. The interaction between consumers/ tourists and the suppliers in the tourism market brought to the term “Smart Tourism” or “Tourism 4.0”. This came after the term “Fourth Industrial Revolution” or “Industry 4.0”, that was widely described and used in the recent industry and academia publications (Korze, 2019). It is almost generally accepted that the term Tourism 4.0 is rooted in Industry 4.0, similarly to other terms ending by ‘...4.0’. According to the European Parliament (2016), Industry 4.0 “describes the organization of production processes based on technology and devices that autonomously communicate with each other along the value chain in virtual computer models”. For Schwab (2016),

leader of World Economic Forum, also first and the most known author on this topic, Industry 4.0 is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, enabling the creation of new business models and absolute customization of products and services.

While Industry 4.0 aims to achieve higher added-value products and services through operational efficiency and the automation of the production process by utilizing the modern technologies, it is almost logical that Tourism 4.0 might intend doing the same for the tourism sector. International organizations, in their analysis and efforts to stimulate development, do clearly state that technology advancement is definitely one of four megatrends that are likely to have significant impacts and relevance in tourism development (OECD, 2018).

Researches show that there is a wide range of ideas and activities put ‘under the umbrella of Tourism 4.0’ in different countries, e.g. fostering tourism entrepreneurship, implementing tourism action programs, encouraging tourism digital innovations, designing tourism digital ecosystems etc. (Pencarelli, 2019), (Dredge, 2018), (Ambrogio, 2017). Generally, most of them are related to technological changes of the fourth industrial revolution, adapted to tourism. While tourism is characterized mostly by services (not tangible products) which are co-created by their users, it is logical that the paradigm of Tourism 4.0 is slightly different to the paradigm of Industry 4.0 (Peceny et al., 2019). Nevertheless, all organizations and countries taking initiatives to encourage and involve in Tourism 4.0, have expectations that it should “unlock the innovation potential in the whole tourism sector”. This will happen with the help of key enabling technologies of Industry 4.0 mainly adaptable to tourism, such as Internet of Things (IoT), big data, blockchain, AI, virtual and augmented reality. But Tourism 4.0 concept / paradigm goes beyond the enabling technologies. It is also about establishing collaborative ecosystems, involving local inhabitants, local authorities, tourists, service providers and governments that can co-create an enriched tourism experience in the physical and digital world. In this new collaborative ecosystem, the key enabling technologies from Industry 4.0 should match to the Tourism 4.0 principles. The focus of Tourism 4.0 ecosystems are the local communities and not only tourists (Korze, 2019).

In this framework, it becomes more evident that the key elements of the tourism market, sellers (hotels, restaurants, tour operators, etc.), goods and services (various tourist products) and buyers (tourists) are highly connected and conditioned by each other. Thus, the suppliers try to use the characteristics of the geographical resources of the territory in order to build tourist products for certain profiles of clients. This brings to the competitive advantage of the tourist territory, as well as to the competitiveness of the tourist product. Consequently, it also determines the market strength of the organization that offers it. The whole set of elements provide data which are classified, evaluated, processed and become the input to set up tourism policies and/or tourism products by the tourism market players (Çeltek, 2020).

Corigliano & Baggio (2013) mention several factors that can drive the integrated management in tourism. The evolution of tourism product’ policies towards personalized models, the trend for product differentiation, as well as the increasing pressure of competition between destinations arising from the globalization of the tourism market are some of the factors influencing the competitiveness of tourism organizations, which are themselves highly influenced by technological advancement.

As confirmed by the World Tourism Organization in its development agenda until 2030, technologies can become an integral part of the development of tourism strategies (WTO, 2019). Today, the tourists seek innovation, and do appreciate more those operators who know how to provide them with what they want, without ever neglecting the quality of service. The importance and need for innovation of tourism products and services remains a necessary requirement for a full development of tourism industry. This cannot happen without a widespread use of information and communication technology. The lessons from Porter at the beginning of this century remain valid: “The Internet per se will rarely be a competitive advantage. Only by integrating the Internet into overall strategy will this powerful new technology become an equally powerful force for competitive advantage.” (Porter, 2001).

2.2 Going from international to national level – country context

The Albanian national strategy for sustainable tourism development 2018 – 2022 assigns as one of the strategic objectives “the improvement of ICT infrastructure in public administration for harmonized and integrated developments according to international standards for e-government in all sectors (health, education, environment, agriculture, tourism, culture, energy, transport, etc.) in order to achieve a thorough intercommunication of all systems by the end of 2020” (MTE, 2018). Due to its role, obviously tourism is included in the government digitalization’ policy as an important sector of the economy.

