EFFICIENCY OF INTERNATIONAL TOURISM MARKETING FOR THE PROMOTION OF TOURIST PRODUCTS OF GREEK COMPANIES IN THE EUROPEAN MARKET

Konstantia Darvidou[1], Evangelos Siskos[2]

[1]Ph.D. of International Economic Relations, Department of Management Science and Technology, University of Patras, Greece. ORCID ID: 0000-0002-8113-7302

[2]Professor of International, European and Black Sea Economic Relations Department of International and European Economic Studies (Kozani), University of Western Macedonia, Greece. ORCID ID: 0000-0002-5221-4444

ABSTRACT
The paper provides an overview of how various marketing channels are used by Greek tourism enterprises, especially digital tools. They are important for reaching more customers especially from the European market, which is the main source of international tourists in Greece. Websites, social networks and paid targeted advertising online are the most important digital tools for the Greek tourism businesses. There was also an increase in imports of advertising and marketing research services from the EU in recent years. Correlations, regression models and efficiency ratios are calculated. Websites providing description of tourism services, their prices and online booking, and possibly social networks provided the largest contribution in growth of the EU tourists' expenditure in Greece. There was a large volatility in efficiency of digital marketing tools during and after the pandemic in 2020-2021. Imports of advertising and marketing research services from Luxemburg, Czechia, Denmark, Estonia, Sweden and Germany were the most efficient by generating flows of tourists from those countries.

Key words: international tourism, marketing channels, digital marketing, the EU market, economy of Greece

JEL: M31, Z33, Z32

INTRODUCTION

Digital marketing channels became a new trend in the recent decades and affected tourism industry in particular. Together with traditional advertising and marketing research they may help promote tourism services in domestic and foreign markets. The EU is the most important source of tourists for Greece considering its geographical proximity, absence of entry barriers and high income level in the member states affecting structure of needs of individuals. This paper aims to assess efficiency of various marketing channels in attracting the EU tourists to Greece and increasing earnings from its tourism services.

LITERATURE REVIEW

Since tourism is an important industry in Greece, marketing strategy and tools for this sector have already been analysed in several previous studies. They mostly provided data on frequency of their use (especially of digital tools) and found the gaps in use of some channels. Many researchers focused on specific regions in Greece.

Deffner & Metaxas (2006) compared advantages and disadvantages of various traditional and digital promotional means. For example, television provided high reach but at high costs. Internet provided high selectivity for target audience and interactivity at relatively low cost. Only some of them were mentioned as suitable for promotion at the international and European level (internet, magazines, newsletters, brochures, direct mail, exhibitions and partnerships with other cities). Other means could be more efficient at the national or regional level (television, radio, newspapers, billboards).

Andreopoulou et al. (2014) used multiple criteria to assess digital marketing in rural tourism enterprises in Greece and selected optimal cases for benchmarking. Ziakis & Vlachopoulou (2023) analysed digital presence of Greek tourism companies and identified the gap in implementing a comprehensive digital marketing strategy.

Websites are the main digital marketing channel for most of the enterprises. Velentza & Metaxas (2023) used a questionnaire of Greek hotel, food and beverage businesses to provide a comprehensive assessment of trends in digital marketing. As for website features, 71% accommodation enterprises use Google Maps, 61% Google my business, 54% responsive and mobile friendly websites, 34% newsletter, 4% a blog. 61% offer online booking. Koliouska & Andreopoulou (2023) evaluated 48 websites of the alternative tourism enterprises in the Prefecture of Serres including ecotourism, heritage tourism, dark and gastronomic tourism.

Companies with the most advanced digital marketing use multilanguage websites with information about their products and services, company contact information, online communication form, digital map, audiovisual material, live web camera, sitemap, news about the enterprise, weather forecast application, website visitor tracker, frequently asked questions section, social media profile and sharing button, local information, useful links, additional information, third person advertisement and RSS. There are also a lot of least advanced enterprises using a website with information about their products and services, contact information, local information and online communication form only.

Social media are the second most important digital channel. Facebook and Instagram were the most frequently used social networks for promotion of accommodation services. But about 40% intended to use also YouTube and LinkedIn in future. Social media are often used to attract and inform new customers, receive their feedback, improve company's image, communicate, ensure confidence of customers and build stronger relationships (Velentza & Metaxas, 2023). 36 of 48 alternative tourism enterprises in Serres used social media (Facebook, Instagram or Youtube) for marketing (Koliouska & Andreopoulou, 2023).

As for other digital marketing channels, 16% accommodation enterprises used a mobile application. Search engine optimization and affiliate marketing are more widespread than viral marketing, video marketing and mobile marketing. E-mail marketing and paid marketing are within the intermediate range by popularity (Velentza & Metaxas, 2023). Tsiftelidou & Christodoulou (2020) studied the promotion video "Greece-A 365-Day Destination" with semiotic analysis.

