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Measuring and Comparing the Desired and Actual Service Quality of Pakistan International Airline

Muhammad Farooq[*]
Postgraduate Center, Limkokwing University of Creative Technology, Malaysia

Saeed Muhammad
Postgraduate Center, Limkokwing University of Creative Technology, Malaysia

Valliappan Raju
Postgraduate Center, Limkokwing University of Creative Technology, Malaysia

K. Ramanathan Kalimuthu
Postgraduate Center, Limkokwing University of Creative Technology, Malaysia

Abdul Qadir
Assistant Director, Pakistan Housing Authority, Pakistan

Abstract

Service quality is a critical component in any company's performance. Bad service creates a lousy brand image in the eyes of customers which is difficult to remove. Pakistan International Airline (PIA), a well-known airline in Pakistan is receiving criticism from its passenger's regarding service quality. However, there are very few studies focusing on the improvement of service quality of PIA. In this research, the authors have identified the critical components of customer satisfaction with the help of Parasuraman service quality model. The authors have identified the desired and actual quality gap. The study concludes that reliability and empathy are the top most essential components of customer satisfaction. There is a significant difference in all desired and actual components of service quality. The components which PIA needs immediate improvement are its ability to provide dedicated services and better food quality during flight.

Keywords: Service quality; SERVQUAL; PIA; Pakistan; Reliability; Empathy; Airline.

1. Introduction

Every business must have two things; the first thing; it must have a brand name, and the second thing it; must have some customers to buy its products (Buzdar *et al.*, 2016; Chen and Myagmarsuen, 2011; Rigopoulou and John, 2008). Brand acts as a differentiator. It differentiates one company from its competitors. The brand creates a win-win situation for both buyer and seller. The buyer gets the confidence and knows who is responsible if something goes wrong. In another side, the seller can charge more if it has a good brand name. It has been confirmed via many experiments that the customers prefer to pay more for a branded product compared to nameless products. It is an era of globalization. In globalization due to technology and advancement in communication, transportation and every aspect of life the customers have many opportunities (Farooq M. *et al.*, 2018; Khalil-ur-rehman *et al.*, 2018). Similarly, the sellers have many markets to sell the products (Nguyen *et al.*, 2018; Seo and Jin-Woo, 2018). This situation creates the need for a strong brand which has good relations with its customers. Customers can forgive mistakes of brands if they are treated well. For instance, despite note-7 battery issue customers again trusted on Samsung and brought note-8 and onward products, because of handling well the note-7 battery issue (Ewan, 2018).

Pakistan International Airline (PIA), a well-known brand of old days, is facing a lot of criticism. It has both compliance with policy issues and service quality issues. The customer expects from PIA to understand their preferences, but PIA is continuously facing problems to remove its lousy service Image. Today customers hope from the brand to understand their issues and resolve them proactively. To understand customers, preference firms continuously ask customers feedback. To understand customers feedback different researchers have introduced different models. Aaker (1991), proposed customer-based brand equity, which covers brand awareness, brand image, brand loyalty, and perceived quality. Parasuman *et al.* (1988), introduced the SERVQUAL model. Customer-based brand equity has been criticized due to its limit to only measure brand equity of the company; it's less actionable (Erdogmus and Çiçek, 2012; Gringarten, 2018; Teodoro and Seung-Ho, 2018). The model which most often used to measure the service quality. SERVQUAL has been used in many areas by many scholars, particularly in the airline (Aydin and Seda, 2012; Gupta, 2018; Sultan and Merlin, 2000). Therefore, in this research, we have selected the Parasuraman 22 Items questionnaire to measure the service quality of Pakistan International Airline (PIA).

The Parasuman *et al.* (1988) SERVQUAL model has five items. Its first Item is reliability. Reliability means the extent to which customers trust in the brand. It refers to the trust the customers have on employees and products

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*Corresponding Author

of the company. The second aspects of the SERVQUAL model are empathy. Empathy measures the extent to which the employees understand customers problem. It measures the extent what customers feel that their service providers put their shoes. It also measures that extent at which a service provider employee put themselves at the place of customers. The third variable is the responsiveness. Responsiveness is essential and has been measured as a necessary construct in many studies. It measures the turnaround time of customers complaints resolution. It also covers the assurance which employees provide to the customers that their problem will be resolved. The fifth and last item of the SERVQUAL model is Customer Satisfaction in general. It covers the overall satisfaction. The rationale behind measuring the overall satisfaction is to link it with the rest of the variables to check every variable impact on satisfaction. It also covers the aspects which are not included as an independent variable.

