

THE ROLE OF ALTERNATIVE TYPES OF TOURISM AND ICT-STRATEGY FOR THE TOURISM INDUSTRY OF LESVOS

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This paper suggests that Information Communication Technologies (ICTs) constitute a key factor for promoting economic growth, especially for tourism economy-based regions. The adoption of ICTs in the tourism sector, assists the produced outcomes, introduces innovation and facilitates the shift to a knowledge-based economy. The case of the Lesvos island, in Greece, is considered. A survey is conducted, concerning the development of the tourism sector in Lesvos Island and the role of ICT-use. Data collected from both Greek and foreign tourists and were descriptively analysed. Results indicate the critical role of alternative types of tourism for the development of the tourism sector in the island, while ICT-use has the potential to extend the period of tourism

Keywords: ICTs, alternative types of tourism, Lesvos island, regional development

JEL Classification: L83, M1, O1

INTRODUCTION

On March 2000 in Lisbon, the European Council set out the Lisbon Strategy where aim is to make Europe “the most competitive and dynamic knowledge – driven economy by 2010. The fulfilment of this goal is based to large extent on the economic growth and social improvement of EU regions. The regional development is reflected by the productivity rate, the employment rate and the social inclusion. Under this perspective, EU regions need to focus on improving their competitiveness by creating opportunities for employment and increasing productivity. Additionally,



on 2 February 2005, the European Commission relaunched the Lisbon strategy for the European Union (EU). The strategy seeks to tackle the EU's urgent need for higher economic growth and job creation and greater competitiveness in world markets.

Development of the remote (rural and island) areas, mainly via the inclusion of Information and Communication technologies –ICTs at all the economic sectors, is the key tool for encouraging diversification and innovation in those areas. Based on the above point, the Greek Region of the Aegean Islands is driven into policies for inclusion of new technologies and the blending of digital services into traditional services providing information and context for the creation of innovative action in the tourism sector. Especially for the island of Lesbos, its main advantage is the tourist product (tourism, culture, history, environment, geographical positioning), while its development is held back due to splitting in many parts and insufficient ICT infrastructure.

This paper suggests that ICT-use could affect positively the tourism sector in island areas. Additionally, for Lesbos island, agritourism is the key tourism sector for the economic development of the island. The paper is organised as follows: the following section presents the state-of-the-art regarding the characteristics of island societies. The main characteristics of the Aegean island region and especially Lesbos island are also presented. The next section discusses the role of tourism for regional development, especially for Greek islands, while the following section presents the results of a survey conducted in Lesbos island, concerning the development of the tourism sector in the island and the role of ICT-use. The final section concludes the paper.

MAIN CHARACTERISTICS OF ISLAND SOCIETIES

Keeping in mind that remoteness is the most distinguishable characteristic of all island societies, the major negative development issues in island areas seem to be the following (Kakazu, 2007):

1. Their overall economic activities are less diversified and more specialized than large economies mainly due to their narrow range of human and non-human economic resources and markets.
2. Because of the small domestic market, there are not many options available for Economic development. A heavy dependency of small island economies on external factors creates the problem of economic instability and vulnerability,

3. Island economies usually suffer from diseconomies of scale in production, investment, consumption, transportation, education, and administrative services.
4. Another characteristic of island economies, which is more or less related to the above-mentioned problems, is their heavy dependence on government activities as a major source of income, employment, and probably as a symbol of prestige.

There are, however, a number of characteristics of island areas, which can be considered to be economically advantageous over larger economies, such as "the importance of being unimportant in external commercial policy, more unified national markets, greater flexibility, and perhaps greater potential social cohesion." (Kakazu, 2007).

Island areas have enormous potential to develop a tourist industry, which is a future-oriented industry. The industry is becoming the most important source of foreign exchange income for islands. The tourism industry, however, is in many ways beyond the control of these island economies. It depends not only on economic conditions of industrialized regions but also on various imported inputs such as transportation, hotels, sales promotion, raw materials, souvenirs etc.

