

KUALA LUMPUR INTERNATIONAL AIRPORT (KUL) AS A WORLD CLASS AIRPORT TERMINAL: PASSENGERS' AIRPORT SATISFACTION RATING

**Nur Farizan Tarudin¹, Muhammad Akmal Asyara², Wan Mazlina Wan Mohamed³, S.
Sarifah Radiah Shariff⁴**

¹Malaysia Institute of Transport (MITRANS) and, Faculty of Business and Management, Universiti Teknologi MARA (UiTM), Shah Alam, Selangor Malaysia

²Malaysia Institute of Transport (MITRANS), Universiti Teknologi MARA (UiTM) Shah Alam, Selangor Malaysia

³Malaysia, and Malaysia Institute of Transport (MITRANS) and, Faculty of Mechanical, Universiti Teknologi MARA (UiTM) Shah Alam, Selangor Malaysia

⁴Malaysia Institute of Transport (MITRANS) and, Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA (UiTM) Shah Alam, Selangor Malaysia

*Corresponding author: nurfarizan@uitm.edu.my

Abstract. The significant role airports in this era of globalization could not be denied as its main function in this globalization is connecting cities and countries. As the critical part of a country's infrastructure, airports help in contributing through the economic activities by encouraging trades between companies and countries, the tourism industries and also helps in generating employment. Most airports around the world have the aim of achieving their own world-class status but most of those airports do not fully understand what is required in achieving that particular world-class status. To attain this target, airports have to get high satisfaction ratings which are from their clients or customers namely, the passengers and airlines. The airports also need to understand that these two segments of customers have their own requirements, attitudes, and expectations and the best airports in the world should be able to offer outstanding services towards both customers. Other than that, airports also need to ensure that the ground handlers are providing their services well and also the concessionaires are running first-class retail, food and beverages (F&B) operations. Therefore, this study has focused on passengers' airport satisfaction to measure the airport progress with their business, airline and also airport management as become a world-class airport terminal.

Keywords: World-class, Passenger, Airport Terminal, Passenger Satisfaction, International Airport.

Introduction

The aviation industry as we know it is currently soaring and booming as the technologies are becoming more common and the prices of the tickets are getting cheaper and reasonable. Soon, it would not be a surprise if most people would prefer air mode transport than other modes of transport. Low-cost carriers (LCCs) also are booming along with the industry growth and these low-cost airlines companies are being competitive not just with each other but also with the legacy airlines. With the competition getting fiercer, the passengers would have more choices in making their trips be it for business purposes or even leisure. Passengers now have several options or alternative in their transportation modes based on the budget that they have in mind. The competitions between airlines in providing many choices for the passenger do not stop there. The volume of passengers' growth increases each passing year as passengers prefer to have their trips on flights.

As for the airport operators, this means that their revenue will increase exponentially. According to Airports Council International (ACI), in the ACI Economics Report, the global non-aeronautical revenues continue to constitute 40% of global airport revenues, reaching an industry value of US\$60.4bn and that is only based in the 2017 revenues which would only mean in the increasing revenues year by year as the passenger volume continue to grow. The

increase of both the number of airlines and passengers that operates and making their transit points at the airport sure are some great plus points on the revenue of the company but it still has its drawback. The most common drawback that could be seen is that the terminal itself could not cater to the excessive volume of passengers that come to the terminal and this has cost the passengers the comfortability at the airport. KLIA also could not escape from this problem as the number of passengers increases each year.

Service quality and passenger satisfaction are one of the many subjects of high interest within the airport industry. Surveys have been systematically carried out by international agencies (ACI, 2016; IATA, 2017), as well as several ad hoc initiatives by other organizations and airports (Fodness & Murray, 2007; Zidarova & Zografos, 2011). Due to the huge increase in passenger volume over the past year, it is becoming more important for airport managers to study and searching for the relevant information regarding passengers' perception on Airport Service Quality (ASQ). Due to the nature of the opinion of the passengers and expectation, the perceived service quality is not only subjective but also context dependent and will likely vary according to several factors (Wilson et al., 2012).

