

Segmentation of Social Media Users for Destinations: A Clustering Approach

Abstract

This is a study into the segmentation of social media users interested in traveling into groups and aims to ascertain if differences exist in benefits among segments. It is based on a survey that examines the benefits they see social media as having before, during, and after a trip to a destination, using their responses to generate a data-driven segmentation. Data from a total of 218 questionnaires were analyzed using factor and cluster analysis in sequence, specifically applying a hierarchical cluster analysis using the Ward method and a K-means algorithm. The analysis led to the identification of four useful types of social media user: info-seeker, communication-seeker, interaction-seeker, and hybrid segments, each of which seeks different things from social media and use it in different ways (e.g., to seek information, to see what other people have said about a destination, or to post their own experiences). As such, the implications of our findings offer useful insights for both scholars and destination marketers, highlighting the significance of offering appropriate marketing strategies for each type of segment.

Keywords: destination marketing, segmentation, clustering, social media, eWOM

1. Introduction

Traditionally, destinations are defined as geographical places such as countries, cities, and towns that attract tourists for a temporary stay (Hall, 2000; Pike, 2004). Hence, destination marketing is a complex process (Buhalis, 2000) that mostly concentrates on improving how tourists see destinations (Morgan, 2012). According to the Tourism Highlights by the United Nations World Tourism Organization (UNWTO) in 2019, international tourist arrivals and receipts continue to grow faster than the world economy. In parallel, the competition between worldwide destinations, enacted through creative and attractive promotions, is also becoming fiercer.

On the other hand, digitization is converting all sectors, and the tourism industry is no exception, with travel patterns and experiences changing from year to year. Artificial intelligence and chatbots, the internet of things, virtual reality, and augmented reality are some examples of key trends in tourism. Social media, one of those trends, enables tourists to interact with people with similar interests and increasingly share their experiences by building and maintaining relationships with other tourists (Nusair et al., 2013). As highlighted by Chung and Koo (2015), the number of people who believe that they benefit from social media is increasing dramatically.

Tourists and tourism destinations use social media platforms for various purposes, whereas the use of social media for travel planning pertains to a particular situation of a specific vacation (Simms & Gretzel, 2013). On the other hand, tourism professionals benefit heavily from social media platforms, which can be used to understand market perceptions and behavior (Miah et al., 2017), to gather information on the interests, ideas, and principles of tourists (Luna-Cortés et al., 2019), to influence the future destination choice (Giglio et al., 2019), to positively affect destination image formation (Kim et al., 2017), and to build loyalty and positive

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word-of-mouth (Yap & Tan, 2017). As social media has become increasingly mainstream, destination policy-makers have attempted to distinguish themselves by applying precise strategies. In this study, in line with the benefits of social media usage for tourists, segmentation is examined within the framework of clustering analysis, and the findings are evaluated in terms of destination marketing. The study aims to segment social media users into significant homogenous groups according to how they engage with social media to research/share experiences of destinations and to examine the demographic profiles of these segments.

Social media has become an indispensable part of our lives, and it is seen by many as the fastest and cheapest way to access information. Social media enables people to directly follow, share, rate, and discuss several types of content, resulting in a cultural shift that fosters people to invest their time and creativity online (Jansson, 2018). Social media should be used effectively to inspire tourists' absorption, identification, and interaction with a destination (Harrigan et al., 2017). As it is used as an information source by tourists before, during, and after travel, it can be a powerful tool to help destinations spread the word about their products or services - but destination marketers have to participate in the conversation (Eley, 2011). For instance, destinations should actively participate in complaining practices of displeased customers by properly managing social media to create value for both parties (Sedera et al., 2017; Dolan et al., 2019;).

Social media has several benefits over traditional marketing tools when it comes to destination promotion, particularly in terms of accessibility and cost-effectiveness. Given this, an effective social media marketing strategy is pivotal in the creation of a competitive destination. The growing importance of social media in the online tourism domain, and its increasingly important role in online travel planning via a search engine (Xiang & Gretzel, 2010), means that substantial online marketing strategies are required to establish firm and sustainable relationships with tourists. From this standpoint, comprehending the characteristics of distinct groups of social media users that might be interested in visiting represents an important destination marketing focus.

Despite the rise of social media in destination marketing, relatively little is known about the different ways social media users perceive the benefits of social media when researching destinations or during and after their visit. However, to meet tourists' needs effectively, they cannot all be treated as having identical characteristics (Foster et al., 2011). As Kang and Schuett (2013) observe, much depends on a user's choice of social media platform, how they use social media, and their ability/desire to share their experiences. Knowing that all tourists are different, to identify the similarities among social media users (Dolnicar, 2008), the present study aims to identify the characteristics of various groups of travelers based on their use of social media in connection with the destinations they will visit or have visited. It aims to deliver valuable insights in terms of benefit segmentation that marketing professionals can use to build individualized destination marketing strategies that can influence specific segments as effectively as possible. This study is divided into four sections. The next section offers a literature review of publications on social media, destinations, and market segmentation. The methodology used to analyze the data is then presented, followed by the findings. The final section offers conclusions based on these findings that offer insights into the development of appropriate social media marketing strategies for destinations.

2. Literature review

2.1. Destination marketing by social media

Today, traditional media (i.e., newspapers, television, radio, and magazines) are supplemented by social media: a relatively new phenomenon characterized by blogs, microblogs (e.g., Twitter), social networks (Facebook, LinkedIn), media-sharing sites (YouTube, Flickr, Instagram), forums and virtual worlds, all of which can be used to communicate notions (López, 2010). Through the integration of new technologies, social media has taken a substantial role in marketing destinations, intending to facilitate the viral spread of information

with limited sources to reach a broader global audience. Therefore, adopting social media to marketing communications is critical, especially when destination marketing organizations lose elements of their funding (Hays et al., 2013).

