

6-1-2014

Assessing Customer Service in Airports – Models from the UAE

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Gupta, A., Arif, M., & Richardson, P. A. (2014). Assessing Customer Service in Airports – Models from the UAE. *International Journal of Aviation, Aeronautics, and Aerospace*, 1(2). <https://doi.org/10.15394/ijaaa.2014.1007>

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Customer expectations compared with performance is defined as service quality (Lewis & Booms, 1983). For an organization to be successful it is important to get things right the first time. Berry, Carbone, and Haeckel (2002) claim that for an organization to be among the leading service providers it needs to understand both the customer's expectations before providing the service and the assessment the customer makes after the service is provided. Also, higher levels of customer satisfaction can be achieved only when each employee of the organization is aware of the specific expectations of the customer and has the ability to fulfill them (Asher, 1989). Proactive organizations which focus on prevention of service failure outperform organizations which focus on a reactive approach of recovering the level of service after the damage is done (McCullough, Berry, & Yadav, 2000).

With rising competition among airports, continuous improvement in service quality should have the highest priority. Airports are entry and exit points in many tourists' journeys and airport infrastructure impacts a tourist's perception of the airport as a whole. In an airport, services should be provided efficiently and in a manner that minimizes travel time and provides an enjoyable experience that includes shopping and relaxing in the airport's commercial area (Martín-Cejas, 2006). Customer service and safety are the main forces that influence the aviation industry's strategy (Appelbaum & Fewster, 2003). Competition among airports for attracting organizations to setup their operations and airlines to choose them as preferred destinations will always exist. Airports also compete on how they handle customer complaints and how they have plans in place to take a proactive role to avoid them (Bell & Luddington, 2006; Robbins & Miller, 2004).

This study analyzed various aspects of the customer service programs and models that have been adopted across the globe. It then used that background to explore the current standards of customer service and satisfaction levels in United Arab Emirates (UAE) airports. Subsequently it has gone on to compare this UAE data with other international airports through passenger reviews. Thus this research has involved documentation of criteria to be studied for UAE airports and creation of a new model to assess and serve that aim. It was expected that by studying business practices and attitudes towards customer relations programs, the study would have been able to identify opportunities for improvement. From this baseline, it might have been possible to identify potential benefits of adopting better customer service practices at the UAE airports. The next section includes relevant literature on the quality of customer service in aviation and an overview of models used for assessing UAE airports. Research methodology used to assess customer satisfaction at various UAE airports is then discussed followed by a section that summarizes results of interviews with a group of passengers. It is

followed by a section that presents three observational studies from three airports in the UAE. This in turn was followed by comparative analysis of the airports. The last section summarizes the findings and concluding remarks of the observations.

Literature Review

Numerous models and studies on airport service quality have appeared in the literature. Fodness and Murray (2007) presented a service quality model for airports. The authors concluded that the expectation of passengers' service quality in an airport is comprised of diversion, interaction, and function. Tsai, Hsu, and Chou (2011) presented a model for evaluating the gaps between expected and actual service quality at airports along with managerial measures to reduce those gaps. Park and Jung (2011) investigated airport service quality as perceived by transfer passengers and the influence of quality on different aspects such as value, satisfaction, airport image, and passenger behavior. Employing the multi-criteria decision making approach, Yeh and Kuo (2003) evaluated service quality at 14 international airports in the Asia-Pacific region. Using the dominance-based rough set approach, Liou, Tang, and Yeh (2011) examined different factors which impact quality of service as perceived by the customer. Lubbe, Douglas, and Zambellis (2011) emphasized that customer feedback on airport service quality varies by the type of customer.

To study rate of customer complaints and how customer complaints are handled, Chen, Wang, Cheng, and Kuntjara (2008) conducted an empirical review related to customer complaints and identified factors such as being proactive and timely justice to passengers' complaints that lead to better customer satisfaction. Whyte (2004) concluded that loss of loyal customers and loss of customers' faith/trust cause airlines to fail. Using an empirical study on passengers' perceptions of airline lounges, Han, Hamb, and Baek (2012) concluded that food/beverage service is the most important factor. Pham and Simpson (2006) identified variables including empathy, reliability, tangibles, responsiveness, assurance, etc., as important variables that impact airport service quality. In essence, service quality models identify ways to achieve and sustain customer satisfaction and customer loyalty.