The aniline industry in services is one of the prominent industries. Airlines companies are known for their polite staff, schedule, and safety. The people who make sure all these aspects are their customer service people. The quality is service is the key to success in this industry. Previously in this industry, there are research conducted in United States of America, United Kingdom, India, France, Spain and rest of the world and their airline companies (Aydin and Seda, 2012; Perçin, 2018; Seo and Jin-Woo, 2018; Sultan and Merlin, 2000; Tsafarakis *et al.*, 2018) but the authors could not find any prominent research on honking airline industry, Therefore, as per the objective of this research the research question has adapted from previous studies conducted in the airline.

1.1. Aim(s) and Objectives of Survey

The core goal of the study is investigating and measuring the service quality of Pakistan International Airline (PIA). Using Parasuman *et al.* (1988) SERVQUAL model this study aims to examine the desired and perceived quality of services of Pakistan International Airline (PIA). In Particular, this study investigates;

1. The impact of tangibles both desired and actual quality on customer satisfaction with the PIA
2. The impact of reliability both desired and perceived quality on customer satisfaction with the PIA
3. The impact of empathy both desired and actual quality on customer satisfaction with the PIA
4. The impact of responsiveness both desired and real quality on satisfaction with the PIA

This study has mainly four hypotheses;

H1: The tangibles has a significant positive impact on customer satisfaction
H2: The reliability has a significant positive impact on customer satisfaction
H3: empathy has a significant positive impact on customer satisfaction
H4: The responsiveness has a significant positive impact on satisfaction

After validating the relationship and model of the study, the study also compares the desired and actual quality of the PIA services. The comparison goal is to help managers to identify the areas which need improvement.

2. Research Methodology

This is a quantitative cross-sectional study. The questionnaire has been adapted from Parasuraman service quality model famous with the name SERVQUAL.

2.1. Sampling Strategy

As the researchers of the study are students and do have access to the population framework to conduct random sampling. Therefore, the researcher has tried choosing the least biased sampling technique possible without population framework, which is snowball sampling. The questionnaire was designed on an online Google document and floated to students in the university. Students were requested to share the questionaries' link with their colleagues who travelled via PIA.

2.2. Explanation of Questionnaire Design

The questioner was designed on the google document, it made floatation and sharing with the user's recommendation. The questionnaire constipated of the two parts. One part was related to screening and customer demographics. In screening the first question was asked from customers have you traveled via Pakistan International Airline. The responses were captured in yes or no, those customers who said yes, only their responses were obtained, rest of the responses of the customers were not considered in the analysis as they never experienced the company services. Therefore they could not provide the feedback. In the first section, the respondent's age, gender, education, and income level as also been measured. As generally customers avoid giving the exact numbers, therefore the age brackets were made to gather the customer's data.

The second section was related to the core customer service aspects. The core service aspects were the tangibles; tangibles included customer satisfaction with the food, seats of the airplane and additional products like blankets. The second aspects of reliability, it was about the scheduling and trust level of the customers on the company and its employees. The third variables questions were related to empathy; in this section, we have tried to measure the level on which customers think about the Hong Kong express employees that they know there prefers and they feel their problems as a personal problem. In short, to what extent the employees wear the customer's shoes. The fourth variable is responsive. In the airline industry responsories of the company is very important, as customers can suddenly change their plans. Also, they need to reach on the destination on time, inch age of change in schedule the response time form the company becomes very important. The last variable is assurance. It related to customer experience. The employee's ability to assure that customer complaint will be resolved is the critical aspect of customer service.

3. Findings and Discussion

As explained in the section of the questionnaire design, there were in a total of two sections of the questionnaire, first was related to the demographics and second was related to the service quality. Therefore the findings are also divided into two parts.

3.1. Demographics

Total of 410 responses were captured from the Hong Kong Express customers. 72% of males outnumbered females. Most of the respondents were young in the age bracket of 18 to 25, which were 69% of respondents base. As this questionnaire was shared with the students and through the referral system, it was fill, probably this the reason that we got most responses from the young people. The second age bracket from where we got the answers are the 26 to 35 years old. total responses collected from this age bracket are 23%. As the age grows the respondent's count of our study also decreases. This is general implications with the student base. The respondent base from 36 to 45 is decidedly less which, is only 3% out of 35 which means its 1.

The next aspect of our study was to see whom people are traveling; it has been observed people move weekly in most the case. There is a respondents segment which flies weekly to meet their families.

