

A Study on the Measuring of Consumers' Perception towards the Mobile Marketing Campaigns in Air Transportation

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Abstract

A widespread usage of mobile devices in our age creates a new marketing channel for the corporations to reach the consumers in an effective way. Being effective, personalized marketing tool, mobile marketing attracts the aviation sector, whose aim is to create an environment for the users so that they can require any product and service or pay and learn about them with their mobile devices from anywhere they want.

Accordingly, the purpose of this study is to measure the mobile technology usage in airline marketing and the perceptions of the consumers using airline towards the campaigns about mobile marketing. So, whether the airline customers use mobile devices for ticket reservations, what they think about using mobile devices for these transactions in the future, and their attitude towards the applications run or planned to be run by the airline businesses are tried to be investigated. Survey method is applied and SPSS 17.0 statistics program is used for the analysis.

In conclusion, data towards the necessity of personalizing the mobile marketing applications by airline companies is obtained. The results of the study are expected to help airline companies in Turkey while deciding mobile marketing campaigns via showing them the perceptions and expectations of the customers toward mobile services.

Keywords: Mobile Marketing, Airline Companies, Airline Users

1. Introduction

Mobile marketing or wireless marketing is mostly using text messages through mobile phones in marketing communication (Alkaya, 2007). According to another definition, mobile marketing can be defined as the activities to promote goods, services and ideas via mobile phones, establishing marketing contact with the target customers and sending them promotion-oriented messages in order to benefit all the interest groups of a certain business (Barutçu & Öztürk, 2009).

Mobile marketing began with the integration of mobility into other marketing media. In such promotions, mobility applications are used as a tool to interact with customers (Karaca & Gülmez, 2010).

Below are the mobile marketing activities presented in groups.

Mobile Marketing

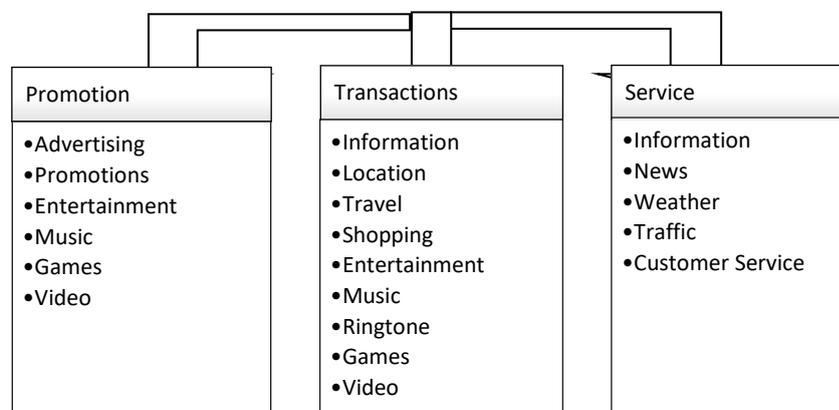


Figure 1: Mobile Marketing (Swilley & F. Hofacker, 2006, 19)

Mobile marketing activities are characterized by personalization, omnipresence, interactivity, localization, measurability, direct marketing, low-cost, dual communication, and raising a high degree of brand awareness. The tools used in mobile marketing are mobile TV (using mobile phones for television advertising), interactive voice response (IVR), mobile coupons (price discounts), call-back tone (call-back ring tone), bluetooth and RFID applications (free information), QR codes, type-send-win (sending passwords), rating and participatory applications (rating contests), contest/prizes, mobile games (advergame), mobile content (logo and melodies) (Sütütemiz & Kurnaz, 2011).

For aviation companies to improve their business models and operations, new products and innovations in mobility offer the most promising and important area since aviation companies are under great stress due to recessions, competition, high costs of fuel, labor and asset, and low demand. Mobile technology use in the aviation industry will help enhance customer experience, ensure operational efficiency, and thus obtain successful results and create sustainable competitive distinction (Lock, Fattah, & Kirby, 2010).

