

# Traveler segmentation through Social Media for intercultural marketing purposes: The case of Halkidiki

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**Abstract:** *This paper aims to present a methodology for the segmentation of travellers by studying social media profiles and extracting information on their preferences and demographic traits. Through the study of the sample's social media profiles (Instagram, Facebook, and Twitter), information about travellers' demographics and preferences are combined for the segmentation of the tourists visiting a Greek region. From the analysis of the data, 10 preference-based segments occur, while the cultural-based division corresponds to the main national groups visiting the region*

**Keywords:** *customer segmentation, customer profiling, digital marketing, social media, intercultural marketing*

**JEL Classification:** *M3, M31, Z33*

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## 1 INTRODUCTION

In the era of digital technology, communication and relationship building between businesses and consumers is becoming more and more vital. On the one hand, consumers are now able to actively generate content and share their preferences, wants and feedback directly with the firm, while, on the other, businesses can actively engage with consumers (Amaro, et al., 2016), address their needs based on the acquired information, and offer them customized experiences and personalization to almost the full extent. Especially with the use of social media, key data for the identification of a firm's target audience is now available publicly (Mitrou, et al., 2017), thus facilitating not only accurate customer profiling, but also making it an essential process for businesses decision making (Xianga, et al., 2015) and creating opportunities to stand out from competitors. Among the plethora of industries affected by this digital revolution,

the hospitality industry has been no exception. Through the use of websites, social media and mobile technologies, travelers have acquired new channels for the distribution of their tourism experiences and narratives (Munar & Jacobsen, 2014), along with the opportunity to actively participate in the development, rating and improvement of the tourism providers (Sotiriadis, 2017). For the utilization of such information, many customer profiling methods have been used from hospitality firms, in an attempt to segment their target audience mostly on the basis of demographic characteristics, such as age, gender, or country of origin. Such models, however, marginalize the importance of qualitative data, context and behavioral characteristics, all of which could offer firms a better understanding of the unexplored online tourist personality (Amaro, et al., 2016), as well as insights to more accurate traveler profiling. In this context, the purpose of the research is to match the social media content posted by the visitors of Halkidiki with the

cultural characteristics of the individual users who uploaded it onto their profiles. The data derived from this process provides a set of criteria for audience segmentation, based on cultural characteristics, preferences and demographic traits. Through the analysis of content available on three main social media platforms (Facebook, Instagram and Twitter), a total of ten (10) segments are generated, all of which assist the division of the target audience into smaller preference-based groups. Additionally, the preference-based model was combined with a cultural-based division of the target group, a process which offers crucial information for the formulation of niche marketing strategies for each cultural sub-group. All in all, this study, which is one of the few that takes place in the region of Halkidiki, aims to suggest a segmentation methodology which focuses more on the sentiment of the target audience, utilizes social media as a tool for consumer segmentation, and attempts to link the cultural background of each national group with their holiday activity preferences.

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## 2 LITERATURE REVIEW

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### 2.1 *The Importance of Segmentation in the Hospitality Industry*

The hospitality industry has long relied on segmentation of consumers, in order to conduct efficient tourism market research (Paker & Vural, 2016), fully comprehend travelers' needs and offer each customer the experience that best suits their needs. The majority of tourism firms apply a series of fundamental criteria for customer profiling, the most common of which include demographic, geographical, socio-economic and psychographic characteristics (Dolnicar, 2007). As a result of segmentation, businesses can form detailed profiles of their customers, thus achieving personalization, increasing their effectiveness and brand value, and generating positive feedback or even recommendations by current to potential consumers (Majid, et al., 2013). Moreover, segmentation limits competition to the segment level, since firms focus only on the target groups of their interest rather than the whole market, and hence strive for the improvement of the hospitality products they offer (Birdir, 2015). Accurate customer profiling also benefits the marketing activities of firms, by allowing marketing teams to focus on the creation of innovative messages, as well as their effective distribution through the most appropriate channels. Combined with the provision of high-quality services, segmentation allows for the generation of positive word-of-mouth and its circulation among the members of each particular segment.