The passenger behaviour and expectations regarding the airport experience are dependent on the type of traveller, trip purpose and other context related things (Fodness & Murray, 2007). Unlike other sectors, the airport industry is still in look for a more comprehensive framework for the antecedents of ASQ (Fodness & Murray, 2007; Jeon & Kim, 2012; Zidarova & Zografos, 2011). Furthermore, the effects of different factors related to airport service on passenger satisfaction are not fully yet understood (Bogicevic et al., 2013). Therefore, the researchers have look on several factors such as Value added services, facilities, passenger service and automation in this study.

Facilities mean that all the physical manifestation of services that enhance and assist the passengers along the way from the curbside to the boarding of passengers for example the signage, restaurants or even the toilets. In the aviation industry, how the operators provide or offer a variety of facilities for the airport users would affect the relationship with airport users (Graham, 2003). The main operation of an airport is divided into two which are, aeronautical and non-aeronautical and each of these operations requires the provision of different facilities. Aeronautical facilities are technically complex and include instrument landing systems, air traffic management systems, together with runways, taxiways and aircraft stand while non-aeronautical facilities are varied and may include hotels, restaurants, shops and car parks. Non-aeronautical facilities, in particular terminal buildings, may be considered to be substantially different from other building types where long-lasting technologies have been used.

Besides that, many of the facilities in the terminal incorporated the local flavour and their uniqueness in their products (Stokes, 2014; Williams, 2016). As airports are one of the main attractions places, the operators need to showcase what the destination has to offer for the airport users (Wattanacharoensil, Schuckert, & Graham, 2015). Moreover, the role and function of airports are also evolving. Wattanacharoensil, Schuckert, Graham, & Dean (2017) found that passengers think airports as the face or the 'first impression' of a place.

In addition, the evaluation of the airport's passenger service is an on-going process and requires continuous monitoring to maintain high levels of service quality across a number of distinctive service areas. According to Horonjeff, Mckelvey, Sproule, and Young (2010) these are: the accessibility interface, which consist of the terminal curbs, parking facilities and connecting roadways that allow starting and ending passengers, visitor, and baggage to enter and exit the terminal. It is in this described system is where passengers develop an important part of their pre-travel experience. In fact, the first and last perception of a tourist destination quality takes place at the airport (Rendeiro Martin-Cejas, 2006). It is here where a passenger is exposed to all services' attributes. Hence, passengers will have all the elements to construct their quality of service perception.

Apart from that, Self-service airport technologies such as check-in, baggage drop, information, and ticketing kiosks are highly effective since they reduce waiting times (Abdelaziz et al., 2010; Lin & Hsieh, 2011). Smartphones, Big Data, biometric systems, and near field communication are changing the travelers experience (Pesonen & Horster, 2012). Automation refers to technology or system that is dependent from the involvement of the employees of the terminal except for monitoring purposes. Broadly speaking, a business will be successful and profitable when passengers are satisfied with the service that had been delivered. Realizing that airport is a service oriented business, Subha (2012) stated that passengers satisfaction is an essential goal for each airport providing airline service in domestic and international destination. Passenger satisfaction is vital for every airport since it portrays the first image about that country in the eye of the passengers especially the outsider.

Method

A survey was done to explore the passengers’ satisfaction level while using the facilities in KLIA and klia2 as well their views towards the facilities and services provided. Questionnaires were distributed to passengers at international departing halls in KLIA and klia2. 128 passengers at KLIA participated in the survey and 353 passengers at klia2 responded to the questionnaires. All passengers were asked about their background, demographic information, trip characteristics, perception about KLIA and klia2. They were also prompted to give suggestions to improve the airport service level and its facilities. Information sources could be classified into two types which are primary and secondary.