Another future-oriented growth industry, which is well suited to small islands, is the information and communication technology (ICT) industry. The ICT industry is a "footloose" and does not require natural resources, transportation and heavy technology which are prerequisites for agriculture and manufacturing. The ICT industry is also future-oriented because the resultant next society will be a knowledgeable society. Knowledge will be its key resource, and knowledge workers will be the dominant group in its workforce. Manufacturing was the dominant social and political force in the 20th century, knowledge technologists are likely to become the dominant social and perhaps also political force over the next decades.

Characteristics of Lesvos Island

Lesvos belongs to the islands of the Northern –Eastern Aegean region in Greece. It is constituted by 3 Islands: Lesvos, Lemnos and Agios Eustratios. It is the third largest island in Greece and one of the forested islands of the Aegean, apart from the olives groves found everywhere, pines, oaks, chestnuts etc cover a great proportion of its land. The capital is Mytilini that mirrors the economic growth of the island from the 18th century. Its castle was one of the most powerful in the

eastern Mediterranean. The location of Lesvos island in the context of Greece is presented at the following map:



Map 1 Location of Lesvos island at the map of Greece
(copyright: www.greeka.com)

Island's coastline forms two bays in the south - Geras and Kallonis - and a plethora of creeks and capes. The main plains are the plains of Kalloni, Ipeeos, Perama and Eressos and the highest mountains are Lepetymnos, Olympos. Generally the flora and fauna of the island are extremely rich.. Today, 1,400 taxa (species and sub-species) of plants have been recorded on the island making Lesvos a "botanic paradise": aromatic, pharmaceutical, ornamental and rare plants, bushes and trees. Although western Lesvos, with the exception of some small plains is barren, the eastern, southern and central parts are cloaked in olive groves (11 million olive trees) and forests of pine chestnut, oak, beech and plane trees.

The climate of Lesvos is mild and healthy: the winter is warm and the sun shines throughout the year. The local economy is based on the

agricultural production with an emphasis on olive oil production (of exceptionally high quality), cattle-raising (mainly dairy products) and fishing. Distillery is developed and its main product is the world famous ouzo. Many of the island's inhabitants are professionally engaged in tourism.

The total extent of Lesvos is 2.154 km², the total length of coasts is 696 km, and the total population is 105.194 people. In Lesvos there are 17 Municipalities (13 in Lesvos and 4 in Lemnos) and the community of Agios Eustratios. The capital city of the island is Mytilene, where the central offices of the Ministry of Aegean, the Regional Authority of Northern Aegean and the Rectorate of Aegean University are located.

Lesvos island has innumerable beaches to satisfy all its visitors, like Vatera, Varia, Agios Isidoro, Skala Eresou, Molyvos, Thermi and Anaxo. The coastal settlements that are notable for their particular colour are Molyvos (Mithymna) and Plomari with their architecture and natural beauty. Equally notable and peaceful is Sigri with its petrified forest. A map of Lesvos is following presented:



Map 2 Lesvos island

(copyright: www.greeka.com)

Throughout its long history, Lesvos has to show for a plethora of intellectuals. The most famous among the ones who lived and worked on the island are: Terpandros (700 B.C.), poet and musician the father of ancient lyrical poetry, Pittakos (648 B.C.) politician and one of the seven wise men of Ancient Greece, Arion (625 B.C.), a charismatic lyrical poet and musician, Alcaeus (600 B.C.), one of the best known lyrical poets of ancient Greece, and finally Sappho (620 B.C.), the most famous ancient Greek poetesses whose poems, distinguished for their stylistic elegance, passion and depth of feeling, won her the name the "tenth Muse". Other significant personalities are Theophrastus (372 B.C.) philosopher and botanist - known as the father of botany - and Theophanes (100 B.C.), a significant historian who accompanied Pompey in his Asia Minor expeditions

The table following presents some tourism indices of the island in year 2005 (copyright: <http://www.economics.gr>).