### 2.2 *Current Tourist Segmentation Methods*

In the academic literature of hospitality studies, many attempts have been made for the effective categorization of consumers into specific target groups. With respect to methodology, "a priori" and "post-hoc" constitute the main approaches during the process of market segmentation. The former refers to the choice of variables at an initial stage, followed by the classification of the target market, while the latter operates through the collection of data, on the basis of interrelated variables, before the individuals are segmented

into groups with high internal similarities (Paker & Vural, 2016). Regarding the segmentation variables, the first and most common type of consumer grouping is described by Dolnicar (Dolnicar, 2007) as that of "common-sense segmentation". The main characteristic of this model can be identified as the inclusion of strictly demographic criteria. Personal characteristics acquire the most important role, and the selection of attributes is based mainly on experience gained from relationships with the local market or from practical considerations (Dolnicar, 2007). For instance, age, gender, language and country of origin are often chosen by hospitality firms for the division of clients into groups of interest, thus leading to the formation of distinct strategies for each segment. In an attempt to move away from these basic attributes, contemporary hospitality businesses have gradually begun to include behavioral characteristics, such as purposes of travel (Sarin, 2015) or even psychographic parameters, such as their need for independence or security (Prince, 2017), or even the effect of destination popularity on their final holiday choice (Cruz-Milán, 2017).

Despite its contribution to the traveler segmentation process, the commonsensical approach has often been criticized as simplistic, arbitrary and descriptive (Dolnicar, 2007), thus surfacing the need for the utilization of sophisticated statistical techniques. This realization has led to the rise of data-driven segmentation based on the development of algorithms for more accurate final results. In the academic research of traveler segmentation, clustering appears to be the most common algorithm of choice. The use of this method is illustrated in Amaro's research for the identification of traveler segments based on their level of social media usage (Amaro, et al., 2016). Currently, data-driven segmentation is continuously expanding, especially through the assistance of information technologies such as web crawling, computational linguistics, machine learning and other statistical techniques for the collection and analysis of big data (Xiang, et al., 2017). In this direction, Majid proposed an innovative method for utilizing the content of geotagged social media images, in order to infer semantically meaningful tourism destination data and ultimately utilize this information for the recommendation of each destination to matching tourist profiles (Majid, et al., 2013). However, according to Wong, research in the field of geotagging still remains at an early stage, since it focuses mainly on the technical aspects of the development of new software and data analysis methodologies (Wong, et al., 2017) rather than on the content itself.

Overall, on the one hand, data-driven segmentation can be combined with a common-sense approach for a more in-depth analysis of demographic segments. On the other hand, any data-driven segmentation research requires repetition of studies on a regular basis, in order to identify alterations among and within groups that may provide insights for tourism firms. A significant addition for the development of an even better-rounded traveler segmentation methodology can be the inclusion of the preference and cultural aspects in the analysis of the provided data. Such an approach is suggested in following sections of this paper.

### 2.3 *Use of Social Media by Travelers*

Social media have become an integral part of consumers' everyday lives by allowing them to create and share content

instantly online with fellow users. This constantly growing trend has also had a significant impact on the hospitality sector, especially through the emergence and growth of numerous tourism-dedicated social platforms (Mkono & Tribe, 2017). Due to the intangible nature of the tourism sector products (Ip, et al., 2010), where imagery and storytelling play an important role in destination branding, hospitality firms “are more susceptible to social media conversations and stories” (Lund, et al., 2018, p. 272). Moreover, with the exception of content generated by hospitality brands, the majority of user-generated content available on social media is perceived as “informal (or personal)” (Kourouthanassis, et al., 2017) and, thus, unbiased and trustworthy (Lai & To, 2015; Christou, 2015; Narangajavana, et al., 2017). Even before traveling to their destination, holidaymakers use social media as a source of information for effective decision making (Hays, et al., 2013), due to their accessibility, ease-of-use, and direct communication options for interconnecting with other users. This activity leads to the reduction of uncertainty and creates the perception of an improved decision-making process (Hwang, et al., 2013). It is characteristic that a vast amount of results during online tourism information searches derive from social media (Ho, et al., 2012). The effectiveness of social media on travelers decisions can be illustrated in Leung’s study of Facebook and Twitter in the hotel industry (Leung, et al., 2013), according to which consumers’ attitudes towards a firm’s social media page has an impact on his/her disposition towards the brand, and, ultimately, affects booking decisions. Furthermore, while on holiday and after their departure, travelers remain active on social platforms by uploading images of their experiences, rating services or offering holiday recommendations to other online users (Mkono & Tribe, 2017). More specifically, during their vacation, travelers tend to replace information searching with content creation and sharing, while, after the end of their holiday, posting of comments, recommendations and reviews becomes also a popular activity. All of these activities can be utilized by firms, in order to create a two-way flow of communication with consumers and increase their engagement with the brand. This engagement is described by So (So, et al., 2012) through the five dimensions of enthusiasm, attention, absorption, interaction and identification. These dimensions range from simple interest in a brand activity to the formation of a relationship with the brand on the basis of matching with the customer’s self-image (Revilla-Hernández et al, 2016; Harrigan, et al., 2017).

