# Using the Electronics Development Advantage in Creating a Buzz for the Airline Passengers

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*More and more airlines are trying to show their customers their ability to understand their needs, the market trends and the importance of technology in their lives. In response to the rapid development of the consumer electronics, the airline companies focus their attention on offering their customers the possibility to book a flight or check-in using a smartphone, spend time watching movies or be connected to the internet during the flight. Customers search for airlines who are more "tech-geek" and opened to new technologies, which allows them to rate the airline companies through apps or connect more often with the airline through social-media. Technology has become an important part in developing and marketing the airline services for a better quality, more customer-focused and for better flight experience which ultimately makes the difference when chosing to fly an airline company.*

***Keywords:*** *airlines, aviation, passengers, inflight-entertainment, customer loyalty, customer personalization.*

## 1. Introduction

In the aviation market, where competition is putting airlines under pressure to become more customer-oriented, the development of technology is a key part for a successful strategy. In these days, it is not all about the food served inside the aircraft, the luggage allowed on-board, but also on how airlines can cope with what is essential for the customer, in fact technology being on top of the list. In the last years, with the internet growth, we have seen a large development of the social-media networks and apps which are essential tools for companies who broaden their view and want to offer a special feeling to their customers, making them a part of the company growth by providing essential feedback. This would not have been possible without the growth of technology, which enabled airlines to be more creative starting from the point when the customers search for fares and until de-boarding the airplane.

Airline companies have always been keen on offering a better experience for the customer in every step of interaction with the services of the company. Starting from the option to book a flight via a smartphone, interact with the company via social media to obtain information regarding schedule or other options available, rate the company services with the help of certain free apps, check-in on the smartphone or check-in machines at the airport, effectively use the inflight-entertainment system during the flight to watch a movie, documentary or connect to the internet to keep up with to the latest news, each step of the flying

experience has to be somehow related to technology in order to achieve a high customer satisfaction and retention. Technology development is also beneficial for the companies, who are willing to use technology to personalize the service even in economy class, to receive fast feedback, better connect with passengers via social media, increase customer ancillary revenue by using special apps on tablets or give tablets to cabin crew in order to find quick information about each passenger or to facilitate the buy-on-board process.

## 2. Literature Review

Passenger satisfaction in the airline industry has become an important issue for every company who wants to have loyal customers. Dennet, Ineson and Colgate (2000) suggest that as competition has become more and more intense, with the growth of the LCC and Gulf carriers, service quality in the airline industry has also received more attention. In the transportation and logistics field, Dresner and Xu (1995) examined the link between customer service and customer satisfaction using data from the airline industry. They found that three measures of customer service, mainly mishandled luggage, ticket over-sales and on-time performance, were all positively related to customer complaints, their measure for customer satisfaction. Reducing the problems facing luggage and on-time aircraft performance contributes to fewer customer complaints.

Saha and Theingi (2009) pointed out that the growth of low-cost carriers has raised concerns on how satisfied the customers are with the services provided. Keeping quality and developing strong points are huge concerns of the airline companies, due to the fierce competition, especially the low-cost carrier model which has seen many changes with the arrival of new technology aircraft which allows low-cost carriers like Norwegian Air Shuttle to develop long-haul routes with the help of their Boeing 787's. The delivery of high-quality service ultimately becomes a marketing requirement among air carriers as a result of competitive pressure (Ostrowski et al., 1993). Chang and Keller (2002) argue that quality in the airline service is difficult to describe and measure due to its heterogeneity, intangibility, inseparability, and only the customer can truly define service quality in the airline industry (Butler and Keller, 1992). Other researchers have identified corporate image as an important factor in the overall evaluation of the service and the company. The relationship between corporate image, service quality and loyalty has been investigated in other studies. Andreassen and Lindestad (1998) noted that corporate image has an impact on customer's choice of company when service attributes are difficult to evaluate. Zeithaml and Bitner (1996) also demonstrated that image can influence customers' perception of the good and services offered.