Geographical location is another important factor and the model should be built in context to the country where the airports are located. The features that are specific to UAE include, over one hundred different nationalities, a large percentage of population that travels to airports in other parts of world, and UAE's intent to be a connection between Europe and Far East.

To satisfy the five criteria including the above three features in the previous paragraph and two from service quality models (customer satisfaction and customer loyalty), and the dynamics involved in UAE's aviation sector, a customer service model is developed which is a combination of three models namely: (a) inter-cultural, (b) boomerang, and (c) pleasure. The three models are described next.

Inter-cultural Model

To understand inter-cultural service encounters and customer's responses to those encounters Hopkins, Hopkins, and Hoffman (2005) presented a framework which includes variables such as: language; word choice; specific cultural needs and queries; non-verbal communication mechanisms of different cultures; and attitudes toward stereotypes and discrimination. The model has further been applied in different contexts by researchers such as Sharma, Tam, and Kim (2012); Hopkins, Nie, and Hopkins (2009); and Hulten (2009); hence, the utility of this model has been demonstrated.

Boomerang Model

To assess an organization's proactivity, the boomerang model developed by Partch (1996) can be used. The boomerang model proposes the proactive approach of identifying customer issues as opposed to a reactive approach of fixing the issues after the fact. In this model employees are encouraged to provide/offer customers the service even before the customer has asked for it. In other words, the service providers take a proactive approach. The model evaluates front-end staff members on quick customer service related decision making. The model is of great significance for the UAE market because of the large volumes of passengers passing through its three major airports combined. The main factor that was incorporated from this model was the fact that airline and airport staff members actually can and do travel the extra mile to satisfy the customers' needs and wants that are not explicitly asked for.

Pleasure Model

Le Bel (2005) presented the pleasure model which sheds light on how scientific research can be applied to the fields of customer service and relationship management. The focus of the model is to understand the tangible and intangible elements related to pleasure. In the proposed model the pleasure elements include intellectual, sensory, and social and emotional pleasure. The model has been used

in other published work also. Babbar and Koufteros (2008) evaluated the elements related to personnel and identified the elements that impact the satisfaction of airline passengers. Brand loyalty and airlines' customer involvement were examined by Chen, et al. (2008). McKechnie, Grant, and Golawala (2011) used the pleasure model to examine the impact of dividing service engagement at the airports into touchpoints. The authors claimed that touchpoint preference is apparent from passenger nationality segmentation and travel purpose reasons. In this research the above three models were combined and a detailed framework was developed that was used to collect data about three UAE airports as shown in Figure 1.

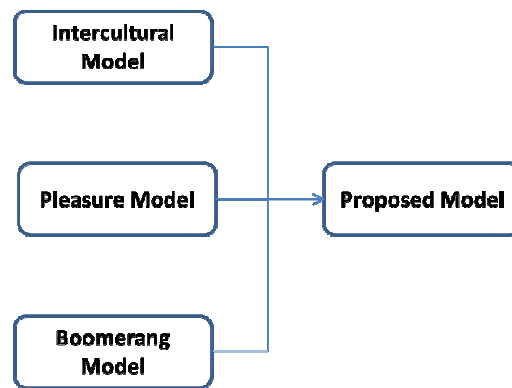


Figure 1. Proposed model

Fifteen variables of customer service were extracted from the three models (described above) and were incorporated in the proposed model to examine each criterion, shown in Table 1. The criterion identification numbers (left column) in Table 1 correspond to the findings presented in the following research methodology section.

Table 1

List of Variables Used in the Model

Variables from Boomerang Model

Criterion Identification #

- (1) Cooperativeness of the ground staff at the airport, with the requirements, needs, queries, issues faced by passengers through the airport.
- (1) Extent to which the airport supports provisions for allowing the passengers to make use of the services of the airport in the event of flight delays.
- (2) Receptiveness of airports passengers feedback including, are there clear adequate means of feedback, is feedback and complaints put forth by the customers recorded and looked into properly.
- (4) Customer's experience with immigration section, with regards to any related concern, whether it was delay because of long queues, or visa issuance issues, or staff with limited respective knowledge, or any other issue.
- (5) Extent to which the airport staff is informed and helpful when it comes to finding out about the timings, locations, counters, gates of arrivals or departures of different airlines taking place at the airport.