In many ways, the success of a destination depends on that destination's ability to attract tourists through positive word-of-mouth communication (Crotts, 1999). Word-of-mouth is the most efficient form of marketing, as well as the most successful and the cheapest (Eley, 2011). The emergence of social media has enabled people to connect online with both individuals and groups (Blossom, 2009) by sharing a combination of words, photos, videos, and audio; the social media world is thus heavily (or in many cases entirely) dependent on people's contributions and interactions, representing a new way of communicating (Zeng, 2013). In some respects, the role of social media is an extension of traditional word-of-mouth networks, as it allows tourists to talk to each other in a forum that is outside the direct control of destinations (Öz, 2015). Sharing visual word-of-mouth content plays a vital role for some tourist segments (Ring et al., 2016), and thereby the success of social media marketing can be measured in terms of returns through interaction and engagement, rather than returns on investment (Frick, 2013). Conformity and realness lead tourists to be emotionally attached to a destination and also to be active in social media by liking and leaving comments (Kim & Kim, 2019). However, as Liu et al. (2019) point out, destinations on social media should also encourage travelers to share their experiences to enhance social media engagement.

Thus, social platforms have also been a phenomenon in destination marketing (Buhalis, 2000). Destination marketers use the social media forms for various reasons, such as to provide the kind of credible information (Hays et al., 2013; Nusair et al., 2013) that tourists need before booking and during their travel (Sigala et al., 2011), to promote destinations (Zeng, 2013; Song & Yoo, 2016), and to better understand and respond to consumer preferences (Dellarocas, 2003). According to Megatrends Travel (2017), tourists feel more comfortable if they have viewed virtual tours and reviews when choosing a destination since they reveal a positive influence. However, a destination is also directly affected by negative comments from dissatisfied tourists (Zeng & Gerritsen, 2014), in which user-generated content creates a challenge for destinations as well as opportunities. As Narangajavana Kaosiri et al. (2019) demonstrate, user-generated content affects tourist expectations and decision-making; on perception while having a tourism experience and satisfaction.

2.2. Social media and benefit segmentation

When identifying discrete groups among the general population, tourism researchers traditionally adopt either a priori or posteriori (data-driven) segmentation approaches (Calantone & Mazanec, 1991; Bigne et al., 2007). Scholars used a priori segmentation strategies, especially when the segments were already known. A posteriori segmentation approaches usually used factor/cluster statistical analysis when the sizes and number of visitor segments were unknown (Laesser et al., 2006). In cases where the researchers lack prior knowledge, a posteriori approaches are extensively utilized. To a great extent, a posteriori segmentation is used to develop knowledge and to gain insight into the tourism market (Ernst & Dolnicar, 2018), and this approach is much more effective in gaining competitive advantage by a destination (Dolnicar, 2004). Bigne et al. (2007) report that 75% of the tourism segmentation studies use a posteriori segmentation primarily, and according to Hsu and Lee (2002), a posteriori approaches are almost exclusively used for psychographic segmentation. Psychographic market segmentation mainly depends on dimensions such as benefits, motivation, and preferences in grouping respondents (Dolnicar, 2006; Bigne et al., 2007). Some a posteriori tourist segmentation studies have also been employed precisely based on benefits (Jang et al., 2002; Frochot, 2005; Lee et al., 2006).

Despite the high number of studies on the tourism market segmentation (Jang et al., 2002; Lee et al. 2004; Laesser et al., 2006; Katsikari et al., 2020), social media user segmentation studies, specifically in travel and tourism (Shao et al., 2015; Amaro et al., 2016) are rather limited. According to Amaro et al. (2016), travelers use social media for travel purposes in various ways. For instance, Pesonen (2012) implies that social media

users purchase travel products online such as accommodation, airlines, attraction-admission tickets, and write reviews about their holidays. Parra-López (2011) echoes this fact in a more structured approach, noting that the main reason for using social media is the benefits that the user perceives that they get. Social media platforms offer users functional benefits such as easy and quick access to information; social benefits such as interaction and relationship building; psychological benefits such as belonging to a group, identity expression through the group, and building a relationship with other members in the group; and hedonic benefits that include entertainment, amusement, and fun (Wang & Fesenmaier, 2004). The functional benefits related to information gathering via social media seem to be much more credible when compared with traditional media, as social media allows the interaction of users. Information either generated by users or destination marketers is disseminated to tourists via social media. On the other hand, psychological benefits, an expansion of social benefits, accrue due to continuous communication (Parra-López et al., 2011).

3. Methodology

3.1. Development of research instrument

The original research instrument developed for this study consisted of two main sections with 40 statements and was prepared based on an extensive literature review (Wang & Fesenmaier, 2002; Chen, 2006; Yoo & Gretzel, 2008). The first section of the research instrument involved positively and negatively expressed items about what benefits respondents saw in destination-related social media use. Respondents were asked to indicate their level of agreement using a 5-Likert Scale survey instrument ranging from 1 = *strongly disagree* to 5 = *strongly agree*. The four negatively phrased statements were reverse coded prior to factor analysis. The second section contained questions regarding the respondent’s socio-demographic characteristics, such as age, gender, and education level, to validate the differences between identified segments. The questionnaire was arranged in two languages: Turkish and English. Firstly, original questions in English were translated from English to Turkish, and then they were translated back to English by native speakers to confirm that the statements had the same meanings in both languages.

3.2. Data sampling

The universe of the study consists of people who actively use social media for destination-related purposes. To carry out quantitative research, the sample population was created utilizing purposive sampling: sending an invitation message through social media platforms such as Facebook and Twitter to active social media users of travel and tourism social media groups. Therefore, the identified target population for data sampling was followers of destinations’ social media accounts between 19 and 50+ years old.