Table 1 Tourism indices of Lesvos Island in year 2005

| | |
|--|--------|
| Number of beds in hotel lodgings | 8703 |
| Number of hotels | 132 |
| Traditional lodgings | 7 |
| Overnight stays of foreigners in hotels | 521556 |
| Overnight stays of foreigners in camping | 2790 |
| Overnight stays of native lands in hotels | 279919 |
| Overnight stays of native lands in camping | 7021 |
| Overnight stays of foreigners per resident | 4,85 |

THE ROLE OF TOURISM FOR REGIONAL DEVELOPMENT ESPECIALLY FOR THE GREEK ISLANDS

In the tourism literature most studies consider the effects of tourism on resource allocation, welfare and growth in a real economy. Since most tourists arrive and consume the goods that are not traded internationally, an expansion of tourism is equivalent to an increase in the exports of the non-traded goods. Tourism increases the prices of the non-traded goods and thus improves welfare via an improvement in the terms of trade (Copeland, 1991). According to many commentators (e.g. Ritzer, 1999; Urry, 2001; Rocha, and Victor, 2010) culture has now become an essential element of the tourism system. Cultural tourism is also

frequently quoted as being one of the largest and fastest growing segments of global tourism (WTO, 2004). Tourism and culture both play an important role in image creation processes, providing a major rationale for the aestheticisation of landscapes (Morgan & Pritchard, 1998), as well as in shaping the environment to meet the needs of consumers. Indeed, the growth of cultural consumption (of art, food, fashion, music, tourism) and the industries that cater to it has fuelled the 'symbolic economy' of cities and regions (Ray, 1998; Zukin, 1995).

Tourism and recreation are two of the most important social activities. Tourism generates more income and jobs, increases understanding of other cultures, and preserves cultural and national heritage and investment in infrastructure, which in turn brings social and cultural benefits. For many small states with favourable natural resources, tourism was regarded as an easy, low cost/profit source (OECD, 1967:11-15).

However, problems arise when development is rushed, paying little consideration to the environment.(May, 1991). Thus, some forms of tourism –mass tourism—and some recreational activities can cause degradation of landscapes and competition for rare resources and services, such as land, fresh water, and energy and sewage treatment. Moreover, host populations may suffer the loss of their traditions and become over dependent on tourist income.

In order to sustain tourism in the long run strategic planning is necessary. Bramwell and Lane (1993) view sustainability as holistic planning and strategy formulation. Farrell (1992) justifies the holistic stance by defining sustainability as: 'essentially an exercise in the optimization and finer tuning of all elements and sub-elements of the development system in its operation, the system as a whole maintains direction and one or more of the elements does not surge or is not enhanced, to the detriment and impairment of others'.(Farrell 1992: 123)

The World Tourism Organization, WTO (1993 b) attributes the tourist growth to a great extent to the following influences:

- Socio- demographic factors- especially the aging of populations in the industrialized countries;
- Electronic information /communication systems;
- Responsible tourism development;
- A polarization between global players and 'niche' businesses; and
- Constraints upon growth related to labor, capital and infrastructure.

As for the Greek economy, it suffers from low productivity mainly due to: Underdeveloped or not up to date systems for science, technology and innovation; Quality level of Human Resources and availability of specialized workforce; and a low level of entrepreneurship.

Tourism is becoming the heavy industry of Greece, due to the fact that it contributes 18,4% to county's GDP, with 720,000 direct jobs (18,3 of the active population). In addition, Greece should be in tune with the changing demand of tourism as consumers are becoming more experienced, informed and discerning. Poon (1993) provides the following list of characteristics of the new tourist. They have: more experience; changing lifestyles; changing values and more flexibility.

Development of New Forms of Tourism

According to Ayres (2000) the tourist product and the tourist market will become segmented. New competing destinations are emerging and there is the growth of alternative forms of tourism. Prosser (1994) sees tourism as a fashion industry. The new types of tourism have the decentralization and removal of tourist activities from the coast to the mainland as a common characteristic and therefore the development of poor regions.