Variables from Pleasure Model

Criterion Identification #

- (1) Seating arrangements made for the passengers to sit and rest while waiting for their flights to arrive and board and also necessities provided (Coffee, toilets, prayer) within the facility.
- (1) Extent to which the airport is equipped with facilities to support and counteract and security threats which may arise. Exp. enough security personnel, fire exits that are clearly marked, enough fire extinguishers within sight, instructions in case of threat, etc.

(continued)

Table 1

List of Variables Used in the Model (continued)

Variables from Pleasure Model

Criterion Identification #

- (1) Provisions made for the passengers in transit to cater to the needs of the passengers, especially in cases of long transit periods.
- (1) Effectiveness of facilities supported for carrying heavy baggage and luggage until the check-in point, including, weighting systems, baggage rappers, and means of payment for excess luggage.
- (2) Extent to which the airport is equipped with clear indicators and signs regarding the various facilities and services, like terminals, gates, restrooms, restaurants, prayer rooms... etc. and their reliability (reliability means do you need to ask staff despite existing signs because of confusion?)
- (2) Availability of transportation to and from the airport, whether cabs or public transport or airport shuttles.
- (4) Accessibility to the airports from where the customers' departing locations, whether during peak or off-peak hours.

Variables from Inter-Cultural Model

Criterion Identification #

- (1) Ease of communication with airport staff, especially staff's proficiency in more than a single language so as to converse with passengers in a language that they are more comfortable in.
- (2) Extent to which the airport is equipped and tailored to handle the special needs of ailing passengers, elderly, children, and physically disabled who may need special and sometimes constant attention.

(continued)

Table 1

List of Variables Used in the Model (continued)

Variables from Inter-Cultural ModelCriterion Identification #

- (3) Quality of services such as food, shopping and other activities in the airport, taking into consideration the variety of choices for different religions and cultures (e.g. Vegetarian, Halal food, different religion prayer rooms, magazines in varied languages).

Note: Adapted from “Customer service in the aviation industry—An exploratory analysis of UAE airports,” by M. Arif, A. Gupta, & A. Williams, 2013, *Journal of Air Transport Management*, 32, pp. 1-7.

Research Methodology

The model described in the previous section was applied to three observations of three major airports in the UAE to assess the level of customer service quality. In order to compile the data for analysis, we reviewed the websites of these airports, made three visits to each of the airports over a period of one week, and collected primary data using semi-structured interview. Due to security restrictions, access over a longer period of time to the areas beyond the immigration and customs was not possible. The researchers could only obtain permission for one week and hence the observation part of the study was limited to this period. As Fellows and Liu (2003) argued, semi-structured interviews are intermediates between the two extremes, structured and the unstructured. The purpose of doing the interview was to get a much deeper perspective and more detailed information on the level of customer service quality at the airports. Moreover, it allowed for non-verbal communication or body language and tone of voice which added the ability to analyze the information in a different context.

For the purpose of this study the three airports in the UAE were selected. This research was conducted on a random arbitrary sample of seventy-eight (78) residents of the UAE. This group consisted of frequent, normal, and infrequent fliers in order to provide more reliable results. The sample was selected based on passenger demography expected across UAE airports. The passengers interviewed at an airport did not necessarily live in the respective emirate. The proportions were: 45% (15 out of 33) of Sharjah International Airport participants were

Sharjah residents, 62% (35 out of 56) of Dubai International Airport participants were Dubai residents, and 90% (28 out of 31) of Abu Dhabi International Airport participants were Abu Dhabi residents. The numbers showed that relatively fewer people from other emirates traveled through Abu Dhabi International Airport at least during the period of this study. If we consider the criterion presented in Table 1 and number them according to the order in which they have been presented, the mean scores for criterion 1, 2, 3, 4, and 5 for (Dubai, Sharjah, and Abu Dhabi) were (4.23, 3.30, 3.23), (4.02, 3.12, 2.97), (3.57, 2.73, 3.29), (4.14, 2.45, 3.06), and (4.11, 2.97, 2.65) respectively. The standard deviation of scores for criterion 1, 2, 3, 4, and 5 for (Dubai, Sharjah, and Abu Dhabi) were (0.603, 0.883, 0.884), (0.726, 0.740, 0.983), (0.657, 0.517, 1.039), (0.672, 0.506, 0.772), and (0.731, 0.585, 0.661) respectively.