Aviation businesses can take advantage of mobile marketing applications in location-based services (gate, luggage-tracking), advanced emergency management (delay or cancellation, gate changes, luggage loading/transfer errors), in social media (following comments, tracking physical locations), in movement tracking and passenger flow management (automatic check-in etc.), in advanced push messages (flight and luggage information, promotions), in mobile payments (airport parking, extra luggage fees, onboard shopping etc.), in Near Field Communication (check-in, boarding etc.), in self-service (check-in, luggage status check, accessing lounges, meal selection etc.) (Amadeus, 2011).

Especially the global airline companies put great emphasis on mobile services because they think that mobile services can provide huge benefits in product discrimination, operational efficiency and cost reduction. In this sense, in Turkey, Turkish airlines leads the way in mobile services application. THY took an important step in early 2013 with its *Fly Turkish* mobile application.

2. Aim of the Study

The aim of the study is to analyze the airline users' perception of the value of the mobile service and applications currently offered or will be offered by airline companies, as part of their mobile marketing. To this end, in this study airline users were asked questions about mobile reservation, applications for information and facilitation of flight processes and future applications in progress. Due to the novelty of such mobile applications both in Turkey and in the world, the extent of airline users' use of mobile devices in their travel reservations and the degree of their interest in using these applications in the future were sought to be determined.

3. Scope and Significance of the Study

The use of mobile technologies by everybody leads to creative marketing applications in air travel and reshapes the air travel experience. Furthermore, mobile marketing applications are beginning to play an important role in the success of global airlines. The economic recessions in recent years have led to cost-effective policies in the aviation industry. Mobile marketing applications are becoming increasingly important for airline businesses both to ensure operational efficiency and customer satisfaction and also to conduct their interactive marketing activities in a cost-effective way. The research and projections carried out by SITA and Amadeus on airline mobile marketing activities indicate that airline companies are continuing to invest in such marketing and airline users are interested in these type of activities that facilitate their travel experiences. As the scarcity of relevant literature on mobile marketing shows, this study is also significant since it is the first study on mobile marketing in airlines in Turkey. On the basis of the findings about users' opinions of mobile applications, the authors of this study aim to be a reference for the airlines in their due future adjustments. The study involves the airline users located in Turkey, regardless of any specific airline company.

4. Material and Method

This study employs the field work method and the questionnaire that was designed on the basis of research aims was administered online through social media tools (Facebook, e-mail, twitter) and applied by means of electronic survey management and face-to-face interviews. The questionnaire from Lubbe and Louw (2010) was adapted to the aviation sector. The questionnaire was administered online between May 2, 2013 and May 24, 2013, and it was accessible for 24 hours during this period. The questionnaire included questions about the user opinions of using mobile devices in airline reservation transactions and their use in future ticket reservations, perceptions about whether or not using mobile devices in reservation was safe, and perceived value of future airline mobile marketing activities. The study is based on non-random convenience sampling, and thus sampling error could not be statistically determined. 200 analyzable questionnaires were included in the study. SPSS 17.0 for Windows statistics program was used for the analysis.

5. Findings

5.1. Findings Regarding the Demographic Characteristics

The distribution showing the participants' demographic characteristics is displayed in Table 1. According to this, 46,5% of the participants are female and 53,5% are male. The majority (84%) are aged 19-30, and so our sample consists predominantly of the young Y generation. The analysis of the participants' education level reveals that most of them (88%) have graduate or postgraduate education. The participants' income levels indicate that 34% earn

501-1000 TL. This figure is followed by 1001-1500 TL (25%) and 2001 TL (18%), 500 TL (%14) and finally 1501-2000 TL (9%).

Table 1.

Participants' Demographic Characteristics

Gender:	Frequency	Percentage %
Female	93	46,5
Male	107	53,5
Age:		
18 and under	2	1
19-30	168	84
31-40	12	6
41-50	8	4
51-60	7	3,5
61 and up	3	1,5
Education Level:		
Primary Education	6	3
High School	18	9
Graduate	160	80
Post Graduate	16	8
Income Levels:		
500 TL and down	28	14
501-1000 TL	68	34
1001-1500 TL	50	25
1501-2000 TL	18	9
2001 TL and above	36	18

5.2. Findings Regarding the Use of Mobile Devices

In our questionnaire, regarding the mobile marketing and airline users' mobile device use, firstly the participants are asked whether they use mobile devices (*mobile phone, smart phone, PDA, tablet PC, etc.*) for their airline reservation transactions. The answers to this question are presented in Table 2. 54,5% (108 participants) responded that they indeed used such devices. 45,5% (90 participants) reported not using them. 2 participants did not answer this question.