#### *2.4 Intercultural Marketing for Tourism through Social Media*

Intercultural marketing or multicultural marketing can be defined as the practice of a targeted marketing strategy, which focuses on one or more audiences of a specific nationality, usually different from the culture that is dominant in the firm’s country of origin. The essence of intercultural marketing lies in the exploitation of the elements which characterize another culture, in order to facilitate the communication process and, ultimately, lead to the formation of a business relationship between the two parties. Due to the nature of the industry, tourism-based organizations and their clients are the main participants in the process of cross-cultural communication. Furthermore, effective

communication, clear understanding and adaptation to the client’s wants and preferences are vital for the creation of a unique holiday experience (Albu, 2015; Misirlis et al., 2018). For the application of intercultural marketing, firms require the possession of “culturally intelligent” personnel. These individuals must be able to adapt to the culture of the target country, and identify the differences in terms of perceptions, motives and beliefs of customers, and reflect these cultural traits in their marketing strategies (Samo, 2014; Chatzigeorgiou, 2017). This requires the expression of their genuine interest for the target culture, along with the ability to capitalize on common elements and existing similarities and ultimately achieve the optimal balance between cultural adaptation and product or service standardization. However, with the development of digital technology, social media platforms can assist firms in their attempt to apply intercultural marketing practices. Social media has permitted businesses to appeal to their customers on emotional grounds through innovative and highly targeted campaigns. In other words, “business can build such emotional relations with their customers based on the mutual interaction in the online community” (Copuš & Čarnogurský, 2017, p. 190). This, of course, requires in-depth knowledge of the target group’s culture (Zafiroopoulos, 2015; Samo, 2014), in order to appeal to its members in an effective way and arouse positive emotions. Firms can also gain important insights directly from their customers and help them comprehend their needs (Copuš & Čarnogurský, 2017). Finally, through the application of intercultural marketing principles, market research is easier to conduct, while information on the particularities of each national market can be derived directly from relative sources, so as to incorporate them in the firm’s strategy for each cultural group. Hence, in the era of social media, marketing experts have a unique opportunity to experiment with intercultural communication principles to an even greater extent.

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### **3 METHODOLOGY**

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The collection of the data took place over a period of 4 months, from the beginning of July to the end of October 2017. This specific time frame was chosen based on the fact that these four months constitute the main holiday period for the region of Halkidiki, with July and August as the peak and September and October as the calmer months of the tourist season. The choice of the destination occurred due to the fact that, in the region of Northern Greece, Halkidiki is considered to be the most popular tourist destination, both for foreign visitors and residents of neighbouring metropolitan areas. Moreover, in contrast to more advertised touristic regions of Greece, such as the Aegean Islands or Crete, Halkidiki is an area which has not been included in many academic studies in the field of hospitality. Hence, this paper offered an opportunity for such a research to take place and lay the ground for its further expansion in the future. For the collection and examination of the research data, 272 social media profiles were studied, so as to pinpoint the characteristics of the tourists visiting the area of interest. The sample was based on the selection of random profiles from the social media platforms of Instagram, Facebook and Twitter. These social media platforms were selected on the basis of popularity among users, rich imagery, as well as the

inclusion of hashtags as tools for the categorization of uploaded content. More specifically, a number of hashtags were used as a search query for the identification of the user profiles that included these tags in their posts from the previous summer season. Due to the large diversity of activities and holiday options available in Halkidiki, a wide range of tourism-related keywords were applicable. Furthermore, the name of the region itself appeared in different spelling forms (#halkidiki, #chalkidiki, #khalkhidiki, and even #halhidiki in cases of misspelling). Another important methodological issue was the inclusion of all the sub-regions of Halkidiki, in order to collect additional content made publicly available by the participants included in the sample.

