

## DIGITAL MARKETING TOOLS IN THE EU TOURISM SECTOR

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### ABSTRACT

The aim of this study is to evaluate trends in using digital marketing tools in tourism sector of the EU and to assess, which ones are currently more beneficial considering increasing travel services exports. Previous literature review includes studies which often focus on one or several types of digital marketing tools, devices, countries or, conditions, niche types of services or effects on specific segments of tourists. Statistical analysis shows that company websites and social networks are the most widely used instruments. Multimedia content sharing websites and geodata-based targeted advertising grow in popularity. Travel exports of the EU member states grew almost by 50% in 2016-2024. Larger increase in the exports is more likely in countries, which extend their marketing efforts to novel tools, because further increase in using traditional digital tools do not provide a significant positive effect after reaching a saturation point. At the same time, accommodation services providers may benefit the most from targeted paid advertising online. Travel agencies and other tourism intermediaries are recommended to maintain a website with personalised content for clients, blogs and to use social media to exchange views within the enterprise.

**Key words:** marketing channels, digitalization, European Union, internet advertising, company websites, tourism agencies.

**JEL:** M31, M37, Z33, Z32, F140

## INTRODUCTION

Many European Union countries have a well-developed tourism sector, which provides a substantial contribution to economic growth, employment and exports in those countries. In the 21<sup>st</sup> century marketing of accommodation, transportation and other tourism related services should adjust to new technological trends such as digitalization. This affects marketing campaigns' reach and costs. Enterprises try to use those marketing tools, which provide the best efficiency. New domains of digital tools gain popularity among potential customers (Kanan Fadani (2023)). It is not enough to have just only a company website with essential information and booking option. A wider set of tools becomes a sophisticated mix aiming to fit the needs and trends among tourists. Greece is a country where tourism is an important economy driver. It is a member state of the EU. Therefore, analysis of other member states' experiences in this field can be interesting for its tourism enterprises and government policy. The aim of the paper is to evaluate the scope of use and efficiency of the main digital marketing tools used by the EU accommodation business and travel intermediary enterprises in the modern period of technological development.

## LITERATURE REVIEW

Researchers nowadays switch their focus from traditional to digital marketing tools. The same regularity takes place in tourism sector too. Digital marketing tools can initiate changes in attitudes, encourage trying novel activities and locations, demonstrate a new perspective on already known destinations, support sustainable tourism, and engage new segments of tourists (Murto et al., 2025). Internet and social media are important tools to maintain customers' loyalty to destinations in European countries (Almeida-Santana & Moreno-Gil, 2017). Kontis et al. (2019) marked fast growth of e-intermediaries, which provide a competitive pressure on traditional tourism companies. But Igoumenakis & Giannoukou (2025) mentioned challenges in digital marketing as well: insufficient skills, increased competition, and data protection issues.

Despite narrowing gap in general digitalization of the EU countries, there are still divergent behaviour patterns in use of ICTs in tourism (travel and accommodation) sector. For example, in 2016 in Luxemburg several times more tourists used internet for travel and accommodation services than in Bulgaria and Romania (Navío-Marco et al., 2018). Among 30 European countries in 2017, Internet booking for accommodation was the most popular in Malta (55%), Belgium (45%) and Germany (45%). The lowest value was in Romania (3%), Bulgaria (5%) and Croatia (12%). Internet booking is more practiced in rich economies with better digital skills and higher expenditure per trip (Saseanu et al., 2020).

Guedes et al. (2023) included virtual proximity (Google Trends search data) and digitalization (number of internet users) variables in a gravity model of tourism arrivals in five South European countries (France, Greece, Italy, Portugal and Spain). Virtual proximity promoted by digital platforms (“Tripadvisor,” “Booking.com,” “Travelocity,” “Expedia,” and “Orbitz”) was a significant positive factor for the inbound tourism in 2004-2019. Digitalization was also important: internet penetration increase by 1% increased foreign tourists arrivals by 0.6%.