Table 1
Variables of the survey

Measures	References (adapted from)
Social media allows me to get information about the destination.	Chen (2006)
I can easily reach photos and useful information about destinations with social media.	Chen (2006); Parra-Lopez et al. (2011)
Social media helps me to discover new destinations.	Chen (2006); Wasko & Faraj (2005)
I think that the sharing of tourists on social media is not reliable.	Chen (2006); Wasko & Faraj (2005); Yoo & Gretzel (2008)
I find shared travel experiences and comments on social media convincing.	Chen (2006); Parra-Lopez et al. (2011)
Social media allows me to keep in touch with people who are familiar interests with me for travel.	Wang & Fesenmaier (2002); Jeong (2008)
It takes a long time to reach useful information about destinations on social media.	Chen (2006)

Table 1 (continued)

Sharing photos and video clips on social media requires complex operations.	Parra-Lopez et al. (2011)
I like to share my travel experiences and comments about these trips on social media.	Wang & Fesenmaier (2002)
I share with my friends on social media the pages of the destination which I like.	Wasko & Faraj (2005); Yoo & Gretzel (2008)
I convey my positive review of a destination to my friends through social media.	Wasko & Faraj (2005); Yoo & Gretzel (2008)
I convey my negative review of a destination to my friends through social media.	Wasko & Faraj (2005); Yoo & Gretzel (2008)
Social media is an effective tool for announcing events held in the destination.	Wang & Fesenmaier (2002)
Social media is an important tool in reaching potential tourists.	Wang & Fesenmaier (2002)
Social media affects my thoughts about the destination.	Parra-Lopez et al. (2011)
I become a follower of destinations on social media.	Wang & Fesenmaier (2002)
Social media positively affects the increase of communication between destinations and tourists.	Wasko & Faraj (2005)
I find it difficult to monitor the social media sites that might be interesting when organizing and taking vacation trips.	Yoo & Gretzel (2008)

3.3. Data collection

The self-administered questionnaire form was created by Google Forms (docs. google), and the link was sent out to the respondents through social media networks. A web-based survey was preferred, as the survey administration and data collection are both cost-effective and convenient. The data were collected in the period from February 2018 to April 2018. The respondents were asked to provide socio-demographic information and rate the statements. There were 265 questionnaires collected for the research, of which 218 were valid. The invalid question forms involved mostly missing values (incomplete benefit sections) and response bias.

3.4. Data analysis

A great number of tourism market segmentation studies have employed a factor-cluster analysis to classify tourists into homogeneous groups (Cho et al., 2017; Dryglas & Salamaga, 2018; Guttentag et al., 2018). Therefore, this study conducted a factor-cluster approach throughout a series of analyses using SPSS 25. First, factor analysis was conducted to homogenize the data and identify more concrete variables for cluster analysis. Cluster analysis is considered one of the most useful methods for segmenting the market and distinguishing precise groups among respondents (Saunders, 1980; Dolnicar, 2002). Next, a hierarchical technique based on Ward's method was applied to create a certain number of clusters by analyzing the dendrogram and agglomeration coefficients. Then, a non-hierarchical technique was applied by removing outliers and establishing clusters without problems (cluster analysis encompassing two stages has proven more reliable than using only one method, as the two methods complement each other's benefits; see Frochot & Morrison, 2000). Finally, to find out about the differences across clusters, ANOVA and chi-square analyses were conducted.

4. Findings

4.1. Profile of respondents

Descriptive statistics revealed that 52.8% of the sample of 216 respondents were female, and there is a minor skew towards a higher proportion of single respondents (60.6%). The majority of the sample comprises 19-29-aged respondents (45.9%), 67.4% of the participants have a university degree, and 26.2% hold a higher level of education, as exhibited in Table 2. The respondents were from Turkey (85.2%) against only 14.8% from other countries, as expected given that the researchers live in Turkey.

Table 2
Descriptive statistics of respondents

Demographics	Frequency N	Percent %
Gender		
Female	115	52,8
Male	103	47,2
Marital status		
Married	86	39,4
Single	132	60,6
Age		
19-29 years old	100	45,9
30-39 years old	60	27,5
40-49 years old	25	11,5
50 years and over	33	15,1
Education		
High school graduate and less	14	6,4
Undergraduate	147	67,4
Graduate	57	26,2
Country		
Turkey	185	84,9
Other	33	15,1
Total	218	100,0

4.2. Exploratory factor analysis

In terms of preliminary data reduction, exploratory factor analysis was employed to identify the variables for further cluster analysis. Firstly, Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy were calculated as 0.832, and Bartlett's Test of Sphericity showed significance at the 0.000 level. A Cronbach's alpha test gave reliability scores of each factor ranging from 0.684 to 0.855 (a value above 0.6 indicates adequate internal consistency; Hair et al., 1998). Then a principal component analysis with varimax rotation was utilized, and factor loadings were produced. Items representing benefits with factor loadings less than 0.40 (Lee et al., 2004) and items with higher loading on more than one factor (Hair et al., 1998) were eliminated. Furthermore, two items produced a factor that was unaccountable and was accordingly taken out. As Table 1 shows, the final factor analysis with 18 items resulted in a 4-factor solution explaining 60.14% of the total variance in the data (eigenvalue > 1). The first factor was labeled "functional benefits", the second factor was labeled "convenience benefits", the third factor was named "social benefits", and the fourth factor was labeled "communication benefits". The factor analysis showed that the variables were not strongly correlated (Hair et al., 2014).

Table 3
Exploratory factor analysis for the benefits of social media

Factor	Mean	S.D.	Factor loading	Eigen-value	Variance explained
Functional benefits	4,32	0,826		5.321	29.559
Getting information	4.22	0.877	0.841		
Reaching photos	4.31	0.788	0.737		
Discovering new destinations	4.42	0.812	0.751		
Convenience benefits	3.44	1,076		2.506	13.922
Easy to get reliable information	3.25	1.005	0.637		
Easy to reach useful information	3.59	1.092	0.750		
Easy to share photos and video clips	3.83	1.169	0.718		
Easy to monitor the social media sites	3.10	1.038	0.721		

Table 3 (continued)

Social benefits	3.64	1.044		1.716	9.533
I like to share my travel experiences and comments	3.49	0.822	0.460		
I share the pages of the destination that I like	3.84	0.962	0.433		
I find shared travel experience and comments convincing	3.62	1.182	0.761		
Keeps in touch with people	3.70	1.140	0.832		
I convey my positive review of a destination to my friends	3.75	1.080	0.882		
I convey my negative review of a destination to my friends	3.63	1.022	0.833		
I become a follower of destinations on social media.	3.37	1.099	0.608		
Communications benefits	4.21	0.795		1.283	7.129
I keep updated about events	4.52	0.673	0.812		
Destinations can reach me as a potential tourist	4.34	0.778	0.744		
Social media influences my thoughts about the destination.	3.92	0.935	0.548		
Social media enables me to communicate to destinations	4.04	0.793	0.775		
Total variance extracted (%)					60.143