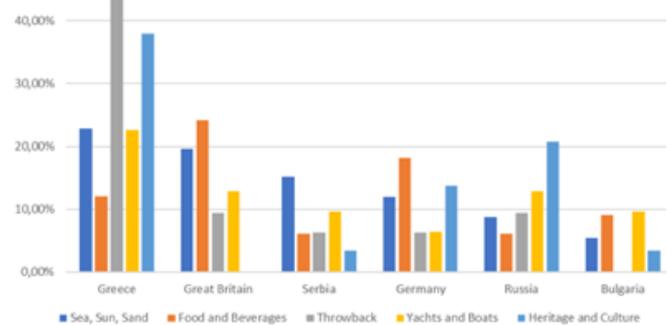
In terms of format, both images and video were taken into consideration and studied by the researchers. In cases where multiple tourism preferences were presented within a single picture, only the most predominant one was taken into consideration, and, for users posting photographs with similar content, only one image out of each particular group was selected by the researchers, so as to avoid biases towards certain themes. Content created by tourism-based businesses was excluded from the research, so as to distinguish between original, user-generated content and promotional material which could alternate the final result of the study and lead to false conclusions. However, social media content posted by influencers was also included in the sample, due to the fact that such personalities create marketing trends within the industry. Moreover, apart from social media posts uploaded during the summer period, the “throwback” theme was also a part of the research material, based on the fact that many users present their positive memories, experiences and their nostalgia for their vacation by posting content created in the past.

After the collection of the data, all of the 272 social media profiles selected were analyzed through the methodological approach of content analysis. This type of analysis was selected due to the emphasis of the study on sentiment and culture on the one hand, and due to the lack of algorithm-based analytics tools on the other. Content analysis allowed the researchers to carefully examine the imagery and linguistic terms used in the sample posts and extract the qualitative data that represents the culture and preferences of the users participating in the study. Regarding the content per se, the main sources of data included the photographs uploaded from these profiles on Instagram, Facebook and Twitter, along with any existing text which accompanied these images. The combination of these two elements provided the researchers with data regarding the cultural background of the user, the selected holiday destination, preferences, possible likes and dislikes, and any other information which could facilitate the formation of a future personalized social media marketing campaign. More specifically, image background, surroundings, items, food, clothing and other elements related to specific locations were taken into account, along with the language and expressions used by the participants in the images. Another important factor included in this particular content analysis was the attitude and dispositions expressed by the participants, to the degree of course that these could be comprehended through a single image.

## 4 RESULTS AND DISCUSSION

Before presenting the findings of this study, it is important to highlight the main national groups which visit the region of Halkidiki during the summer season. In contrast to Southern Greek resorts, the area is highly popular with visitors from the Balkan states, as well as Northern, Central and Eastern Europeans, while travelers from the Americas, Asia, Africa and Oceania are only beginning to become familiar with the region. The largest group of tourists derives from Germany, followed by Russians, British, Turks, Serbians, Romanians and Bulgarians. All of these ethnic groups appear in the findings of the study, after being segmented on the basis of their holiday preferences.

Table 1. Analysis by Preference



With the exception of the destination parameter, all other elements were taken into account and combined with the availability of data for the creation of distinct preference-based segments by the researchers. Based on the popularity of each theme, the content and the context of the available user-generated posts, the categories formed were the following ten (10): “Food and Beverages (F&B)”, “Heritage and Culture”, “Sea, Sun and Sand (3S)”, “Watersports”, “Activities”, “Events”, “Throwback”, “Yachts and Boats”, “Camping and Backpacking”, and “Experience”. Out of these categories, “Food and Beverages”, “Sea, Sun and Sand”, “Yachts and Boats” and “Watersports” included a variety of images, which often overlapped between two or more themes. However, the categorization took place based not only on the image itself, but also on the text which accompanied each one, thus facilitating the process of content segmentation. Furthermore, wedding ceremonies constituted the central theme of the “Events” category, while “Heritage and Culture” was also expanded to pilgrimage tourism, depending on the religious sentiment and motivation behind each traveler’s visit. The “Throwback” category included clubbing, live concerts or any kind of activity related to past experiences and happy, even nostalgic, memories. In contrast to the “Throwback” theme, “Experiences” concerned mostly images of special interests taken during the individual person’s travels. Also, since Halkidiki is considered to be primarily a summer destination, the “Activities” category was limited mainly to outdoor activities, including table tennis, golf, hiking, bicycle, horseback riding, and fishing. Finally, since the summer season of Halkidiki offers mostly leisure options, the concept of Business Tourism was excluded from this research. This can be attributed mainly due to the lack of data available in