As for specific digital tools, Parlov et al. (2016) considered technological communication means for tourism promotion: accessible, user friendly and mostly interactive web-sites, web domains, content management system for search engine optimization, highly-personalized e-mail marketing, mobile e-marketing via applications for smartphones and tablets, and management of social networks. Iswanto et al. (2024) provided a systemic literature about digital marketing in tourism. Most of the studies mentioned social media, websites, some – interesting content, search engine optimization, blogs, emails and advertisements. They empathize the role of influencers and hashtags in social media marketing campaigns, quality content creation, website optimization, search engine optimization implementation and integrating consumer participation.

Word of mouth communication via social media is important (Kastanidou, 2019). Tourists also can alter other consumers’ behavior by sharing ideas and experiences within social media platforms (Surugiu et al., 2019). Kilipiri et al. (2023) showed the positive effect of Instagram travel influencers on promoting sustainable destinations. At the same time, using geo-location data by them provides no additional positive effect on travellers’ choices. Dewantara et al. (2023) considered the role of travel vlogs and their ecosystem including (vlogger, viewer and destination marketer).

The role of smartphones is increasingly important as a typical person checks it 150 times per day (Kastanidou, 2019). There are more opportunities nowadays for personalized marketing at digital platforms and potential clients spend more hours a day in their mobile devices (Ratiu & Purcarea, 2015). Maurer (2022) mentioned that in 2020 an average person was online more than 6.5 hours a day (or 40% of waking life), mostly via mobile devices. Pranicevic et al. (2019) suggest that hotels and travel agencies should adapt to wider use of mobile platforms (in particular web site design suitable for tablets and smartphones). Mobile devices were increasingly more used for planning travels (hotel reservations and services of travel agencies) in 2010-2016. A great majority of travellers do not plan all their activities in advance. They use mobile devices when they are on the road or when they arrive in the destination. A decade ago 53% business travellers and 31% of leisure travellers used mobile phones to make their reservations. The ratios are higher in weekends. Mastorakis et al. (2013) proposed a technology convergence model

for feedback from viewers of interactive digital television systems and automatically customizing services within tourism relationship marketing.

Krabokoukis (2025) considered a neuromarketing and data analytics-based tourism adaptive digital marketing framework for hotels and destinations. The main components include attraction, engagement and conversion. Feedback is provided within behaviour analysis, campaign performance optimization, heatmap insights, and A/B testing feedback. Several technologies may be integrated: including Google Analytics to track consumer online behaviour; Hotjar, Crazy Egg, or Smartlook to highlight areas of user attention; and Tobii Pro and Bitbrain for eye-tracking. Ad-hoc solutions include seasonal campaigns, segmentation strategies, loyalty programs and crisis response.

Meanwhile, a differentiated approach in feedback analysis is necessary. According to Mariani et al. (2023), online consumer reviews (at TripAdvisor.com and Booking.com) in America and Europe depend on online review policies about length of reviews. Better evaluation is provided to services when the policy is lenient (such as at Booking.com) in comparison to platforms with stricter policies (TripAdvisor allows to submit only larger reviews with more than 200 characters, which is a constraint for mobile phone users). Therefore, reviews at different websites should be evaluated separately during analysis. Artificial intelligence in marketing is a new field of study. According to a survey of marketing professionals from tourism companies by Muntean et al. (2024), AI helps to make digital marketing strategies more adaptive to technological changes and consumer behaviour. Advantages of AI application are customer segmentation, personalized content, predictive analytics and automated processes.

