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An Exploratory Study Of Airline Passenger Technology Use: A Customer Experience Perspective

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AN EXPLORATORY STUDY OF AIRLINE PASSENGER TECHNOLOGY USE: A CUSTOMER EXPERIENCE PERSPECTIVE

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ABSTRACT

Airline passengers have many choices and preferences in the way they interact with airlines. This creates numerous challenges for airlines. This research examines technology preferences by Millennials when interacting with airlines. Seven common airline interaction scenarios were evaluated using repeated measures Analysis of Variance with data collected from an online survey. The results show that Millennial generation airline passengers vary their preferences for technology when interacting with airlines. One intriguing finding of this study is that using mobile devices does not rank high as one of their preferred choices.

INTRODUCTION

It is not enough for airlines to compete on market share, flight schedules, or inflight amenities. Competing on service, and more specifically, customer experience where replication is more difficult, can be a differentiator among airline competitors. Chauhan and Manhas (2014) explain that customer experience begins from a set of interactions between a customer and an organization, which then provokes a reaction. Customer experience links customer feeling and reactions to customer satisfaction and loyalty (Otto and Ritchie, 1996). Etihad Airways believes that customer experience is central to achieving differentiation among airlines and provides for future profitability and growth for the airline (Laming and Mason, 2014). Many other airlines are following suit. Airlines for America reports that U.S. airlines invested $20 billion in 2017 to enhance customer experience (Airlines 4 America, 2017). In a bid to improve the passenger experience even more, information technology spending by airlines in 2018 is expected to reach $24.3 billion (Airports Council International, 2017).

For airlines, technology appears to be their "go to" approach to improving customer experience, and for good reason. It has been established that self-service technologies can create positive outcomes, such as providing more value to customers through better service quality (Meuter et al., 2000) and enhanced customer experience (Åkesson, Edvardsson, and Tronvoll, 2014). Self-service technologies can make information seeking, transactions, and other communication faster and more convenient. However, as Inversini (2017) points out, mobile technology can provide benefits to passengers only if the customers' journey and mobile touchpoint (interaction between the customer and company's mobile technology) are identified. While services and information provided through mobile and self-service solutions are an integral part of the customer experience, traditional information and service distribution systems cannot be deemed unimportant. Before implementing or expanding self-service technologies, firms must better understand the customer and technology relationship (Meuter et al., 2000).

With so many passenger – airline interaction possibilities, airlines may not understand the passenger – technology relationship very well. Even though airlines are investing enormous sums of cash in technology to improve customer experience, overall customer satisfaction has not improved. In fact, compared to other industries, the airline industry remains at the lower end of customer satisfaction. In a well-established yearly customer satisfaction survey, the airline industry achieved a score of 73 out of 100 in 2017, ranking 41st out of 44 industries (ASCI 2018). The low ranking is not an anomaly either; it is similar to past years. Consider the following scenario. An airline passenger can interact with an airline via telephone, email, chat, social media, kiosk, mobile app, website, and face-to-face with employees. An airline passenger might prefer to investigate flight

schedules via a website using a laptop, then purchase the ticket via a website using a desktop, whereas the same passenger might prefer to check-in for a flight using a mobile app on a smartphone, and then use the telephone when locating lost luggage. At the same time, other passengers might prefer to use entirely different interaction mediums for the same scenario. Airlines might consider improving customer experience by better integrating and aligning the technology in the interactions between airlines and passengers. For example, if consumers prefer to speak to airline representatives about lost luggage, rather than investing large sums of capital in to lost luggage mobile app communications technology, airlines might invest in technology that provides clear directions and answers via telephone prompts and recordings, as well as implementing intelligent call routing and monitoring software to reduce wait times. Implementing technology that consumers prefer, airlines increase the likelihood of creating positive feelings and improving passenger satisfaction.