Table 2.

The Use of Mobile Devices in Airline Ticket Reservation Transactions

Do you use mobile devices for your airline reservation transactions	Frequency	Percentage %
Yes	108	54,5
No	90	45,5

Table 3 shows the answers given by those who did not use mobile devices to the question "Would you consider using mobile devices in the future?". With an additional participant who had not responded earlier, 78% (71) of those who did not use mobile devices for airline ticket reservation said "Yes" to the question "Would you consider using mobile devices in the

future?”, while 22% (20) said “No”. This result indicates that the non-users are interested in using these devices.

Table 3.

Opinions Regarding the Use of Mobile Devices for Airline Ticket Reservations in The Future

<i>If you don't use, would you consider using mobile devices for airline ticket reservation in the future?</i>	Frequency	Percentage %
Yes	71	78
No	20	22

Table 4 shows the answers provided for the question inquiring about whether mobile devices are safe for airline ticket reservation. According to the answers given by the participants who use mobile devices for airline ticket reservations, the majority 74,8% (77 people) find these devices safe. When the mobile device use is analyzed on the basis of gender, it is clear that the number of females using such devices in airline reservation is slightly higher than males. An analysis of the data through cross-tabulation method reveals that 77,1% of the males (48 participants) responded affirmatively to the question of whether mobile devices were safe for airline ticket reservation, while 4,2% answered this negatively, and 18,7% said they had no opinion on this question. 77,6% of the females (53 participants) responded positively to the same question, while 11,3% responded negatively, and 17,1% reported having no opinion about this question. Thus, we could say that, compared to males, females find mobile devices for airline ticket reservation safer.

To the question that was asked to find out whether the participants thought carrying out ticket reservation transactions via mobile devices was time-saving, 87% replied affirmatively, while 3% responded negatively. When analyzed by means of cross-tabulation, based on gender, of the mobile device user males (48 participants) 91,5% thought it saved time, while 83% of the females (53 participants) thought so. For this question, it can be said that the males are more satisfied with mobile devices than females are. Consequently, we can reach the conclusion that airline ticket reservation transactions are easier on mobile devices. Furthermore, in view of the age groups, our participants' being predominantly from the Y generation, and their effective use of technology can be said to have an impact on this result.

Table 4.

Opinions about the Security of Using Mobile Devices in Airline Ticket Reservation

<i>Mobile devices are safe for airline ticket reservation</i>		
Positive	Frequency	77
	Percentage	74,8
Negative	Frequency	8
	Percentage	7,8
I have no idea	Frequency	18
	Percentage	17,5

Table 5 displays the responses to the questions aiming to pinpoint participant opinions about the use of mobile devices for future ticket reservations. Considering that the majority of the participants (53,2%) answered “I absolutely agree”, and 25,8% answered “I agree”, it is quite likely that mobile devices will be used in the future. The age/gender comparative cross-tabulation analysis of the question data on whether participants wanted to book, change tickets, and purchase tickets by using mobile devices indicates that most of the participants

belong to 19-30 age group. No significant difference in the answers is observed between the males and females in this age group. Males (86 participants) are eager to make reservations, change tickets and buy tickets by using a mobile device and a majority of them (76,8%) responded positively. 82,5% of the females (74 participants) responded positively. The answers given for this question seem to support the rates presented in Table 3. Evidently, the females tend to use mobile devices relatively more frequently than the males.

Table 5.

Opinions About the Use of Mobile Devices for Future Ticket Reservations

<i>I want to book, change tickets, and purchase tickets by using my mobile devices in the future</i>		
Positive	Frequency	150
	Percentage	79
Negative	Frequency	22
	Percentage	11,6
I have no idea	Frequency	18
	Percentage	9,5

The answers that were provided for the questions aiming to find out the participants' opinions about the use of mobile devices besides ticket reservation are shown in Table 6. According to the responses from 191 participants, the majority (72,7%) are positive about making reservations for or buying airline ancillary services via mobile devices. However 13,6% of the participants are negative and the same ratio of them reported (13,6%) not having any opinions on this issue.