As for this study, aside from the main data collection of the primary data through a questionnaire, the researcher also obtained the information through articles and journals by other researchers on the related topics. This is for the reference of the researcher and to help the better understanding of the researcher towards the research situation. Another secondary data that the researcher obtained is the statistical data from the R&P department of Malaysia Airports Holdings Berhad which contributed in determining the sample size of the respondents based on the total population of passenger movement at KUL. Once the data collection process is done, the collected data are then edited manually, inspected, and coded for analysis processes. This next step of the process usually combined both quantitative and qualitative data analysis methods due to the data collected are either in the form of numbers or words.

Discussion and Result

Passenger satisfaction is the utmost priority of any airport operators around the world. Therefore, in this survey passengers or travelers at KLIA and klia2 were asked to rank their priority based on airport services that they feel important and necessary.

a) The Most Important Areas of Service as Airport Users

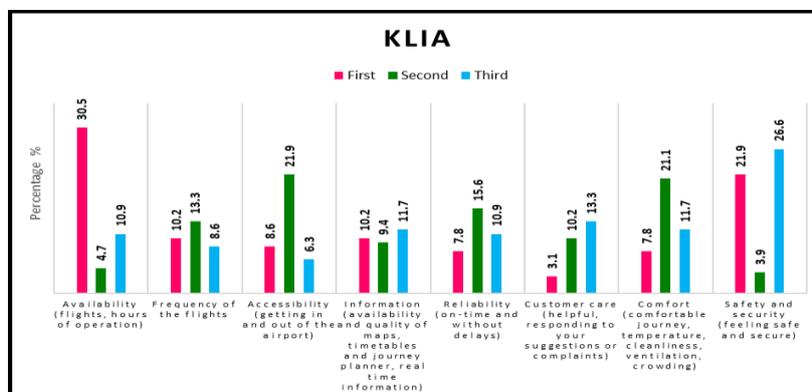


Figure 1. Most Important Areas of Service (KLIA)

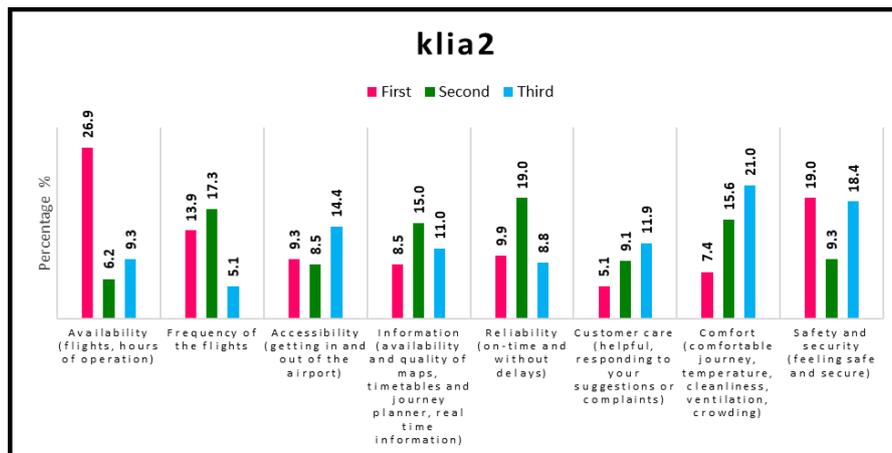


Figure 2. Most Important Areas of Service (klia2)

Respondents at both ranked the availability of flights (30.5% at KLIA and 26.9% at klia2) to be their first priority. However, for the second and third priority, the respondents from KLIA and klia2 have different views. At KLIA, accessibility (21.9%) in getting in and out of the airport is of priority, followed by safety and security at the airport (26.6%).

b) Airport’s Facilities and Services

Facilities and services provided by public transport operators’ play important roles in fulfilling passenger satisfaction and loyalty. Therefore, the following elements: airport staff, security officer, airport facilities, airport condition and other related aspects have been included to measure passengers’ satisfaction towards airport services.