The consequence of airlines not knowing their passengers' preferences could mean allocating inappropriate amounts of resources to various touchpoints that could jeopardize their customer experience efforts. Even more so, airlines may inadvertently create an environment where customers become frustrated with the medium choices that airlines have made available. Consumer frustration can lead to ill will, jeopardizing customer satisfaction and loyalty initiatives, and increasing negative word-of-mouth comments. Therefore, it is important for airlines to understand the mediums customers prefer for different kinds of consumer – airline interaction. As pointed out by Laming and Mason (2014), in order to implement an appropriate customer journey, measuring consumer behavior at each touchpoint is necessary. If airlines can uncover which interaction mediums that customers prefer at each touchpoint, higher customer satisfaction rates may result.

This paper examines which interaction medium passengers prefer to use when interacting with airlines given specific touchpoints along their customer journey. Scenarios were developed considering several technology use and adoption theories. Further, the Millennial generation is the target population of this research since this generation is now America's largest generation and their purchasing power is important to company executives, marketers, and researchers (Henderson, 2016). Considering that the Millennial generation is often portrayed as heavy users of technology and have been labeled as "digital natives" who are "native speakers" of the digital language of computers and the Internet (Prensky, 2001), the insights from this research could bring true understanding to decision makers about this generation's preferences for how they want to interact with airlines.

Consequently, this paper sets out to answer the following research question:

- *RQ1:* Which mediums do Millennials prefer when interacting with airlines?

The remainder of this article is organized as follows: Literature review and scenario development, Research methodology, Data analysis and results, Discussion, and Conclusion.

LITERATURE REVIEW

Airline Customer Experience

Surprisingly, there is very little customer experience academic research in air transport. Much of the current literature comes from practitioner and consultant white papers (Accenture, 2016; IBM, 2017). A study by Chauhan and Manhas (2014) explored customer experience among three airlines in India, though the study did not evaluate airline-passenger interactions or the use of technology during the customer journey. Laming and Mason (2014) examined customer experience in airlines in Europe, Middle East and Asia from a service quality perspective by asking passengers to rate their service experience. Again, this study did not evaluate airline-passenger interactions or use of technology during the customer journey. A study by Inversini (2017) examined mobile touchpoints in an airport scenario. From a set of five activities and five information sources, activities that passengers would

engage in and which information sources they used during an airport journey were identified. Two other closely related studies were conducted, one by Lu, Choi, and Tseng (2011) and one by Castillo-Manzano and López-Valpuesta (2013). Even though these studies were constrained to the check-in touchpoint, they investigated factors that influence air travelers' choice of check-in medium, whether it be the conventional ticket-counter, kiosk, or web check-in.

Airline Technology Adoption and Use

A number of studies have been conducted related to the adoption and use of specific airline technology. The Technology Acceptance Model (TAM) developed by Davis (1989), suggests that behavioral intentions are driven by perceived usefulness and perceived ease of use. TAM has been used to explain the use of airline technologies such as flight ticket booking applications (Suki and Suki, 2017), online check-in service (Lin and Filieri, 2015), self-service airport kiosks (Ku and Chen, 2013) and online airline ticket purchases (Ruiz-Mafe, 2009). Similar to TAM, Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), has been used to examine travelers intentions to use biometric e-gates in airports (Morosan, 2016), websites to purchase airline tickets (Escobar-Rodríguez and Carvajal-Trujillo, 2013), and service mobile apps, including airline mobile apps (Leon, 2018).

Further, the Information System (IS) Success Model (DeLone and McLean, 1992) suggests that information quality leads to system use. When information quality is better, users find the output information to be more helpful and are willing to use the information system more frequently (Chen and Tsai, 2017). Information quality is defined as the degree to which the user believes that the information has the attributes of accuracy, timeliness, usefulness, completeness, and relevance (Delone and McLean, 2003; Kim, Xu, and Koh, 2004; Lin and Lee, 2006). Several research studies demonstrate the ways in which information quality affects a user's intention to use technology. In the air transport domain, Brida, Moreno-Izquierdo, and Zapata-Aguirre (2016) found that the information that is provided by information and communication technologies influences satisfaction in an airport setting. Additionally, Elkhani, Soltani, and Jamshidi (2014) found that information quality leads to satisfaction with airline websites in an e-ticketing context and Forgas et al. (2012) revealed that information quality significantly influences airline website e-quality.