Lacárce (2022) used systemic literature analysis to assess the role of artificial intelligence in digital marketing strategies. This included data-driven learning for decision support (Machine Learning, Data Mining, Deep Learning, Support Vector Machine, Q-Learning, Association Rule Learning and Decision Tree), decision support systems (Decision Support Systems, Knowledge-Based Systems, Environmental and Decision Support Systems), social data analysis (Social Media Analytics, Sentiment Analysis and Network Analysis), artificial intelligence algorithms (Natural Language Processing, K-Nearest Neighbors algorithm, Multilayer Feedforward, Artificial Neural Networks, Probabilistic Neural Networks, Artificial Neural Network, R programming language, Bayesian inference and Data Cleaning), and artificial intelligence strategies for the improvement of the user experience (Virtual Reality, Chatbots and Self-service kiosks).

Several studies analysed digital marketing tools in specific temporal conditions. Avraham (2020) used content analysis of digital marketing tools to determine the strategies used to restore confidence in European destinations after terror attacks in 2014-2019 (“business as usual”, crisis mitigation, initiating events and new attractions,

image expansion, and encouragement of film production”). Deb et al. (2022) stated that digital marketing is especially efficient in crisis times. Aman et al. (2024) analysed marketing tools in terms of tourism behaviour in post-pandemic period, including application of virtual tourism, cloud computing and artificial intelligence. Some studies are focused on specific national cases. For example, Greece practiced initiatives to stimulate digital transformation of tourism small and medium enterprises through the policies of digital skills development, financial support and other tools (Dionysopoulou & Tsakopoulou, 2021). Parlov et al. (2016) concluded that there was still a large potential for improving digital marketing in Croatia in comparison to practices of other European countries.

Veseli-Kurtishi & Ruci (2023) used a survey of Albanian travel agencies. They considered Instagram (55% of respondents) and Facebook (30%) to be the most efficient marketing tools. Other tools included internet advertising (10%) and Youtube (5%). 85% of the agencies also had their own website. 85% increased their sales after starting using social media.

Veseli et al. (2025) used semi-structured interviews of consumers, businesses, and industry experts in Kosovo. All the three groups treated digital marketing as important for tourism sector. Consumers mentioned importance of social media (particularly Facebook, Instagram and TikTok) for choosing a destination considering availability of visual content and interactivity. Digital tools can promote sustainable tourism by directing tourists to under-visited locations and promoting eco-friendly options. Lack of a national tourism agency was mentioned as a drawback. Tourism businesses representatives noted that digital marketing tools are more cost-effective. They ensure wider and more targeted reach (especially for youth) than traditional ones such as radio and TV promotions, and brochures.

A city-level approach was used by Confetto et al. (2023) who proposed a Digital Destination Branding framework for cities:

- Social Network Presence (selection of social network channels, main information and contacts of organization, link from the company website, and frequency of publications);
- Social Network Content (visual and textual information, links, calls to action, hashtags, mentions, geotags, presence, place, potential, essential services, events, sustainability, safety, and reposting content created by users);
- and Digital Tourism Services (booking, newsletter, guides, maps, virtual tours, and links to review portals).

They used the framework to evaluate 10 destinations in Europe in 2021-2022. Vienna received the best ranking. Other cities (in descending order) were London, Munich,

Paris, Madrid, Rome, Amsterdam, Berlin, Barcelona and Milan. Usually destination marketing organizations of large and famous cities possess inertia as their existing cultural and historical heritage is already recognized worldwide.

A subsector breakdown of studies allows to provide examples of application of digital marketing tools for cultural, sports, adventure and natural heritage tourism. Evangelou et al. (2024) analysed behaviour of individuals practicing cultural tourism in Western Macedonia region in Greece and suggested that social media can be a good option for cultural organizations for better audience engagement. Gdonteli et al. (2024) interviewed managers of sport tourism businesses. Companies with better knowledge and use of marketing apply social media for customer segmentation, targeting and positioning. Businesses that consider marketing to be a supplementary activity use a passive approach and expect customers to come to them.