Following the international standards and methodology of economic activity’classification, Tourism includes accommodation, food and drink services, travel agencies, tour operator, car rentals and other reservation service activities (2 digit NACE Rev.2: 55, 56, 77, 79) (EU/ Eurostat, 2018). Official publications from Albanian Institute of Statistics (INSTAT, Tourism in figures 2019) show that activities related directly with tourism generated 45 ALL billion (Albanian currency LEKE) value added in 2018 with a contribution by 2.8 % in GDP. Taking in consideration the indirect effect of those expenditures in other activities, this contribution is higher (WTTC, 2019). Tourism contributes to directly employing around 90.000 persons (2019), amongst which a high proportion are women and young people (RisiAlbania, 2014). However, from around 20.000 enterprises that are part of this sector by the end of 2019 (Register of enterprises, INSTAT), 95% of them have a limited number of employees (1-9 persons), 4.5% of them have 10-49 employees and less than 0.5% employ 50+ persons.

Considering the role of tourism in Albanian economy, our work intends to look into the digitalisation in Albanian tourism sector, especially by comparing it with other branches of the economy. The Albanian Institute of Statistics has, since 2016, realized surveys to evaluate “Use of Information and Communication Technology in Enterprises”, providing annual results from different business activities (INSTAT, 2019). The tourism activity has been included in the surveys, but without any specific attention to this sector.

The main goal of this study is to observe the use of information and communication technologies in Albanian tourism and envision what the future can bring for it.

The analysis will build on several questions that comprise the key objectives of the study:

- what is the role of ICT development in the Albanian tourism compared to other economic activities in country?
- are there features of the “smart tourism” or Tourism 4.0 in Albanian market?
- what factors would support the digital transformation in Albanian tourism?

3. Methods

SME-s are dominant in Albania in all economic activities. The same happens in tourism industry that includes a large number of micro and small enterprises providing food & drink, accommodation, travel and guide services, and other services closely related to tourist needs. Surveys in a number of countries, including European developed ones, have shown that SMEs often lack both human resources and the skills needed to digitalise, as well as resources required for training. The costs of implementing new technology are another important concern for tourism SMEs (Dredge et al., 2018). Also, the results of various researches from many sub-sectors of the tourism industry have shown that travel agencies and tour operators are the most prominent adapters of information technology and e-commerce, followed by the sub-sector of accommodation units, and afterwards, by the restaurant sector (EC, 2006). These arguments has affected our choice of the target companies and the methodology for our purpose of analyzing the expansion of the information and communication technology in the Albanian tourism.

Our survey is realized using a questionnaire with 21 questions, most of which are similar to those used by INSTAT for measuring “Use of Information and Communication Technology in Enterprises” in 2019. The intention was to obtain data on tourism enterprises that could be comparable to other economic activities in Albania. The INSTAT surveys were done in enterprises of different economic

sectors, tourism included, which permits comparisons between sectors. There is one condition applicable to both cases: the size of firms in terms of number of employees should be equal. The data collected in our survey was processed excluding companies with 1-9 employees and the results are provided considering those enterprises from tourism sector that have 10+ employees.

The survey by INSTAT (ICT survey, 2019) is applied in a broad range of economic activities, where manufacturing, construction, information and communication activity itself, professional services as well have a considerable weight. It is also based on the European Commission survey' structure and methodology (EC, 2019) and contains detailed questions not necessarily applicable in tourism. In the light of above fact, we left out of our questionnaire a few questions not affecting the research on ICT use in tourism activity.

On the other hand, there are added in our questionnaire several questions purposely made to observe specific issues of the tourism market recently developed under the name of "smart tourism". The answers to such questions provide information regarding: the potentials for the customization of tourist products, the use by companies of data obtained from the social media, the use of digital platforms for exploiting regional/ national information on tourism, and the managerial aspects of organizations operating in tourism sector.

In order to detect elements of smart tourism in country and to highlight factors and ways to further encourage them, structured interviews were conducted with some companies from those participating in the survey. The intention was to figure out how top managers of tourism companies perceive the future of their activity in close relation to ICT advancement, which couldn't be apparent from the information collected through the questionnaire only.

The target of our survey was that part of tourism activity providers which are making more extensive use of information and communication technologies for business purposes, as abovementioned (Dredge et al., 2018), (EC, 2006). We did put the Albanian tour operators in the focus of our survey. There were 151 tour operators licensed by the Ministry of Tourism and Environment carrying out their activity in January 2020 (time of survey) (MTE, 2020). As to the geographic distribution, 72% of them are located in Tirana, capital city, around 9% in Saranda and almost 5% in Durres. The remaining companies were located in 13 other towns, although they might operate locally or throughout Albania (Figure 2).