In addition, the Common Agriculture Policy (CAP) throughout its existence has played a significant role towards the development of rural tourism in EU. Reduction in support prices makes farmers turn to other alternatives in order to supplement their income. Due to the above reasons tourism has been widely promoted in the European Union, Pompl and Lavery (1993); Williams and Shaw (1991).

Agritourism is increasingly regarded as a means of reversing economic and social decline in rural areas intended to promote an integrated approach to rural development, emphasizing local support and involvement. Farm enterprises have benefited to a great extent from the EU funding. The objectives of E.E. as far as agritourism is concerned are:

1. Development of the least favoured regions and protection of natural and cultural heritage
2. Conversion of regions facing difficulties
3. Interregional cooperation
4. Sustainable development of urban areas
5. Development of innovative strategies to make regions more competitive placing an emphasis on quality
6. Transport development and preservation of the local environment

Especially for Greece, agritourism (or farm tourism) set out in Petra –Mitolini—Lesvos- in 1984-1985 by the women’s agritourism cooperative.

A study by Gousiou A. Spilani I. Kizos T (.2001), regarding farm tourism in Lesvos-Mytilini, showed that most agritourism holdings on Lesvos operate marginal to the mass tourism. Rural agritourism in Greece is conceived differently than the other countries where it has flourished.

Agritourism in Greece has nothing to do with offering the experience of farm life to tourists, as it is in other countries (France, UK, Canada, etc.). It is simply the diversification of farm incomes by offering accommodation in rented rooms Katsaros D.(1998). Furthermore, there is no national strategy, law framework, quality guidelines for agrotourism and the GNTO (EOT) has no involvement in agritourism. The government has all the necessary elements to plan national policy marketing of new forms of tourism.

The number of farms in Greece amount to 700,000 and the average size is 4 hectares compared to 16,4 hectares in the European Union. Multi-activity is very common. Tourism and services have contributed towards job creation for women.. For instance, in Arachova, Petra in Mytilini, St German in Florina, Chios etc., women’s co-operatives carry out professional domestic activities—local culinary specialties, traditional arts and crafts etc.

In Greece, as in most countries, farm tourism is still in its infancy, although in some parts of Europe, e.g Austria: Tacquard (1986); France: Mascha (1984)-- it is an activity that has existed for more than hundred years (Hummelbrunner & Miglbauer, 1994, p.42). In Sweden and Switzerland agritourism sector reaches 20% and in Austria it exceeds 10%. A study, by Iakovidou et al (2001) reached to the conclusion that agritourism is not defined as simply offering bed & breakfast but also includes leisure activities as well as cultural events and activities connected to the environment and high income.

The Role of ICTs for the Tourism Industry

Development in the sector of Information and Communication Technologies (ICTs) has profound effects on the development of remote, especially island areas and possibly on the competitive advantages of such areas. ICTs have been applied in tourism since the early adoption of the Computer Reservation System (CRS) in airlines in the 1950’s and in the

transformation to Global Distribution Systems (GDSs) in the 1980's. Hotel property management systems (PMSs) and hotel CRS systems appeared shortly afterwards, bringing switch companies into the market as well, in order to improve interconnectivity and interoperability.

It is the development of the Internet that brought the revolutionary changes to the structure of the industry, by providing tourist authorities, airlines and hotel owners, an opportunity to sell directly. Because of this development travel intermediaries that connected suppliers and consumers have been faced a danger of being cut off and replaced. Travel agents felt the pressure of these changes.