Each interviewee was briefed on the goal of the interview, was shown a short documentary to educate him or her on the Middle East and UAE's history of aviation, and was interviewed alone. The documentary touched upon the development and the initiation of the Dubai aviation center and the further development of the Dubai International Airport, soon followed by the Sharjah and Abu Dhabi airports' construction. After watching the documentary, a fifteen-question survey regarding the services provided by the airports and the ease of travel and commuting through the airports was administered. The questions were created from the variables presented in table 1 by converting them into question statements. For example, the first variable in Table 1 was converted into a question statement by adding "How would you rate the" at the beginning of variable definition. The aim was to gain a better understanding of the views of varied strata of passengers traveling through UAE's airports, to understand their mindset, and establish potential areas where the services provided could be improved. To get firsthand experience, the research team also visited the airports and observed different facilities, systems and processes. The team also looked at the airport website and the information present on the website was used to compile the profile of the airport and compare what was said on the website and what was actually there.

Results of the Interviews

Based on the results of the interview it could be established that all three airports are providing good levels of service to passengers from different nationalities. Staff at all three airports provided good service for passengers who speak a range of languages and passengers who are disabled. As far as meeting passengers' expectations Dubai and Abu Dhabi airports were found to meet international standards. Sharjah airport lacked proper signage and this negatively

impacted passenger experience. All three airports had friendly staff but where facilities such as connectivity to public transportation are concerned, Dubai outperforms both Abu Dhabi and Sharjah airports.

The interviewees had some interesting viewpoints to share about proactivity of staff and facilities at the airport in times of flight cancellations and delays. Only Dubai International airport has enough seating capacity and accommodation to help passengers when flights are cancelled. The signage and the helpfulness of staff at Dubai airport are significantly higher than that at Abu Dhabi and Sharjah. Facilities such as availability of trolleys were much better at Dubai airport compared to Abu Dhabi and Sharjah airport. Payment facilities for upgrades and excess baggage payments are much better at Dubai and Abu Dhabi airports. At Sharjah airport passengers reported excessive delays. Regarding the location of the airport and ease of commuting to the airport was much better at Dubai and Sharjah airport. Abu Dhabi airport is located slightly outside the city limits. As far as the time through immigration is concerned, Dubai performed much better than the other two airports. Dubai also was rated much better than the other two airports for executive class lounges and transit hotel facilities.

Results from Observations

The actions and interactions of airlines and airports are the primary determinates of aviation customer service attitudes in the traveling public in the UAE today. When airlines are in the process of choosing which airports to land in, other than the monetary factor, customer service and infrastructure of that airport are also analyzed. This implies that the upkeep of airports' infrastructure and customer service is not only necessary to win the passengers as customers but also the airlines as customers as well. This analysis is reinforced by the findings of interviews conducted, side talks with panel members, and the correspondence of the response averages to the criteria chosen.

Observation: Dubai International Airport

Dubai International Airport was inaugurated in 1960 and since then has catered to over 402 million passengers with an annual growth rate of 15.5% (with one million passengers in 1974, five million in 1990, and 10 million in 1999) (Facts and Figures - Dubai International Airport, n.d.). It handled about 3.87 million aircraft movements (12.4% annual growth rate), and total freight volumes over 17.9 million tons (average growth rate of 14.3% annually). Dubai International Airport went through multiple expansions and upgrades in 1999 which included a new terminal (Terminal 2), a new air traffic control tower, two

new runways (asphalted), and a terminal extension (Facts and Figures - Dubai International Airport, n.d.). With continued growth, the airport added a new terminal (Sheikh Rashid Terminal) in 2000 which increased annual capacity of the airport to 23 million passengers. The passenger traffic kept increasing due to economic growth with over 20 million passengers in 2004 and 34 million by 2007. To prepare for future growth and rapid expansion the airport added an international terminal in October 2008 called Dubai International Emirates Terminal 3. The terminal was built exclusively for Emirates (Facts and Figures - Dubai International Airport, n.d.).

In order to assess the effectiveness of the airport, the research team visited different parts of the airport and spoke to some of the passengers. Dubai International Airport has staff, kiosks and displays deployed at all critical locations for anyone to find their way and get information about where to go for getting on his or her flight or immigration. The immigration section is large and has several kiosks that are operational at any given time. However, just because of the sheer number of passengers, queues tend to be long; nonetheless, overall processing time per passenger is quite fast. There was no place to provide feedback about any services though, and the feedback section of the airport website was also not operational. However, there is enough staff available on site to sort out any issues one might have and take remedial action. The airport staff is quite helpful once you approach them, and the signage and displays are quite clear and posted at strategic locations. There are several maps located at multiple locations for passengers to locate where they are and how to get to where they want to reach.