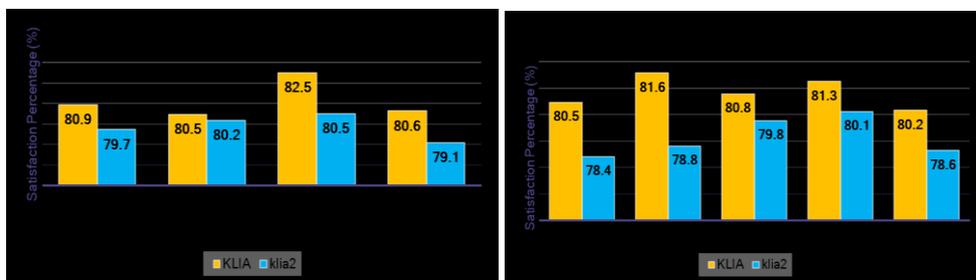


Figure 3.

Airport staffs are perceived to be knowledgeable about airport services, well groomed, helpful and customer friendly as more than 80% of the respondents at both KLIA and klia2 agree on these facts and they are satisfied with airport staff in KLIA and klia2. In KLIA, security officer characteristics received a quite similar percentage with airport staffs when more than 80% of respondents agreed and are satisfied with these characteristics. However, in klia2 security officers received a slightly lower percentage as compared to that in KLIA. This is maybe due to the size of klia2 which is bigger and with a lot of information and places that need to be memorized.

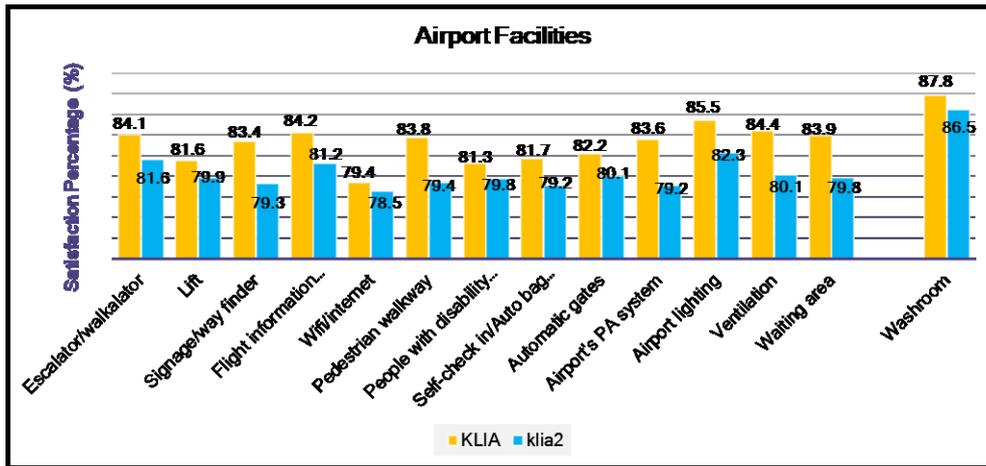


Figure 4. Airport Facilities

Overall, all the respondents in both airports are satisfied with airport facilities because the average satisfaction percentage is more than 80 for both (83.3% in KLIA and 80.5% in klia2). This satisfaction level is measured based on airport facilities in terms of airport services such as escalator/travellator, lift, signage/way finder, flight information display (FIDS)/travel information board, wifi/internet, pedestrian walkway, people with disability (PWD)/OKU/handicapped facilities, self-check in/auto bag drop kiosks, automatic gates, airports PA system, airport lightings, ventilation, waiting area and washroom.