The discussion of disintermediation and reintermediation has lasted for more than 10 years ever since the e-commerce model appeared along with the Internet booming. The implications of ICTs on the tourist distribution system has been discussed thoroughly and extensively in many published studies including Buhalis (1998, 2003), O'Connor (1999, 2000), Sheldon (1997), Inkpen (1998), Cooper et al. (2000), Palmer and McCole (1999), Lang (2000) and Standing and Vasudavan (2001). The most recent developments in eTourism applications are at the destination level. By employing Internet, Intranet and Extranet, some destination management organisations (DMOs) have successfully integrated this function in promoting their destination, providing tourists with pre-trip and in-trip information; helping small and medium-sized tourist enterprises (SMTEs) promote their products, expanding internal management within DMOs into destination networking and promotion systems (Buhalis, 1993, 1998).

Companies and investors have realised that the Internet should not cannibalise business models, but act as an enabler that empowers organisations to achieve their objectives. Technology itself cannot bring value to any tourism company. However, the strategic and efficient implementation of technology within a business can reduce operational costs and support the delivery of better products or services to customers. If managed properly ICTs help tourist companies and destinations gain competitive advantage by either maintaining their price leadership in the market or by differentiating their product and services. This will eventually lead to the increase of value added to the company. It is from this point of view that strategic implementation of information technology (IT) and Internet become critical for all companies trying to survive in this new economy (Poon, 1993; Sheldon, 1997; Werthner and Klein, 1999; Alford, 2000; WTO, 2001).

Most published literature on eTourism has been based on the Internet and ICTs developments and case studies in Europe and America, with

little effort being made to study the eTourism developments in China (Martinsoms, 2002; McGregor, 2002; Gronau and Kaufmann, 2009). However, the huge market and great potential of the demand in China makes it imperative to evaluate how the technological transformation will influence the Chinese tourism industry structure. According to an online survey held by one of the official information websites (www.cnnic.com), the number of total Internet users in China was doubled every year over the last 3 years. Therefore, eTourism applications in China are worth the attention of researchers, considering the potential dynamic changes.

RESEARCH METHODOLOGY

Five hundred participants (250 Greek and 250 non Greek tourists) who visited Lesvos island during the period June-September 2006 were administered a questionnaire consisting of items about their impressions and assessments of their stay. Apart from the demographic data of tourists (age, gender, country of origin, educational and financial background), the questionnaire consisted of topics concerning the reasons for visiting Lesvos, the specific places on the island that they visited, assessments about the facilities, the transport network, accommodation, food and recreation, culture and customs, financial comparisons to other places in Greece and abroad, sense of safety and an overall evaluation of the island.

Data were collected at the airport and the port of Mytilini one hour before tourists' departure. This method recorded their impressions of their holidays as a whole. Participants were randomly selected and answered both quantitative and qualitative questions.

Results

As expected, the majority of respondents claimed that the natural beauty of Lesvos island is the primary reason for visiting it (42.8% of Greeks tourists, 64% Non Greek tourists). It seems that religious tourism is a very important factor of tourist development, since Lesvos attracts thousands of Greek pilgrims each year, who visit Saint Raphael's Monastery, Mandamados and Agiasos for the famous icons of Archangel (Taxiarchis) and Virgin Mary. Eventually, 19% of Greek tourists visited Lesvos for religious reasons, 17.7% for low cost and 12% for the possibility of alternative types of tourism, such as eco-tourism etc. 16% of non Greek tourists visited Lesvos because of the low cost and 12% for the possibility of alternative types of tourism

The reasons for visiting specific places within Lesvos were the local tradition, which was especially important to non Greek tourists, clean sea and beaches, residents' hospitality, rich vegetation and wild life. On the contrary, cheap residence and high quality of services had low proportions of tourists responses, which emphasizes the fact that special care should be given to the improvement of infrastructure and attitudes (table 2).

