



Note

An assessment of passenger experience at Melbourne Airport

Hongwei Jiang^{a, *}, Yahua Zhang^b^a School of Aerospace, Mechanical and Manufacturing Engineering, Royal Melbourne Institute of Technology (RMIT University), Melbourne, Australia^b Australian Centre for Sustainable Business and Development, School of Commerce, University of Southern Queensland, Australia

ARTICLE INFO

Article history:

Received 20 May 2015

Received in revised form

7 April 2016

Accepted 7 April 2016

Available online 14 April 2016

Keywords:

Airport service quality

Airport management

Melbourne airport

IPA

ABSTRACT

This paper aims to assess the service quality at Melbourne airport by conducting an airport user survey. The results demonstrate that there are significant discrepancies between passengers' expectations of service quality and their perceptions of service quality at the airport. Measured values for passenger satisfaction are found to be consistently lower than those for passenger expectations, which imply that there is room for Melbourne airport to improve its service quality. Fourteen of the thirty service items used in the survey were rated as important and satisfactory, and thus should be maintained. Airport parking, immigration, internet/Wi-Fi access, and baggage delivery are areas that may have caused concerns for passengers and should be urgently addressed by airport management. These results complement the existing survey findings reported by Airports Council International and Australian Competition and Consumer Commission.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

These days many people would agree that airports should invest in enhanced facilities and higher levels of service quality in order to attract passengers, thereby generating significantly higher non-aeronautical revenue, which is critical to airport profitability. [Merkert and Assaf \(2015\)](#) even argue that service quality is a significant performance indicator to an airport and should be treated with the same level of importance as profitability.

The issue of airport service quality has been widely examined in airport literature. For example, [Yeh and Kuo \(2003\)](#) evaluated the service quality of fourteen major Asia-Pacific international airports using a fuzzy multi-attribute decision making approach. [Arif et al. \(2013\)](#) assessed customer satisfaction at the United Arab Emirates' three airports. Transfer passengers' experiences at Bandar-anaike International Airport in Sri Lanka were studied by [De Barros et al. \(2007\)](#). In Australia, Melbourne Airport was once ranked within the top 5 airports that handled 15–25 million passengers according to the Airport Quality Service Survey conducted by Airports Council International (ACI) in 2008, but not any longer since then. In 2011 it did not even make the top 100 according to ACI's rankings. The [ACCC \(2015\)](#) has found that service quality at all the

monitored Australian airports has declined in the last decade in part due to the fact that customers' expectations are constantly changing, and Melbourne airport received the lowest quality of service rating amongst Australian airports in the last few years. This research selects Melbourne airport as a case study in order to re-examine the service quality issue using both expectation and perception data to identify areas requiring focus and investment of resources, so as to deliver satisfactory services that fulfil the needs and expectations of airport passengers.

2. Methodology

A service quality gap model proposed by [Parasuraman et al. \(1985\)](#) suggests that service quality constitutes the differences between expectation and performance along dimensions of quality. One of the suggested gaps is the difference between consumer expectations and perceptions. Any organisation seeking to build long-term relationships with its customers needs to identify and minimise the gap between the two accordingly.

The selection of service items is important for examinations of airport service quality gaps. The design of the questionnaire for this study follows [Fodness and Murray \(2007\)](#), [Tsai et al. \(2011\)](#) and the survey used by ACI's Airport Service Quality. Only the services that are most likely used by departure and arrival passengers are included in this research. The first segment of the questionnaire contained questions regarding respondents' socio-demographic traits including age, gender, education, nationality and income.

* Corresponding author.

E-mail addresses: george.jiang@rmit.edu.au (H. Jiang), yahua.zhang@usq.edu.au (Y. Zhang).

The second segment collected passengers' flight information including purpose of travel, travel frequency, and cabin class. The third section was composed of 30 items which could be found in Table 2. Respondents were asked to indicate their satisfaction levels of "expectation" and "perception" separately according to their experiences after using Melbourne airport. Each item was rated using a five-point Likert scale, using the key "1 = strongly dissatisfied", "2 = dissatisfied", "3 = neutral", "4 = satisfied", and "5 = strongly satisfied".