Table 6.

Opinions About the Use of Mobile Devices in Airline Ancillary Services

<i>I want to make reservations for or buying airline ancillary services (car rental, hotel, wi-fi etc.) via mobile devices</i>		
Positive	Frequency	139
	Percentage	72,7
Negative	Frequency	26
	Percentage	13,6
I have no idea	Frequency	26
	Percentage	13,6

The responses that were given to the question regarding whether mobile devices facilitated check-in and boarding procedures at airports are presented in Table 7. The answers indicate that 83,9% of the participants think that mobile devices facilitate check-in services and 80,2% think that these devices expedite the procedures for boarding services. Conversely, 8,4% think mobile devices do not make check-in easier and 8,8% think they do not facilitate boarding procedures, while 7,8% and 10,9% reported having no idea. These results lead to the inference that the use of mobile devices is relatively more common in check-in services.

Table 7.

Opinions About the Facilitativeness of Mobile Devices in Airport Check-in and Boarding Procedures

		Mobil devices facilitate easier check-in services at airports	Mobile devices facilitate easier boarding services at airports
Positive	Frequency	161	154
	Percentage	83,9	80,2
Negative	Frequency	16	17
	Percentage	8,4	8,8
I have no idea	Frequency	15	21
	Percentage	7,8	10,9

Table 8 displays the replies to the question that was intended to find out whether passengers wanted to receive information messages regarding their flights. 82,8% of the participants reported that they want to receive information about their flight. Cross-tabulation analysis reveals that, being the biggest group of participants, 62,1% of the 19-30 age group males reported a strong agreement, 21,8% reported agreement, 5,7% were undecided, 4,6% disagreed, and 5,7% expressed strong disagreement for the question on whether they wanted to receive informative text messages to their mobile devices regarding flight status, flight timetables, route info, gate info etc. Rates for the females are similar to this age group of males. 77% of the females reported strong agreement, 10,8% expressed agreement, 8,1% were undecided, 2,7% disagreed and 1,4% strongly disagreed with the question statement. In the other age groups, mostly the rates for "I strongly agree" and "I agree" answers are the highest for both genders, but the 61 and older age group of both genders answered "I strongly disagree" (2 participants) and "I disagree" (1 participant).

Based on age and gender, both genders are very eager to receive information text messages from airline companies regarding flight status, flight timetables and such. The answers from the participants consist of over 85% "I strongly agree" and "I agree". A low number of participants (6%) answered this question negatively. As can be seen, one of the most important issues for airport passengers is information messages. Therefore, through running their mobile marketing applications effectively, airlines can ensure customer satisfaction by meeting their information demands.

Table 8.

Opinions About The Use of Mobile Devices for Flight Information

<i>I want to receive information messages regarding flight status, flight timetables, gate number etc.</i>		
Positive	Frequency	159
	Percentage	82,8
Negative	Frequency	17
	Percentage	8,9
I have no idea	Frequency	16
	Percentage	8,3

In case of flight changes and delays, in order to prevent users' dissatisfaction, airlines need to manage this process properly and inform them about issues such as alternative flight information and vouchers. As regards to this, the answers given for the question on whether

passengers wanted to receive information messages are shown in Table 9. About 90% of the participants are positive about getting informative messages about flight changes, delays or cancellations, while a small number (7%) view this negatively. Similarly, whereas 87% want to be informed about alternative flights and vouchers, 8% of them do not wish to be informed. Cross-tabulation analysis indicates that for the question on whether they wanted to receive information via their mobile devices before their flights about schedule changes, delays and cancellations, 90% of both male and females in the biggest age group of participants (19-30 year olds) replied that they strongly agreed. In the other age groups, both genders mostly answered that they strongly agreed. Thus, airline passengers seem to be very eager to receive information about changes in flight schedules and delays.