Another framework, Task-Technology Fit (TTF) has guided several technology adoption studies related to tourism and travel (D'Ambra and Wilson, 2004; Kim et al., 2010). TTF is the degree to which a technology assists an individual in performing his or her tasks (Goodhue and Thompson, 1995). It suggests that task and technology characteristics affect individual performance through task-technology fit. Thus, as the fit between the technology and the task it supports becomes better, the greater the likelihood a specific technology will be used and the greater the likelihood that the user's satisfaction with the interaction and with the firm will be higher.

Based on the literature review, this study sets out to make several important research contributions. While the theoretical frameworks are useful in explaining the significance of latent constructs and their influence on technology use and adoption, they do have some limitations for practical use. They have not been particularly useful to decision makers who are deciding which technology to implement along the customer journey and they do not capture users' preference of technology when multiple technologies are available. Therefore, the first contribution of this research is to add to the limited airline customer experience literature investigating interactions at various touchpoints along an airline customer journey. This research will help to guide airline decision-makers about which technology choices to offer and implement at each touchpoint in a customer journey. Second, this research examines the Millennial generation in the United States. The Millennial generation is the largest generation in the United States and one that has significant purchasing power. Previous airline customer experience papers were conducted outside of the United States and did not examine Millennials. In summary, the results

of the study will provide a more complete view of the customer journey and will provide guidance to airline management for interaction medium implementation and resource allocation, thus improving customer experience and satisfaction scores.

RESEARCH METHODOLOGY

Data Collection Instrument and Sampling Method

The theories in the literature review in some regards have commonality and are the backdrop for developing the seven scenarios in this study. The scenarios were developed with different levels of complexity, structure and ambiguity, and information requirements. Further, the survey was developed to measure the likelihood of responsdents using a particualar interaction medium in each of the scenarios. The interaction mediums (*desktop_website, laptop_website, mobile device_mobile app, mobile device_website, kiosk, telephone*) were selected because of their pervasive use in customer – airline interactions. Subjects were asked how likely they were to use a particular interaction medium using a 5-point Likert scale anchored by 1 (*extremely unlikely*) to 5 (*extremely likely*). The survey was pretested on several representative subjects. Only non-substantive changes were necessary.

The online survey was distributed in 2016 and was directed toward participants who are residents of the United States, those who have flown on at least one commercial airline flight in the previous 12 months, and who are categorized as Millennials (those born in years 1980 through 2004) (Weinbaum, Girven, and Oberholtzer, 2016). Data were collected from undergraduate junior and senior level students from a public university in the southeast region of the United States. The survey was voluntary, though students were offered extra credit for completing the survey. The survey returned 677 total responses. Twenty-four responses were excluded since the birth year in these responses was prior to 1980. Thus, 653 responses remained, a net response rate of 96.5%.

Data Analysis Method

The survey data were analyzed using repeated measures ANOVA to explore the differences in interaction medium among the seven scenarios. Repeated measures ANOVA is appropriate when dependent variables are nominal categorical and independent variables are continuous, and when respondents are observed over several instances.

Data Analysis

Of the 653 respondents, 62.3% ($n = 407$) were male and 37.7% ($n = 246$) were female. The years the respondents were born ranged from 1981 to 1998 with 73.4% of them born in the years 1993 to 1995. The survey showed good reliability with a Cronbach's alpha reliability coefficient of .879 (Nunnally 1978).

RESULTS

Following is an overview of the results, and a review for each scenario.

Overview of Results

Interaction medium analysis investigates passenger preferences for a medium given the task that confronts the customer. Table 1 provides an overview of the rankings and identifies which interaction medium is more likely to be selected in each of the seven scenarios. Customers are more likely to use a laptop and less likely to use the telephone to speak with a reservation agent when purchasing an airline ticket. Alternatively, a customer is more likely to use the telephone and less likely to use a desktop computer when rectifying a frequent flyer mileage error.