The target population for this study consisted of passengers who travelled from/to Melbourne airport. Fifteen pilot questionnaires were handed out at Melbourne airport to check if the questions could be properly understood by the passengers. After a minor change to the wording of some questions, the survey was conducted from 1 to 30 September 2014 with the help of two research assistants who further explained the questions to the participants when distributing the survey. Considering the large number of passengers who use the airport and the purpose of using factor analysis in this research, 1000 passengers at Melbourne Airport acted as study participants. The survey was conducted between Monday and Sunday, with 500 questionnaires being randomly distributed to passengers at the international arrival lounge and check-in area from 6 a.m. to 12 p.m., and another 500 at the domestic boarding gates, as well as arrival lounges from 1 to 8 p.m. In total, 715 questionnaires were verified as useful.

It should be pointed out that the ACCC (2015) Airport Monitoring Report and ACI's Airport Service Quality did not examine the impact of demographic variables on the airport rating. In this research, Multivariate analysis of variance (MANOVA) has been used to help understand the differences between perception and expectation among different demographic groups. An Important Performance Analysis (IPA) introduced by Martilla and James (1977) can then be employed to devise managerial strategies by analysing passenger expectation (importance) and passenger perceptions (performance) of service quality. The IPA analysis can provide airport management with useful guidance in allocating resources appropriately and efficiently to satisfy the needs and desires of passengers.

3. Results and discussion

3.1. Sample characteristics

Table 1 shows the demographic information of the sample. About 52.4% of the respondents were male. In terms of education level, over half the travellers possessed a bachelor degree or a higher qualification. The most common nationality, constituting approximately half the respondents were Australian citizens (49.0%), followed by Asian passengers (33.6%). Approximately 60.8% of participants travelled for the purposes of holiday and/or visiting friends or relatives. Interestingly, the largest proportion of respondents' annual income fell within the category of A\$20,001–40,000, the second lowest annual income class investigated.

3.2. Mean and GAP analysis (difference between perceptions and expectations)

Table 2 reports the mean and standard deviation of the expectation and perception scores for the 30 items. The numbers in parentheses represent the ranks of the service items. A paired t-test suggests that there are significant differences between perception scores and expectation scores (p-values for all items are less than 0.001). All the expectation scores are significantly higher than the corresponding perception scores. The five items displaying the

Table 1
Demographic data (N = 715).

	Frequency	Percent
Gender		
Male	375	52.4%
Female	340	47.6%
Age Group		
20 -	60	8.4%
21–30	340	47.6%
31–40	145	20.3%
41–50	105	14.7%
51–60	55	7.7%
60+	10	1.4%
Nationality		
Australian	350	49.0%
New Zealander	20	2.8%
European	30	4.2%
North American	10	1.4%
Latin American	15	2.1%
Asian	240	33.6%
Other	50	7.0%
Travel Frequency (per year)		
Less than 3	760	53.15%
3–6	440	30.77%
7–10	160	11.19%
10 and more	70	4.89%
Education		
High school or lower	80	11.2%
Diploma	250	35.0%
Bachelor Degree	255	35.7%
Postgraduate Degree or higher	130	18.2%
Annual Income (A\$)		
less than 20,000	110	15.4%
20,001–40,000	260	36.4%
40,001–60,000	150	21.0%
60,001–80,000	125	17.5%
80,001–100,000	15	2.1%
Over 100,000	55	7.7%
Purpose of Travel		
Business	75	10.5%
Holiday/Visiting friends or relatives	435	60.8%
Study	125	17.5%
Others	80	11.2%

largest gaps are: item 2 ("Airport parking"), item 16 ("Internet/Wi-Fi access"), item 7 ("Waiting time at immigration"), Item 1 ("Surface transport to/from airport"), and Item 24 ("Battery recharge facilities"). These significant discrepancies suggest that passengers could have felt most disappointed by these services.

3.3. Factor analysis

A factor analysis was performed to reduce these 30 service items to an interpretable and manageable set of factors based on the expectation values. The principal component analysis with promax rotation generated three dimensions (Table 3) when eigenvalues were set at greater than 1.2. The oblique rotation method was selected because these dimensions were not expected to be independent of each other. Three factors, which can be summarised as "essential airport services", "service items for comfort, convenience and enjoyment", and "services related to business travel and baby changing facilities" cumulatively accounted for 56.7% of the variance. Table 3 shows the factor loadings after rotation (only those greater than 0.40 are displayed).

Cronbach's reliability coefficients in Table 3 range from 0.77 to 0.94, which are considered to be quite acceptable according to Kline (1999). The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy. The sample size is considered to be adequate for factor analysis, given that the KMO values are well above 0.70 (Hutcheson and Sofroniou, 1999).

Download English Version:

<https://daneshyari.com/en/article/1030654>

Download Persian Version:

<https://daneshyari.com/article/1030654>

[Daneshyari.com](https://daneshyari.com)