4.3. Cluster analysis

Shoemaker (1989) describes cluster analysis as a statistical method for classifying respondents into separate unique groups. According to Hair et al. (2014), applying a hierarchical technique before a non-hierarchical one is often recommended to achieve more accurate results. Therefore, to segment the tourist market into meaningful groups, prior to the non-hierarchical cluster analysis, hierarchical agglomerative cluster analysis, using Ward's method with Squared Euclidean distance to measure dissimilarities, was applied to the four factors derived from the benefits section of the question form. Ward's method helps to separate clusters of roughly equal observations (Tan et al., 2013) and helps determine the number of clusters. Following Fodness (1994), an increase in the percent of variance explained by each cluster was observed to track where the magnitude of this increase drops off sharply. Finally, the agglomeration coefficient and dendrogram indicated a three-to-five-cluster solution. In the meantime, two responses were detected as outliers and removed. Thus, the sample size was accepted as 216.

Then, K-means cluster analysis, a non-hierarchical analysis technique, was implemented using the cluster centers from the hierarchical results as the initial seed points (Hair et al., 1998). Consequently, each solution ranging from three to five was calculated for evaluation, and the results were compared. Eventually, based on those results, non-hierarchical cluster analysis indicated the most appropriate number of clusters as four, with the examination of group membership, group sizes, and the associated dendrograms. Therefore, cluster analysis suggested four distinct and considerable segments of social media users regarding destinations. According to distances between final cluster centers, while maximum heterogeneity was seen between clusters 1 and 3, the most similar clusters were 2 and 3, as illustrated in Table 2. In addition, a one-way ANOVA was performed; the results revealed that the clusters' means were statistically significant across all four clusters, as demonstrated in Table 3.

The final four clusters were based on Shoemaker's (1989) criteria of having high within-cluster similarity and low between-cluster similarity, being stable, interpretable, and large enough to be managerial. The clusters were interpreted and named based on the mean value, even if it was difficult to label them with a particular term. As shown in Table 4, Euclidean distances between the final centers reveal maximum homogeneity between Cluster 1 and 3. The least distance between clusters corresponds to the greatest dissimilarity as observed between Clusters 2 and 3. To outline the four clusters and to label them, final cluster centers for each

benefit factor were computed and exhibited in Table 6. The largest cluster was Cluster 3 (40%), followed by Cluster 4 (25%), Cluster 1 (25%) and Cluster 2 (10%). The final clusters were labeled as interaction-seeker, communication-seeker, info-seeker, and hybrid segments.

Table 4
Distances between final cluster centres

Cluster	1	2	3	4
1		1.875	1.422	1.550
2	1.875		2.190	1.480
3	1.422	2.190		1.455
4	1.550	1.480	1.455	

Table 5
ANOVA test for factor mean square among error mean square

Factors	Cluster	Error
Functional benefits	13.009	0.193
Convenience benefits	24.705	0.255
Social benefits	4.617	0.151
Communication benefits	21.968	0.258

Table 6
Final cluster centers of the benefits sought by social media users ^a

Benefit factors	Cluster 1 Interaction- seeker (n=53) (25%)	Cluster 2 Communication-seeker (n=21) (10%)	Cluster 3 Hybrid (n=87) (40%)	Cluster 4 Info-seeker (n=55) (25%)	F Value	Sig.
Functional	4.52	3.10	4.57	4.30	67.362	0.000
Convenience	2.67	2.89	4.08	3.36	97.028	0.000
Social	3.63	2.80	3.62	3.34	30.535	0.000
Communication	4.12	3.27	3.99	2.79	85.127	0.000

^a Mean importance scores represent the rates of the respondents on the benefit factors across the four clusters. Mean values are measured with a 5 point scale (1: strongly disagree, 3: neutral, 5: strongly agree).

4.4. Profiling the clusters

To further profile the four segments that emerged from the analysis, a series of chi-square tests was conducted, and each cluster was cross-tabulated with external variables such as respondents' gender, age, marital status, education level, and country. As shown in Table 5, the result of the chi-square tests clearly indicated that excluding gender (Chi-square = 1.997, p-value = 0.573), there were statistically significant differences among the clusters with respect to the socio-demographic characteristic such as age (Chi-square = 33.272, p-value <0.001) and country (Chi-square = 87.710, p-value = 0.011). For instance, all four clusters were dominated in age category by 19 to 29-year-old respondents (Cluster 1 = 49.1%, Cluster 2 = 61.9%, Cluster 3 = 46.0%, Cluster 4 = 38.2%), though Cluster 4 also had a sizeable proportion of respondents aged 50 years and over (34.5%). The results of the analysis also showed substantial similarities among clusters in terms of education level (Chi-square = 14.643, p-value = 0.101), and marital status (Chi-square = 5.287, p-value = 0.152). The profile of each cluster can be summarized as follows.

Cluster one - Interaction-seeker: This cluster accounts for 25% of travelers. This cluster's mean score for functional benefits is higher than other benefits. In contrast, communication benefit for this segment accounts for the highest among other clusters. Members of the interaction-seeker segment use social media to search for information about destinations before their trip. They stay in contact with the destinations after their trip- to be updated about events, for instance. They also believe in the power of social media to reach them as potential tourists and believe that it impacts the decision-making process of tourists about which destination to visit. This cluster has the highest percentage of respondents with graduate degrees among other clusters.

Cluster two - Communication-seeker: Members of this cluster represent 10% of travelers. They appreciate social media more as a communication tool to be in touch with destinations about the latest events and activities that take place. Among all benefits that social media provides to users, this group mainly benefits from the posts and reviews about destinations on social media when making a travel decision. Its members express greater appreciation of the bond built among the potential tourist and the destination's attributes. Also, this cluster has a higher percentage of singles (66.7%). The data also suggests that members of this cluster are mostly young and have a bachelor's degree.

