

AN EMPIRICAL ANALYSIS OF DIFFICULTIES FACING BY PASSENGER IN CHENNAI INTERNATIONAL AIRPORT TERMINAL WAITING AREA

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ABSTRACT

The purpose of this paper is to further discuss the conceptual model of passenger facing difficulties in Chennai airport international terminal waiting area. Managing passenger difficulties is crucial to the airport business where the correlation between customer satisfaction and profitability has been widely accepted. This research paper will be focusing on passenger – the end users of airports facilities and services together with relevant examples that will further illustrate the concept finding passenger difficulties together with example of how it can be overcome the research design used in this study was descriptive research design. The population used in the study was passenger's travelled at Chennai airport. The sample size is 100 passengers from Chennai airport. the sampling technique used in this study was convinces sampling the statistical analysis was done using SPSS software the research helps us to understand the difficulties faced by the passengers in Chennai airport waiting area and the study helps to overcome the difficulties

KEYWORDS: Passenger difficulties, Waiting area, airport, Terminal building, Aviation.

INTRODUCTION

Airport passenger terminal operations have several problems frequently observed in many airports. What are some of the common problems of terminal operations? Based on growth and development, increases in the number of passengers' and aircraft movements, airport terminal operations have had to adjust many of their procedures and implement different services for passengers, especially when they are being processed at airport terminals The

purpose of this research is to identify the difficulties facing by the passengers in waiting area. The question guiding this research is: What factors impact airport passenger difficulties? Numerous factors can be considered problematic in creating difficulties for the passengers in waiting area. There are some problems which are consistently shown to cause the most concern and pose the most difficulty for airport passenger waiting area. Since operating passenger flight is the airports' essential duty, defining and investigating the problems that affect flight operations and finding adequate solutions for these problems is fundamental for improving airport terminal operation.

Waiting room

A **waiting room** or **waiting hall** is a building, or more commonly a part of a building or a room, where people sit or stand until the event or appointment for which they are waiting begins.

Passenger Waiting

For certain passenger processing systems, waiting areas at or close to the aircraft gates may be required; the form and use of such areas depend on the systems used for connecting the passenger building to aircraft. Where waiting areas provided at forward positions they may affect the form and use of the main waiting area in the passenger building. The waiting area can be the appropriate location for certain passenger amenities. It is, however, of the utmost importance to separate functions and preserve clear, unobstructed routes for the primary flows.

REVIEW OF LITERATURE

| | |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| According to Padrón, Guimarans & Ramos (2016) | The source of customer frustration are security requirements and practices. Customers prefer constant updates on the length of delays Digital Communications at Hub Airports Page 32 of 107 due to the frustrations they undergo, due to longer queues with unknown waiting times. The deployment of digital technologies, such as smart queuing systems, provides notifications to passengers on the shortest lines and the expected waiting times. Digital technologies have also facilitated the creation of security channels in airports, whereby customers walk through with their luggage without the need for invasive and cumbersome physical searches. |
| According to Ritchie & Crouch (2003) | Digital communication and surveillance systems are critical in the major airports, since they enhance the effectiveness of both air and ground activities in addition to improving airport operations and customer experience. |
| According to Straker & Wrigley (2016) | Passengers are informed in a timely fashion about the expected waiting times through the web-based apps that make their transit, if not entirely hassle-free, at least more convenient. Further, some airports, including Dubai International, have piloted and adopted facial recognition technologies that minimise the need for customers to present their boarding passes and passports at every stage of their journey |
| According to Rendeiro Martín Cejas (2006) | Due to Airports' significance in being the first and last point of contact for a tourist on a flying holiday, Airport infrastructure can heavily affect perception of service quality. |
| According to Burghouwt (2007) | Deregulation has led to changes in the way airlines organise their network and how airport authorities plan their infrastructure |
| According to Ritchie & Crouch (2003) | Technology-focused communication or digital communications have had a significant positive impact on processes and activities within the airport, as well as enhancing the provision of passenger-centred services to improve their satisfaction. |
| According to Kraal & Kirk (2010) | The digital communication reduces the overall time spent to process customer activities. Digital communication can also add to reducing the effects of delays and cancellations of flights, a commonplace event with current air travel |
| According to Ritchie & Crouch (2003) | Digital communication and surveillance systems are critical in the major airports, since they enhance the effectiveness of both air and ground activities in addition to improving airport operations and customer experience. |
| According to Chen & Batchuluun (2015) | The identification of different customer needs, through the use of the different airport apps, supports the multi-functional nature of today's airports. Most airports offer an increasing array of services to customers, such as spa |