Digital marketing tools are especially important for niche travel services enterprises, such as adventure tourism, which may have limited resources. Adventure tourism organizations were surveyed in Bulgaria, Estonia, Ireland and Scotland in 2017-2018. They mostly use their websites, Facebook and pay for online advertisements. Instagram, Twitter and Pinterest were sometimes used, and Snapchat was rarely used. Video and image posts are especially appreciated. Several digital marketing skills were mentioned as important: search engine optimization, digital media platforms, accurate position tracking and mobile applications, location-based mobile applications. Less attention was paid to augmented virtual reality, 3D and 4D personalized site tours, drone technology and interactive wearable devices (Palamarova, 2018).

Luque-Martínez et al. (2019) interviewed directors of Natural Protected Areas and analysed marketing activity in Twitter and Facebook. The study was related to the areas in USA, Spain, Italy and Mexico. The US parks used Twitter much more actively. Activity in use of Facebook was also the largest in the US and the lowest in Mexico. Mitova et al. (2021) assessed natural heritage objects websites in Bulgaria in 2020 against benchmarking frameworks developed by them.

The framework for natural heritage benchmarking included several items grouped into several categories: general presentation (including quick facts), heritage values, site condition such as ecological vulnerability, ecosystem services and benefits, site advantages including opportunities and safety measures, site promotion, public engagement including educational campaign and scientific projects, techniques and design (including virtual tours, videos, maps, e-shops for souvenirs etc.). The tourism and related activities benchmarking system included accessibility, safety and security, primary service supply, secondary service supply, amenities, and responsible tourism

(F.A.Aliev, E.R.Shafizadeh, R.M.Aliev, N.O.Hajiyev, U.M.Galandarova (2019). The information about natural heritage sites of Bulgaria is present in Wikipedia, YouTube, Google Maps, online travel guides, websites of ministries, government agencies, municipalities, and pseudo-official private web-pages. But the natural heritage sites still remain underrepresented in information channels (the score of official websites is 24% of the best possible level). Especially they lack information about financial accessibility and organizational details for planning visits.

Finally, it is worth noting studies on digital marketing for specific segments of customers or businesses in tourism sector. Sharma & Sharma (2024) focused on digital marketing in small and medium enterprises in tourism industry. Kapota et al. (2024) analysed gender aspects, in particular use of digital marketing by women-led travel agencies. Digital skills development can both stimulate tourism and empower women in entrepreneurship.

Hysa et al. (2021) provided social media analysis with a breakdown by generations (Baby Boomers, X, Y, and Z) in Poland. Younger people are more active users of social media, in particular for checking opinions about destinations before making a travel decision and for short-term apartment rentals. Intergenerational differences are small in such activities as travel planning, finding information about local history and culture of tourist places, possible barriers, and establishing relationships with the local community. Women are more likely to pay attention to positive and negative comments in social media about places to visit. Karagianni et al. (2021) focused on the attitude of generation Y to digital marketing in tourism sector (peer-to-peer short-term rental services). Theofanous et al. (2024) developed a conceptual framework of digital inclusivity and accessible tourism including sustainable development, user-friendly technologies, stakeholder engagement, implementation strategies, evaluation and refinement.

Katsikari et al. (2020) found correlations between push and pull motivation factors for travels in Greece. For example, more knowledgeable, educated and intellectual tourists are more attracted by cultural and historical content in social media. Content about sports and outdoor activities attracts more customers with novelty and adventure as a motivation for travelling. Wildlife and parks content is associated with knowledge, intellectuality and sports as push variables. Security and luxury are correlated with escape, entertainment and prestige. As we see, most of the studies use a microeconomic approach in estimating effects of marketing tools. A lot of studies are focused either on specific countries or customer segments or types of tourism or marketing tools.