Cluster three - Hybrid: Cluster 3 is the largest segment, with a 40% share of respondents. This segment particularly values functional benefits more than the other types of benefits, and it has the highest mean score also among other segments. This cluster's mean score for factor convenience benefits was also higher than other clusters', with the mean score of 4.08, which reveals that they value the benefits of social media that related to easy access to reliable information about destinations at the travel planning stage, and as an easy way to share photos and videos during their vacations. The hybrid segment contains the most socially active users of destination-related social media, especially before and during their travels. In addition, this segment uses social media as a means of bonding and communicating with the destinations. The study's findings also reveal that the vast majority of members of this group were under 40: 19-29 years (46%) and 29-39 years (33.3) of age.

Cluster four - Info-seeker: This cluster comprises 25% of the sample. Members of this cluster like to research information about new destinations or places that they wish to visit, and they actively use social media before and during their trips. They also like to share posts and reviews about their own destination experiences and contact others who have similar interests. The demographics of this cluster show it is evenly split in terms of marriage (52.7%), and that it has a relatively wide age range: 19-29 years (38.2%), 50 years, and over (34.6%).

Table 7
Socio-demographic profiles of final clusters

Socio-demographic characteristics		Sample size 216	Interaction-seeker (N=53. 25%)	Communication-seeker (N=21. 10%)	Hybrid (N=87. 40%)	Info-seeker (N=55. 25%)	
Gender	Male	102	26 (49.0%)	7 (33.3%)	41 (47.1%)	28 (50.9%)	Chi-square =zz 1.997, p-value =0.573
	Female	114	27 (51.0%)	14 (66.7%)	46 (52.8%)	27 (49.1%)	
Marital status	Single	130	35 (66.1%)	14 (66.7%)	55 (63.2%)	26 (47.3%)	Chi-square = 5.287, p-value =0.152
	Married	86	18 (33.9%)	7 (33.3%)	32 (36.8%)	29 (52.7%)	
Age	19-29 years old	100	26 (49.1)	13 (61.9%)	40 (46.0%)	21 (38.2%)	Chi-square = 33.272, p-value <0.001
	30-39 years old	58	12 (22.7%)	4 (19.1%)	29 (33.3%)	13 (23.6%)	
	40-49 years old	25	9 (16.9%)	-	14 (16.2%)	2 (3.6%)	
	50 years and over	33	6 (11.3%)	4 (19.1%)	4 (4.6%)	19 (34.5%)	
Education level	High school graduate and less	14	5 (9.4%)	4 (19.1%)	1 (1.1%)	4 (7.3%)	Chi-square = 14.643, p-value =0.101
	Postgraduate	146	34 (64.2%)	13 (61.9%)	60 (68.9%)	39 (70.9%)	
	Graduate	56	14 (26.4%)	4 (19.5%)	26 (25%)	12 (21.8%)	
Country	Turkey	184	47 (88,7%)	14 (66,7%)	75 (86,2%)	48 (87,2%)	Chi-square = 87.710, p-value =0.011
	Other	32	6 (11,3%)	7 (33,3%)	12 (13,8%)	7 (12,7%)	

5. Conclusion and implications

To date, despite the general segmentation studies of social media users (Foster et al., 2011; Amaro et al., 2016), many tourism and marketing studies lack a precise focus on destinations. The current study fills this void by segmenting travelers and classifying respondents through cluster analysis. The empirical findings indicate that travelers using social media for destination-related purposes fall into diverse market segments labeled as interaction-seeker, communication-seeker, info-seeker, and hybrid. The findings of the study segmenting

the social media benefits reveal four main segments, including hybrid and functionality-seeker, which are in line with the two of four segments identified by Shao et al. (2015) that are devotee, and finder. The Hybrid segment accounts for the biggest segment for destinations on social media whose scores are greater than three on all four benefits. The study's findings indicate that this segment benefits from social media in every sense, just like the devotee segment. The finders segment mentioned in Shao et al. (2015) parallels the functionality-seeker segment as they are both positive about information seeking. Thus, destination managers should be aware that tourist segments have distinguishable characteristics in terms of social media benefits they seek, which could be a basis for creating customized marketing strategies for each identified segment.

The findings have several potentially significant theoretical and managerial implications for the marketing of destinations through social media. From a methodological standpoint, the study contributes to the current literature by developing a measurement scale for social media use with a focus on destinations that can be used for similar research. From a practitioner's perspective, benefit segmentation provides useful insights into how destinations can target social media strategies to maximum effect among different types of social media users. In line with Hays et al. (2013), this study found that social media users value functional benefits the most; therefore, destination marketers should provide rich, accurate, and up-to-date information via both visual and textual media. Another finding was that each segment seeks its unique benefits from social media regarding destination-related purposes that pinpoint important paths to destination marketers. These delineated segments show the different ways people use social media to research, contact, and post about destinations. For instance, young travelers are more likely to use social media and share during and after travel (Mulvey et al., 2019). But, gaining a deep and comprehensive understanding of the differences between these groups can help destinations design more customized and powerful marketing strategies to reach different types of users, based on the specific benefits each segment perceives social media as providing and positioning the destination. Öz (2015) found that one of the main reasons tourists use social media is to find destination-related information. However, younger travelers do not seem to trust the available online travel information (Kourouthanassis et al., 2017). This study extends those findings, showing how the benefits provided by social media can, for some types of tourists, be more important than finding reliable information. For example, some tourists use social media to increase their online followers' visibility based on their travels.

Many social media users are also very active in generating content about destinations, either positive or negative. As tourists react very fast on social media, social media managers should closely follow comments and reviews to respond as quickly as possible and maintain interactive communication with users. Another managerial implication of the study arises from the fact that most of the respondents highlighted the significance of sharing and socializing regarding destinations, showing that social media users like to be visible when they travel and/or like to influence others' decisions about travel. Given this, social media managers should find ways to encourage tourists to post pictures and positive stories about the destination.

It is hoped that this study's suggested segmentation of tourists who utilize social media sites to search for and post about destinations will provide insights into how destination marketers can use social media to their maximum advantage. Profiling potential tourists according to how they use social media (assessed in terms of the benefits they see in its use) can help destination marketers understand their target audience and improve their social media services, products, and marketing strategies. In doing so, they can develop the most appropriate strategy to communicate with the users more efficiently and create different marketing strategies for each segment with customized messages. Destinations should consider social media as a significant communication channel to reach travelers, as there is no segment among travelers unresponsive to social media about destinations.