The airport has a large shopping area which has Dubai Duty Free, operating as one of the prominent vendors. Dubai Duty Free has experienced a healthy growth year after year with sales of US\$1.27 billion (AED4.6bn) in 2010 (Facts and Figures - Dubai International Airport, n.d.). In comparison to other airports and duty free business in general, Dubai Duty Free accounts for 3.3% of worldwide duty free and travel retail sales and 5.5% of all the airports around the world (Facts and Figures - Dubai International Airport, n.d.). Some other remarkable numbers include: buyers encompass 50% of all passengers, average spend per customer is approximately US\$46 (AED169), annual number of sales transactions in 2010 was 20.5 million (average annual growth of 11%), Terminal 3 annual sales growth of 20%, and Terminal 2 annual sales growth of 24% (Facts and Figures - Dubai International Airport, n.d.). Refurbishment of Terminal 2 retail operation was also planned for 2013 (Facts and Figures - Dubai International Airport, n.d.).

In addition to the shopping, there are restaurants offering a number of different cuisines and price categories. There is an airport hotel, and several airport lounges for people to wait and catch up on a few hours of sleep. There are vending machines and pharmacies for anyone in need. All these are spread all over the airport; one can easily find things to do in the airport while waiting for a flight or in case a flight gets delayed (M. Arif, personal communication, January 15, 2013).

There is plenty of seating available for people to sit upright or, with stretched legs, to catch up on rest and sleep. Toilets and prayer areas are spread all across the airport. Some airport boarding/waiting areas also have dedicated toilets of their own, since once passengers enter these areas, they cannot come out. The airport is well equipped for dealing with any emergency or threat; security personnel are clearly visible all over the airport as is signage. There are sufficient trolleys available from the time one arrives at the airport. There is a porter service available and there are places to get luggage shrink wrapped if needed. The counter for excess baggage payment is clearly marked and is easily accessible. Once luggage is checked in, and the passenger moves into the departure lounge, there are escalators, elevators and people movers for easy access. There are also small trolleys available if one doesn't want to carry hand luggage (M. Arif, personal communication, January 15, 2013).

The baggage collection area is big and not crowded despite multiple flights landing at around the same times. The carousels are spread over a large area. The check-in area is also large and despite large number of flights, the area does not appear crowded as, again, the counters are spread over a very large area. The signage is clear and in showman English and Arabic. In addition, easily identifiable symbols are also used in the signage (M. Arif, personal communication, January 15, 2013).

The airport is located inside the city and is easily accessible by road. There are sufficient taxis available for arriving passengers both during peak and off-peak times. For in-transit passengers, this is a very good airport to enjoy different cuisines and take a rest in the airport hotel. However, the rates for the airport hotels are quite high. Due to the number of flights the airport receives, there are occasions when the aircraft cannot dock at the main terminal building. Aircraft then have to be parked away from the terminal and passengers have to be taken in buses to the terminal. The buses are low floor buses but there isn't enough seating capacity. Some of these trips could be as long as 20 minutes, some passengers find the length of time inconvenient especially after a 10-12 hour flight (M. Arif, personal communication, January 15, 2013).

Passengers who can communicate in English or Arabic can easily find their way through the airport. There are wheel chairs and baby strollers available throughout the airport for people to use. Also, wherever there is an escalator, there is an adjacent elevator for people to use if they have a stroller or are in wheel chair. Overall, travelers can find all kinds of provisions to facilitate their destination even first time visitors can easily navigate through the airport. If one is looking for assistance, then help is easy to locate. This airport can compete with any airport worldwide (M. Arif, personal communication, January 15, 2013).

Observation: Abu Dhabi International Airport

Abu Dhabi International Airport is located in the capital of UAE, Abu Dhabi. The airport experienced a record 12.4 million passengers in 2011, up by 13.9 per cent compared with 2010 (Media Center, Abu Dhabi International Airport, 2013). The airport is conveniently located 32 kilometers from the city center, spread over 350,000 square meters and accessible from three different highway systems namely, Al Khaleej Al Arabi Street, Sheikh Rashid Al Maktoum Street, and Al Salam Street (Media Center, Abu Dhabi International Airport, 2013). With the addition of Terminal 3 in 2009, annual airport capacity increased to 12 million passengers (Media Center, Abu Dhabi International Airport, 2013). In 2011 the airport handled 481,548 tons of cargo, nearly double the 2006 figure of 257,622 tons (in just 5 years) (Media Center, Abu Dhabi International Airport, 2013). In 2011 the airport saw 115,000 aircraft movements. Abu Dhabi Duty Free operates 63 outlets airport wide and the retail revenue reached AED 582 million in 2010 representing 15% increase over 2009 sales performance (Media Center, Abu Dhabi International Airport, 2013).