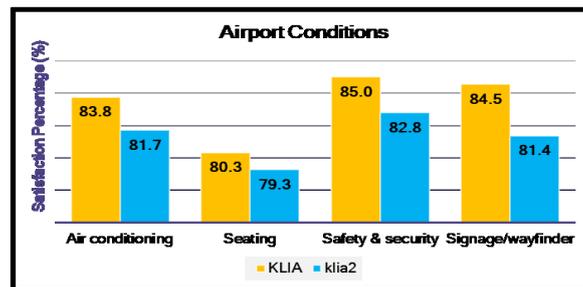


Figure 5. Airport Condition

The airport conditions in KLIA perceived to be satisfying by almost 85% of the respondents and slightly lower by 5% in klia2. Again, this is maybe due to the higher number of passengers in klia2 that causes some congestion in certain areas like toilets.

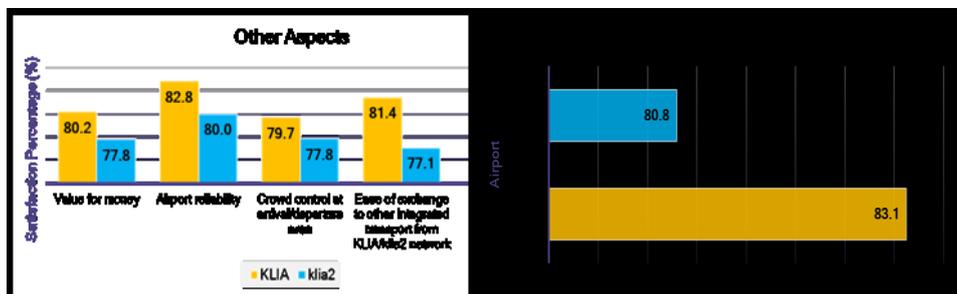


Figure 6. Overall Satisfaction Airport Services

Other aspects of facilities and services considered are value for money, airport reliability, crowd control at arrival/departure area, and ease of exchanging of integrated transport from KLIA/kli2 network where the rating for KLIA is above that of klia2 by 2.3% in average.

The biggest difference is the ease of exchanging to other integrated transport from KLIA or klia2 network where the average of the satisfied respondents at both airports is only 79.25%.

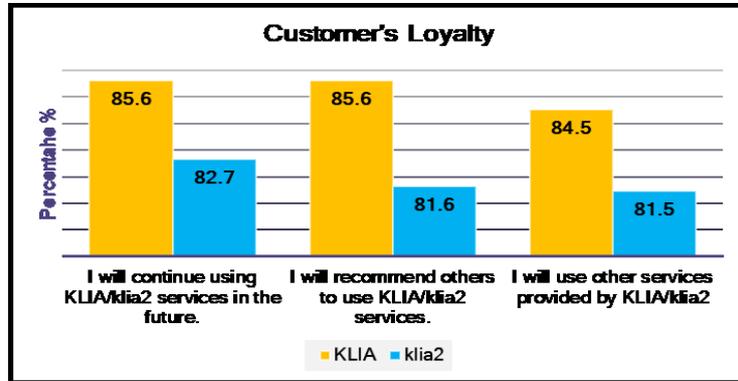


Figure 7: Customer's Loyalty

As a conclusion, more than 80% of the respondents are satisfied with the services provided in airports, KLIA and klia2. At the KLIA, 85.5% of the respondents are satisfied with the services and they will continue using KLIA services in the future and also will recommend others to use KLIA services. The same goes for klia2, average respondents that are satisfied with this airport are about 81.9%.

Conclusion

The main focus of this study is to measure the level of satisfaction experienced by the passengers at the airport terminal in KLIA and klia2, so that any corrective measures can be done when satisfaction could not be achieved, thus it gives benefit to MAHB to improve further. The overall findings were indicated that there is an improvement that has been done by MAHB towards their services and also facilities based on the recommendation from the previous study. One of the improvements that obviously we can see is the availability of customers' assistance with the ability to converse more language. As a conclusion, more than 80% of the respondents satisfied with the services and facilities that have been provided in KLIA and klia2. This is a good start for MAHB in measuring their customer's satisfaction and loyalty index in the future.