However, the study does have some limitations when interpreting the study findings. The primary limitation was that the majority of the respondents were Turkish tourists; only a small number of respondents were from other countries. Other limitations were the small sample size of 216 respondents and the elimination of some items from the factor analysis. Thus, the findings may not be generalizable to the broader population.

Last but not least, the data were collected in 2018, and any topic relating to social media is subject to very rapid change. Notwithstanding these limitations, this present paper is one of the first to undertake a benefit segmentation analysis of tourists regarding social media whenever they use it for destinations.

Future studies could continue the analysis of social media users, concentrating on a more diverse range of social media platforms with different characteristics. A study looking into how, specifically, destinations' marketing strategies can be customized to respond to these various platforms would be of particular use. Future research might also involve a comparison of how people from different countries use social media and what benefits they see in it. A longitudinal study would also be of use to track how tourists' use of social media is changing over time.

Social media is a powerful tool that cannot be ignored in any modern marketing strategy. While many destinations are already making extensive use of it, this study suggests that a broad-brush approach - treating all social media users as a single homogenous body - might not be the most effective one. To understand how to reach a particular type of social media user, it is necessary to understand why they are using social media, i.e., to comprehend its benefits. It is hoped that this study represents a preliminary step on the way to achieving this.

References

- Amaro, S., Duarte, P., & Henriques, C. (2016). Travelers' use of social media: A clustering approach. *Annals of Tourism Research, 59*, 1-15. <https://doi.org/10.1016/j.annals.2016.03.007>
- Bigné E., Gnoth J., & Andreu, L. (2008). Advanced topics in tourism market segmentation. In A.G. Woodside (Ed.), *Tourism management: Analysis, behaviour and strategy* (pp. 151-173). CABI. <https://doi.org/10.1079/9781845933234.0151>
- Blossom, J. (2009). *Content nation: Surviving and thriving as social media changes our work, our lives, and our future*. Wiley.
- Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management, 21*(1), 97-116. [https://doi.org/10.1016/S0261-5177\(99\)00095-3](https://doi.org/10.1016/S0261-5177(99)00095-3)
- Calantone, R.J., & Mazanec, J.A. (1991). Marketing management and tourism. *Annals of Tourism Research, 18*(1), 101-119. [https://doi.org/10.1016/0160-7383\(91\)90042-a](https://doi.org/10.1016/0160-7383(91)90042-a)
- Chen, C. (2006). Identifying significant factors influencing consumer trust in an online travel site. *Information Technology & Tourism, 8*(3), 197-214. <https://doi.org/10.3727/109830506778690849>
- Cho, M., Bonn, M.A., & Brymer, R.A. (2017). A constraint-based approach to wine tourism market segmentation. *Journal of Hospitality & Tourism Research, 41*(4), 415-444. <https://doi.org/10.1177/1096348014538049>
- Chung, N., & Koo, C. (2015). The use of social media in travel information search. *Telematics and Informatics, 32*, 215-229. <https://doi.org/10.1016/j.tele.2014.08.005>
- Crotts, J. (1999). Consumer decision-making and prepurchase information search. In K.S. Chon, A. Pizam, & Y. Mansfeld (Eds.), *Consumer behavior in travel and tourism* (pp. 149-168). Haworth Hospitality Press.
- Dellarocas, C.N. (2003). The digitization of word-of-mouth: Promise and challenges of online feedback mechanisms. *Management Science, 49*(10), 1407-1424. <https://doi.org/10.2139/ssrn.393042>
- Dolan, R., Seo, Y., & Kemper, J. (2019). Complaining practices on social media in tourism: A value co-creation and co-destruction perspective. *Tourism Management, 73*, 35-45. <https://doi.org/10.1016/j.tourman.2019.01.017>
- Dolnicar, S. (2002). A review of data-driven market segmentation in tourism. *Journal of Travel & Tourism Marketing, 12*(1), 1-22. https://doi.org/10.1300/J073v12n01_01
- Dolnicar, S. (2004). Beyond "commonsense segmentation": A systematics of segmentation approaches in tourism. *Journal of Travel Research, 42*, 244-250. <https://doi.org/10.1177/0047287503258830>
- Dolnicar, S. (2006). Data-driven market segmentation in tourism approaches, changes over two decades and development potential. In P.A. Whitelaw & G. Barry O'Mahony (Eds.), *CD Proceedings of the 15th International Research Conference of the Council for Australian University Tourism and Hospitality Education (CAUTHE)*, Australia. (pp. 346-360). Victoria University.