Changes in flight schedules and delays are very important for airline passengers because when passengers encounter a delay at the last minute or when they have to wait for hours at the airport due to delays, their attitude towards the airline company may change and their dissatisfaction reaches to the maximum level. Airline companies do not sufficiently inform their passengers in time of any delays and this causes some problems.

Table 9.

Opinions about Receiving Information via Mobile Devices about Flight Changes, Delays, Alternative Flights, and Voucher Offers

		I want to receive messages via mobile devices about flight changes and delays	I want to receive messages via mobile devices about alternative flights and voucher offers
Positive	Frequency	173	167
	Percentage	90,1	87
Negative	Frequency	14	15
	Percentage	7,3	7,8
I have no idea	Frequency	5	10
	Percentage	2,6	5,2

The airline user opinions about receiving information messages regarding airport information and luggage arrival are presented in Table 10. According to the answers, at least 75% of the participants want to be notified of airport and luggage arrival information, while at most 24% are negative about getting such messages. Thus, the majority regard getting informative messages positively

Table 10.

Opinions About Receiving Airport Information (airport map etc.) and Luggage Arrival Information via Mobile Devices

		I want to receive airport information messages	I want to receive luggage arrival information
Positive	Frequency	143	153
	Percentage	74,8	80,1
Negative	Frequency	24	22
	Percentage	12,6	11,6
I have no idea	Frequency	24	16
	Percentage	12,6	8,4

Concerning airline marketing activities, Table 11 shows the answers provided for the question on whether users wanted to be informed about new services/promotions and frequent flier programs. As can be seen in this table, regarding the reception of messages about new services/promotions, 71,4% of the participants were positive, and 13% were negative, while 15,6% did not have any opinions on the matter. Cross-tabulation analysis reveals that when the gender/age comparison is taken into account, 41,4% of the males in the 19-30 age group (87 participants) reported strong agreement with the given statement about the reception of new service and promotion messages, followed by 23% agreement, 20,7% indecision, 9,2% disagreement and 5,7% strong disagreement. Approximately 65% of the males answered this question positively, while 52,7% of the females in the 19-30 age group (74 participants) responded with strong agreement with the same statement, followed by 21,6% agreement, 14,9% indecision, 8,1% disagreement and 2,7% strong disagreement. About 75 of the females expressed positive opinions regarding the reception of new service and promotion messages. As for the opinions pertaining to the reception of informative messages about Frequent Flier Program, 64,9% were positive, 16% were negative, and 19,1 had no opinion.

Table 11.

Opinions About Receiving Messages via Mobile Devices Regarding New Services/Promotions and Frequent Flier Programs

		I want to receive messages via mobile devices regarding new services and promotions	I want to receive messages via mobile devices regarding frequent flier programs
Positive	Frequency	137	122
	Percentage	71,4	64,9
Negative	Frequency	25	30
	Percentage	13	16
I have no idea	Frequency	30	36
	Percentage	15,6	19,1

As shown in the Table that compares the use of mobile devices for reservation processes as - a safe method- by gender, of the males that use mobile devices for their airline booking activities, 25% reported absolute agreement, 52% agreed, 18,8% were undecided, and 4,2% disagreed in response to the question asking whether they thought using mobile devices was a safe method for airline ticket booking. 35,8% of the females reported absolute agreement, 35,8% agreed, 17% were undecided, 3,8% disagreed, and 7,5% absolutely disagreed. Majority of the female/male participants who use their mobile devices in airline booking said either that they absolutely agreed or agreed with the statement that using mobile devices was a safe method for airline ticket booking. There are some differences in the “strongly agree” and “agree” responses given by females and males. While most of the males (52,1%) said that they “strongly agreed”, only 35,8% of the women gave the same answer.

Table 12.