Table-1. Demographics

Gender	Count of Respondents	%
Male	288	72%
Female	122	28%
Grand Total	410	100%
Age	Count of Respondents	%
18 to 25	278	69%
26 to 35	94	23%
36 to 45	26	6%
46 and Above	12	3%
Grand Total	410	100%
How frequently you travel	Count of Respondents	%
Weekly	46	11%
Monthly	107	26%
Semi-annually	126	31%
Annually	118	29%
Just used once	13	3%
Grand Total	410	100%

3.2. Service Quality Results

Service quality results of the Hong Kong Express are outstanding. Generally, customers are satisfied with the services. Out aspects were to make sure the model is valid, and customers are happy with the service. So, the table-2 shows the model validation statistics. It shows the out loadings are in the desired crater. The questionaries' where the outer loadings were not in the desired criteria has been removed. The next section is Cronbach's alpha. The Cronbach alpha score is more for the enquired threshold against all variables. To test the model more and its validity we have also tested the AVE. the score of AVE is also as per the required threshold. The most important indicator is how much this model measures customer satisfaction. the coefficient of determination of this model is 82% which means it's covering the critical aspects of the model. In the table, the f2 shows the impact of every variable on the overall service quality. It shows that reliability has a 20% impact on the service quality, the responses has only 0.03%, while the assurance is 11% and the tangibles are 30%. The tangibles have proved to be the essential factor in the satisfaction of the passengers.

Table-2. Construct Validity, Reliability, and Impact

	Items	Outer Loadings	Cronbach's Alpha	AVE	R²	F²
Empathy	Instils confidence	0.7	0.7	0.7		0.2
	Recommendations for better flights	0.8				
	Sends targeted/personalized e-mails	0.7				
	Provides personal profile flight preferences	0.6				
Reliability	Delivers committed services on time.	0.8	0.7	0.5		0.3
	Shows sincere interest in solving passengers' problems	0.7				
	The Company does error-free transactions.	0.7				
	Provides adequate security to passenger's belongings and personal information/data	0.6				
Responsiveness	Never too busy to respond to passenger's requests.	0.7	0.7	0.6		0.1
	Resolves passenger's complaints on a priority basis.	0.7				
	Proactively informs about the delay in services	0.8				
	Knowledgeable staff	0.78				
	Staff provides prompt answers to questions.	0.8				
Tangibles	Quality food is provided to the passengers	0.7	0.7	0.5		0.2
	Facilities for entrainment are available	0.8				
	Can online booking be made quickly?	0.7				
	Additional facilities on requirement are provided like the blanket	0.6				
	Staff is always well dressed.	0.6				
Overall Satisfaction	Services are very good.	0.8	0.8	0.7	0.6	
	Services are up-to-date.	0.8				
	Services are recommendable to other passengers	0.8				
	First Choice to travel	0.7				

Table-3. Discriminant Validity

	Empathy	Overall Satisfaction	Reliability	Responsiveness	Tangibles
Empathy					
Overall Satisfaction_	0.79				
Reliability	0.79	0.80			
Responsiveness	0.88	0.82	0.89		
Tangibles	0.79	0.87	0.77	0.76	

Discriminant validate is the latest way to make sure the validity of the model as per discriminant validity the core of every variable or every box must be below 0.9 which as per threshold is at the required level for all the variables.

After making sure the construct validity and reliability, the researcher has compared the desired service and actual service. It has been observed all areas customers want is more compared to regarded service. The regions in tangibles which need immediate improvement are seating arrangements and online book. The areas which are comparatively better in tangibles are the functional food quality and staff dressing. In reliability, the committed services are not being delivered; it needs immediate improvement. Rest of the services like sincere interest, error-free transaction and security are comparatively better. The customer's service end is doing well compared to the product side. All variables of responsiveness are also at par except the staff response to queries. There is need more staff on the front to improve the performance of the airline. In empathy and customer satisfaction, there is a very less significant difference between the desired and actual service.

Table-4. Desired Service and Actual Service of PIA

	Desired Service		Actual Service
	Sample (N)	Mean	Mean
Tangibles			
1-Quality food is provided to the passengers	410	3.98	3.12
2- Facilities for entrainment are available		4. l2	3.90
3- Can online booking be made quickly?		4.66	4.58
4- Additional facilities on requirement are provided like the blanket		3.71	3.61
Reliability			
1- Delivers committed services on time.	410	4.13	2.90
2-Shows sincere interest in solving passengers problems		4.53	4.06
3-Does error-free transactions.		4.74	4.26
4-Provides adequate security to passenger's belongings and personal information/data		4.77	4.31
Responsiveness			
1 Never too busy to respond to passenger's requests.	410	4.20	3.92
2-Resolves passenger's complaints on a priority basis.		4.50	4.01
3-Proactively informs about the delay in services		3.41	3.49
4-Knowledgeable staff		4.60	4.50
5-Never too busy to respond to passenger's requests.		4.20	3.22
1-instills confidence	410	3.49	3.36
2-Recommendations for better flights		3.28	3.17
3-Sends targeted/personalized emails		3.46	3.44
4-Provides personal profile flight preferences		3.77	3.65
Overall Satisfaction			
1-Services are very good.	410	3.49	3.36
2-Services are up-to-date.		3.28	3.17
3-Services are recommendable to other passengers		3.46	3.44
4-First Choice to travel		3.77	3.65