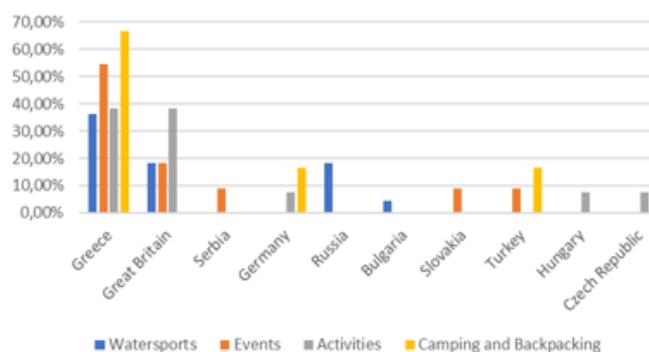
the summer months, as well as the increase of business or conference travelers during the autumn and winter months, a period which not included in this specific study's timeframe. Out of the total number of segments formed during the study, "Sea, Sun and Sand" appears to include the majority of social profiles, since it has both the highest number of posts and the largest diversity among the nationality of participating users. Aside from the Greek posts, most content posted on social media which was relevant to this category derived from tourists from Great Britain (19,57%). Travelers from Serbia follow (15,22%), along with German visitors (11,96%) and Russians (8,70%). The rest of the results are made up of smaller groups of different nationalities, including Central and Eastern Europeans, Asians, as well as a small minority from the United States and Africa. The second largest segment is that of "Food and Beverages", with the majority of culinary-related content uploaded by British tourists (24,2%) depicting mainly local delicacies and alcoholic beverages such as local wine. German tourists come in second (18,18%), while, apart from the Greeks (12,12%), Bulgarians, Serbians and Russians also share their food-related content on social media (9,09%, 6,06% and 6,06% respectively).

The "Throwback" theme constitutes the third largest preference-based segment. In this particular case, it is the Greek profiles which have the most relevant activity, since almost half of the content examined in the sample is produced by Greek travelers (43,75%). However, it is important to stress that these social media users are not exclusively national Greeks, since many of the posts derive from Greek diaspora. Russian and British tourists also post content related to the "Throwback" theme (9,38% respectively), followed by Germans and Serbians (6,25% respectively). The results are completed by other national groups, the majority of which derive from Europe. The "Yachts and Boats" segment comes in fourth. Excluding the Greeks, this category is highly popular among Russians and British (12,9% respectively), followed the Serbians and Bulgarians (9,68%) and by members of Northern European states (6,45% each). Images of luxury cruises and tours around the region of Mount Athos are highly popular within the sample of this category, due mostly to the religious affinity of Russian tourists with this monastic area. Moreover, much of the content included in this category presents elements of other themes of the research, such as watersports or unique experiences.

Furthermore, the "Heritage and Culture" segment appears to be popular among the nationalities which show an interest in historical monuments and participate in sightseeing activities. From the non-Greek national groups, the largest number of posts derives from users of Russian origin (20,69%). For this particular group, the content of this category can also be expanded to the pilgrimage concept, since many of the travelers visit the area in order to pay their religious respect to the monasteries of their choice. The second group exhibiting high interest for cultural tourism is that of German tourists (13,79%). On the contrary, tourists from the Balkan region and Central Europe show limited or no interest at all, since many countries did not provide any data related to this category. Moreover, like "Yachts and Boats", "Watersports" is another segment directly related to the concept of sea, sun and sand tourism. Again, with the exception of Greek tourists, Russians and British visitors

exhibit the most interest in activities of this nature (18,18% each). These two groups make up one third of the sample, while the remaining ethnicities include travelers mainly from the Balkan region, as well as the Mediterranean. The preference of both Russian and British tourists towards watersports could be explained by the high cost of such activities, since they require an increased budget in comparison to more relaxing options such as sunbathing or swimming.