Each of the seven scenarios was analyzed using repeated measures ANOVA. Tables 2 and 3 provide the mean and standard deviation of each interaction medium for each task. Table 2 list the scenarios that are simpler for passengers to accomplish, while Table 3 lists the more complex scenarios. Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated ($p < .001$) for each of the seven scenarios therefore; the Greenhouse-Geisser correction was used.

TABLE 1
INTERACTION MEDIUM LIKELIHOOD RANKING

Interaction Medium	Ticket Purchase	Flight Information	Check - in	Frequent Flyer Mileage Correction	Seat Change	Lost Luggage Information	Departure Ticket Change
Desktop -Website	2	4	5	6	6	5	5
Laptop - Website	1	1	4	2	1	4	1
Mobile Device - Mobile App	4	3	1	4	3	3	4
Mobile Device - Website	3	2	3	3	4	2	3
Telephone	5	5	6	1	5	1	2
Kiosk	-	-	2	5	2	-	-

Note: 1 = more likely; 6 = less likely

TABLE 2
INTERACTION MEDIUM PREFERENCE (SIMPLE TASKS)

Interaction Medium	Ticket Purchase	Flight Information	Check-in
	Mean (SD)	Mean (SD)	Mean (SD)
Desktop -Website	3.43 (1.470)	3.28 (1.433)	2.63 (1.480)
Laptop - Website	4.60 (0.760)	4.58 (0.762)	3.52 (1.393)
Mobile Device - Mobile App	3.00 (1.308)	3.57 (1.183)	4.02 (1.225)
Mobile Device -Website	3.01 (1.306)	3.70 (1.155)	3.83 (1.252)
Telephone	2.01 (1.285)	1.98 (1.242)	1.93 (1.225)
Kiosk	-	-	3.91 (1.254)

TABLE 3
INTERACTION MEDIUM PREFERENCE (COMPLEX TASKS)

Interaction Medium	Frequent Flyer Mileage	Seat Change	Lost Luggage Information	Departure Ticket Change
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Desktop -Website	3.04 (1.506)	2.95 (1.528)	2.51 (1.459)	3.30 (1.542)
Laptop - Website	3.95 (1.231)	3.95 (1.232)	3.28 (1.479)	4.36 (0.938)
Mobile Device - Mobile App	3.33 (1.365)	3.71 (1.263)	3.53 (1.407)	3.44 (1.321)
Mobile Device -Website	3.34 (1.344)	3.68 (1.253)	3.68 (1.344)	3.45 (1.309)
Telephone	4.10 (1.235)	3.00 (1.486)	3.81 (1.424)	3.56 (1.423)
Kiosk	3.23 (1.528)	3.89 (1.195)	-	-

Scenario 1 - Ticket Purchase

Scenario 1 assesses the likelihood of using a particular interaction medium when purchasing an airline ticket by comparing the mean values of each interaction medium. The results indicate that there is a significant main effect in the likelihood of using a particular interaction medium when purchasing an airline ticket [$F(2.887, 1879.208) = 417.382$, $p < .001$]. LSD post hoc tests showed that there were significant differences ($p < .001$) between all interaction mediums when purchasing airline tickets except for the non-significant ($p > .10$) difference between mobile devices-mobile app (mean = 3.00; SD = 1.308) and mobile devices-website (mean = 3.01; SD = 1.306). Ticket purchasers are more likely to use laptops (mean = 4.60; SD = 0.760) to purchase tickets over all other mediums, and they are less likely to use the telephone (mean = 2.01; SD = 1.285).

Scenario 2 - Seeking Flight Information

Scenario 2 assesses the likelihood of using a particular interaction medium when searching for flight information by comparing the mean values of each interaction medium. The results indicate that there is a significant main effect in the likelihood of using a particular interaction medium when searching for flight information [$F(3.001, 1953.799) = 446.672$, $p < .001$]. LSD post hoc tests showed that there were significant differences ($p < .001$) between all interaction mediums when searching for flight information. Passengers searching for flight information are more likely to use laptops (mean = 4.58; SD = 0.762), mobile devices-website (mean = 3.70; SD = 1.155) or mobile devices-mobile app (mean = 3.57; SD = 1.183). They are less likely to use the telephone (mean = 1.98; SD = 1.242).