Table 2 Reasons for visiting specific places in Lesvos

| Reasons for visiting other places in Lesvos | Greeks | Foreigners |
|--|---------------|-------------------|
| Local Tradition | 19,0% | 31,0% |
| Cheap accommodation | 2,0% | 3,0% |
| Accommodation quality | 2,0% | 9,0% |
| Clean sea and beaches | 26,0% | 33,0% |
| Rich Vegetation | 13,0% | 6,0% |
| Inhabitants' hospitality | 10,0% | 14,0% |
| Religious reasons | 21,0% | 2,0% |
| Close destination from the islands' capital | 3,0% | 0,0% |
| Other reasons | 4,0% | 2,0% |

Table 3 following presents the most frequently visited places of Lesvos by Greek and non Greek tourists. The difference in response is statistically significant at 0.05 level, which indicates that our sample of Greek and non Greek tourists belong to different populations, with different motives and preferences: Foreigners visit the most advertised places (Molyvos, Eftalou, Eressos, Sigri and Skalla Kallonis) with large and luxurious hotels, whilst Greeks have higher variation in their final destinations.

Lesvos is not a typical Aegean island. It is situated far away from the mainland (about 380 Km), it has its own customs, culture, long tradition and architecture and the inhabitants mainly work in agriculture, services and fishery. Lesvos is unknown to tourists and local authorities have never seriously attempted to attract them, through systematic campaigns. The majority of Greek tourists is influenced by friends and relatives in their decision to visit the island. Only a low percentage of Greeks have read something about it in tourist guides (10 %) and only 1% came to Lesvos through a travel agency. Non Greek tourists, on the other hand,

have selected Lesvos because it was referred to by friends or relatives (23%), through tourist guides and travel agencies (21% and 27% respectively), 24% found the appropriate information on the Web and only 4% of the total sample has been informed by advertisements and campaigns.

Table 3 Places on Lesvos visited by tourists

| Places on Lesvos that were visited by tourists | Greeks | Foreigners |
|---|---------------|-------------------|
| Mytilene | 12% | 9% |
| Saint Raphail- Monasteries | 10% | 3% |
| Mantamados | 10% | 4% |
| Sykamia | 5% | 5% |
| Molyvos- Eftalou | 11% | 23% |
| Petra- Anaksos | 10% | 19% |
| Kaloni- Skala Kalonis- Agia Paraskevi | 9% | 14% |
| Eressos- Sigri | 8% | 13% |
| Polichnito- Vatera | 6% | 1% |
| Plomari- Gera | 7% | 3% |
| Agiasos | 8% | 4% |
| Other | 4% | 2% |

Consequently, 32% of the Greek tourists stay at friends' and relatives' houses, 37% in rented rooms and only 16% in hotels. Non Greek tourists prefer to stay in hotels (45%) and rented rooms (49%). Curiously enough, 3% of the Greek students chose camping compared to 0% of the foreigners.

In comparison to other places approximately half (52%) of the foreigners consider Lesvos better, whereas the Greeks, in their majority (63%), believe that it is the same.

The financial status of the tourists who visit Lesvos is in direct opposition when Greeks and foreigners are compared. In particular 41% of the Greek visitors believe that their income is not sufficient, on the other hand 46% of the foreigners are in the higher income bracket. A very small percentage (Greeks 1,9%),(foreigners 5,7%) used a credit card or a loan to go on vacation

Both Greek (57,7%) and non-Greek visitors (65,8%) got information about the island before their arrival. There is a very small percentage, both of Greeks and foreigners, that believed they were deceived on the island of Lesbos, but the vast majority, 85% of the Greeks and 92,6% of the foreigners, had no complaints and were totally satisfied with the people.

Comparing the cost of their stay on Lesbos 44% of the Greeks mentioned that it was cheaper, 51% that it was at the same level and only 5% thought it was more expensive than other places. As far as the foreigners are concerned the figures are 37%, 59%, 4%, respectively. Specifically concerning the residential cost, 59% of the Greeks and 74% of the foreigners believed it was satisfactory. 16% of the Greeks thought it was expensive and 10% of the foreigners thought it was cheap. The transportation cost thought of as satisfactory and expensive by 36% of the Greeks, whereas 50% of the foreigners found the transportation satisfactory and 18% quite cheap. Additionally, the eating cost was considered as satisfactory by 62% of the Greeks and 38% of the foreigners. A low number of 14% of the Greeks believed that it was expensive, contrary to 28% of the foreigners who believed that it was cheap. The entertainment cost is concerned 60% of the Greeks as well as 52% of the foreigners mentioned that it was satisfactory. Only 1% of the foreigners and the Greeks thought it was very expensive.