The role of intermediaries has been transformed under the digital revolution. Tzioras (2018) analysed various functions of online travel agencies. Their customer subsystem includes electronic directory services (tourism services description), search services (for tour packages, hotels, cruises, transport tickets etc.), booking services and additional services (for example images and videos from destinations). Fountoulaki et al. (2015) interviewed hotel managers and tour operators related to Crete. They noted about importance of social media and mobile applications nowadays for marketing and decreased importance of local travel agents in future. But tour operators remain important for Crete because of their control of aircraft capacities considering the fact that Crete as an island depends on air passenger transport. The situation is different for mainland destinations were online travel agencies have more market power. The respondents also mentioned booking.com as important channel for reservations at the European market. Also Extranet/XML was expected to be a tool of growing importance for linking hotels and tour operators.

Some researchers analysed only specific types of tourism enterprises. Most of the websites of medical tourism providers in Greece have a section about a company, photo gallery, interactive maps, company logo, external links, contacts (e-mail, phone number, address, information request form), staff members' CVs.

More rare web site features include frequently asked questions section, downloadable material, weather conditions, last updated date, a site map, hotel or flight booking service, patients' testimonials, newsletter, information about prices, hospitals' credentials, visa conditions, insurance, international mobiles, medical records transfer services, sightseeing services, translation services, pre and post care services, foreign language used by the staff (other than English). Many have social media pages (Katsoni et al., 2018). Halkiopoulos et al. (2021a) suggested that hotels should cooperate with thematic tourism platforms.

They consider the case of a proposed intelligent e-Tour Facilitator Platform aiming at promoting health tourism. It contains a database about service providers, video database about health tourism products, helps to search services according to the needs of patients, considers patients' kinetic state to exclude the destination lacking facilities for people with disabilities, enables commenting and feedback with further sentiment analysis, and uses text analytics for intelligent e-mail response system. Rentzi & Constantoglou (2023) focused on the opinion of the elderly about their preferences on tourism destination and the media they use for information search. Halkiopoulos et al. (2020) analysed the websites of a hundred of 4 and 5 star hotels in the Region of Attica. They had up-to-date content, but only a quarter of them contained information on accessibility for people with disabilities.

Papathanasiou-Zuhrt & Russo (2019) described the cases of composite interactive tourism products in 7 countries including Greece (Rhodes). These products are based on digital publishing and include cultural route, iBook and heritage games. The EUROTHENTICA Collection developed within a COSME supported project and published as an iBook Collection uses storytelling to support such type of interactive tourism. Zouni & Digkas (2019) provided recommendations for marketing religious tourism in Thessaloniki including improving the city travel web portal, investing in creating films related to its cultural and religious heritage, cooperation with different religious communities, and using both local and global media.

Tsekouropoulos et al. (2012) studies Greek skiing centres and their digital marketing policies. About a half of them did not have e-marketing policies. 52% provided rich information on their websites. 52% used interactive e-marketing for customers including chatting. 35% used third party advertising through the website. 40% offered sales discounts and similar promotional options. Vasios et al. (2020) explained how a local problem in Lemnos island (increasing wild rabbit population affecting the biodiversity) could be potentially solved with targeted marketing for the location as a hunting tourism destination.

Some studies considered marketing of the destinations in general (countries, cities or regions) instead of individual companies. Such marketing activities are organized by local or national authorities, international projects or non-governmental organisations. In particular, Belias et al. (2019) wrote that tourists first pay attention to destination. After choosing it, they start searching for a proper hotel. Therefore, destination marketing is also important in addition to tourism enterprise marketing.

Papa & Avgeri (2009) used a comparative analysis of the official National Tourism Organizations portals of the European Union member states. Greece and Italy underperformed by four aspects: marketing, customer, technical and information for the destination. Dionysopoulou & Tsakopoulou (2021) described the efforts of Greek regional authorities and tourism industry associations to facilitate digital transformation of Greek small and medium tourism enterprises. Halkiopoulos et al. (2021b) devoted their research to the case of the European Program "Regio-Gnosis - Information and updating on cohesion policy in Greece" with social media campaigns with cultural and tourism information. They explained that advertising in Facebook could be useful. The posts mainly contained information about photo contests cultural events, workshops, live streaming videos and photos of these events. Photo contests were the most efficient to reach response of the users.

Deffner & Metaxas (2006) discussed methodology of city marketing plans within the INTERREG IIIC CultMark project aiming at creating a successful image of the participating cities. The analysed case in Greece was about the Olympic Municipality of Nea Ionia in the Prefecture of Magnesia. After auditing its distinctive features it decided to focus on promoting cultural, sports and food tourism. 8 components were considered (product, partnership, people, packaging, programme, place, price, promotion). Deffner & Metaxas (2008) continued to study city marketing and their relationship with culture and tourism. The analysed case was again about Nea Ionia.

