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# **Service Quality Insights from Airline Industry**

<sup>1</sup>Premkumar Balaraman, <sup>2</sup>Kalpanan Kosalram and <sup>3</sup>Sungkrityayan Khan

<sup>1</sup>Department of Management, College of Business and Economics,

Adigrat University, P.O. Box 50, Adigrat, Ethiopia

<sup>2</sup>Department of MBA, SRM University, Kattankulathur Campus, Chennai, India

<sup>3</sup>Department of MBA, SRM University, Vadapalani Campus, Chennai, India

Abstract: The main objective of the paper is to assess the existing service quality metrics, analyze airline industry service process and gain insights on service quality gaps airlines industry. The literature review on service quality models and the initial airline industry desktop study using secondary sources of data enable to focus on the airline industry service quality metrics and service process. In an attempt to gain exploratory insights on service quality gaps in Airline industry, the research paper attempts to explore the Indian Airline market using qualitative tools. Forming the 10 focus groups was carefully planned and sample size 5 per group was chosen with convenient sampling. The SERVQUAL Model seems to best fit in explaining the service quality gaps in Airline industry. Amongst the various ratings, Airline Quality Rating (AQR) is found to be one of the best suited service quality metrics. In service industries, quality tools are more effective when they are industry specific. LEAN tool is best suited TQM tool for Airline industry which can solve issues on long waiting times, material movements and others. Service quality factors like on time arrival, cabin crew appearance, cleanliness, airport amenities, customer care, web page appearance and usability also play a significant role in affecting the overall service quality. The radical shift towards Low Cost Carriers (LCCs) poses new challenges in delivering expected services in Airline Industry.

**Key words:** SERVQUAL, quality ratings, service quality factors, LCCs, LEAN tool

# INTRODUCTION

The service industry accounts for >70% of the GDP in developed as well as developing countries. And as a direct requirement of this aspect, it is highly vital to improve the quality of services in the current and near future. Today, irrespective of the business domain, companies must focus on speed, efficiency and customer value to be globally competitive and the long-term health of any organization depends on their commitment to continuous improvement. This type of vision helps companies remain competitive in the face of customer's constantly changing and evolving expectations (Evans and Lindsay, 2002).

In this research, an attempt is made to examine some of the fundamental quality management models and also understand valuable case insights from the Airline Industry on service quality metrics. According to Jost and Sascha in future the right combination of strategy, structure and external environment will lead to the establishment of various LHF (Long haul flight) LCC.

# Objective of the study:

 To assess the existing service quality metrics and analyze airline industry service process  To gain insights on service quality gaps in Indian Airlines Industry

Need for quality in service industry: Application of generic tools of quality management may not be appropriate in all situations and therefore it is useful to identify the specific improvement methods to various industries. Kovach et al. (2008) examined this issue within the healthcare industry and it is proven that many organizational practices are largely controlled by Management functions. The idea of choosing airline industry to gain insights on quality was because of highest safety standards maintained in airline industry, prior planning processes of airline industry would throw some best practical benchmark quality practices for upcoming service industries.

# Literature review

**Service quality:** According to Edward deming, service quality is defined as a predictable degree of uniformity and dependability to low cost and suited to the market (Pressman, 2005). The SERVQUAL Model (Parasuraman *et al.* (1985), uses five specific criteria that recognize and evaluate the quality of service rendered-tangibles: related to physical facilities,

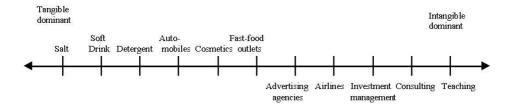


Fig. 1: Scale of market entities (Shostack, 1977)

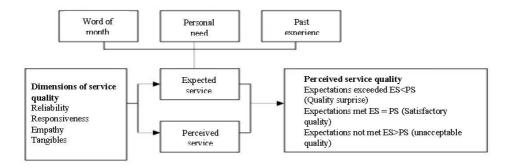


Fig. 2: Perceived service quality model (Fitzsimmons and Fitzsimmons, 2000)

equipment and personnel; Reliability: related to the ability of personnel to perform the service accurately and dependably; Responsiveness: related to the eagerness and willingness of staff to help customers and provide prompt service; Empathy: related to the caring level that is shown by staff and the amount of individualized attention given; Assurance: related to the ability to inspire trust and confidence with courtesy due to good knowledge of the job and the needs of customers.

NORDIC service quality model: The Nordic Model applies traditional concept of satisfaction/dissatisfaction in explaining service quality. Gronroos (1998, 2008) identified two service quality dimensions, namely technical quality and functional quality. Technical quality focuses on the outcome from the respective service through the interactions with the service provider in satisfying the customer's basic needs which indicates the what factor. Whereas, the functional quality relates to the process dimension and evaluates the manner of delivery of the respective service which refers to the how factor. Later, the service quality model was modified to include a third dimension, namely image (Rahman et al. 2012).