Throughout the terminal there are quite a few kiosks and information desks. However, there is not as many staff visible which could prove a problem if one got lost or was in need of further information as observed by several passengers during the interviews. To offset the limited staff presence, there are sufficient information displays and self-help touch screen displays are easy to operate. The immigration section is sufficient in size for the traffic of passengers and the processing time is similar to that encountered at Dubai airport. There is an operational section on the website for feedback (Media Center, Abu Dhabi International Airport, 2013).

The shopping area is a good size for the airport and there are plenty of things to shop for during one's stay at the Abu Dhabi airport. There are several restaurants and places to eat. There is an airport hotel for one to catch up on some

sleep and rent a room by the hour; however, this is not a large facility and advance booking during peak times is preferable. The hotel rates are also similar to those in Dubai. There are pharmacies, a post office and vending machines if one needs them during his or her stay at the airport (M. Arif, personal communication, January 17, 2013).

There is plenty of seating available at the airport. Toilets and prayer areas are spread all across the airport. There are sufficient trolleys available from the time one arrives at the airport. There is also a porter service available and then there are places to get the luggage shrink wrapped if needed. The counter for excess baggage payment can be a bit difficult to locate if the check-in desk is located away from it; but once located it is easily accessible. Once the luggage is checked in, and the passenger moves into the departure lounge, there are escalators, elevators and people movers for ease of accessibility. However, for passengers moving between terminals to change flights, the walk can be very long. There is also a need for more people carriers (M. Arif, personal communication, January 17, 2013).

The baggage collection area is sufficient for the number of flights it receives and there are plenty of carousels. The check-in area can appear a bit crowded depending on the terminal but there is still construction going on and plans to expand this area. The signage is clear and is shown in English and Arabic. In addition, easily identifiable symbols are also used in the signage. The airport is easily accessible from different highways in the city. Passengers have often complained about taxi waiting times especially at peak times, but this seems to be one of the issues being dealt with by the expansion (M. Arif, personal communication, January 17, 2013).

People knowing Arabic and English can navigate through the airport easily, however people did highlight that while moving from one terminal to the other during transit, some people can find it difficult and the walk too long. There are limited numbers of strollers and wheelchairs available throughout the airport and they can be difficult to locate. This again can be attributed to an airport that is still growing and is under major construction at the moment (M. Arif, personal communication, January 17, 2013).

Observation: Sharjah International Airport

Middle East's air transportation gateway Sharjah Airport is considered the region's top cargo hub (Media Center, Sharjah International Airport, 2013). The airline Air Arabia is based out of Sharjah serving countries in North Africa, the

Gulf, and the Commonwealth of Independent States. In the year 2000 there were 25,000 aircraft movements. This has gone up to 66,000 in the year 2012. The annual passenger movement has increased from about 950,000 to 7.5 million during the same period. The freight handled during this period has remained constant around 475,000 tons (Media Center, Sharjah International Airport, 2013).

This airport is significantly smaller compared to the other two UAE airports and only caters for short distance flights (3 to 5 hours). The airport check-in area is quite crowded at peak times and queues can be long. There is a baggage wrapping facility at the check-in area and it is easy to locate the excess baggage payment counter as the whole area is quite small and compact. The airport has enough escalators and elevators for the volume of traffic it handles (M. Arif, personal communication, January 20, 2013).

The airport signage is shown in both English and Arabic and the overall size of the terminal is not large enough for people to get lost or disoriented. Since the airport is mainly used as a final destination point, rather than an in-transit stop, passengers do not generally spend a long time at the terminal. There are shopping and eating facilities available at the airport but the selection is not as wide as the other two airports in the UAE. The airport has a passenger suggestion system program called “we care” and has won several awards for this suggestion system (M. Arif, personal communication, January 20, 2013).