- Dolnicar, S. (2008). Market segmentation in tourism. In A.G. Woodside & D. Martin (Eds.), *Tourism management: Analysis, behaviour and strategy* (pp. 129-150). CABI. <https://doi.org/10.1079/9781845933234.0129>
- Dryglas, D., & Salamaga, M. (2018). Segmentation by push motives in health tourism destinations: A case study of Polish spa resorts. *Journal of Destination Marketing and Management*, 9, 234-246. <https://doi.org/10.1016/j.jdmm.2018.01.008>
- Eley, B., & Tilley, S. (2009). *Online marketing inside out*. Sitepoint Pty.
- Ernst, D., & Dolnicar, S. (2018). How to avoid random market segmentation solutions. *Journal of Travel Research*, 57, 69-82. <https://doi.org/10.1177/0047287516684978>
- Foster, M., West, B., & Francescucci, A. (2011). Exploring social media user segmentation and online brand profiles. *Journal of Brand Management*, 19(1), 4-17. <https://doi.org/10.1057/bm.2011.27>
- Frick, T. (2013). *Return on engagement: Content, strategy and design techniques for digital marketing*. Focal Press.
- Fodness, D. (1994). Measuring tourist motivation. *Annals of Tourism Research*, 21, 555-581. <https://doi.org/10.1177/004728759403300294>
- Frochot, I. (2005). A benefit segmentation of tourists in rural areas: A Scottish perspective. *Tourism Management*, 26, 335-346. <https://doi.org/10.1016/j.tourman.2003.11.016>
- Frochot, I., & Morrison, A. (2000). Benefit segmentation: A review of its application to travel and tourism research. *Journal of Travel and Tourism Marketing*, 9(4), 21-45. https://doi.org/10.1300/J073v09n04_02
- Giglio, S., Bertacchini, F., Bilotta, E., & Pantano, P. (2019). Using social media to identify tourism attractiveness in six Italian cities. *Tourism Management*, 72, 306-312. <https://doi.org/10.1016/j.tourman.2018.12.007>
- Guttentag, D., Smith, S., Potwarka, L., & Havitz, M. (2018). Why tourists choose Airbnb: A motivation-based segmentation study. *Journal of Travel Research*, 57(3), 342-359. <https://doi.org/10.1177/0047287517696980>
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate data analysis*. Prentice Hall.
- Hair, J.F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall.
- Hall, C.M. (2000). *Tourism planning: Policies, processes and relationships*. Pearson Education.
- Harrigan, P., Evers, U., Miles, M., & Daly, T. (2017). Customer engagement with tourism social media brands. *Tourism Management*, 59, 597-609. <https://doi.org/10.1016/j.tourman.2016.09.015>
- Hays, S., Page, S.J., & Buhalis, D. (2013). Social media as a destination marketing tool: Its use by national tourism organisations. *Current Issues in Tourism*, 16(3), 211-239. <https://doi.org/10.1080/13683500.2012.662215>
- Hsu, C.H., & Lee, E. (2002). Segmentation of senior motorcoach travelers. *Journal of Travel Research*, 40(4), 364-373. <https://doi.org/10.1177/004728750204000403>
- Jalilvand, M.R., Samiei, N., Dini, B., & Manzari, P.Y. (2012). Examining the structural relationships of electronic word of mouth, destination image, tourist attitude toward destination and travel intention: An integrated approach. *Journal of Destination Marketing & Management*, 1(1-2), 134-143. <https://doi.org/10.1016/j.jdmm.2012.10.001>
- Jang, S.C., Morrison, A.M., & O'Leary, J.T. (2002). Benefit segmentation of Japanese pleasure travelers to the USA and Canada: Selecting target markets based on the profitability and risk of individual market segments. *Tourism Management*, 23(4), 367-378. [https://doi.org/10.1016/s0261-5177\(01\)00096-6](https://doi.org/10.1016/s0261-5177(01)00096-6)
- Jansson, A. (2018). Rethinking post-tourism in the age of social media. *Annals of Tourism Research*, 69, 101-110. <https://doi.org/10.1016/j.annals.2018.01.005>
- Jeong, S. (2008). Collective production of public goods in online travel communities. *Information Technology & Tourism*, 10(4), 355-373. <https://doi.org/10.3727/109830508788403141>
- Kang, M., & Schuett, M.A. (2013). Determinants of sharing travel experiences in social media. *Journal of Travel & Tourism Marketing*, 30(1-2), 93-107. <https://doi.org/10.1080/10548408.2013.751237>
- Katsikari, C., Hatzithomas, L., Fotiadis, T., & Folinas, D. (2020). Push and pull travel motivation: Segmentation of the Greek market for social media marketing in tourism. *Sustainability*, 12(11), 4770-4788. <https://doi.org/10.3390/su12114770>

- Kim, M., & Kim, J. (2019). Destination authenticity as a trigger of tourists' online engagement on social media. *Journal of Travel Research*, 59(7) 1238-1252. <https://doi.org/10.1177/0047287519878510>
- Kim, S.E., Lee, K.Y., Shin, S.I., & Yang, S.B. (2017). Effects of tourism information quality in social media on destination image formation: The case of Sina Weibo. *Information and Management*, 54, 687-702. <https://doi.org/10.1016/j.im.2017.02.009>
- Kourouthanassis, P.E., Mikalef, P., Pappas, I.O., & Kostagiolas, P. (2017). Explaining travellers' online information satisfaction: A complexity theory approach on information needs, barriers, sources and personal characteristics. *Information and Management*, 54(6), 814-824. <https://doi.org/10.1016/j.im.2017.03.004>
- Laesser, C., Crouch, G.I., & Beritelli, P. (2006). Market segmentation by reasons and influences to visit a destination: The case of international visitors to Australia. *Tourism Analysis*, 11, 241-249. <https://doi.org/10.3727/108354206778814718>
- Lee, G., Morrison, A.M., & O'Leary, J.T. (2006). The economic value portfolio matrix: A target market selection tool for destination marketing organizations. *Tourism Management*, 27(4), 576-588. <https://doi.org/10.1016/j.tourman.2005.02.002>
- Lee, C., Lee, Y., & Wicks, B. E. (2004). Segmentation of festival motivation by nationality and satisfaction. *Tourism Management*, 25(1), 61-70. [https://doi.org/10.1016/s0261-5177\(03\)00060-8](https://doi.org/10.1016/s0261-5177(03)00060-8)
- Liu, H., Wu, L., & Li, X. (2019). Social media envy: How experience sharing on social networking sites drives millennials' aspirational tourism consumption. *Journal of Travel Research*, 58, 355-369. <https://doi.org/10.1177/0047287518761615>
- Loda, M.D., & Coleman, B.C. (2010). 11 adjusting attitudes using traditional media: Magazines can still move millennials. In P.J. Benckendorff, G. Moscardo, & D. Pendergast (Eds.), *Tourism and Generation Y* (pp. 119-130). CABI. <https://doi:10.1079/9781845936013.0119>
- Luna-Cortés, G., López-Bonilla, J.M., & López-Bonilla, L.M. (2018). Self-congruity, social value, and the use of virtual social networks by Generation Y travelers. *Journal of Travel Research*, 58, 398-410. <https://doi.org/10.1177/0047287518755502>
- Megatrends Travel. (2017). The changing hotel, tourist and destination. *Megatrends Travel*, (5). <http://pdf.euro.savills.co.uk/european/european-commercial-markets/megatrends-travel-issue-5-2017.pdf>
- Miah, S.J., Vu, H.Q., Gammack, J., & Mcgrath, M. (2017). A big data analytics method for tourist behaviour analysis. *Information and Management*, 54, 771-785. <https://doi.org/10.1016/j.im.2016.11.011>
- Morgan, N. (2012). Time for 'mindful' destination management and marketing. *Journal of Destination Marketing & Management*, 1(1-2), 8-9. <https://doi.org/10.1016/j.jdmm.2012.07.003>
- Mulvey, M.S., Lever, M.W., & Elliot, S. (2019). A cross-national comparison of intragenerational variability in social media sharing. *Journal of Travel Research*, 59(7), 1204-1220. <https://doi.org/10.1177/0047287519878511>
- Narangajavana Kaosiri, Y.N., Callarisa Fiol, L.J., Moliner Tena, M.Á., Rodríguez Artola, R.M., & Sánchez García, J. (2019). User-generated content sources in social media: A new approach to explore tourist satisfaction. *Journal of Travel Research*, 58(2), 253-265. <https://doi.org/10.1177/0047287517746014>
- Nusair, K., Bilgihan, A., Okumus, F., & Cobanoglu, C. (2013). Generation Y travelers' commitment to online social network websites. *Tourism Management*, 35, 13-22. <https://doi.org/10.1016/j.tourman.2012.05.005>
- Öz, M. (2015). Social media utilization of tourists for travel-related purposes. *Journal of Contemporary Hospitality Management*, 27(5), 1003-1023. <https://doi.org/10.1108/ijchm-01-2014-0034>
- Park, Y.A., & Gretzel, U. (2007). Success factors for destination marketing web sites: A qualitative meta-analysis. *Journal of Travel Research*, 46(1), 46-63. <https://doi.org/10.1177/0047287507302381>
- Parra-López, E., Bulchand-Gidumal, J., Gutiérrez-Taño, D., & Díaz-Armas, R. (2010). Intentions to use social media in organizing and taking vacation trips. *Computers in Human Behavior*, 27(2), 640-654. <https://doi.org/10.1016/j.chb.2010.05.022>
- Parra-López, E., Gutiérrez-Taño, D., Díaz-Armas, R.J., & Bulchand-Gidumal, J. (2011). Travellers 2.0: Motivation, opportunity and ability to use social media. In M. Sigala, E. Christou, & U. Gretzel (Eds.), *Social media in travel, tourism and hospitality: Theory, practice and cases* (pp. 171-187). Routledge.
- Pesonen, J. (2012). Social media channel segmentation of tourists. *e-Review of Tourism Research*, 10(2), 67-71.