The Use of Mobile Devices for Reservation Processes as - A Safe Method– by Gender

Sex		Mobile devices was a safe method for airline ticket booking.					Total
		Absolutely disagreed	Disagreed	Undecided	Agreed	Absolute agreement	
Male	Used		2	9	25	12	48
			4,2%	18,8%	52,1%	25,0%	100,0%
	Total		2	9	25	12	48
			4,2%	18,8%	52,1%	25,0%	100,0%
Female	Used	4	2	9	19	19	53
		7,5%	3,8%	17,0%	35,8%	35,8%	100,0%
	Total	4	2	9	19	19	53
		7,5%	3,8%	17,0%	35,8%	35,8%	100,0%

In the comparison of the items about booking with a mobile device, making ticket changes, wanting to buy a ticket – age – gender, overall, according to the participants' age groups and gender, most of the responses regarding the booking with a mobile device, making ticket changes, and wanting to buy a ticket are "I strongly agree" and "I agree". Most of the participants are in the 19-30 age group. There are no significant differences between the males and females in this age group in their responses. It is clear that the males ($n=86$) are eager about booking with their mobile devices, making changes to their tickets, and purchasing tickets, and most of them responded with "I strongly agree" (53,5%) and "I agree" (23,3%). The female participants ($n=74$) indicate similar response rates. 54,1% of the females reported strong agreement and 28,4% reported agreement.

Table 13..

Booking with A Mobile Device, Making Ticket Changes, Wanting to Buy A Ticket – Age – Gender

Sex		Booking with a mobile device, making ticket changes, wanting to buy a ticket					Total
		Absolutely disagreed	Disagreed	Undecided	Agreed	Absolute agreement	
Male	19-30	4 4,7%	5 5,8%	11 12,8%	20 23,3%	46 53,5%	86 100,0%
	31-40	0 ,0%	1 25,0%	0 ,0%	0 ,0%	3 75,0%	4 100,0%
	Ag e 41-50	0 ,0%	1 20,0%	1 20,0%	2 40,0%	1 20,0%	5 100,0%
	51-60	1 20,0%	0 ,0%	0 ,0%	1 20,0%	3 60,0%	5 100,0%
	61 and up	0 ,0%	0 ,0%	0 ,0%	0 ,0%	1 100,0%	1 100,0%
	Total	5 5,0%	7 6,9%	12 11,9%	23 22,8%	54 53,5%	101 100,0%
		0	0	0	0	1	1

Female	18 and down	,0%	,0%	,0%	,0%	100,0%	100,0%	
	19-30	4 5,4%	3 4,1%	6 8,1%	21 28,4%	40 54,1%	74 100,0%	
	31-40	1 14,3%	0 ,0%	0 ,0%	3 42,9%	3 42,9%	7 100,0%	
	Age	41-50	0 ,0%	0 ,0%	0 ,0%	1 33,3%	2 66,7%	3 100,0%
		51-60	0 ,0%	0 ,0%	0 ,0%	1 50,0%	1 50,0%	2 100,0%
	61 and up	2 100,0%	0 ,0%	0 ,0%	0 ,0%	0 ,0%	2 100,0%	
	Total	7 7,9%	3 3,4%	6 6,7%	26 29,2%	47 52,8%	89 100,0%	

In the comparison between “I’d like to receive notifications to my mobile device before my flight about flight changes and delays” – Age – Gender, most of the males/females (65%-64%) from the age group constituting the majority of the participants (ages 19-30), said that they strongly agreed. In the other age groups, participants from both sexes mostly responded with “I strongly agree.” This shows that airline passengers are quite keen on receiving updates about flight changes and delays.

Flight changes and delays are crucial for airline passengers because when passengers encounter a last minute delay or they have to wait at the airports for hours on end due to some delay, their attitudes towards the airline company may change and customer dissatisfaction reaches the maximum level. In case of any delays airline companies do not inform their passengers adequately and in time, and this leads to some problems. As the largest age group among the survey participants, 90% of the males and females in the 19-30 age group reported strong agreement and agreement.

According to age and gender, regarding receiving informative messages from airline companies about updates like flight status and flight schedule information, both sexes were obviously very enthusiastic. Very few participants responded to this question negatively. Therefore, one of the most important issues that are paid attention by the passengers is such informative messages.

Table 14.