Service quality, a consumer's judgment about the overall superiority of a product or service (Zeithaml, Bitner, Gremler, 2009) is widely acknowledged as one the important determinants of brand loyalty. Service quality is essential strategy for every airline success and mainly concerning the survival of any business organisation, as it can influence customer purchase behavior and organization performance (Zeithaml, Berry, Parasuraman, 1996).

## 3. Technology Development on Customer Satisfaction in Airline Industry

As global economies begin to show signs of recovery and people start to travel more often, the airline companies start to understand what the changing customer needs. As technology grows and people become more and more addicted to technology (tablets, smartphones, internet), the airlines search for more ways to increase customer satisfaction. Among all the industries benefiting from the advancement in computer technology, the airlines are taking the maximum benefits; because the revolutionary development has completely changed the structure, form and especially the future of the industry. The technology has had a great impact on the way customers can book their tickets via a website or can compare fares on different booking websites. This promising start was just the beginning of the development and a positive example of how technology can change the way airlines treats their customers.

The new trends in the airline industry are to take advantage of the mobile technology and use it effectively to meet customers' needs. In a survey issued in 2013 by SITA (*Société Internationale de Télécommunications Aéronautiques)* to IT executives in each of the top 200 passenger carriers, including low-cost operators and regional and leisure operators, found out that a predicted 62% increase in the use of applications provided by Apple or Samsung for check-in or boarding passes via mobile technology. Currently, only 21 percent of all airlines use technology, contrasting with 61 per cent of all airlines using their own check-in apps. In the current market, 50 per cent of all airlines offer flight search, ticketing, check-in and boarding passes via mobile technology. In the next three years, it is expected that more than 60 per

cent of airlines will extend the mobile technology and its functionality to include flight re-booking, lost bag reporting and bag status updates in case of a lost luggage. More than 75 per cent of airlines are planning to move to electronic flight bags and automated cabin crew services by 2016. In addition, airlines are expected to generate 14 per cent of total revenue from ancillary sales just from mobile technology and social media by 2016. Nine out of 10 airlines by 2016 are expected to use mobile apps for ticket sales, estimated to be worth more than 70 billion US dollars within three years. By 2016, 71 per cent of the airlines plan to use tablet-based mobile solutions in engineering and maintenance. The final results show a hastening trend towards the use of mobile technology both for operational use and by customers.

The new game between the airlines is to be seen on how the new technology promises to change the way passengers search, buy and most of all experience the comfort of flying and the way airlines create and market their products and services. Customer satisfaction is on the top of the list and airlines are adding more and more Wi-Fi options on their aircraft to attract more business customers or economy class passengers who want to enjoy working while flying. Ancillary revenue from Wi-Fi payments is to increase in the next years, taking into consideration the fact that customers are now allowed to use their mobile phone during take-off and landing procedures. For example, Spanish budget airline Vueling is planning to add more Wi-Fi systems on their aircraft in bid to lure more business passengers and set itself apart from other low-cost carriers like rivals Ryanair or EasyJet. The airline is seeking to target business clients who account for almost 40 per cent of ticket sales, securing the Wi-Fi plan through a deal, coming at no cost to Vueling. Another prosperous example is Turkish Airlines, which has added high-speed Wi-Fi broadband internet and inflight television on its trans-Atlantic flights using the existing platform. Turkish Airlines aimed to offer customers more options where they search for value, passengers being able to access high-speed, unlimited internet with laptops, tablets, smartphones or other devices. As Lufthansa did, the internet will initially be provided free of charge as an introductory offer. After a period, passengers will be able to access internet via an access code, being available for a credit card purchase. Not all airlines succeeded to stir the customers' interest in using the internet on-board. For example, Qantas has scrapped the plans to provide wireless internet access on its flights, citing a lack of interest from customers during a trial who ran for nine months in 2012/2013, allowing passengers to access the internet on six of the airline's A380 on some long-haul routes like Sydney-London or across the Pacific to Los Angeles. The customers were not interested in using the Wi-Fi system, evoking the fact that the service was extremely expensive, the airline charging between 13 and 40 dollars for its data packages on board. The unsuccessful attempt of providing Wi-Fi was due to the costs associated with offering a reliable connection which are significantly higher than on the ground, especially when flying long-haul routes that can't connect to ground towers and require special system installed on the aircrafts. Other airlines like Emirates has introduced the same technology on its A380 aircraft, currently providing wireless internet on-board, charging 15 dollars for each 25 used MB or 25 dollars for each 100 MB using a laptop, or 8 dollars for each 5 MB for mobile phones in all classes. Singapore Airlines also offers wireless internet on-board on some flights, with price ranging from 10 dollars for 10 MB or 25 dollars for 30 MB.