Scenario 3 - Check-in

Scenario 3 assesses the likelihood of using a particular interaction medium when checking in for a flight by comparing the mean values of each interaction medium. The results indicate that there is a significant main effect in the likelihood of using a particular interaction medium when checking in for a flight [$F(3.911, 2546.124) = 308.380$, $p < .001$]. LSD post hoc tests showed that there were significant differences ($p < .001$) between all interaction mediums when checking in for a flight except between mobile devices-mobile app (mean = 4.02; SD = 1.225; $p = .120$) and kiosk (mean = 3.91; SD = 1.254; $p = .120$), and mobile devices-web (mean = 3.83; SD = 1.252; $p = .280$) and kiosk (mean = 3.91; SD = 1.254; $p = .280$). Passengers' checking-in for a flight are more likely to use a mobile device-mobile app (mean = 4.02; SD = 1.225), and are less likely to use the telephone (mean = 1.93; SD = 1.225).

Scenario 4 - Frequent Flyer Mileage Correction

Scenario 4 assesses the likelihood of using a particular interaction medium when contacting an airline to correct frequent flyer account mileage by comparing the mean values of each interaction medium. The results indicate that there is a significant main effect in the likelihood of using a particular interaction medium when contacting an airline to correct frequent flyer account mileage [$F(3.804, 2476.382) = 77.061$, $p < .001$]. LSD post hoc tests showed that there were significant differences ($p < .001$) between interaction mediums when contacting an airline to correct frequent flyer account mileage except for the following: Desktop (mean = 3.04; SD = 1.506) and kiosk (mean = 3.23; SD = 1.528) was significant at $p = .018$; and laptop (mean = 3.95; SD = 1.231) and telephone (mean = 4.10; SD = 1.235) was significant at $p = .036$. Further, non-significant comparisons ($p > .10$) occurred between mobile device-mobile app (mean = 3.33; SD = 1.365) and mobile device-web (mean = 3.34; SD = 1.344); mobile device – mobile app (mean = 3.33; SD = 1.365) and kiosk (mean = 3.23; SD = 1.528); and mobile device-web (mean = 3.34; SD = 1.344) and kiosk (mean = 3.23; SD = 1.528). Passengers contacting an airline to correct their frequent flyer account mileage are more likely to use the telephone (mean = 4.10; SD = 1.235) or laptop (mean = 3.95; SD = 1.231) and are less likely to use a desktop computer (mean = 3.04; SD = 1.506).

Scenario 5 - Seat Change

Scenario 5 assesses the likelihood of using a particular interaction medium when making a seat change by comparing the mean values of each interaction medium. The results indicate that there is a significant main effect in the likelihood of using a particular interaction medium when making a seat change [$F(3.888, 2530.844) = 81.555$, $p < .001$]. LSD post hoc tests showed that there were significant differences ($p < .001$) between interaction mediums when making a seat change except for the following significant and non-significant comparisons: Mobile device – mobile app (mean = 3.71; SD = 1.263) and kiosk (mean = 3.89; SD = 1.1195) was significant at ($p = .005$). Non-significant comparisons occurred between desktop (mean = 2.95; SD = 1.528) and telephone (mean = 3.00; SD = 1.486); between laptop (mean = 3.95; SD = 1.232) and kiosk (mean = 3.89; SD = 1.263); mobile device – mobile app (mean = 3.71; SD = 1.263) and mobile device-web (mean = 3.68; SD = 1.253). Passengers making a seat changes are more likely to use a laptop (mean = 3.95; SD = 1.232) or a kiosk (mean = 3.89; SD =

1.263), and are less likely to use the telephone (mean = 3.00; SD = 1.486) or a desktop computer (mean = 2.95; SD = 1.528).