## **METHODOLOGY**

This paper considers developments in popularity of use of digital marketing tools by tourism enterprises in 27 EU member states. These are the growth rates in the shares of enterprises (10 persons employed or more) using various instruments of digital marketing (the share in 2023 or 2024 in % minus the share in 2016 or 2015 in % because availability

of the data varies by years) in two tourism sector components: Accommodation (prefix A is used in variables) and Travel agency, tour operator and other reservation service and related activities (prefix T). These independent variables include the shares of enterprises:

- web – with a website;
- webdescr – where the website provided description of goods or services, price lists;
- wevorder – where the website provided online ordering or reservation or booking, e.g. shopping cart;
- webtrack – where the website provided order tracking available online;
- webcustom – where the website provides possibility for visitors to customise or design online goods or services;
- webperson -where the website has personalised content for regular/recurrent visitors;
- adv – which pay to advertise on the internet;
- advcont – which pay to advertise on the internet, based on the webpages' content or keywords searched by users;
- advpast – which pay to advertise on the internet, based on the tracking of internet users' past activities or profile;
- advgeo – which pay to advertise on the internet, based on the geolocation of internet users;
- advoth – which pay to advertise on the internet, based on any other method of targeted advertising;
- advtarg – which pay to advertise on the internet, based on the webpages' content, keywords, users' past activities or profile or the geolocation;
- smimage – using social media to develop the enterprise's image or market products;
- smresp – using social media to obtain or respond to customer opinions, reviews questions;
- sminnov – using social media to involve customers in development or innovation of goods or services;
- smopin – using social media to exchange views, opinions or knowledge within the enterprise;
- smcust – using social media with customers;
- snetw – using social networks (e.g. Facebook, LinkedIn, Xing, Viadeo, Yammer, etc.);
- blog – using enterprise's blog or microblogs (e.g. Twitter, Present.ly, etc.);
- mmedia – using multimedia content sharing websites (e.g. YouTube, Flickr, Picasa, SlideShare, etc.);
- sm – using any social media;
- lsmttype – using only one type of social media;



- sevsmttype – using two or more social media.

The data is taken from Eurostat (2025). Correlation analysis is used to find the most important factors of economic growth. Then regression analysis is applied to create models. The dependent variables are the growth of tourism exports in 2016-2024 (Balance of payments by country – annual data: services: travel, million euro, credit) measured in % relatively the level of the tourism exports in 2016 (TE) and in % of GDP (Gross domestic product, current prices, million euro) in 2015 (TEGDP).

## RESULTS

Table 1 shows the trends in using digital marketing tools by tourism sector enterprises. The general trend towards digitalization is not an absolute regularity. Sometimes there are exceptions. For example, the share of accommodation enterprises using websites decreased, but that was rather a minor fluctuation. Websites are used by a great majority of accommodation enterprises (between 87% in Slovakia and 100% in Finland in 2023). The websites are used mostly for description of services, their prices and booking. Other website functions are used by a minority of tourism sector enterprises.

**Table 1:** Use of various digital marketing tools in tourism sector in the EU-27, % enterprises.

Sector	Accommodation		Sector	Travel agency, tour operator and other reservation service and related activities	
	2016 or 2015	or 2023		2016 or 2015	2024 or 2023
Tool			Tool		
Aweb	95.7	94.5	Tweb	92.7	94.1
Awebdescr	86.9	90.1	Twebdescr	80.4	85.0
Awevorder	76.2	78.2	Twevorder	60.7	60.3
Awebtrack	26.4	26.3	Twebtrack	29.3	25.2
Awebcustom	26.4	28.7	Twebcustom	27.0	26.5
Awebperson	16.2	15.3	Twebperson	21.3	18.8
Aadv	54.2	56.9	Tadv	47.9	63.5
Aadvcont	45.5	48.3	Tadvcont	40.7	54.7
Aadvpast	20.3	29.0	Tadvpast	22.7	36.6
Aadvgeo	19.8	33.8	Tadvgeo	19.9	36.0
Aadvoth	22.5	30.7	Tadvoth	22.2	35.0
Aadvtarg	46.9	50.5	Tadvtarg	41.5	56.0
Asmimage	66.8	75.6	Tsmimage	67.0	81.2
Asmresp	58.3	63.6	Tsmresp	51.3	64.3
Asminnov	32.6	25.8	Tsminnov	31.0	28.3