4. Conclusion

Service quality as an essential aspect of any business (Al-Majali *et al.*, 2018; Jhatial *et al.*, 2018; Rizaimy, 2018; Yancheva- and Lidia, 2018; Zuñiga- and Raul, 2018); particularly in an airline it's the guaranteed source of sustainable competitive advantage. It can be one of the core advantages any company can have (Mas-Machuca, 2018; Sukwadi and Hendry, 2018). Service quality does not only give assurance of new customers, but it also helps the companies to earn a sustainable long-term competitive advantage. In this study, the researchers have used the SERVQUAL model. It has been concluded that all the variables of the model have an impact on customers

satisfaction. The reliability is the most critical factors. The second most important aspects are related to the empathy of employees, and the third aspects are responsiveness factors.

The airline is all about reliability; it is expected from the employees of the companies to fulfill the committed promises, Follow the schedule as committed and provide its passenger's good food quality and supporting in additional customers preferences like the requirement of blankets. The study found that the desired service level of the customers is high compared to the service they are receiving. The PIA must also improve its tangibles and responsiveness. The products of PIA are already cheaper, but still, customers felt that it's not value for money. In general, the customers are satisfied with the overall service, Upton date services, and technology. Customers also said that they would recommend the facilities and it is their first choice to travel. The results are actionable and at the same encouraging for PIA airline. It further needs to improve some aspects which are highlighted in table-4, the rest of the elements of service must be maintained to attached new customers and sustain existing customers base.

The study was conducted based on the popular service quality model the SERVQUAL. All variables have been approved that they have a relationship with the customer's satisfaction. The critical process started with the evaluation form the first step which was the screening of the questionnaires. All the people who never traveled using honking expresses were excluded. Secondly was the model validation, the questionnaire validation and the third was the comparison and mean values of very aspects of the services. The final step which differentiates the desired and actual service quality is extremely critical for the managers. The managers can take advantage of positive points. For example, the customer satiation with overall customer services, willingness to recommend the products to other customers are encouraging. Customer experience and word of mouth is the ultimate source of marketing (Farooq, 2019). Customers today can make anything viral. The expression of customers that committed services which they desired, and the PIA promised are not provided. This is a significant risk for PIA. This point needs immediate attention. Also, customers feel that the staff is not trained during rush time, there is a need to educate the team and make them the most critical person in the business.

5. Practical Implications of the Research

The Study is useful for the management of PIA to realize the improvement areas. The study is also helpful for researchers to take PIA as an example for brands where they were on top due to service quality and now are the least preference of customers due to service quality.

References

Aaker, D. A. (1991). *Managing brand equity.* The Free Press: New York.

Al-Majali, Bashar and Mervat, A. (2018). The role of european foundation for quality management, Efqm in improving public sector efficiency and it impacts on customer satisfaction employees results and corporate image. *International Journal For Quality Research,* 12(3): 593–608.

Aydin, K. and Seda, Y. (2012). The measurement of service quality with servqual for different domestic airline firms in Turkey. *Serbian Journal Of Management,* 7(2): 219–30. Available: Http://Scindeks.Ceon.Rs/Article.Aspx?Artid=1452-48641202219a

Buzdar, M. F., Janjua, S. Y. and Khurshid, M. A. (2016). Customer-based brand equity and firms' performance in the telecom industry. *International Journal Of Services And Operations Management,* 25(3): Available: https://doi.org/10.1504/IJSOM.2016.079516

Chen, C.-F. and Myagmarsuen, O. (2011). Brand equity, Relationship quality, Relationship value, And customer loyalty, Evidence from the telecommunications services. *Total Quality Management,* 22(9): 957–74.

Erdogmus, I. and Çiçek, M. (2012). The impact of social media marketing on brand loyalty. *Procedia - Social And Behavioral Sciences,* 58(July): 1353–60.