Scenario 6 - Lost Luggage Information

Scenario 6 assesses the likelihood of using a particular interaction medium when obtaining information about lost luggage by comparing the mean values of each interaction medium. The results indicate that there is a significant main effect in the likelihood of using a particular interaction medium when obtaining information about lost luggage [$F(2.952, 1921.894) = 99.754$, $p < .001$]. LSD post hoc tests showed that there were significant differences ($p < .001$) between all interaction mediums when obtaining information about lost luggage except there was a non-significant difference between mobile devices-web (mean = 3.68; SD = 1.344; $p > .10$) and telephone (mean = 3.81; SD = 1.424; $p > .10$). Passengers obtaining information about lost luggage are more likely to use the telephone (mean = 3.81; SD = 1.424) and are less likely to use a desktop computer (mean = 2.51; SD = 1.459).

Scenario 7 - Departure Ticket Change

Scenario 7 assesses the likelihood of using a particular interaction medium when making a change to departure day and time by comparing the mean values of each interaction medium. The results indicate that there is a significant main effect in the likelihood of using a particular interaction medium when making a change to departure day and time [$F(3.023, 1968.049) = 78.888$, $p < .001$]. LSD post hoc tests showed that there were significant differences ($p < .001$) between all interaction mediums when making a change to departure day and time except for the following significant comparison. Desktop (mean = 3.30; SD = 1.542) and telephone (mean = 3.56; SD = 1.423) was significant at ($p = .001$). Non-significant ($p > .10$) comparisons occurred between desktop (mean = 3.30; SD = 1.542) and mobile device-web (mean = 3.45; SD = 1.309); mobile device-mobile app (mean = 3.44; SD = 1.321) and mobile device-web (mean = 3.45; SD = 1.309); and between mobile device-mobile app (mean = 3.44; SD = 1.321) and telephone (mean = 3.56; SD = 1.423). Passengers making a change to their departure day and time are more likely to use a laptop (mean = 4.36; SD = 0.938) or a telephone (mean = 3.56; SD = 1.423), and are less likely to use a desktop computer (mean = 3.30; SD = 1.542).

DISCUSSION

Interaction Medium Discussion

Even though airlines are spending enormous amounts of money on technology and customer experience enhancements, passenger satisfaction is habitually low. This may be an indication that airlines are not allocating appropriate technology to each touchpoint. While aggregate or construct results as provided in previous research is useful in some situations, it is not as useful when attempting to improve the customer experience when enhancing the passenger journey at each touchpoint. Disaggregate results from several touchpoints rather than aggregate results from fewer touchpoints are more beneficial. Disaggregate results shed light on preconceived notions and can help management make appropriate operational decisions that improve the passenger journey at each touchpoint.

The insights from exploring interaction medium preferences become important for allocating resources and for focusing attention to the appropriate touchpoints to create better customer experiences. This study uncovers Millennials' preferred interaction mediums relative to the touchpoints in their journey. Millennials vary their interaction medium preferences and ironically, they prefer interaction mediums other than mobile technology in the most common interactions with airlines. One of the most glaring insights from this study is that mobile technology is not the be-all-end-all solution for passenger interactions with airlines.

Largely, Millennials prefer to use a website via a laptop for structured – rule based transactional tasks like ticket purchases and searching for flight information. Additionally, they prefer a website via a laptop for more ambiguous tasks such as Making Seat and Departure Ticket Changes. When airlines are developing their websites, it would be wise for them to focus on the tasks that passengers often

undertake. Where rule based tasks are concerned, clear and intuitive process steps should be the focus. For less structured and ambiguous tasks, a collaborative and multidisciplinary team of airline employees ought to consider all possible outcomes that a passenger might encounter and then incorporate each of these possibilities into the website design. Information quality is of the utmost importance when customers are accomplishing less structured and ambiguous tasks.

