Use of Geographic Information Systems in the Analysis of Vacation Preferences of Passengers as a Marketing Tool

Fatma Selin SAK
Anadolu University
Havacılık ve Uzay Bilimleri Fakültesi,
Havacılık Yönetimi Bölümü,
Eskişehir, Turkey
fatmaselinsak@anadolu.edu.tr

Özlem ATALIK
Anadolu University
Havacılık ve Uzay Bilimleri Fakültesi,
Havacılık Yönetimi Bölümü,
Eskişehir, Turkey
oatalik@anadolu.edu.tr

Hakan UYGUÇGİL
Anadolu University
Yer ve Uzay Bilimleri Enstitüsü, Uydu ve Uzay Bilimleri Bölümü,
Eskişehir, Turkey
uygucgil@anadolu.edu.tr

Extensive Summary

Nowadays, with the use of new technologies, in order to provide the airline customers who are increasingly active in increasingly competitive conditions, it is necessary for airline companies to adapt their products to their wishes and expectations according to their profiles and preferences. Indeed, this is the key to achieving a sustainable advantage. In this context, airlines need new tools to launch effective marketing campaigns with detailed analysis. One of these tools is geographic information systems (Gürder, 2011: 35).

The use of GIS technology by businesses results in more accurate decision making, higher throughput, significant cost improvements and higher customer satisfaction (Dangermond, 2005). GIS enables its employees to move faster, catch up with new market opportunities and be ahead of the competition. It also saves time, money and resources by making it possible for the largest customers to truly understand where their density is, what they buy, how far they are willing to travel, their lifestyle, and much more (ESRI, 2010).

In this context, it is aimed to determine the profiles and preferences of the airline passengers who come to Antalya for vacation and to analyze the profiles and preferences with geographical information systems and to show the position based results.

The profiles of airline passengers and their preferences for consumption have been examined both within the airline and by the place they are located (district-based). It has been revealed how tourist attractions come from with determining the positional preferences of the passengers.

The resulting spatial information is grouped by positioning on the map; For example, the locations of the places in Antalya can be determined by collecting the

locations as units, for example, in the airports, in units of places, for example, in places where they live and where they are gathered according to the demographic data such as people, regions, occupation, Thematic maps were produced in the direction of.

When the profile results of the first passengers who are holidaying to Antalya in the result of the study are examined; whose monthly income levels are below 1000-1999 euros and 1000 euros, in which the majority of women are employed, the majority of them are in the ages of 20-39, married and their families are graduated from high school and undergraduate, It has been found that German passengers are more frequent than other nationalities.

It has been found that, in the context of booking behavior, the majority of passengers arriving by package tour, mostly purchasing package tours from a travel agent, and secondarily by airlines using their own internet page at very low levels, often organizing from other sites. It was found that most of them made their reservations in less than 1 month.

When general travel preferences are examined; It has been seen that air travel to and from Antalya is mainly used by Sunexpress Airlines, mainly for low-cost airline companies for arrivals and departures, followed by tariff-free airline companies.

It is thought that the passengers who come to Antalya in the package tour are more interested in the five stars of the package tours when the passengers who are arriving with package tours are thought to be more intensive than the result of the package tours. This is thought to be due to the weight of the passengers who usually do not arrange package tours and purchase tours arranged through a travel agency. According to this, it is recommended that airline companies operating flights to the regions mentioned in Antalya consider this factor.

When the thematic maps produced by the GIS method are examined; it is seen that the airports used for the development in Antalya are mostly in Russia and Germany depending on the regions they live in. In this context, the relations that cannot be recognized with the GIS method are seen, the cities where they live and the airports they came from are compared and it is determined that the passengers who live in the most preferred airports are located and Germany is shown as an example. In this context, it is thought that one of the reasons of not choosing passengers despite the fact that there are airports in some cities in Germany is due to the fact that an airline operation directly coming to Antalya does not have flight activities in these cities. In this context, it is proposed to investigate this and to start flight operations of airline companies in these regions according to the students.

When the accommodation preferences of incoming passengers are examined; It was determined that they preferred Alanya, Manavgat and Kemer districts at the most, and Kaş and Kumluca districts were least preferred districts. When profile and preference levels are examined according to the most preferred provinces within this scope; Most of the passengers arriving in Alanya are female, they are in the age range of 20-39 years, they are in high school and undergraduate education, they are married, they are under 1000 Euro and they have 1000-1999 Euro monthly salary, they are Russian, they come by package tour, They prefer a traditional airline operation. When the profiles and preferences of those coming to Manavgat district are analyzed in general terms, Male passengers are heavier, those who are in the age range of 20-29, the

majority of high school graduates, married passengers come, 1000-1999 and 2000-2999 Euros monthly income, Germans are concentrated and they prefer to come with package tours, Airline companies.

It was determined that most of the passengers who came to the study were concentrated in Alanya. According to this, despite the presence of Gazipaşa Airport in Alanya, passengers come to Antalya and pass through to Alanya is a remarkable result. According to this result Gazipaşa Airport does not address all the passengers coming to Alanya. Decision makers are urged to take initiatives to increase the bilateral flights of Gazipaşa Airport to Europe.

For the purposes of the study, the current situation in the Antalya region for airline operators was analyzed and the results were presented. It is believed that the results obtained from the study will help the decisions to be taken in the planning stage of the strategies for both airline operators and tourism operators and also contribute to the academic literature. While developing the work, there was a very obvious gap related to the use of geographical information systems in terms of analyzing airline passengers, and a new opportunity was created for researchers working on this field.

According to the results obtained without working, it has been found that the use of Geographic Information Systems for airline operators is appropriate. This study presents the present situation by presenting profiles and preference levels of passengers for Antalya region from a wide perspective. In this context, it is recommended to conduct new studies to be analyzed with GIS by examining the reasons of the preference or non-preference level of the passengers coming to each region for the subsequent studies.