Ewan, S. (2018). Samsung's galaxy note 7 damage may not be as painful as you think. Available: Https://Www.Forbes.Com/Sites/Ewanspence/2016/11/21/Samsung-Galaxy-Note-7-Brand-Battery-Fire-Damage/#1d0229027ab6

Farooq (2019). *Customer experience management, A handbook to acquire and retain valuable customers.* Kindle Direct Publishing (KDP): Cyberjaya. https://www.amazon.com/gp/product/B07MC8SJ4X/ref=dbs_a_def_rwt_bibl_vppi_i0

Farooq, M., Aneeqa, Z., Faisal, K.-U.-. and Mst, N. Y. (2018). Impact of digitalization on holy quran readers. *Experience And Expectations,* 23(7): 59–67.

Gringarten, H. (2018). Price and store image as mitigating factors in the perception and evaluation of retailers' customer-based brand equity. *Journal Of Multidisciplinary Research,* 10(1/2): 51–84. Available: Http://Web.B.Ebscohost.Com/Ehost/Pdfviewer/Pdfviewer?Vid=4&Sid=697d26d6-Dc2e-4dec-A70b-8dfd81dae130%40sessionmgr104

Gupta, H. (2018). Evaluating service quality of airline industry using hybrid best worst method and vikor. *Journal Of Air Transport Management,* 68: 35–47. Available: Http://Dx.Doi.Org/10.1016/J.Jairtraman.2017.06.001

Jhatial, K., Hussain, A., Dr, A. A. and Dr, J. A. H. (2018). Corporate governance in Pakistan, An exploratory study of the pakistan international airlines corporation limited. *Grassroots* 52(1): 246–60.

Khalil-ur-rehman, F., Farooq, M. and Tansholpan, B. W. Y. R. (2018). Investigating the factors impacting the student satisfaction with the Universities, A comparative study of Malaysia and Pakistan. *The Journal of Social Sciences Research,* (2): 117–26.

Mas-Machuca, M. (2018). Behavioral profiles of consumers of online travel agencies. *International Journal For Quality Research,* 12(3): 703–22.

Nguyen, H. T., Yufei, Z. and Roger, J. C. (2018). Brand portfolio coherence: Scale development and empirical demonstration. *International Journal Of Research In Marketing,* 35(1): 60–80. Available: Https://Doi.Org/10.1016/J.Ijresmar.2017.11.003

Parasuman, A., Zeithaml, V. and Berry, L. (1988). A multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing,* 64(1): 12–37. Available: https://doi.org/10.1016/S0148-2963(99)00084-3

Perçin, S. (2018). Evaluating airline service quality using a combined fuzzy decision-making approach. *Journal Of Air Transport Management,* 68: 48–60. Available: Http://Dx.Doi.Org/10.1016/J.Jairtraman.2017.07.004

Rigopoulou, I. and John, K. (2008). Personal development planning under the scope of self-brand orientation. *International Journal Of Educational Management,* 22(4): 300-13.

Rizaimy, M. E. A. (2018). Determinants of iso 9001 quality management system effectiveness amongst electrical and electronics manufacturing firms in Malaysia. *International Journal For Quality Research,* 12(3): 655–76.

Seo, E.-J. and Jin-Woo, P. (2018). A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. *Journal Of Air Transport Management,* 66(september): 36–41. Available: Http://Linkinghub.Elsevier.Com/Retrieve/Pii/S0969699717303472

Sukwadi, R. M. and Hendry, P. S. (2018). Incorporating kansei engineering into service quality tools to improve the airline services. *International Journal For Quality Research,* 12(2): 297–316.

Sultan, F. and Merlin, C. S. (2000). International service variants: Airline passenger expectations and perceptions of service quality. *Journal Of Services Marketing,* 14(3): 188–216.

Teodoro, M. P. and Seung-Ho, A. (2018). Citizen-based brand equity, A model and experimental evaluation. *Journal Of Public Administration Research And Theory*: 1–18. Available: Https://Academic.Oup.Com/Jpart/Advance-Article/Doi/10.1093/Jopart/Mux044/4924535

Tsafarakis, S., Theodosios, K. and Angelos, P. (2018). A multiple criteria approach for airline passenger satisfaction measurement and service quality improvement. *Journal Of Air Transport Management,* 68: 61–75. Available: Https://Doi.Org/10.1016/J.Jairtraman.2017.09.010

Kundurzhiev, T., Prodanova, Y., Yancheva-Stoicheva, M., Tsacheva, N., Hristova, L., & Miteva, I. (2018) (2018). Ownership of medical institutions in bulgaria - impact on the quality of working life of workers. *International Journal For Quality Research,* 12(3): 689–702.

Zuñiga-, A. and Raul, A. (2018). Process innovations in tourist companies. *International Journal for Quality Research,* 12(3): 677-88.