There are sufficient toilets and prayer areas at the airport but some passengers interviewed highlighted issues dealing with cleanliness of these facilities during peak times. The baggage collection area is also compact and therefore can result in a bit of chaos if multiple flights arrive at the same time. The number of immigration counters is small and can result in delayed processing at peak times (M. Arif, personal communication, January 20, 2013).

The airport is well connected from the city and the number of taxis available is sufficient for the most part. Occasionally, at peak times, there could be some delays for the taxi. Although the walking distance around the terminal is not long, there are a limited amount of strollers and wheelchairs available. There are enough trolleys and a porter service available which are reasonably priced. Since there are not many transit passengers there is no need for an airport hotel. But there is a shopping area and facilities such as banks and post office are available at the airport. It is a small, functional airport that primarily caters at the moment to low-cost airlines; but it is fit for purpose (M. Arif, personal communication, January 20, 2013).

Comparative Analysis

Conclusions arising after triangulating data from interviews, websites, and personal visits indicate that Dubai International Airport ranks much higher than the other two airports covered by the three observations. Abu Dhabi International Airport and Sharjah International Airport contended with each other for more favorable placements on different evaluation criteria, and it can be argued that Abu Dhabi International Airport received a more favorable review.

One of the biggest positive aspects of Dubai International Airport is the large number of international flights which pass through the emirate. In addition, airport staff has a wide experience with customer service issues and are fully aware of the expectations of international travelers. Moreover, the Dubai International Airport is more widely developed than the other airports in the country; support facilities and services are significantly better than those at the other airports. As a result of the services provided at the Dubai Airport, passengers are keener to take flights from Dubai rather than from other emirates.

While Dubai International Airport has managed to position itself as one of the world's best airports, Abu Dhabi International Airport is not far behind and is aiming to rival the airport at Dubai in terms of services provided to the customers. With the development of a separate lounge for frequent fliers, a food court and even a hotel for travelers in transit, Abu Dhabi International Airport is expected to attract a larger number of customers and passengers to the emirate. Also, with the growing popularity of Etihad Airways, Abu Dhabi is expected to be the next hotbed for travelers looking for a comfortable and enjoyable experience while traveling to their destination (Media Center, Abu Dhabi International Airport, 2013).

In comparison to Dubai International Airport and Abu Dhabi International Airport, the Sharjah International Airport needs to undergo a considerable make over. Improvements need to be made in the overall administration of the airport and in the management of the customer service plans and strategies being implemented. The introduction of new security equipment and faster immigration control lines along with better amenities and services for the passengers seems to be a few of the changes expected in the remodeling and revamping process taking place at the airport today.

While these changes all signify an upward trend in the development of the aviation infrastructure and the improvement of the airports across the country, the

airports must eventually reach an international standard so as to be able to be compared favorably with airports across the world. Today, only Dubai International Airport is truly in a class of its own and is even considered by some of the participants comparable or indeed better than some of the world's most famous airports like London's Heathrow Airport. Since the UAE is promoting itself as the top tourist destination in the Middle East today, attention must be paid to the services being provided by the airports across the country. It is believed that the first impression a person gets about a country is from the port of entry. As a result, it is important for the governments to pay heed to this matter and attempt to develop the remaining airports of the country in a much better manner so as to be considered as world class airports.

In terms of staff availability and information display to help customers, Dubai airport has staff, kiosks, and displays deployed at all the critical locations for anyone to find their way and get information about where to go for getting on their flight, connecting flights or immigration. The observation and feedback from participants for Abu Dhabi airport is that there are quite a few kiosks and information desks, but many of them are not manned. Also, there are not as many staff personnel visible on the ground to help customers. However, the displays are sufficient and self-help touch screen displays are easy to operate. On the other hand, the check-in area at Sharjah airport is quite crowded at peak times and the queues can be long.

The immigration section at the Abu Dhabi International Airport is sufficient in size for the passenger traffic. The immigration section at Dubai International Airport is large and has several kiosks that are operational at any given time. However, the queues tend to be long due to the sheer number of the passengers handled every day. The processing times are comparable between Abu Dhabi and Dubai airports. On the other hand, the number of immigration counters at Sharjah airport is small and can result in delayed processing at peak times.

On Abu Dhabi airport's website, there is a section for feedback and it is operational. At the Dubai airport terminal there was no place to provide the feedback about any of the services and the feedback section of the airport's website was not operational. However, there is enough staff available on site to sort out any issues one might have and take remedial action; also signage and displays are quite clear and posted at strategic locations. At Sharjah airport there is a passenger suggestion system program called "we care" which has won several awards.