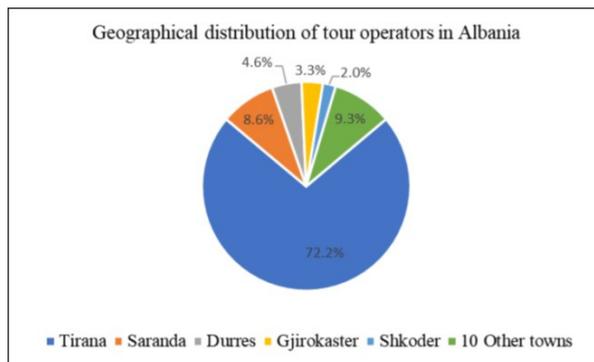


Figure 2. Tour operators location in Albanian territory

Source: MTE, processed by authors

The questionnaire was sent to all tour operators and answers were collected during a one-month period, from January 15 to February 15, 2020. 57 of the companies did respond, equal to 37,7% response rate. Around 74% of the respondents were employing more than 10 employees, thus fulfilling the requirement for taking their answers in consideration both as source of information for the sector in

question, as well as for comparison purposes. They all were in operation for more than 5 years, while the other 15 companies (remaining 26%) are considered micro businesses. From the total number of tour operators, 43% of them have more than 10 employees, while 57% employ from 1-9 persons. A higher proportion of medium size companies responding to our survey enables having data more comparable with those of INSTAT' survey.

Finally, the data collected by this sample of 42 respondents was processed and made the basis of discussion regarding the use of ICT in Albanian tourism companies. For further discussion on smart tourism elements and drivers, interviews were realized with top managers of 10 companies randomly selected from the respondents and located in capital city.

Selection of tour operators only as the target of our study, which was constrained by the difficulties of realizing a bigger survey with companies in other sub-sectors of tourism activities, is one of the study limitations. However, it is also an opportunity for future searches in the field, by the same or different authors.

Also, a higher response rate was expected, which would bring more significant results and conclusions. Fortunately, the opinions expressed by respondents during the interviews have in some extent helped to compensate this shortcoming.

4. Results and Discussion

There are various key indicators used for tracking the digitisation processes in different businesses, generally accepted and made comparable in the international level. Having a website or homepage and using any social media are mostly up ranked in the European and national level. (DESI, INSTAT). Number of persons using internet and computers, and companies employing ICT specialist are amongst the dimensions that help the analysts to judge upon the degree of penetration of digital technologies in different sectors, countries and regions.

The Albanian tour operators responding to our survey did report they all have internet access. All their employees should can, according their job description, and actually are using a pc or smart device. In the company level, they all possess digital archives for customers, products and finance activity. These indicators are in the upper limits regarding the degree of ICT use for all types of businesses operating in the Albanian market, as per last ICT survey reported. They are in the same level with the biggest companies in Albania (250+ employees), which represent only a small percentage of businesses in most of economic activities, tourism included.

- Asked about the quality of the broadband connection, 42.9% of Albanian tour operators confirmed they are using internet connections with maximum download speed from 10 -30 Mbit/s. At the country level, number of businesses using such connections is 32.7% (2019). This indicator highlights the increased chances of tourism companies to expand the digital position in the market in terms of quantitative and qualitative data. The fact that tour operators are positioned higher than companies from other economic activities shows their actual advancement and the potential for a faster pace in the digitalization of their activity.
- Infrastructure and devices are worthless without the human capital. Employing ICT specialists is an important indicator of the capabilities companies raise in order to adopt the latest technologies applicable in their activities. It is one of the question in most of surveys related to digital transformation and we did it to our sample companies too. From the respondents, only 21.4% of tour operators have employed persons graduated in ICT. This is a lower level than the average for all the economic activities in country. The number of companies employing specialists in the field of information and communication technology is 23.4% during 2019, with a slight increase from 22.9% in 2018) (INSTAT, 2019). This seems contradictory to the fact that when tour operators are asked about engaging full-time or part-time employees for network maintenance, online promotion of products and other digital services, 85.7% confirm they do have such staff. In order to avoid any inaccuracy, this issue was further and deeper observed during the interviews. From the conversations with the top

managers of tourism companies contacted, it was clarified that in most cases the professional work for the maintenance of the systems, networks, programs, additions or modifications to the platforms used, was done by external contractors. In their opinion and from experience, this is cost effective and ensures the quality of service as well. In some cases, the suppliers of devices and software take over not only their warranty, but also the training and maintenance of the systems. The companies who had employees graduated in ICT have hired them mostly because of skills and abilities to perform tasks in tourist activity then due to expertise in information technology. The ICT knowledge and qualification of those graduates are certainly an advantage and makes them more valued employers for tourism activity while considering the digitalisation' trend of the sector.