| | |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | centres, restaurants and even boutique retail outlets, as customers' transit to their destinations. The use of digital technologies at airports, facilitates the easier identification of the location of such services since most customers, especially international travellers, are not well acquainted with the geography of the airport. The availability of diverse, web-based apps, promotes the easier identification of the locations that are a source of higher levels of customer satisfaction. |
| According to Schwartz, (2014) | Most leisure travellers spend more time conducting shopping and other commercial activities at airports and many of these travellers complain of poor Wi-Fi connectivity in most of the retail areas; even when available, such services are often inadequate. Other problems experienced by leisure travellers include lengthy waiting times in making orders or items such as food. However, many airports have innovated their retail areas, allowing customers to pre-order their preferred products in the terminal and collect them in a timely manner. Business lounges in some airports have equally benefitted from such innovations, to a point where a business traveller's coffee can be waiting for him on arrival in the lounge |

OBJECTIVES OF THE STUDY:

- To find out the difficulties faced by the passengers in Chennai airport international terminal waiting area
- To find out the solution to overcome the difficulties faced by the passengers in Chennai airport international terminal waiting area
- To find out the ambience in Chennai airport waiting area causing difficulties in waiting area.
- To study about the security in Chennai airport waiting area is sufficient enough.
- To figure out the lack of facilities in Chennai airport waiting area.
- To identify which type of passengers facing more difficulties in Chennai airport waiting area
- To figure out flight delay causing difficulties for the passengers in Chennai airport waiting area.

RESEARCH METHODOLOGY:

We have used (Google forms) to answer Questionnaire online.

Totally 100 sample survey have been collected from the online consumer.

Hypothesis of the study

Facilities:

H0: There is no significant relationship between facilities and passenger difficulties.

H1: There is a significant relationship between facilities and passenger difficulties.

Flight Delay:

H0: There is no significant relationship between flight delay and passenger difficulties.

H1: There is a significant relationship between flight delay and passenger difficulties.

Passenger type:

H0: There is no difference between passenger type and passenger difficulties.

H1: There is a difference between passenger type and passenger difficulties.

Security:

H0: There is no association between security and passenger difficulties.

H1: There is an association between security and passenger difficulties.

ANALYSIS AND DISCUSSION

H1: There is a significant relationship between facilities and passenger difficulties.

Facilities:

H0: There is no significant relationship between facilities and passenger difficulties.

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1 | .391a | .153 | .144 | .418 |

a. Predictors: (Constant), Is the wi-fi facilities in Chennai airport waiting area easily accessible to you

ANOVA

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------|
| 1 | Regression | 3.080 | 1 | 3.080 | 17.638 | .000b |
| | Residual | 17.110 | 98 | .175 | | |
| | Total | 20.190 | 99 | | | |

a. Dependent Variable: Are you continuously facing difficulties in all your journey

b. Predictors: (Constant), Is the wi-fi facilities in chennai airport waiting area easily accessible to you

Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | |
|-------|------------|-----------------------------|------------|---------------------------|--------|
| | | B | Std. Error | Beta | T |
| 1 | (Constant) | 3.871 | .251 | | 15.424 |
| | Facilities | .273 | .065 | .391 | 4.200 |

Result

Based on the outcome of analysis the p-value as .000 and f value 17.638 and 15 % relationship between passenger facing difficulties and facilities in Chennai airport waiting area. Absence of Wi-Fi facilities

having 15% influence of passenger facing difficulties.

Flight Delay:

H0: There is no significant relationship between flight delay and passenger difficulties.

H1: There is a significant relationship between flight delay and passenger difficulties.

Correlations

| | | Are you continuously facing difficulties in all your journey | What will you do once your flight gets delayed |
|------------------------|---------------------|--------------------------------------------------------------|------------------------------------------------|
| Passenger difficulties | Pearson Correlation | 1 | .515** |
| | Sig. (2-tailed) | | .000 |
| | N | 100 | 100 |
| Flight delay | Pearson Correlation | .515** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 100 | 100 |

Result

From the above table the p-value as .000 (less than 0.05) and correlated value is .515 . so there is significant relationship between flight delay and passenger facing difficulties in Chennai airport waiting area.

Security:

H0: There is no association between security and passenger difficulties.

H1: There is an association between security and passenger difficulties.