To Receive Notifications To My Mobile Device Before My Flight About Flight Changes And Delays– Age – Gender

Sex		I'd like to receive notifications to my mobile device before my flight about flight changes and delays.					Total
		Absolutely disagreed	Disagreed	Undecided	Agreed	Absolute agreement	
Male	19-30	5 5,7%	1 1,1%	3 3,4%	13 14,9%	65 74,7%	87 100,0%
	31-40	0 ,0%	0 ,0%	0 ,0%	2 40,0%	3 60,0%	5 100,0%
	41-50	0 ,0%	1 20,0%	0 ,0%	1 20,0%	3 60,0%	5 100,0%
	51-60	1 20,0%	0 ,0%	0 ,0%	0 ,0%	4 80,0%	5 100,0%
	61 and up	0 ,0%	0 ,0%	0 ,0%	1 100,0%	0 ,0%	1 100,0%
	Total	6 5,8%	2 1,9%	3 2,9%	17 16,5%	75 72,8%	103 100,0%
Female	18 and down	0 ,0%	0 ,0%	0 ,0%	0 ,0%	1 100,0%	1 100,0%
	19-30	2 2,7%	2 2,7%	2 2,7%	4 5,4%	64 86,5%	74 100,0%
	31-40	0 ,0%	0 ,0%	0 ,0%	2 28,6%	5 71,4%	7 100,0%
	41-50	0 ,0%	0 ,0%	0 ,0%	0 ,0%	3 100,0%	3 100,0%
	51-60	0 ,0%	0 ,0%	0 ,0%	1 50,0%	1 50,0%	2 100,0%
	61 and up	2 100,0%	0 ,0%	0 ,0%	0 ,0%	0 ,0%	2 100,0%
Total	4 4,5%	2 2,2%	2 2,2%	7 7,9%	74 83,1%	89 100,0%	

6. Chi-Square Analyses

6.1. The analysis of whether there is a significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and gender status.

Chi-Square Tests (Ki-Kare Analizi)			
	Chi-Square value	degree of freedom	significance value (P)
Chi-Square	2.772 ^a	1	0,096

H00: There is no significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and gender status.

H10: There is a significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and gender status.

Regarding this hypothesis, the Chi-Square value is 2,772, degree of freedom is 1 and the significance value (P) is 0,096.

Since $P > \alpha$, H_0 is accepted, that is, There is no significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and gender. This study identified that the opinion difference between males and females was not at a significant level. Male and female opinions seem to be similar. However, since P value is very close to the α value, by increasing the number of the questionnaires, a significant relationship can be established.

6.2. The analysis of whether there is a significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and age status.

Chi-Square Tests			
	Chi-Square value	Degree of freedom	Significance value (P)
Chi-square	12,504 ^a	3	0,006

H02: There is no significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and age status.

H12: There is a significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and age status.

For this hypothesis, the Chi-Square value is 12,504, the degree of freedom is 3, and the significance value (P) is 0,006.

Since $P < \alpha$, H_0 is rejected, in other words, There is a significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and age.

6.3. The analysis of whether there is a significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and income status.

Chi-Square Tests			
	Chi-Square value	Degree of freedom	Significance value (P)
Chi-Square	7,802 ^a	3	0,050

H03: There is no significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and income status.

H13: There is a significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and income status.

For this hypothesis, the Chi-Square value is 7,802, the degree of freedom is 3 and the significance value (P) is 0,050.

Because $P > \alpha$, H_0 is accepted, meaning that there is no significant relationship between the answers given for the question about using mobile devices in airport ticket reservation transactions and income status.

7. Conclusion

This study set out to find out the value perceived by the users of the present and future mobile service and applications provided by airline companies as part of their mobile marketing. To do this, airline users were asked questions about mobile reservation, reception of information, facilitative applications for air travel processes, and activities planned for the future. Airline users' mobile device use for their travel reservations was analyzed and it was aimed to be figured out whether they were interested in using these applications in the future as well.

As a result of this study, it becomes evident that more than half of the participants use mobile devices for their ticket reservations. 80% of those who do not use mobile devices for their booking want to use them for future reservation transactions. Furthermore, almost 75% of those who use mobile devices for their ticket reservations think that using mobile devices for booking purposes is safe and 87% think that such devices will save time in ticket-booking.