The factors for accomplishment of vision included joint participation in European development programmes, understanding of the community, partnerships (between local authorities, individuals, academic and research centres, enterprises), innovative promotional policies of local authorities, assessment of city's distinctive features, capacity and knowledge of local authorities etc. Experts noted that the event website was most developed. The components with intermediary level of implementations were the city website, city image guides, promotional packages for specific target markets, participation in European cultural networks, links with other cities and countries. Less developed policies included sponsorship packages, strategic marketing plans, participation of city actors in the city promotion strategies.

The next analysed case was about Museum of Tobacco in Kavala, Greece (Metaxas, 2013). Interaction between a general (city) image and a special (museum) image was in the core of the theoretical marketing model. It was noted that marketing should not be limited only to tourist guides, brochures and municipalities webpages. Efficient marketing should consider real needs and expectations of the target markets.

Amoraidis et al. (2021) described the concept of sustainable marketing in contrast to social and ecological limitations of conventional corporate marketing philosophy, and analysed approved funds for tourism promotion in the Greek regions, tourist over-night staying and tourism saturation. Katsoni (2015) promoted the cultural landscape approach in marketing management and described activities of Environmental Information Centres.

But there is a lack of studies that assess final efficiency of various marketing tools. According to a survey by Velentza & Metaxas (2023), most accommodation businesses considered that digital marketing tools helped them to improve readability and company's image, public relations, interactivity and feedback, business analytics, timeliness of services, to increase product lifecycle, income, market share and expand into new markets, to reduce costs for marketing and services of intermediaries. Nevertheless, most companies considered that they still lacked knowledge and training. Some worried about the costs of digital marketing, lack of time, data security, legal limitations, management mentality, lack of vision for expansion, annoying advertisements, no face-to-face contact, difficulty of targeting some segments, information readability and increased international competition. Only few businesses had problem with language, access speed and technophobia. Nevertheless, they used subjective views of the respondents with Likert scale without objective statistical efficiency indicators such as increase in income of tourist companies or tourist arrivals.

METHODOLOGY

First, this paper describes the trends in the main inbound tourism indicators of Greece at the EU market. Current situation in the use of various digital marketing channels by tourism enterprises is shown. Correlations between the tourism sector performance indicators and trends in using digital and traditional marketing channels are calculated. Marketing channel efficiency indicators are calculated for recent years as ratios of the growth rate of the EU tourists' expenditure in Greece to the change in a marketing channel use. Regression models are created to assess significance of the effect of the marketing channels after controlling for the EU tourists' income factor (GDP growth in the EU). The difference in efficiency of attracting tourists from the specific EU member states by the expenditure to marketing services imports from those countries is also considered.

Eurostat (2024) is the main source of statistical data on the tourism links between Greece and the EU, tourism sector digital marketing channels and other indicators. International Trade Centre (2024) was used to get data on total imported advertising, market research, and public opinion polling services by Greece from the EU as a more traditional marketing tool. IMF (2023) was used for the EU GDP growth rates.

RESULTS

The EU tourists are the main segment of inbound tourism in Greece. The majority of them travel for personal reasons especially for recreation. In 2012 tourists' expenditure grew despite the decreasing number of arrivals.

Table 1: Inbound tourism indicators in Greece (the EU tourists)

Indicator, year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All trips, million	12.83	11.68	13.46	12.22	13.15	15.24	16.52	16.82	7.18	11.85	17.84
Trips for personal reasons, million	12.29	11.16	12.88	11.73	12.56	14.74	16.12	16.25	6.91	11.55	17.32
Visits to friends and relatives, million	1.96	1.52	1.75	1.44	1.47	1.81	2.05	1.83	0.86	0.99	1.94
Professional and business trips, million	0.54	0.52	0.58	0.49	0.59	0.50	0.40	0.57	0.28	0.30	0.52
Tourists' expenditure, € billion	6.48	7.75	8.58	7.85	8.89	13.07	14.11	13.56	4.31	11.12	16.18
Personal reasons tourists' expenditure, € billion	6.18	7.44	8.20	7.59	8.58	12.74	13.82	13.19	4.14	10.88	15.69
Professional and business tourists' expenditure, € billion	0.30	0.30	0.38	0.27	0.31	0.33	0.29	0.38	0.18	0.25	0.49

2014 was a more challenging year. But the most difficult year was 2020. That was the year of the coronavirus pandemic leading to a drop in Greek income from the EU tourists by 2/3. But in all the other recent years tourism indicators were growing, especially during the recovery from the pandemic crisis.