At Dubai airport, in addition to the shopping, there are restaurants offering a number of different cuisines and price categories. The shopping area is of good size for the airport and there are plenty of things to shop for during ones stay at the Abu Dhabi airport. There are several restaurants and places to eat but the selection is not as wide as Dubai. At Sharjah, there are shopping and eating facilities available but the selection is not as wide as the other two airports.

There is one airport hotel at Abu Dhabi and the rates are comparable with the ones in Dubai. At Dubai airport, there is an airport hotel, and several airport lounges for people to wait and catch up on a few hours of sleep. Both the airports have vending machines and pharmacies for anyone in need. Since there are not many transit passengers at the Sharjah airport, there is no need for an airport hotel.

Plenty of seating is available at all three airports. Toilets and prayer areas are spread all across the airport. But some passengers interviewed highlighted issues dealing with cleanliness of these facilities during peak times at Sharjah airport.

There are sufficient trolleys and porter service available at all the three airports. At Dubai airport, there are also small trolleys available, if one doesn't want to carry the hand luggage. The baggage wrapping and excess baggage payment facilities are also available at all three airports. Once the luggage is checked in, and the passenger moves into the departure lounge, there are escalators, elevators and people movers for ease of accessibility. However at Abu Dhabi airport, passengers changing flights and moving between terminals can find the walk from one terminal to the other very long. There is also a need for more people carriers.

The baggage collection area is sufficient for the number of flights at Abu Dhabi and Dubai airports; there are also plenty of carousels in both the airports. The baggage collection area at Sharjah is compact and therefore can result in a bit of chaos if multiple flights arrive at the same time. The check-in area at Dubai airport is large and despite the large number of flights, the area does not appear crowded as the counters are spread over a very large area. The check-in area at Abu Dhabi can appear a bit crowded depending on the terminal but there is still construction going on and plans to expand this area. The signage is clear and is available in English and Arabic at all three airports. In addition, easily identifiable symbols are also used in the signage.

All three airports are easily accessible from different highways in their respective cities of location. There are sufficient taxis available for the arriving passengers both during peak and off-peak times at Dubai and Sharjah airports, but passengers have often complained about some waiting required for taxis especially when there is peak traffic at the Abu Dhabi airport, but this seems to be one issue related to the on-going expansion. There are strollers and wheelchairs available throughout each of the airports but at some places at Abu Dhabi airport they are difficult to locate or insufficient and at Sharjah airport number of strollers and wheelchairs can often be insufficient. At each of the airports, wherever there is an escalator, there is an adjacent elevator for people to use if they are in a wheel chair or have a stroller.

Conclusions

The aim of this paper was to present the proposed customer service quality assessment model and analysis of the three airports in the UAE. Semi-structured interviews were conducted for data collection to get a wider picture and more detailed information on the level of airport customer service quality. The data from these interviews was triangulated with the information on airport websites and observations through personal visits. Dubai International Airport turns out to be significantly better than the Abu Dhabi and Sharjah International Airports on a number of criteria which include expectations of international passengers and proactive approach towards retaining customers. Dubai has always been the center of attraction for most people in the Middle East and for people from around the world, and as a result sees a large volume of traffic coming into the country.

Due to ever increasing volume of traffic in Dubai, the government has undertaken an expansion and development plan to handle the increasing traffic in a much better manner. The positive image of Dubai on the world map has been bolstered by the introduction of Emirates Airlines and the maintenance of an extremely high standard of service by this airline. Emirates Airlines has today set benchmarks in excellence which other international airlines are now attempting to match or surpass. While Dubai airport seems to be competing at the international levels, work still needs to be done in Sharjah and Abu Dhabi with respect to the aviation industry. The model developed as part of this research is a useful tool to perform a holistic assessment for other airports in the world for customer satisfaction. It identified the key indicators that helped us focus on variables that affected the customer service quality at airports. It was able to identify opportunities for improvement and could perform comparative analysis of different airports. This model can be used for other airports in the world as well

and can be easily adapted for other countries. There are some limitations of this study. The first one is the limited sample size. A more extensive study over a longer period of time will be beneficial. The researchers were also limited by access to secure areas beyond immigration and customs. The access was provided for only one week and all the observations were made during that period. This research also did not evaluate the impact of airport service quality on passengers' choice of airlines that fly into that airport. A future study should look at correlating airport service quality with this decision variable.

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