Millennials were however, likely to choose a mobile device-mobile app for Checking-in for a Flight. This could be due to the ease of use of the technology or the mobility of Millennials, where access to a laptop and desktop computer is less likely, and certainly, using a mobile device ought to be quicker than calling a reservation agent by telephone. Interestingly, in the scenarios that this study examined, mobile apps ranked in the middle for preference. Even more, using mobile devices is not the preferred medium for any of the tasks explored in this study except for Checking-in for a Flight. Passengers would consider checking in for a flight a simple task, though of the three simple tasks in this study, Checking-in for a Flight was viewed as more difficult than the other two tasks. When airlines develop mobile apps, the ease of use for the check-in feature ought to be a high design priority. Therefore, if airlines want to improve customer experiences when customers use mobile devices, they ought to prioritize the user design of the check-in functionality and at the same time, when introducing secondary functionality; it should not interfere with the check-in process.

Surprisingly, Millennials prefer the telephone for tasks that appear more ambiguous and seem to require human intervention to accomplish, such as making a frequent flyer mileage correction, obtaining lost luggage information, and even making a departure ticket change. Speaking to live agents via telephone can reduce the time to achieve a desired outcome from a task that does not involve a routine answer. Further, the preferred use of the telephone dispels some preconceived notions that Millennials prefer mobile apps and mobile technology to all else. In an attempt to contain costs, airlines reduce call center overhead and headcount, while implementing technology as a replacement. However, human call center support is relevant for certain passenger tasks. Airlines have a great opportunity to improve customer experience in the areas of call centers.

Telephone calls from passengers happen because passengers have encountered an issue or problem along their journey where human assistance is necessary. Airlines could focus more on preventing lost luggage and making it easier to correct frequent flyer mileage. Further, airlines could make it more difficult to make frequent flyer mileage errors in the first place. Reducing these errors would reduce incoming calls, reduce the need for additional headcount, and improve the passenger experience. Additionally, since it appears that the telephone is highly preferred to correct frequent flyer mileage issues, to obtain lost luggage information, and to change a departure ticket, the remaining call center employees ought to be trained chiefly in these areas to swiftly and accurately resolve these issues.

CONCLUSIONS AND FUTURE RESEARCH

This study contributed to the current research in a number of ways. First, this research added to the limited customer experience literature in the airline industry. Second, this study provided a holistic view of the passenger journey, identifying the interaction mediums that Millennials in the United States are likely to choose at each touchpoint. Last, this study provides insights and guidance for airline managers about where to invest resources and which interaction channels ought to be their focus. Using seven scenarios that were developed with varying degrees complexity, structure and ambiguity, and information requirements, this study set out to answer the research question: 1) Which mediums do Millennials prefer when interacting with airlines? The insights and guidance provided in the study could assist airlines in improving their customer experience and passenger satisfaction.

While this study contributed to the current literature in a number of ways, future research could extend this study even more. Since this study examined the

Millennial generation, a longitudinal study examining changes in their interaction preferences could be insightful. Additionally, other interaction mediums such as chat, text, Twitter, virtual assistants, and even video conferencing could be studied. Also, future research could examine each touchpoint further. Research could uncover passenger satisfaction with each touchpoint and determine how well airlines are performing at each one. Last, researchers could seek to understand reasons behind interaction medium preferences. Passengers might choose an interaction medium because of ease of use, usefulness, information quality, access, convenience or because there is no better alternative. Understanding these factors could improve passenger experience even more.

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APPENDIX 1

Seven Scenarios

1. Before purchasing an airline ticket, I search for fight information such as available fares, departure and arrival times. During this pre-purchase phase to find information, I am likely to use …

2. When I make the actual purchase of an airline ticket, I am likely to use …

3. When I check-in for my flight, I am likely to use …

4. After my flight is over, I notice that my luggage has been lost. I am likely to obtain information about how to resolve this situation by …

5. After purchasing my airline ticket and getting a seat assignment, I decide later that I want to change my seat assignment. To make the actual seat assignment change, I am likely to do this via …

6. After purchasing my airline ticket, I decide later that I want to change my departure day and departure time. To make the actual ticket changes, I am likely to do this via …

7. After my fight is over, I notice that my frequent flyer mileage has not been applied to my account. I am likely to contact the airline to resolve this situation by …

BIOGRAPHY

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