Table 2: Marketing channels of tourism enterprises in Greece in 2023, % of the enterprises with 10 persons employed or more

Indicators of enterprises, Sector	Accommodation services	Travel agencies, tour operators and other reservation services and related activities
Total turnover from e-commerce sales, % total sales	20	8.2
With a website	95.5	96.2
The website provides description of goods or services, price lists	70.3	60.2
The website provides online ordering or reservation or booking, e.g. shopping cart	73.3	32.8
The website has content available in at least two languages	74.3	70.5
Have a mobile app for clients (e.g. for loyalty program, e-commerce, customer support)	25.2	5.3
The website provides possibility for visitors to customise or design online goods or services	34.8	11.7
Pay to advertise on the internet	75.4	42
Pay to advertise on the internet, based on the webpages' content or keywords searched by users	69.8	37.3
Pay to advertise on the internet, based on the tracking of internet users' past activities or profile	39.8	21.5
Pay to advertise on the internet, based on the geolocation of internet users	49.5	21.6
Pay to advertise on the internet, based on the webpages' content, keywords, users' past activities or profile or the geolocation	70.9	37.3
Have a website and pay to advertise on the internet	75	40.1
Use social networks (e.g. Facebook, LinkedIn, Xing, Viadeo, Yammer, etc.)	83.3	78.5
Use enterprise's blog or microblogs (e.g. Twitter, Present.ly, etc.)	27	12.3
Use multimedia content sharing websites (e.g. YouTube, Flickr, Picasa, SlideShare, etc.)	58.7	34.6
Use any social media	85.7	78.5
Use any social media to develop the enterprise's image or market products	67.7	59
Use any social media to obtain or respond to customer opinions, reviews questions	70.4	46.7
Use any social media to involve customers in development or innovation of goods or services	29.9	19.8
Using social media with customers	83.8	65.6

Most Greek tourism enterprises have their websites with description of their services, although other website functions are usually less widespread. Using more than 1 language on the websites helps to target foreign tourists. Social networks are the second most important digital marketing channel, which is mostly used to promote a company, its products and to find out customers' opinion. Accommodation enterprises favoured more online booking, payment for consumer targeted advertising on the internet and multimedia content sharing websites than travel agencies and similar enterprises. A much smaller share of businesses use mobile applications, blogs or microblogs. Paid targeted advertising on the internet and using multimedia content sharing websites have been largely growing in popularity in recent years. Websites and social networks were already well-established marketing tools about a decade ago. Total imports of advertising and marketing research services by Greece from the EU was almost stable in 2012-2017 (33-41 million euro) and then grew to 70 million in 2019 and 114 million euro. Despite that indicator is not only for tourism enterprises, it is assumed that tourism sector depends on the overall country brand of Greece, which is promoted by advertising various sectors of Greek economy at least indirectly.

Input-output data for 2021 shows that the sectors related to tourism (Accommodation and food service activities; Travel agency, tour operator reservation service and related activities; Creative, arts and entertainment activities; libraries, archives, museums and other cultural activities; gambling and betting activities; Sports activities and amusement and recreation activities) imported advertising and marketing research services from the EU with a value 6.4 million euro and the services of Travel agencies, tour operators reservation service and related activities from the EU with a value 13.2 million euro. The similar purchases from the Greek advertising, marketing and reservation businesses were 139 and 81 million euro.

Correlation coefficients between the inbound tourism indicators and marketing tools can provide only very approximate estimation of their potential efficiency. Longer time series are not available yet, especially for growth rates of tourism indicators and change in the shares of enterprises using specific types of digital marketing tools. Moreover, when the preceding and subsequent values were known, some missing values were imputed using interpolation method. Therefore many correlations are insignificant even when the effect is reasonably expected. Travel agencies' e-commerce sales, website use and online reservation systems have the only significant correlations with arrivals of the EU tourists to Greece and their expenditure especially for travels for personal reasons. The effect on business trips is by the expenditure and not by the number of arrivals.

Table 3. Correlation matrix for inbound tourism indicators in Greece (the EU tourists) and marketing tools use 2012-2022