- Possession of a website and what are its functionalities are key questions in most surveys on ICT too. 85.7% of tour operators did answer “yes” to the question if they have a website/homepage. Asked about the interactive functionalities of their website, 91.7% of them confirmed they use it for personalized communication with clients. According to the interviews, almost all of them have additional programs for specialized communication, which means these companies have paid great attention – as it should be - to the customer relations by using advanced technology (Figure 3).

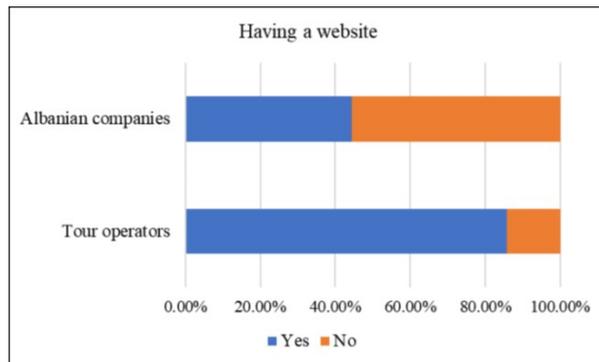


Figure 3. Companies having a website
Source: INSTAT & authors survey, processed by authors

From the national survey of 2019, Albanian companies (in all activities observed) that have websites are 44.5% of companies that use computers with Internet access, slightly less than the figure 44.9% of 2018. As to the pattern of use, 87.8 % of enterprises in 2019 were using their websites to display product catalogs and/or their prices.

- Online sale of products or services through the company' website is another dimension of digital progress, especially for the companies with 10 or more persons employed. In general Albania fall behind European countries (EU-28), where one in five enterprises made electronic sales in 2018. However, even in those countries the share of companies making e-sales and the turnover from e-sales varies significantly according to size (DESI, 2018). According to our survey, 58.3% of tour operators that have a website enable online sales of their products. This is in line with other dimensions and features of the company' functioning and organization that reinforce it, such as card payments or the use of e-banking, as will be mentioned below. This indicator can be considered a promising one, keeping in mind the evidence from interviews that the company' websites provide such functionalities regardless of the level of using them by consumers. This brings in the issue that might be a gap between suppliers and consumers in tourism in terms of level of digital education and access to technologies, which

affects the degree of digital penetration.

In country level, only 5.8% of enterprises in 2019 have sold products / services through a website or dedicated applications, from 5.6% on previous year. The largest share of e-sales goes to enterprises operating in information and communication activities with 28.5%, followed by accommodation and food service activities with 12.8% and administrative and support services with 9.7%. The different levels of e-sales among tourism sub-sectors are closely related to the heterogeneity of products and services they provide.

- Use of social media is becoming a strong marketing instrument for many companies. Social networks (Facebook, Twitter, YouTube, Instagram, etc.) are being used by 92.9% of tour operators. They consider such use as a key factor in attracting new customers and increasing the market. As confirmed from the interviews, social networks are the main means of communication between tour operators and their clients. This communication helps them to build new tourism products, to improve the service' level, to collect data regarding the profile of potential customers, etc. In many cases, the visibility of social networks permits even information and judgment on the competition, especially for small companies with limited resources dedicated to market studies.

Consecutive surveys from 2016 in Albania show an increase in using of social media (Facebook, LinkedIn, Twitter, Youtube, etc.), with 59.5% of companies (that use computers with Internet access) in 2019, compared to 52.4% that was in 2018. During 2019, social media was used to improve the image of the enterprise or product market (eg for advertising, for launching a new product , etc.) in 82.2% of Albanian enterprises from 80.0% that was in 2018. Only 26.7% of enterprises have used social media to exchange opinions or knowledge within the enterprise from 25.4% that was in 2018 (INSTAT, ICT 2019).

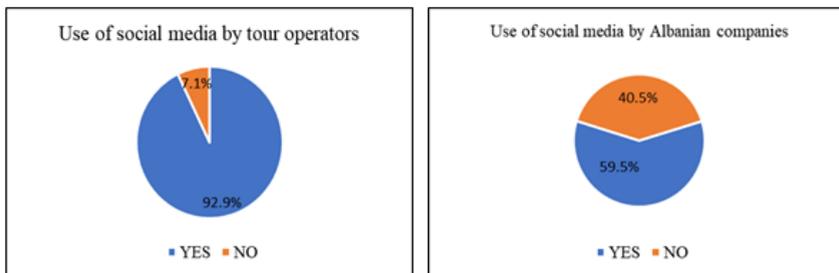


Figure 4. Use of social media

Source: INSTAT & authors survey, processed by authors

In general the most obvious result is that medium tourism enterprises (10+ employees) are more active in terms of adoption of different information and communication technologies compared to companies of the same size from other industries. This trend might extend in a greater number of tourism enterprises, including micro and small ones (employing 1-4 and 5-9 persons, acc. INSTAT classification), that constitute the majority of the sector in Albania.