Apart from that, this study also will give benefits to several parties. Firstly, the Malaysian government would gain from this research because if the ranking of KLIA improved or moved up, the Return on Investments (ROI) that been made through Khazanah Nasional Berhad will be shorter as airlines and passengers would like to use KLIA as their transit point due to its high-ranking place in the award. Secondly, the operator of KLIA which is Malaysia Airports (Sepang) Sdn. Bhd. will be able to pinpoint the critical areas that need improving to increase the passengers' satisfaction towards KLIA terminal services. The airport operator also will be able to accommodate the increasing number of passengers each year if the research proved to be better to cater to the passengers' wants in making a top-ranking world-class airport. Thirdly, it will benefit for the passengers and airlines as to when the operator be able to tackle the current problems that preventing the ranking from moving up, both passengers and airlines will be able to fully experience what a top-ranking airport should be and, in this case, what KUL should be.

References

- Abdelaziz, S.G., Hegazy, A.A. and Elabbassy, E. (2010). Study of Airport Self-service Technology within Experimental Research of Check-in Techniques Case Study and Concept. *IJCSI International Journal of Computer Science Issues*, Vol. 7, Issue 3, No 1, May 2010 ISSN (Online): 1694-0784.
- ACI Airport Economics Report (2017).
- ACI (2016). Does passenger satisfaction increase airport non-aeronautical revenue?.
- Bogicevic, V., Yang, W., Bilgihan, A., and Bujisic, M. (2013). Airport service quality drivers of passenger satisfaction. *Tourism Review*, 68(4), 3-18.
- Fodness, D., Murray, B. (2007). Passengers' expectations of airport service quality. *J. Serv. Mark.* 21 (7), 492e506. <http://dx.doi.org/10.1108/08876040710824852>.
- Graham, A. (2003). *Managing airports: an international perspective*. Butterworth-Heinemann.
- Horonjeff, R., McKelvey, F.X., Sproule, W.J. and Young, S.B. (2010). *Planning and Design of Airports*.
- International Air Transportation Association (IATA) (2017). *Air Passenger Market Analysis*.
- Jeon, S., Kim, M.S. (2012). The effect of the servicescape on customers' behavioral intentions in an international airport service environment. *Serv. Bus.* 6 (3), 279e295.
- Lin, J. S. C., & Hsieh, P. L. (2011). Assessing the self-service technology encounters: development and validation of SSTQUAL scale. *Journal of Retailing*, 87(2), 194-206. Retrieved on May 15th, 2017 from <https://www.sciencedirect.com/science/article/pii/S002243591100014>
- Martín-Cejas, R.R. (2006). Tourism service quality begins at the airport. *Tourism Management* 27 (2006) 874–877.
- Pesonen J.A. and Horster, E. (2012). Near field communication technology in tourism. *Tourism Management Perspectives* 4:11–18 · October 2012. DOI: 10.1016/j.tmp.2012.04.001
- Subha, M. V. (2012). A Study on Level of Passenger Satisfaction of Services Delivered in Chennai International Airport a Research Paper. *European Journal of Social Sciences*, 289 - 297.
- Stokes, N. (2014). Best airport restaurants around the world.
- Wattanacharoensil, W., Schuckert, M., Graham, A., and Dean, A.D (2017). An analysis of the airport experience from an air traveler perspective. *Journal of Hospitality and Tourism Management*, 32, 124-35.
- Wattanacharoensil, W., Schuckert, M., and Graham, A. (2015). An Airport Experience Framework from a Tourism Perspective. DOI: 10.1080/01441647.2015.1077287.
- Williams, S. (2016, May 31). Terminal thrills. *The Australian*, pp. 16.

Wilson, A., Zeithaml, V.A., Bitner, M.J., Gremler, D.D., (2012). Services Marketing: Integrating Customer Focus across the Firm, second ed. McGraw-Hill, Berkshire.

Zidarova, E.D., Zografos, K.G., (2011). Measuring quality of service in airport passenger terminals. J. Transp. Res. Board 2214, 69e76.