	All trips	Trips for personal reasons	Visits to friends and relatives	Professional and business trips	Tourists' expenditure	Personal reasons tourists' expenditure	Professional and business tourists' expenditure
Imports of advertising, market research, and public opinion polling services from the EU	-0.19	-0.16	-0.55	-0.73	0.18	0.19	-0.40
Accommodation enterprises' total turnover from e-commerce sales	0.18	0.19	0.01	-0.32	0.35	0.35	0.38
Accommodation enterprises with a website	0.24	0.25	-0.19	-0.33	0.51	0.51	0.15
Accommodation enterprises where the website provides description of goods or services, price lists	-0.02	-0.02	-0.28	-0.14	0.18	0.18	0.04
Accommodation enterprises where the website provides online ordering or reservation or booking, e.g. shopping cart	0.18	0.20	-0.02	-0.40	0.39	0.39	0.09
Accommodation enterprises where the website provides possibility for visitors to customise or design online goods or services	-0.02	-0.01	-0.20	-0.39	0.22	0.22	0.14
Accommodation enterprises using social networks	0.19	0.21	-0.02	-0.48	0.50	0.51	0.06
Accommodation enterprises using a blog or microblogs	0.12	0.12	0.16	-0.11	0.19	0.20	-0.12
Accommodation enterprises using multimedia content sharing websites	0.03	0.06	-0.20	-0.55	0.33	0.34	0.08
Travel agencies and similar enterprises' total turnover from e-commerce sales	0.73*	0.73*	0.44	0.19	0.70*	0.69*	0.88**
Travel agencies and similar enterprises with a website	0.53	0.54	-0.09	-0.29	0.72*	0.72*	0.39
Travel agencies and similar enterprises where the website provides online ordering or reservation or booking, e.g. shopping cart	0.56	0.59	-0.14	-0.69	0.85**	0.86**	0.15

Note: significant correlations are marked with ** (p<0.05) or * (p<0.1).

Relatively large but insignificant correlations tell about potential effect of websites and social networks used by accommodation enterprises on travels for personal reasons. But they become larger (more than 0.7) and significant if the pandemic year 2020 is not considered, especially for the websites with description of goods or services and price lists. Several negative insignificant correlations also exist.

Table 4: Correlation matrix for growth of inbound tourism indicators in Greece (the EU tourists) and change in marketing tools use in 2013-2022

	All trips	Trips for personal reasons	Visits to friends and relatives	Professional and business trips	Tourists' expenditure	Personal reasons tourists' expenditure	Professional and business tourists' expenditure
Imports of advertising, market research, and public opinion polling services from the EU	0.57	0.58	0.52	0.17	0.50	0.50	0.43
Accommodation enterprises' total turnover from e-commerce sales	0.28	0.29	0.48	0.09	0.17	0.16	0.30
Accommodation enterprises with a website	0.06	0.06	0.08	-0.06	0.07	0.07	0.08
Accommodation enterprises where the website provides description of goods or services, price lists	-0.14	-0.13	-0.34	-0.40	0.18	0.19	-0.25
Accommodation enterprises where the website provides online ordering or reservation or booking, e.g. shopping cart	-0.12	-0.12	0.23	-0.02	-0.25	-0.26	0.09
Accommodation enterprises using social networks	0.07	0.07	0.04	-0.11	0.20	0.20	0.04
Accommodation enterprises using a blog or microblogs	-0.03	-0.02	-0.03	-0.37	0.13	0.14	-0.22
Accommodation enterprises using multimedia content sharing websites	-0.10	-0.09	-0.23	-0.42	0.07	0.08	-0.28
Travel agencies and similar enterprises' total turnover from e-commerce sales	0.94**	0.93**	0.95**	0.94**	0.64	0.61	0.97**

Using growth rates and changes in the indicators for correlation analysis shows that significant correlations exist between travel agencies and similar enterprises' e-commerce sales and arrivals of the EU tourists, but the number of the available data is too low (5 years only). There is a potential but insignificant positive effect of advertising Greek products and services in the EU.

Efficiency of other marketing channels cannot be proved yet with the available data, considering lower correlations and missing data. The effect of other major factors such as lockdowns and the pandemic may also affect the results. This may lead to volatility in efficiency of marketing tools. According to table 5, there was an obvious drop in efficiency of all marketing tools in 2020 by the ratio of the EU tourists' expenditure growth to the increase in use of a marketing channel by Greek tourism businesses. Other periods of deterioration of efficiency were in 2015 and 2019. Increase in imports of advertising, market research, and public opinion polling services from the EU was the most efficient in 2016, increase in using websites with description and prices of accommodation services in 2017, and increase in using social networks for marketing accommodation services during recovery from the pandemic crisis.

Table 5. Trends in ratios of growth rates of the EU tourists' expenditure in Greece to change in marketing channels use (when it was positive)

Indicator in denominator	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Imports of advertising, market research, and public opinion polling services from the EU		0.49		13.72	4.45	0.15	-0.15	-9.81	3.00	
Accommodation enterprises' total turnover from e-commerce sales						0.86		-19.49	45.12	5.48
Accommodation enterprises with a website	2.92	1.27	-7.70		9.59	31.62	-15.48		315.85	29.35
Accommodation enterprises where the website provides description of goods or services, price lists	1.32	4.30	-1.39	3.73	13.24			-4.30	9.96	
Accommodation enterprises where the website	7.26	1.33			4.16	11.29	-5.53	-37.89		11.52

provides online ordering or reservation or booking, e.g. shopping cart										
Accommodation enterprises where the website provides possibility for visitors to customise or design online goods or services								-6.12	14.16	
Accommodation enterprises using social networks				1.39	4.95			-21.65	50.14	69.98
Accommodation enterprises using a blog or microblogs			-0.61		2.69			-18.94	43.87	
Accommodation enterprises using multimedia content sharing websites			-0.62					-4.87	11.28	11.09
Travel agencies and similar enterprises' total turnover from e-commerce sales				6.62	23.50					1.31
Travel agencies and similar enterprises with a website	1.38	0.48								6.06