Asmopin	20.5	21.5	Tsmopin	18.8	28.0
Asmcust	70.1	81.3	Tsmcust	68.9	83.3
Asnetw	79.1	83.3	Tsnetw	77.9	85.5
Ablog	22.3	15.0	Tblog	32.1	28.2
Ammedia	26.8	55.1	Tmmmedia	36.2	60.8
Asm	79.6	85.3	Tsm	79.5	86.1
A1smttype	44.2	30.3	T1smttype	34.1	23.5
Asevsmttype	35.4	55.0	Tsevsmttype	45.3	62.6

**Source:** Compiled by the authors

57% accommodation enterprises pay for advertising only (between 43% in Slovenia and 89% in Finland in 2024). Travel agencies overcame the digital gap with accommodation enterprises in recent years in paid advertising online (64%). Thus, around 60% companies in the entire tourism sector pay for advertising online, which became more targeted, especially considering webpages' content or keywords searched by users (about 1/2 enterprises), while other targeting features are used less frequently (by around 1/3). Geolocation of internet users is the most increasingly popular targeting feature.

**Table 2:** Growth of tourism exports and main digital marketing tools use in tourism sector enterprises.

	TE	TEGDP	Aweb	Aadv	Asm	Tweb	Tadv	Tsm
	2024/ 2016	2024/ 2016	2023/ 2016	2024/ 2016	2023/ 2015	2023/ 2016	2024/ 2016	2023/ 2015
Economy	47.9	1.2	-1.2	2.6	10.2	1.5	15.6	12.0
EU- 27	17.3	0.3	-1.7		49.8	4.2		
Belgium	22.3	1.6	-4.6				18.5	-4.5
Bulgaria	47.9	1.6	-0.5	-7.8	18.9	-2.7	2.7	13.7
Czechia	42.9	1.1	-3.2		12.9	0		18.5
Denmark	9.5	0.1	-0.6		12.1	4.8	22.8	20.6
Germany	8.8	0.6	-4.3		12.4	3.9		4.3
Estonia	33.2	0.7	-1.0	-8.8	-2.4	-3.1	-1.5	-16.5
Ireland	63.5	4.8	8.7		14.7			
Greece	63.0	3.5	-1.8	3.0	10.5	1.8	2.5	26.4
Spain	50.3	1.1	-2.0		12.9			8.3
France	85.1	15.1			6.6			-15.7
Croatia	49.1	1.1	-2.5		-1.6	-2.6		-3.2
Italy	37.6	5.4	-0.7	24.7	7.6	-4.1	43.1	-0.9
Cyprus	52.6	1.8	-3.2	13.3	29.1	8.9	10.7	19.9
Latvia	62.3	1.8	0.6	13.1	18.7	0	1.5	10.9
Lithuania	20.2	1.9	-3.6		20.3			
Luxembourg	45.5	2.1	2.7	6.3	11.1	-2.1	25.4	32.8
Hungary	103.5	13.2	-2.9	27.6	14.6	-8.0	-0.0	-0.5
Malta								

Netherlands	41.7	0.9	6.5	10.9	0.1	0.1	-9.2	5.6
Austria	39.5	2.0	1.0			0		
Poland	34.5	0.8	-6.1	-7.3	15.3	-2.1	-14.4	11.3
Portugal	115.6	8.3	-8.3	20.9	2.5			
Romania	189.7	2.2		12.9	11.9		11.8	5.9
Slovenia	46.1	2.7	-9.8	-7.2	-4.6	0	33.5	30.0
Slovakia	-37.3	-1.2	-7.0	2.4	18.4	9.2	23.5	-8.3
Finland	32.6	0.4	0.6	30.9	10.9			
Sweden	19.4	0.4	0.1		7.9	-2.8		-2.5

**Source:** Compiled by the authors

A great majority of enterprises uses social media (between 72% in Romania and 100% in Finland in 2023 specifically in accommodation sector), especially social networks, but using multimedia content sharing websites has almost doubled, while blogs became a less popular tool. Enterprises prefer to use more than 1 social media type nowadays. Social media tools are mostly used to develop the enterprise's image or market products and to obtain or respond to customer opinions. But social media are less used for involving customers in development or innovation of services.