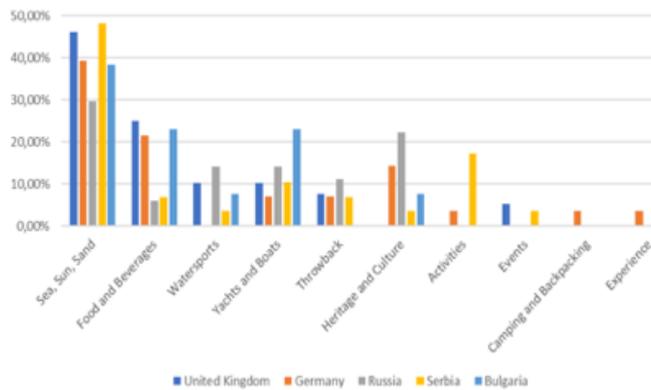
Table 2. Analysis by Preference



With respect to "Events", it appears that Greek tourists generate the majority of online content related to this category (54,55%). Nevertheless, just like the "Throwback" theme, a large amount of profiles belongs to Greeks of the diaspora or even foreign nationals married to Greeks, the events of which take place in the region of Halkidiki. British visitors come in second (18,18%), followed by Serbian, Slovak and Turkish tourists (9,09% each). For all nationalities, the main theme of their uploaded content concerns weddings, since many travelers choose to perform their wedding ceremony in the peninsula of Halkidiki. Also, many visitors combine their wedding reception with their honeymoon trip, thus posting them both online during their visit to the area.

In contrast to the previous content categories, "Activities" is the only one where the majority of non-Greek surveyed profiles derives from Serbia (38,46%). The percentage of profiles is equal to those of Greek travelers, and the remaining content is generated by tourists from Central Europe (Germany, Czech Republic and Hungary, with 7,69% each). Furthermore, regarding the "Camping and Backpacking" segment, the majority of content is uploaded by Greeks (66,67%), followed by travelers from Turkey and Germany (16,67% each). These results could be attributed to the lack of content related directly to camping and its equipment, the non-participation of camping enthusiasts on social media or even the unavailability of public content. Finally, the lowest number of uploads are related to the "Experience" category. Only a limited number of profiles generated such content, mainly from the countries of France, Germany and Greece. Unfortunately, the amount of data does not provide a clear image of the preferences of foreign travelers with respect to these unique experiences. Nevertheless, they could be better utilized in the future for marketing purposes, especially for tourists from Western Europe, which are the only national group participating in the category

Table 3. Analysis by Nationality



In the second stage of the analysis, the preference-based model was combined with a cultural-based approach, in order to match social media content to attributes of national groups and extract insightful information for the formation of separate intercultural marketing strategies. A wide variety of ethnicities were involved in process, mainly from the target markets of Halkidiki's tourism industry. These include Greece, the United Kingdom, Germany, Bulgaria, Serbia, Russia, the U.S., Switzerland, Italy, France, China, Slovakia, Poland, Romania, the Netherlands, the Czech Republic, Turkey, Sweden and many more. However, due to the small number of representatives from certain states, only the most predominant nationalities are presented in the results, followed by trends that appear among a number of groups with common cultural backgrounds, such as Northern Europe or the Eastern European states. The selection of the categories and the target-market tourism groups were decided based on two main factors. The first was the availability of tourism-related activities combined with the main national groups visiting the region. Details on both were provided by publicly available information from destination management organizations (DMOs) of Halkidiki, as well as from interviews with key officials of the region's industry. The second factor was the data provided by previous similar studies, which aimed to identify the profile of the area's visitor's and improve Halkidiki in ways that meet their individual needs (Marits, 2013).