It is reasonable to assume that business cycle in the EU may affect demand for travels of the EU residents to Greece. The correlation between the GDP growth in the EU (EG) and expenditure of the EU tourists in Greece (ET) was 0.72 in 2012-2022. The correlation with the growth of this expenditure (GET) was 0.80 in 2013-2022. Therefore adjustment for business cycle should be provided in further regression analysis. Under the small number of cases only 2 marketing channels provided significant effect and 1 more was close to significance.

The first regression model estimates that on average increase in the share of accommodation enterprises with a website providing online ordering or reservation or booking (WB) by 1 % resulted in 320 million more income for Greece from the EU tourists (N=11, R2=0.72). T-statistics is in parentheses with *** denoting significance at p<0.01, ** denoting significance at p<0.05 and * denoting significance at p=0.1.

ET = -12.3 + 0.97EG+0.32WB
   (-1.4)   (4.0)*** (2.4)**

The second regression model estimates that on average increase in the share of accommodation enterprises using social networks (SN) by 1 % resulted in 220 million more income for Greece from the EU tourists (N=9, R2=0.66).

ET = -7.5 + 0.79EG+0.22SN
   (-0.9)   (2.7)** (1.9)*

The third regression model estimates that on average acceleration in increase in the share of accommodation enterprises with a website providing description of goods or services and price lists (WD) by 1 % resulted in 2% more growth of income for Greece from the EU tourists (N=10, R2=0.82).

GET = -14.0 + 18.2EG+2.1WD
    (-1.3)   (5.7)*** (2.7)**

Using data by individual EU member states shows that in 2021 there was a positive correlation between their tourists' expenditure in Greece and imports (by Greek tourism related businesses) of advertising and marketing research services from those member states (0.36) and the services of travel agencies, tour operators reservation service and related activities from them (0.38). The correlations are close to significance (p<0.10). But after controlling for the GDP of the countries, the effect of these imports becomes insignificant.

The highest ratio of tourists' expenditure in Greece to imports of advertising and marketing research services was in case of Luxemburg (13 thousand) and Czechia (8.8 thousand) as countries of origin of tourists and the services. Relatively high ratios were for Denmark (5.3 thousand), Estonia (4.8 thousand), Sweden (4.7 thousand), Germany (4 thousand). The lowest ones were for Malta (19), Bulgaria (105) and Belgium (107).

CONCLUSIONS
Statistics on digital marketing channels in the EU member states already allows estimation of their popularity and efficiency. But limitation on the availability of the data in earlier period means that the research results are preliminary and require further verification in the subsequent years.

Greece was a successful destination in earning more and more income by attracting European tourists, though with a temporary sudden stop during the pandemic crisis. Most of the trips are for personal reasons. Websites together with social networks are the most important digital tools for the Greek accommodation enterprises, travel agencies and tour operators. Most accommodation sector businesses also pay for targeted advertising online. Mobile applications, blogs and microblogs are a less popular tool for promotion. Paid targeted advertising on the internet and using multimedia content sharing websites have been largely growing in popularity in recent years. Total imports of advertising and marketing research services by Greece from the EU increased 3 times in 2017-2021 after several years of stable values.

After controlling for the tourists' income trends (the EU GDP growth), websites providing description of tourism services, their prices and online booking, and possibly social networks demonstrate the effect on the income of Greek tourism sector. Data limitations and lower popularity of other digital marketing tools do not allow proving their substantial contribution at the macro-level. Using micro-level data may help to address their efficiency in further studies. Imports of advertising, marketing research and tour reservation services from individual EU member states also correlates with expenditure of tourists from those member states in Greece, but it is more related to the size of their GDP. The highest direct efficiency was for imports of advertising and marketing research services from Luxemburg and Czechia.