Beyond the comparable indicators, the collected information from the survey and interviews permit the discussion of some elements related to the digitalization of the running activity of companies and the factors encouraging further advancement in tourism sector.

Management, accounting, finance and marketing functions in tour operator enterprises are considerably affected by digitisation. The data show that 78.6% of tour operators are users of e-banking, 42.9% offer the opportunity to make payments by card, and 42.9% of them are involved in online public procurement activities.

Most of tour operators declare having established good databases for their customers. This is

complementing the fact that 91.7% of them were working hard to have customized relations with their clients relying on digital technologies.

Human resource management couldn't be out of digitalization influence. Moreover, in actual conditions of pandemic and an uncertain future of face-to-face activities, it is worthwhile to point out a few issues on labor relations. They relate to distance working and training of employees for use of information technology in tourism companies. There was at least one employee working remotely in 58.3% of the surveyed businesses since before the pandemic period (survey done by the beginning of year 2020, data processed and analysis realized during the pandemic period in Albania, March - April 2020). After the pandemic period it is highly expected this number will be increasing, regardless of the lockdowns imposed for the time being. It is also found that 46.2% of the companies were conducting employee' trainings, most of which focused on digitalization in touristic operations. Both issues depend on digital technologies and bring to our attention the elements of industry 4.0 applied in tourism.

A large part of Albanian tour operators (64.3%), are interested in accessing the digital platforms of the local government for information on tourist places and local events. Unfortunately there aren't many municipalities providing this opportunity. Even services such as urban or regional transport are missing the digital platforms which could offer detailed information open to interested individuals or companies, facilitating the touristic activities in real time. There are only a few cases of local government providing digital tourist kiosks (Tirana, 2019) and digital platforms (Gjirokastra, 2020), while in other locations the tourist is almost powerless to get general and practical information in digital form. The role of government to drive the digitalization process in general and that of tourism in particular seems to be of paramount importance (MTE- Due mari, 2020).

5. Conclusions

Research findings from our work permit to draw some conclusions. They respond to the study objectives and encourage the attention of all stakeholders for tourism ecosystem development.

There is an obviously important role of digital technologies in Albanian tourism. The use of information and communication technology by Albanian tour operators is in a higher level than the average level for economic activities in country, officially measured and available in form of comparable indicators.

This is mainly conditioned by two factors: the first is endogenous and driven by the type of activity itself, which is biased to adopt the technological advancement and innovation. The second relates to the market forces' interaction. Albanian tour operators are closely connected to foreign ones and necessarily acquire their means and experience faster than other types of businesses. On the other hand, the consumers are definitely requiring most advanced, innovative, specialized and customized products and services that can be realized through digitalization more easily than in other branches of the economy.

Albanian tourism market displays some initial elements of "smart tourism", amongst which can be mentioned digitally enabled functions such as personalized communication, special elements of digital marketing, and use of programs for economic decision-making by the companies.

Albanian tour operators are still far from Tourism 4.0-related technologies such as cloud computing, use of Big Data in travel experiences, use of IoT for virtual demonstration of tourist places or products, and above all in technology-based business models. However, their knowledge and awareness about benefits of technological progress in tourism will hopefully contribute to a faster pace of smart actions towards a smart tourism.

It is generally accepted that the challenges and obstacles in tourism ask for policy responses and interventions that should be appropriate to assist digitalisation in tourism sector with the participation of many stakeholder groups. Both private and public organizations, both in local and national level might all contribute to higher levels of digitalization. In our country context:

- A key driver for increasing the ICT use in Albanian tourism is the greater integration of the Albanian market in the regional and European one, as it affects the demand and supply as

well.

- An important factor is the implementation of the government's digital agenda for tourism sector in central and local level. Improvement of country' digital infrastructure, establishment of information platforms for local events, development of virtual tourism products for museums, products of religious tourism, archeological sites will be core elements supporting the digitalization of Albanian tourism.
- It should not be forgotten that there is no digital development without proper education of businesses and consumers. At this point, education plays a very important role and becomes a strong driver to higher levels of digitalization of any sector, any economy and any country.

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