How frequent do u travel * Is it difficult to maintain the privacy in waiting area

Cross tabulation

| | | | Is it difficult to maintain the privacy in waiting area | | |
|--------------------------|----------------|----------------|---------------------------------------------------------|----------|---------|
| | | | Agree | Disagree | Neutral |
| How frequent do u travel | Business | Count | 0 | 0 | 0 |
| | | Expected Count | 1.7 | 3.0 | 3.0 |
| % of Total | | 0.0% | 0.0% | 0.0% | |
| Frequent Flyer | Count | 0 | 1 | 1 | |
| | Expected Count | 2.1 | 3.8 | 3.8 | |
| | % of Total | 0.0% | 1.0% | 1.0% | |
| Personal | Count | 1 | 16 | 7 | |
| | Expected Count | 4.1 | 7.3 | 7.3 | |
| | % of Total | 1.0% | 16.0% | 7.0% | |
| Tourist | Count | 1 | 3 | 14 | |
| | Expected Count | 3.0 | 5.4 | 5.4 | |
| | % of Total | 1.0% | 3.0% | 14.0% | |
| Vocational | Count | 13 | 7 | 5 | |
| | Expected Count | 4.2 | 7.6 | 7.6 | |
| | % of Total | 13.0% | 7.0% | 5.0% | |
| Total | Count | 15 | 27 | 27 | |
| | Expected Count | 15.0 | 27.0 | 27.0 | |
| | % of Total | 15.0% | 27.0% | 27.0% | |

How frequent do u travel * Is it difficult to maintain the privacy in waiting area

Cross tabulation

| | | Strongly Agree | Strongly Disagree | |
|--------------------------|----------------|----------------|-------------------|-------|
| How frequent do u travel | Business | Count | 11 | 0 |
| | | Expected Count | 1.8 | 1.7 |
| | | % of Total | 11.0% | 0.0% |
| | Frequent Flyer | Count | 2 | 10 |
| | | Expected Count | 2.2 | 2.1 |
| | | % of Total | 2.0% | 10.0% |
| | Personal | Count | 2 | 1 |
| | | Expected Count | 4.3 | 4.1 |
| | | % of Total | 2.0% | 1.0% |
| | Tourist | Count | 0 | 2 |
| | | Expected Count | 3.2 | 3.0 |
| | | % of Total | 0.0% | 2.0% |
| | Vocational | Count | 1 | 2 |
| | | Expected Count | 4.5 | 4.2 |
| | | % of Total | 1.0% | 2.0% |
| Total | Count | 16 | 15 | |
| | Expected Count | 16.0 | 15.0 | |
| | % of Total | 16.0% | 15.0% | |
| | | | | |

How frequent do u travel * Is it difficult to maintain the privacy in waiting area

Cross tabulation

| | | | Total |
|--------------------------|----------------|----------------|-------|
| How frequent do u travel | Business | Count | 11 |
| | | Expected Count | 11.0 |
| | | % of Total | 11.0% |
| | Frequent Flyer | Count | 14 |
| | | Expected Count | 14.0 |
| | | % of Total | 14.0% |
| | Personal | Count | 27 |
| | | Expected Count | 27.0 |
| | | % of Total | 27.0% |
| | Tourist | Count | 20 |
| | | Expected Count | 20.0 |

| | | |
|------------|----------------|--------|
| | % of Total | 20.0% |
| Vocational | Count | 28 |
| | Expected Count | 28.0 |
| | % of Total | 28.0% |
| Total | Count | 100 |
| | Expected Count | 100.0 |
| | % of Total | 100.0% |

Chi-Square Tests

| | Value | Df | Asymptotic Significance (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
|------------------------------|----------------------|----|-----------------------------------------|-------------------------|-------------------------|
| Pearson Chi-Square | 152.773 ^a | 16 | .000 | .b | |
| Likelihood Ratio | 119.195 | 16 | .000 | .b | |
| Fisher's Exact Test | .b | | | .b | |
| Linear-by-Linear Association | 32.140 | 1 | .000 | .b | .b |
| N of Valid Cases | 100 | | | | |

Result

We can interfere that the p-value (.000) so reject null hypothesis and accept the alternative hypotheses that is a significant relationship security and passengers facing difficulties in waiting area. Vocational and personal passengers facing more difficulties because they have rare travel experience than frequent flyer. And they don't have much knowledge and

information about the facilities present in the Chennai airport waiting area.

Passenger type:

H0: There is no difference between passenger type and passenger difficulties.

H1: There is a difference between passenger type and passenger difficulties.