REFERENCES

Amoiradis, Ch., Stankova, M., Velissariou, E., & Ladis, Ch. (2021). Sustainability Analysis of Greece's Promotion as a Tourism Destination. Regional Science Inquiry, 13(2): 227-238. https://niightstars.net/?h=repec%3Ahrs%3 Ajournl% 3Av%3Aiii%3Ay%3A 2011 %3Ai%3A2%3Ap%3A45-59&_=% 2Fscripts%2 Fshowcites.pf%23KJWq MZBBlFP oJOMFUQ3llZi7aoRwHlzvpPE3

Andreopoulou, Z., Tsekouropoulos, G., Koliouska, Ch.,& Koutroumanidis, Th. (2014). Internet Marketing for Sustainable Development and Rural Tourism. International Journal of Business Information Systems, 16(4): 446-461. https://www.inders cien ceonline.com/doi/pdf/10.1504/IJBIS.2014.063931

Belias, D., Velissariou, E., Vasiliadis, L., Kyriakoy, D., Mantas, C., Varsanis, K., Sdrolias, L., Koustelios, A., & Tselios D. (2019). Tourism and Destination Marketing the Case of Greece. In: D. P. Sakas & D. K. Nasiopoulos (ed.). Strategic Innovative Marketing, Springer, 67-74. https://link. springer. com/ chapter/10.1007/978-3-030-16099-9_9

Dionysopoulou, P., & Tsakopoulou, K. (2021). Policy Responses to Critical Issues for the Digital Transformation of Tourism SMEs: Evidence from Greece. In: V. Katsoni & C. van Zyl (ed.). Culture and Tourism in a Smart, Globalized, and Sustainable World, Springer, 499-510. https://link.springer.com/chapter /10. 1007 /978-3-030-72469-6_33

Eurostat (2024, February 5). Database. https://ec.europa.eu/eurostat/web/main/data/ database

Fountoulaki, P., Leue, M. C., & Jung, T. (2015). Distribution Channels for Travel and Tourism: The Case of Crete. In: I. Tussyadiah & A. Inversini (ed.). Information and Communication Technologies in Tourism 2015, Springer, 667-680. https://e-space.mmu.ac.uk/600471/2/Distribution%20Channels%20for%20T ravel%20and%20Tourism.pdf

Halkiopoulos, C., Georgiadi ,M., Gkintoni, E., & Plexousakis, S. (2020). E-Accessibility Policy for Social Inclusion of Persons with Disabilities in Tourism Marketing. Case Study from Regional Hotel Units in Greece. Technium Social Sciences Journal, 8(1): 651-656. https://techniumscience.com/index.php/social sciences/article/download/ 578/ 309

Halkiopoulos, C., Dimou, E., Kompothrekas, A., Telonis, G., & Boutsinas, B. (2021a). The E-Tour Facilitator Platform Supporting an Innovative Health Tourism Marketing Strategy. In: V. Katsoni & C. van Zyl (ed.). Culture and Tourism in a Smart, Globalized, and Sustainable World, Springer, 609-623. https://www.researchgate. net/publication /352635098_The_E-Tour_Facilitator_ Platform_Supporting_an_Innovative_Health_ Tourism_Marketing_Strategy

Halkiopoulos, C., Katsouda, M., Dimou, E., & Panteli, A. (2021b). Cultural and Tourism Promotion Through Digital Marketing Approaches. A Case Study of Social Media Campaigns in Greece. In: V. Katsoni & C. van Zyl (ed.). Culture and Tourism in a Smart, Globalized, and Sustainable World, Springer, 695-708. https://www.researchgate. net/publication/352594043_Cultural_and_Tourism_Promotion_Through_Digita l_Marketing_Approaches_A_Case_Study_of_Social_Media_Campaigns_in_Gr eece

International Monetary Fund (2023, October 23). World Economic Outlook Database. https://www.imf.org/en/Publications/WEO/weo-database/2023/October

International Trade Centre (2024, February 5). Trade statistics. https://intracen.org/ resources/data-and-analysis/trade-statistics

Katsoni, V. (2015). Application of a Cultural Landscape Tourism Marketing Management Approach in a Mountainous Area. In: V. Katsoni (ed.). Cultural Tourism in a Digital Era, Springer, 121-130. https://www.researchgate. net/publication /274699294_ Application_of_a_ Cultural_Landscape_Tourism_ Marketing_ Management_ Approach _in_a_Mountainous_Area

Koliouska, Ch., & Andreopoulou, Z. (2023). E-Tourism for Sustainable Development through Alternative Tourism Activities. Sustainability, 15(11): 1-13. https://www. mdpi. com/2071-1050/15/11/8485/pdf

Papa, M., & Avgeri, M. (2009). Online Services Delivered by NTO Portals: A Cross-Country Examination. International Journal of Information Systems in the Service Sector, 1(3): 65-82. https://www.igi-global.com/gateway/article/4022