The vast majority of the Greeks and the foreigners felt absolutely safe (Greeks 46,9% and the foreigners 59,7%). A significant amount of people considered that they were very safe on the island (Greeks 30,8% and foreigners 31,8%). On the contrary only 1% of the Greeks didn't feel safe and none of the foreigners had the feeling of insecurity.

Most of the tourists that visited the island of Lesbos would come again on vacation, in particular 86,8% of the Greeks and 88,9% of the foreigners mentioned that they would come again. Additionally, 90,9% of the Greeks and 94% of the foreigners would recommend Lesbos to friends and relatives for their vacation, indicating that the overall feeling towards the island was more than satisfactory.

Finally, tourists were asked to give their stated preference regarding if they would probably extend their period of vacations in Lesbos island, if there was higher ICT infrastructure available (e.g. for teleconferencing, teleworking etc). Tables 4, 5 and 6 following, present willingness to extend the period of tourism, under the scenario assuming high ICT infrastructure in the island, per nationality (Greek or foreign), gender and age group (up to 45 years old, greater than 45 years old), respectively:

Table 4 Willingness to extend the period of tourism, via ICT infrastructure, per nationality

| | | Yes | No |
|-------------|------------|-------|-------|
| Nationality | Greeks | 58,6% | 41,4% |
| | Foreigners | 75,2% | 24,8% |

Table 5 Willingness to extend the period of tourism, via ICT infrastructure, per gender

| | | Yes | No |
|--------|---------|-------|-------|
| gender | males | 72,4% | 27,6% |
| | females | 52,3% | 47,7% |

Table 6 Willingness to extend the period of tourism, via ICT infrastructure, per age group

| | | Yes | No |
|-----|---------------------------|-------|-------|
| age | up to 45 years old | 62,1% | 37,9% |
| | greater than 45 years old | 48,2% | 51,8% |

It is noted that more likely to extend their stay at the island, under such a scenario are the foreign tourists (compared to Greek tourists), men and the younger tourists, maybe because they are more familiar to ICT-use. The above-presented results indicate that ICT-use affects positively the tourism sector and has the potential to extend the period of tourism in the islands

CONCLUSIONS

Information and Communication Technologies (ICTs) seem to be a key factor for promoting economic growth, especially in island areas. Developments in ICT sector have profound effects on the improvement of the competitive advantages of those areas. Especially for the tourism economy-based regions, the adoption of ICT in the tourism sector, assists

the produced outcomes, introduces innovation and facilitates the shift to a knowledge-based economy.

ICTs have been applied in tourism since the early adoption of the Computer Reservation. It is the development of the Internet that brought the revolutionary changes to the structure of the industry, by providing tourist authorities, airlines and hotel owners, an opportunity to sell directly. Because of this development travel intermediaries that connected suppliers and consumers have been faced a danger of being cut off and replaced.

In this paper, a survey contacted with respondents both Greek and foreign tourists in Lesvos island, concerning the reasons for visiting the island, and for possibly visiting it again in the future. Results mainly indicate the critical role of agritourism for the development of the tourism sector in the island. Additionally, it is found that ICT-use affects positively the tourism sector and has the potential to extend the period of tourism in the island.

Lesvos Island, additionally to the incredible beaches, has innumerable coastal settlements and villages, notable for their architecture, natural beauty and uniqueness. The development of agritourism, as an alternative type of tourism, together with improvements in the telecommunications system of the island, could become the key factors for achieving a sustainable competitive advantage of the island, contributing to the development of the island economy and the regional development.

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