For tourists from the United Kingdom, the majority of uploaded content (46,15%) refers to the model of "Sea, Sun and Sand" tourism. Food and beverages are also an important aspect of their holiday (20,51%), followed by sports that take place in the sea, such as various watersports and sailing (10,26% each), while only a small amount of the content belongs to the "Throwback" category (7,69%). Finally, the interest of British tourists towards events seems to be rather limited (5,13%), while the variation of the content is also low, since it mainly refers to wedding receptions and honeymoon trips. In contrast to the British, German tourists present a higher variety in terms of social media content and holiday activity preferences. Although both the "Sea, Sun and Sand" and the "Food and Beverage" segments remain in the top two (39,29% and 21,43% respectively), visitors from Germany also appear to enjoy more outdoor activities and sports. More specifically, the "Heritage and Culture" theme (14,29%) is the third most popular among German travelers, followed by "Yachts and Boats" and "Throwback" (7,14% each). Finally, camping, hiking, cycling, golfing, horseback riding and many

more activities (3,57%) also attract their interest, along with their desire for unique experiences (3,57%).

With respect to visitors from Russia, the themes included in their social media content appear to be more normally distributed, since there is not a single category that represents more than 30% of the sample. Again, the "Sea, Sun and Sand" theme comes in first (29,63%), while "Heritage and Culture" is the second most popular type of tourism (22,22%). Furthermore, Russian tourists appear to enjoy their vacation by the sea, engaging in watersport and sailing activities (14,81%). Members of this cultural group also share their holiday memories online through "Throwback" content (11,11%), while the low amount of content relevant to the "Food and Beverage" category is not considered a surprise, taking into account their increased budget spending for other goods, rather than food and beverages.

In turn, Serbian tourists exhibit a clear preference towards the "Sea, Sun and Sand" model, since the majority of the content belongs to this category (48,28%). Affordable activities such as walking tours or swimming, are the second most popular option (17,24%), followed by "Yachts and Boats" (10,34%). "Food and Beverages" are not a priority for visitors from this national group (6,90%), while only a small amount posts content related to past holiday experiences (6,90%). Finally, "Heritage and Culture", "Watersports" and "Events" (3,45% respectively) constitute a small percentage of online content, due to the fact that Serbian travelers would rather enjoy a relaxing holiday than engage in such activities. Finally, despite the small amount of data gathered, the preferences of Bulgarian visitors can be depicted rather clearly from the research. Once more, "Sea, Sun and Sand" dominates this national group's online content (38,46%), while "Food and Beverages" and "Yachts and Boats" follow (23,08% each). The presence of the "Heritage and Culture" theme can be attributed to the religious affinity towards the monasteries of Mount Athos (7,69%). Nevertheless, this does not apply to the same extent as it does to the case of the Russian tourists. "Watersports" are also a holiday activity selected by Bulgarian visitors (7,69%), due to their link to both the "Sea, Sun and Sand" tourism and the "Yachts and Boats" category.

## 5 DISCUSSION

The analysis above shows how social media data can be utilized in a constructive way for consumer segmentation and the formulation of highly targeted marketing strategies. In the case of this research, cultural attributes and personal preferences took on a more active role, since they became the main focus point for the creation of the 10 preference-based segments. Apart from its methodological contribution, this research also offers valuable insight into the preferences of the tourist groups visiting Halkidiki, and, hence, this information could be effectively used by both the academic and the business liaisons affiliated with the region. Based on the data from the research, without exception, all tourist groups select Halkidiki as their holiday destination, due to the combination of sea, sand and sun. Western Europeans allocate a significant amount of their budget on entertainment activities, food and local experiences. Outdoor activities are important for German visitors and Central Europeans, while travelers from the Balkans prefer more relaxing options. The majority of such tourists also prefer to spend their budget on

their accommodation or inexpensive outdoor activities. Russia and the Balkan states also express their religious affinity towards Mount Athos by visiting the monasteries either by land or via cruises around the peninsula. Finally, with respect to non-European tourists, the combination of sea, sand and sun appears to be their main motivation for their travels to Halkidiki, although more data is required for the full analysis of their traveler profiles.