Descriptive

How often do you come across difficulties in waiting area

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean Lower Bound |
|-------------------------|-----|------|----------------|------------|-------------------------------------------------|
| Adult | 30 | 4.33 | 1.269 | .232 | 3.86 |
| Children | 10 | 3.00 | 1.491 | .471 | 1.93 |
| Differently Able Person | 10 | 3.00 | 1.491 | .471 | 1.93 |
| Pregnant Women | 20 | 2.25 | 1.333 | .298 | 1.63 |
| Senior Citizen | 30 | 1.67 | 1.269 | .232 | 1.19 |
| Total | 100 | 2.85 | 1.690 | .169 | 2.51 |

Test of Homogeneity of Variances

| | | Levene Statistic | df1 | df2 |
|-----------------------------------------------------------|--------------------------------------|------------------|-----|--------|
| How often do you come across difficulties in waiting Area | Based on Mean | .301 | 4 | 95 |
| | Based on Median | .905 | 4 | 95 |
| | Based on Median and with adjusted df | .905 | 4 | 85.663 |
| | Based on trimmed mean | .442 | 4 | 95 |

Test of Homogeneity of Variances

| | | Sig. |
|-----------------------------------------------------------|--------------------------------------|------|
| How often do you come across difficulties in waiting area | Based on Mean | .877 |
| | Based on Median | .465 |
| | Based on Median and with adjusted df | .465 |
| | Based on trimmed mean | .778 |

Based on trimmed mean .778 variance groups are homogeneous

ANOVA

How often do you come across difficulties in waiting area

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|--------|------|
| Between Groups | 115.667 | 4 | 28.917 | 16.441 | .000 |
| Within Groups | 167.083 | 95 | 1.759 | | |
| Total | 282.750 | 99 | | | |

There is a significant difference (.000) between passenger type and passenger facing difficulties

Post Hoc Tests

Multiple Comparisons

Dependent Variable: How often do you come across difficulties in waiting area

| | | (I) Which of the following people are facing more difficulties in waiting area during flight delays | (J) Which of the following people are facing more difficulties in waiting area during flight delays | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval Lower Bound | | |
|-----------|-------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------|------------|-------|-------------------------------------|-------|-------|
| Tukey HSD | Adult | Children | | 1.333 | .484 | .054 | -.01 | | |
| | | Differently Able Person | | 1.333 | .484 | .054 | -.01 | | |
| | | Pregnant Women | | 2.083* | .383 | .000 | 1.02 | | |
| | | Senior Citizen | | 2.667* | .342 | .000 | 1.71 | | |
| | | Children | Adult | -1.333 | .484 | .054 | -2.68 | | |
| | | Differently Able Person | Children | .000 | .593 | 1.000 | -1.65 | | |
| | Differently Able Person | Adult | Pregnant Women | | .750 | .514 | .591 | -.68 | |
| | | | Senior Citizen | | 1.333 | .484 | .054 | -.01 | |
| | | | Children | Adult | -1.333 | .484 | .054 | -2.68 | |
| | | Children | Differently Able Person | Adult | | .000 | .593 | 1.000 | -1.65 |
| | | | Pregnant Women | Children | | .750 | .514 | .591 | -.68 |
| | | | Senior Citizen | Adult | | 1.333 | .484 | .054 | -.01 |

| | | | | | |
|----------------|-------------------------|---------|------|------|-------|
| | Able Person | | | | |
| | Senior Citizen | .583 | .377 | .540 | -.50 |
| Senior Citizen | Adult | -2.667* | .328 | .000 | -3.59 |
| | Children | -1.333 | .525 | .139 | -2.98 |
| | Differently Able Person | -1.333 | .525 | .139 | -2.98 |
| | Pregnant Women | -.583 | .377 | .540 | -1.66 |

Homogeneous Subsets

How often do you come across difficulties in waiting area

| | | | | |
|-------------------------------------------------------------------------------------------------|-------------------------|-------------------------|------|-------|
| Which of the following people are facing more difficulties in waiting area during flight delays | | Subset for alpha = 0.05 | | |
| | | N1 | 2 | 3 |
| Tukey HSDa,b | Senior Citizen | 301.67 | | |
| | Pregnant Women | 202.25 | 2.25 | |
| | Children | 10 | 3.00 | |
| | Differently Able Person | 10 | 3.00 | |
| | Adult | 30 | | 4.33 |
| | Sig. | .730 | .508 | 1.000 |

Result

Senior citizens, pregnant women group are similar they are more difficulties compared to other groups. Children, disabled people group are similar they too facing difficulties comparatively lower than senior citizens and pregnant women, children and disabled having difficulties too in Chennai airport international terminal waiting area.

CONCLUSION

The analysis from each point suggests that interior element can provide comfort while also secure passenger by providing personal comfort through the

sense of safety or physical support through the elements. At the same time, interior element is also able to lead both absorption and relaxation phase of human body that help passenger to inhabit the space and experience a meaningful waiting process at its best. Upon this understanding, we can conclude that either adjustable, or slight variation of interior elements is a step in generating inhabitation as an attempt to accommodate a comfortable waiting experience for the body and the state of mind of passengers in Chennai international terminal waiting area.

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