In 2016-2024 tourism services exports increased almost by 50% in the EU member states (table 2) especially in Romania, Portugal and Malta relatively the base year and in Croatia, Malta and Portugal relatively their GDP. Slovakia was the only country with a negative trend. The dynamics in Germany and Estonia was close to stagnation.

In accommodation sector Greece was the fastest to improve digitalization by website use, Finland led by increase in paid advertisements in the internet, and Belgium in social media use. The leading countries by digitalization dynamics in travel agencies were Slovakia, Cyprus and Hungary respectively. But the situation is more complicated than it may look at first glance. For example, zero increase in use of websites by travel agencies in Denmark, Lithuania, Austria and Slovenia was because 100% of such enterprises already had websites in 2015.

There were also cases of relative dedigitalization (especially in Ireland and Poland), which could evidence about either switching to other marketing tools or entering the market by new companies which have not been digitized yet. But in a majority of cases dedigitalization meant switching between various digital marketing tools (Aliyev. Q. Umudvar, Guliyeva. U. Gunay (2025)). For example, Poland switched to social media (especially multimedia content sharing websites) from company websites and paid advertisements in the internet, and there was also an increased use of geodata for targeted advertising there.

Correlation analysis shows that additional increase in already widely used digital tools is less efficient for stimulating inbound tourism in the EU countries. The correlations between the shares of enterprises at the beginning of the analysed period (2015 or 2016) on one hand and the correlations between the factors and tourism exports growth (correlations taken from the table 3) on another hand are significant negative ones: -0.31 (for TE) and -0.54 (for TEGDP). For example, almost all the companies in accommodation sector (96%) already had a website and the correlations with their use were close to zero (0.07 and -0.06). The correlations for travel agencies were even negative (-0.62 and 0.58) for the website tool (but such a strange affect could be also a result of strong correlation between Tweb and Tsmopin: -0.74). So, there can be a saturation point in use of this instrument in recent years, where minor additional changes in their use provide no significant positive effect or it is difficult to measure it under the influence of various other factors of inbound tourism. The only substantial positive effect for travel agencies was in case of using website with personalised content for regular/recurrent visitors. Investing in developing websites could be an innovative tool in the past, but nowadays applying new digital tools can be more efficient.

**Table 3:** Correlation matrix of digital marketing tools and tourism exports growth.

Sector Factor	Accommodation		Sector Factor	Travel agency, tour operator and other reservation service and related activities	
	TE	TEGDP		TE	TEGDP
Aweb	0.07	-0.06	Tweb	-0.62**	-0.58**
Awebdescr	-0.03	-0.28	Twebdescr	-0.22	-0.63**
Awevorder	0.13	0.05	Twevorder	-0.03	-0.19
Awebtrack	-0.04	0.04	Twebtrack	0.25	0.31
Awebcustom	-0.01	-0.05	Twebcustom	0.19	-0.05
Awebperson	-0.05	0.23	Twebperson	0.45**	0.15
Aadv	0.32	0.52**	Tadv	-0.20	0.00
Aadvcont	0.23	0.48*	Tadvcont	-0.36	-0.19
Aadvpast	0.32	0.60**	Tadvpast	-0.05	-0.27
Aadvgeo	0.21	0.41	Tadvgeo	-0.14	-0.20
Aadvoth	0.52**	0.37	Tadvoth	0.04	-0.01
Aadvtarg	0.30	0.58**	Tadvtarg	-0.29	-0.09
Asmimage	0.13	-0.30	Tsmimage	0.12	-0.31
Asmresp	0.05	-0.21	Tsmresp	0.20	-0.32
Asminnov	0.10	0.06	Tsminnov	0.20	0.15
Asmopin	-0.28	0.01	Tsmopin	0.72**	0.54**
Asmcust	-0.10	-0.31	Tsmcust	0.10	-0.33
Asnetw	-0.12	-0.13	Tsnetw	0.02	-0.29
Ablog	0.13	0.21	Tblog	0.52**	0.39