With some airlines being successful and other airlines accelerate the Wi-Fi installations on-board aircraft, combined with the large number of passengers carrying their personal gadgets or digital devices, the aviation industry has seen changes in what the configuration of the aircraft is concerned. Airlines around the world are fast responding to the large number of passengers carrying smartphones, mobile phones, tablets, notebooks or e-readers, equipping seats with power and USB ports. Other airlines are searching to install seats, creating storage space for personal electronic devices in Business Class, or designed seats in Economy Class, where passengers can store their mobile devices. On the same track, iPads for example are changing the way plane tray tables are designed. Airlines that want their customers to have a pleasant flight experience have adopted new economy class tray tables for storing personal electronic devices. This means that while enjoying the dinner served by the airline, the passengers will be able to watch content on their iPad or iPhones screens hands free with the tray table up, charging their devices at the same time.

Electronic devices, being important items when travelling, have attracted airlines attention and in an effort to offer passengers a much wider variety of news, instead of the limited printed newspapers or magazines, and to save distribution costs, airlines such Air France or Airberlin have started to provide passengers with access to digital newspapers and magazines before and even during the flights. For example, Air France has been offering a digital press service on iPads available for passengers who use the lounges at Charles de Gaulle airport. Air France has expanded the service and launched a new "AF Press App" that allows passengers to download publications up to 24 hours before their flight until the time of departure to read them before, during or after the trip. The same goes for Airberlin, offering Silver and Gold members a

free option to download newspapers or magazines to their own devices while waiting at Berlin or Dusseldorf Airport, the service being free of charge and includes publications in both German or English.

## 4. Towards a More Personalized Service

Wanting to be closer to every passenger, airlines such as Emirates, British Airways, Iberia or KLM, have equipped their cabin crew with tablets. Airlines allowed the cabin crew to see which previous trips a passenger has taken with the carrier before, knowing their food, drinks and seating preferences, other issues a customer had on other flights, their special needs, as well to see who is enrolled in their frequent flyer program to provide a more personalized service even in economy class. Emirates, for example created in 2004 the so called "Knowledge-driven Inflight Service" which allowed them to know their passengers better, using the system to perform inflight upgrades to Business or First Class, as well as get quick feedback.

British Airways, being a "tech-geek" has had a lot of initiatives concerning their marketing campaigns or customer service improvement. To provide a more personalized service, almost 2,000 senior cabin crew were given an iPad, featuring its "Enhanced Services Platform" consisting of several apps that allowed flight attendants to store and receive relevant passenger details in real time, such as the number of flights taken with BA, the meal preferences, birthday, aiming to offer its passengers a more tailored inflight service. In 2012, BA developed a customer recognition program, entitled "Know Me", the program being able to send messages with information about specific customers to the iPads of customer service agents and senior cabin crew via the airline's computer system. This was possible after BA spent almost a decade to gather all of its passenger data from more than 200 sources into one database, generating a single customer view.

## 5. Conclusions

A very dynamic industry as it is, the airline industry has known many changes and the airline companies are trying to show the customers their value when they fly with them. In order to cut costs and provide a better service at each step of their experience with the airline, technology has become an extremely important factor and airlines are trying to cope with the latest changes in the technology industry and implement different concepts that customers would value. The fierce competition is bringing the creativity of the management staff to another level and customers are the only ones to are set to win. Each airline tries to come up with new ideas that would be suitable to their customers and make their flying experience more enjoyable. And nowadays, technology makes all the difference.

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