Papathanasiou-Zuhrt, D., & Russo, A. (2019). Lector in Fabula: Reinventing Digital Publishing to Attract the Youth and Strengthen Cultural Capital in Sites Museums and Collections. In: A. Kavoura, E. Kefallonitis, & A. Giovanis (ed.). Strategic Innovative Marketing and Tourism, Springer, 1189-1197. https://www.researchgate. net/ publication/334200433_ Lector_in_Fabula_ Reinventing_Digital_ Publishing_ to_Attract_the_Youth_and_ Strengthen_Cultural_Capital_in_Sites_Museums_and_Collections

Rentzi, K., & Constantoglou, M. (2023). Silver Tourism in Greece. Basic Elements of Marketing and Branding. In: V. Katsoni (ed.). Tourism, Travel, and Hospitality in a Smart and Sustainable World, Springer, 197-230. https://link.springer. com/chapter /10.1007/978-3-031-29426-6_13

Tsekouropoulos, G., Andreopoulou, Z., Koliouska, Ch., Koutroumanidis, Th., Batzios, Ch., & Lefakis, P. (2012). Marketing Policies Through The Internet: The Case Of Skiing Centers In Greece. Scientific Bulletin - Economic Sciences, 11(1): 66-78. http://economic.upit.ro/repec/pdf/2012_1_7.pdf

Tsiftelidou, S., & Christodoulou, A.-Ch. (2020). Semiotic Analysis of the Greek Tourism Organization's Spot "Greece: A 365-Day Destination". In: V. Katsoni & Th. Spyriadis (ed.). Cultural and Tourism Innovation in the Digital Era, Springer, 393-398. https://link.springer.com/chapter/10.1007/978-3-030-36342-0_31

Tzioras, N. (2018). The Internet as an Important Tool in the Tourism Industry and its Use in Customer Service. Expert Journal of Marketing, Sprint Investify, 6(2): 74-80. https://marketing.expertjournals.com/ark:/16759/EJM_609tzioras74-80.pdf

Velentza, A., & Metaxas, Th. (2023). The Role of Digital Marketing in Tourism Businesses: An Empirical Investigation in Greece. Businesses, 3(2): 1-21. https://www.mdpi. com/2673-7116/3/2/18/pdf

Vasios, G. K., Antoniadis, I., Zevgolis, Y., Giaginis, C., & Troumbis, A. Y. (2020). Turning a Problem into an Opportunity Through Tourism and Marketing: The Case of Wild Rabbits in Lemnos Island, Greece. In: A. Kavoura, E. Kefallonitis, & P. Theodoridis (ed.). Strategic Innovative Marketing and Tourism, Springer, 677-686. https://www.researchgate.net/ publication/339807204_Turning_a_ Problem_into_ an_Opportunity_ Through_ Tourism_and_Marketing_The_Case_of_ Wild_Rabbits _in_Lemnos_Island_Greece

Ziakis, Ch., & Vlachopoulou, M. (2023). Implementation of Digital Marketing in Tourism Industry. In: N. F. Matsatsinis, F. C. Kitsios, M. A. Madas, M. I. Kamariotou (ed.), Operational Research in the Era of Digital Transformation and Business Analytics, Springer, 217-225. https://link.springer. com/ chapter /10.1007/978-3-031-24294-6_23

Zouni, G., & Digkas, D. (2019). Marketing Suggestions for Multi-religious Tourism Development: The case of Thessaloniki. EconStor Open Access Articles and Book Chapters, 5(2): 36-42.https://www.econstor.eu/ bitstream/10419/215630/ 1/5-2-5. P df

Metaxas, Th. (2013). From City Marketing to Museum Marketing and Opposed. MPRA Paper 46968, University Library of Munich. https://mpra.ub.uni-muenchen. de/46968/1/MPRA_paper_46968.pdf

Deffner, A., & Metaxas, Th. (2008). The Cultural and Tourist Policy Dimension in City Marketing: The Case of the Olympic Municipality of Nea Ionia, Magnesia, Greece. MPRA Paper 41001, University Library of Munich. https://mpra.ub.uni-muenchen.de/41001/1/MPRA_paper_41001.pdf

Deffner, A. & Metaxas, Th. (2006). Developing Pilot Place Marketing Plans (PPMPs) in North and South Europe: a Methodological Approach. MPRA Paper 43300, University Library of Munich. https://mpra.ub.uni-muenchen.de/43300/ 1/ MPRA_paper_ 43300. pdf

Katsoni, V., Goula, A., Karagianni, O., Prezani, A., Papandoniou, P., & Hatzidimitriou, M. (2018). Content Analysis of Greek Medical Tourism Websites for a Successful Implementation of an E-Marketing Strategy. In: M. H. Bilgin, H. Danis, E. Demir, U. Can (ed.). Consumer Behavior, Organizational Strategy and Financial Economics, Springer, 37-51. https://www.researchgate. net/publication /324117454_Content_ Analysis_of_Greek_Medical_Tourism_Websites_for_a_Successful_Implement ation_of_an_E-Marketing Strategy