- Pike, S. (2004). *Destination marketing organisations*. Elsevier.
- Ring, A., Tkaczynski, A., & Dolnicar, S. (2016). Word-of-mouth segments: Online, offline, visual or verbal? *Journal of Travel Research*, 55(4), 481-492. <https://doi.org/10.1177/0047287514563165>
- Saunders, J.A. (1980) Cluster analysis for market segmentation. *European Journal of Marketing*, 14(7), 422-435. <https://doi.org/10.1108/EUM000000004918>
- Sedera, D., Lokuge, S., Atapattu, M., & Gretzel, U. (2017), Likes—The key to my happiness: The moderating effect of social influence on travel experience. *Information and Management*, 54(6), 825-836. <https://doi.org/10.1016/j.im.2017.04.003>
- Shao, W., Ross, M., & Grace, D. (2015). Developing a motivation-based segmentation typology of Facebook users. *Marketing Intelligence & Planning*, 33(7), 1071-1086. <https://doi.org/10.1108/MIP-01-2014-0014>
- Shoemaker, S. (1989). Segmentation of the senior pleasure travel market. *Journal of Travel Research*, 27(3), 14-21. <https://doi.org/10.1177/004728758902700304>
- Sigala, M., Christou, E., & Gretzel, U. (2011). *Social media in travel, tourism and hospitality: Theory, practice and cases*. Routledge.
- Simms, A., & Gretzel, U. (2013). Planning a vacation using social media: Influences of demographic, psychographic, and trip-related characteristics. In *Proceeding of The 20th IFITT International Conference on Information Technology and Travel & Tourism, ENTER 2013*.
- Song, S., & Yoo, M. (2016). The role of social media during the pre-purchasing stage. *Journal of Hospitality and Tourism Technology*, 7(1), 84-99. <https://doi.org/10.1108/jhtt-11-2014-0067>
- Strauss, W., & Howe, N. (1991). *Generations: The history of America's future, 1584 to 2069*. William Morrow and Company.
- Tan, P., Steinbach, M., & Kumar, V. (2013). *Introduction to data mining*. Pearson
- United Nations World Tourism Organization. (2019). *UNWTO tourism highlights 2019*. <https://www.e-unwto.org/doi/pdf/10.18111/9789284421152>
- Wang, Y., Yu, Q., & Fesenmaier, D. R. (2002). Defining the virtual tourist community: Implications for tourism marketing. *Tourism Management*, 23(4), 407-417. [https://doi.org/10.1016/s0261-5177\(01\)00093-0](https://doi.org/10.1016/s0261-5177(01)00093-0)
- Wang, Y., & Fesenmaier, D.R. (2004). Modeling participation in an online travel community. *Journal of Travel Research*, 42(3), 261-270. <https://doi.org/10.1177/0047287503258824>
- Wasko, M.M.L., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29(1), 35-57. <https://doi.org/10.2307/25148667>
- Yap, W.C., & Tan, G.W.H. (2017). Mobile social media marketing: a partial least squares structural equation modelling approach. *International Journal of Modelling in Operations Management*, 6(3), 172-193. <https://doi.org/10.1504/ijmom.2017.10005799>
- Yoo, K.H., & Gretzel, U. (2008). The influence of perceived credibility on preferences for recommender systems as sources of advice. *Information Technology & Tourism*, 10(2), 133-146. <https://doi.org/10.133-146.10.3727/109830508784913059>
- Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management*, 31, 179-188. <https://doi.org/10.1016/j.tourman.2009.02.016>
- Zeng, B. (2013). Social media in tourism. *Journal of Tourism & Hospitality*, 2(1), 1-2. <https://doi.org/10.4172/2167-0269.1000e125>
- Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism Management Perspectives*, 10, 27-36. <https://doi.org/10.1016/j.tmp.2014.01.001>

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