Ammedia	-0.23	-0.13	Tmmedia	0.18	-0.41*
Asm	-0.18	-0.17	Tsm	0.05	-0.27
Alsmttype	0.12	-0.04	Tlsmttype	-0.32	-0.03
Asevsmttype	-0.18	-0.04	Tsevsmttype	0.23	-0.35

Significant correlations are marked with \* ( $p < 0.1$ ) and \*\* ( $p < 0.05$ ).

**Source:** Compiled by the authors

The saturation point may start at the level of more than 60% share of enterprises using a tool. Some tools below this value had significant effect on tourism exports. A good option for accommodation sector is to pay to advertise on the internet possibly based on the webpages' content, keywords, users' past activities or profile. At the same time, using knowledge about geolocation of internet users provides a positive but insignificant effect. But paid advertisements online for tourism companies again provide no significant effect at the macro-level.

Instead, some social media tools used by tourism agencies provide a significant impact (blog or microblogs by type of media, and using social media to exchange views, opinions or knowledge within the enterprise as for purpose). At the same time, social media used by accommodation sector provide no significant effect on tourism exports at the macro-level.

The regression model for accommodation sector is  $TEGDP = 1.86 + 0.15Aadvtag$   $R^2 = 0.33$ ,  $p = 0.02$ ,  $N = 16$ . When Malta is excluded the effect is smaller ( $b_1 = 0.09$ ) but still significant ( $p = 0.05$ ). Therefore, increasing the share of accommodation enterprises using targeted paid advertising online by 6-11% leads to increase of tourism exports by 1% GDP.

The regression model for travel agencies and tour operators is  $TE = 44.3 + 2.3Tsmopin$   $R^2 = 0.53$ ,  $p = 0.003$ ,  $N = 14$ . When Romania is excluded the effect is smaller ( $b_1 = 1.8$ ) but still significant ( $p = 0.0003$ ). Therefore, increasing the share of travel agencies and similar companies using social media to exchange views, opinions or knowledge within the enterprise by 10% leads to an increase in tourism exports by 18-23%.

## CONCLUSION

In 2015-2024 the trend towards digitalization of the EU tourism enterprises continued, although some digital tools have already reached a saturation point (such as traditional company websites and social networks). Increasingly more popular tools are multimedia content sharing websites, combining several types of social media and using geodata for targeting internet advertisements. There are also exceptions when some digital marketing tools became less popular (traditional blogs or practice of using only one type of social media). The trends largely varied by countries. Absence of progress in digitalization in some destinations was partially due to reaching a saturation point (such as 100% use of company websites in some countries).

Meanwhile, digital tools varied largely by their macroeconomic effects for tourism exports of the EU member states. The exports increased by almost 50% in the EU since 2016. The digital marketing tools that already have reached a saturation point had either low insignificant or even negative correlation between their change and growth of inbound tourism receipts. Targeted paid advertising online was the best solution for accommodation sector, especially in tourism-dependent economies. Travel agencies and similar intermediary enterprises stimulate exports of travel services by supporting a website with personalised content for regular/recurrent visitors, blogs and using social media to exchange views, opinions or knowledge with the enterprise, especially in countries less depended on tourism. Nevertheless, this study did not consider microeconomic effects of digital marketing tools and the effect on domestic tourism.

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