The participants want to be notified via mobile devices by the airline companies about matters such as flight status, schedule changes and delays. 90% of the participants replied positively to this question. Especially in the winter months, airline companies are not able to carry out their flights on time or have to delay them due to inclement weather. Sending notifications to passengers about flight cancellations and delays before they go to the airport can help prevent needless long waits at the airport and thus relieve them of such victimization. Since customer dissatisfaction rises to the highest level in such situations, such a preventive measure might also work to ensure their satisfaction.

Information messages sent to mobile devices become very crucial when things go wrong. 85% of the participants expressed enthusiasm about getting informed via their mobile devices regarding offers like alternative flights and vouchers when unexpected cases of flight or luggage emergency arise. Mobile devices can provide airline companies with much needed flexibility for airline emergency management and thus allow them to respond to their customers in time, preventing mistreatment and minimizing customer dissatisfaction.

Majority of the participants' attitude was positive about using mobile devices for boarding and check-in at the airport. Using mobile devices for check-in and boarding processes offers great convenience for both passengers and airline companies. Airline users can be spared the long check-in lines and without having to arrive the airport hours earlier, can do their check-in and boarding anywhere, and go on board without wait upon arrival at the airport. Concerning airline companies, check-in related delays can be kept to a minimum as well. Moreover, since there will be no need for paper in this kind of approach, costs can be reduced for both parties and thus customer satisfaction can be ensured.

Allowing interactive and effective marketing communication, mobile platforms can be used in various ways by airline companies and they can inform airline users about new services, promotions etc. The data in this study indicate that the participants are positive about such information and applications from airline companies. 70% of them replied positively to this question.

In the light of all these findings, it can be concluded that users' perceptions of and expectations from airline mobile marketing activities are positive. All the questions regarding the applications of reservation, information and facilitation of air travel processes were

replied positively by the airline users. However, the expectation about the mobile activities concerning the provision of information is higher than the others. Airline users are especially eager to get information about flight delays or cancellations, and flight status and emergencies. Contrary to other applications, sending such notifications to mobile devices can be more effective. Airline companies need to place heavier focus on how to address specific customer needs, rather than mobile check-in, reservation etc. applications because the other services have been activated by almost all major airlines. However, the key point to ensure differentiation for an airline is adapting mobile services to specific customer needs.

Bibliography

- Alkaya, A. (2007). Mobil Kanallar Yoluyla Pazarlama İletişim Süreci Ve Üniversite Öğrencilerinin Mobil Pazarlamaya İlişkin Tutumlarına Yönelik Bir Araştırma. Yayınlanmamış Yüksek Lisans Tezi. Anadolu Üniversitesi Sosyal Bilimler Enstitüsü.
- Amadeus. (2011). The Always Connected Traveller: How Mobile Will Transform The Future of Air Travel. www.amadeus.com.
- Barutçu, S., & Öztürk Göl, M. (2009). Mobil Reklamlar ve Mobil Reklam Araçlarına Yönelik Tutumlar. *KMU İİBF Dergisi*(17).
- Karaca, Ş., & Gülmez, M. (2010). Mobil Pazarlama: Kavramsal Bir Değerlendirme. *Akademik Yaklaşımlar Dergisi*, 1(1), 69-81.
- Lock, H., Fattah, A., & Kirby, S. (2010). Airline of the Future: Smart Mobility Strategies that Will Transform the Industry. CISCO Internet Business Solution Group, 2-3.
- Lubbe, B., Louw, L. (2010). The Perceived Value Of Mobile Devices To Passengers Across The Airline Travel Activity Chain. *Journal of Air Transport Management*, 14-15.
- Sütütemiz, N., & Kurnaz, A. (2011). Mobil Pazarlama Kapsamında İzinli Uygulamaları Etkileyen Boyutların Belirlenmesi: Sakarya Üniversitesi Öğrencileri Üzerine Bir Uygulama. *Sakarya İktisat Dergisi*, 105-136.
- Swilley, E., & F. Hofacker, C. (2006). Defining Mobile Commerce In A Marketing Context. *International Journal Of Mobile Marketing*, 18-23.