In terms of value, this study adds resourceful insight to previous studies on tourism segmentation in Greece. So far, much attention has been given to specific sentimental factors involving decision-making processes, such as the impact of motivation on choosing a travel destination or preparing for a holiday (Assiouras, et al., 2015). However, just like most qualitative characteristics, motivation lacks a widely accepted conceptualization, and the segmentation following the research can be modeled arbitrarily (Alexandris, et al., 2009). Another similar qualitative characteristic is that of satisfaction, which has also been used in the academic literature for the study of tourist segmentation in different Greek resorts. Tsiotsou and Vasioti (Tsiotsou & Vasioti, 2006) use factor analysis and clustering for the study of “short-term” visitors of Greek winter resorts, thus attempting to quantify the level of satisfaction among visitors and segment them on this basis. Despite these fruitful efforts, the concept of social media as a segmentation tool is only starting to be explored in the Greek academic literature. Hence, the research conducted in this paper aims to incorporate the digital tools of social media and combine the cultural attributes of the participants in the sample, thus providing the academic field of traveler segmentation in Greece with new elements for further research.

#### Implications

The findings of this study demonstrate the way in which social media can be utilized for the segmentation of travelers based on behavioral and cultural traits. Through this process, firms can detect the preferences of various cultural groups and use this information for the application of distinct intercultural marketing activities to each separate segment. Hence, hospitality firms can develop highly structured buyer personas, devise complex targeted strategies and facilitate the process of meaningful engagement with online communities (Mkono & Tribe, 2017). However, segmentation cannot just occur once. The engagement and study of user profiles, the collection of data and the utilization of this new information for the update of existing segments is a necessary procedure, so as to not only improve the personalization process but also the digital presence of the firm in a user-centered manner (Ho, et al., 2012), along with the products and services offered. This procedure is necessary to be combined with a cultural and behavioral analysis of each firm’s current customers, so as to gather data for segmentation purposes from both offline and online sources. Furthermore, by applying the suggested model, customer service techniques can be upgraded to a new level, since any disputes or complaints can be resolved through the prism of intercultural communication and respect towards the user. A “culturally intelligent” firm with an accurately segmented audience will have the ability to offer suitable assistance to its online customers, learn more about them (Rosman & Stuhura, 2013), understand their wants and needs through the analysis of their social profiles and overall enhance the digital reputation of the company.

The adoption of this type of segmentation can be improved in a number of ways, so as to increase its effectiveness and offer new tourist profiling options to more hospitality businesses across the world. First, since no data analysis software was utilized for this research, future studies could include the use of data mining software on the one hand, in order to collect data faster, more accurately and more efficiently. On the other hand, sophisticated data analysis and statistical software could be utilized. For instance, the processing of complex data sets derived from social media posts could be implemented with the technique of visual analytics (Cheng & Edwards, 2015). Also, sentiment analysis software could be adopted, thus allowing researchers to acquire a better comprehension of travelers’ behavior, based on the plethora of information and ease of access offered by social media (Ibrahim, et al., 2017). Furthermore, hospitality industries could combine the data extracted from travelers social media accounts with the analytics from their own organic posts and paid advertising campaigns. This method could provide firms with a more well-rounded understanding of their current audience and similar ones that can be targeted. In every case, detailed checks for fake profiles or other harmful social media content are necessary to be made by hospitality firms, so as to engage with the proper audience and lead to the development of market intelligence (Xiang, et al., 2017). Apart from the technological improvement of the method, firms can apply this mentality to their overall digital marketing strategy. For instance, collaborations with influencers which appeal to various segments could facilitate the promotion of the region to the markets of each target audience. Finally, businesses can always rely on feedback from customer satisfaction surveys along with social media content posted before, during and after the completion of their customer’s visit, so as to continuously adapt their services to their customers.

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## 6 CONCLUSION & RESEARCH LIMITATIONS

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Overall, this research attempts to present a methodological tool which combines the elements of culture and personal preferences with the digital tools of social media platforms. By collecting information from user profiles on Instagram, Facebook and Twitter, and by examining the content available, valuable segmentation data is extracted and used for the division of the visitors of Halkidiki into 10 distinct groups.

Despite the useful information presented in this paper, a series of limitations created restrictions to the research process. First, due to the small market size of Halkidiki and its limited holiday season, the sample of the research was restricted to only 272 profiles, which were studied and analyzed under certain time constraints. Second, due to personal data policies that currently govern social media, only publicly available content was taken into consideration. Nevertheless, this process could have been conducted in a more precise fashion with the use of data mining software or other technological tools

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