**SERVQUAL Model:** The second alternative perspective on service quality was developed by Parasuraman *et al.* (1988) and is called the American perspective (Sayed, 2013). Brady and Cronin (2001) highlighted that Parasuraman *et al.* (1988) has used terms that describe

service encounter characteristics such as reliability, responsiveness, Empathy, assurance and tangibles (Brady and Cronin, 2001; Sayed, 2013). Parasuraman et al. (1988) developed the concept of expectation and perception of service quality by creating the gaps model of service quality. They defined the concept by explaining that the gaps model focuses on the discrepancy between customer's expectation and perception (Parasuraman et al., 1985).

Shostack (1977) asserted that airline travel is intangible-dominant. It does not yield physical ownership of a tangible good. As shown in Fig. 1, airline travel is more influenced by intangibles than tangibles. The perceptions of airline service quality are quite diverse and do not seem to exactly fit any single existing quality model.

According to Urban (2010), there are five key contributors to the customer service quality gap in the model developed by Parasuraman *et al.* (1985). These are: word-of-mouth communications, individual needs, previous experiences, service product content and external communications of a marketer to its customers.

Perceived service quality model: Fitzsimmons and Fitzsimmons (2000) explains that the creation of customer satisfaction for a service can be identified through a comparison between service perceptions with service expectation (Fig. 2).

The debate on service quality dimensions is still ambiguous, but it is generally accepted that perceptions of service quality are multidimensional (Brady and Cronin, 2001) and the dimensions are industry-specific. From this significant insight, based on the assessment of the various frameworks the paper attempts to explore the industry specific metrics of airline industry, nature of work processes and expectations of the customers in forthcoming sections.

### MATERIALS AND METHODS

Research approach: The study is qualitative and descriptive in nature and most of the data collection is based on both primary and secondary sources data. To arrive at a conclusive idea of the larger picture of quality management in service industry, analyzing the existing survey data and specific successful case studies of quality management practices in Airline Industry, would give better results. Since the focus of research is to understand and interpret the quality management practices in service sector, specifically focused on airline industry, qualitative research method (Langer, 2001) of data collection and analysis is employed.

# Data collection and sampling

**Primary sources:** Through discussion with panel and experts in the field during focus group discussions and observation of customers and airline personnel in major airports.

**Secondary sources:** It includes the various reports published by the Government and Airline companies, Airline rating agencies, Airline/Tourism magazines, books and journals.

**Data collection tools:** The Research design in this study employs multiple methods like observation and In-Depth Interviews (IDI's) (specifically convergent style) with Airline industry people. Critical incident technique was employed with the airline industry people to highlight the key features of quality in airline services as well as identify customer complaints. The research tools adopted are desktop and focus group study. Field trip was done in Chennai and Bangalore for 3 to 4 weeks which included a visit to various airline companies, air travel booking offices and major airports for understanding the practical and current scenario of airline industry.

Focus group methodology was chosen for reasons like time limit, schedule of the experts and presence of experts in the company and to get understanding of the processes and issues. Forming the 10 groups was

carefully planned and sample size 5 per focus group discussion was chosen because of the nature of the study needs clarity in grasping the service needs. Sampling is Convenient sampling, since the availability and extraction of data is difficult.

The Focus group data was collected from various airline personnel, air ticketing agents, customers, airport establishments, airport cargo operators and transport service providers and those personnel associated in delivering airlines related service (Fig. 3). Formal and Informal ways were used in requesting the data from these personnel during interviews conducted.

During the visits conducted to air ticketing agent offices and airlines related service providers, it was easier to form the groups. Whereas, difficulty was faced in collecting data directly from airline industry personnel in airport booking offices, cabin crew training institutes. In the airports the food shops, taxi operators cooperated well in elucidating data related to the research questions. Only questions relevant to the study was asked and in-depth interviews were conducted in specific cases based on critical incident technique of recollecting issues related to baggage issues, flight delays, etc. The forthcoming sections discuss the valuable insights gained from the various focus group studies and observations.

**Data analysis tools used:** In addition to conversation analysis, matrix tool is used for assessing the level of consensus in focus group. Conversation analysis is a qualitative data analysis technique that offers much potential for analyzing focus group data; this form of analysis appears to be justifiable for focus groups because an underlying assumption of this technique is that it is primarily through interaction that people build social context (Heritage, 2005).

# Desktop study on service quality and airline industry metrics

# Service quality and customer loyalty in airline industry:

A number of research studies confirm the fact of customer loyalty in proportion to the quality of services received (Chen and Hu, 2013). Service quality has positive impacts on customer loyalty in the airline industry. Even airline lounges and the quality of services provided affect customer perception and loyalty towards airlines. Atmosphere and F&B service prove to be the most important dimensions affecting passengers' use of the airline lounge and service quality in a study by Han *et al.* (2012) in South Korea's Incheon International airport.

Tools of quality improvement, six sigma and service quality: Amongst the various TQM tools, Lean

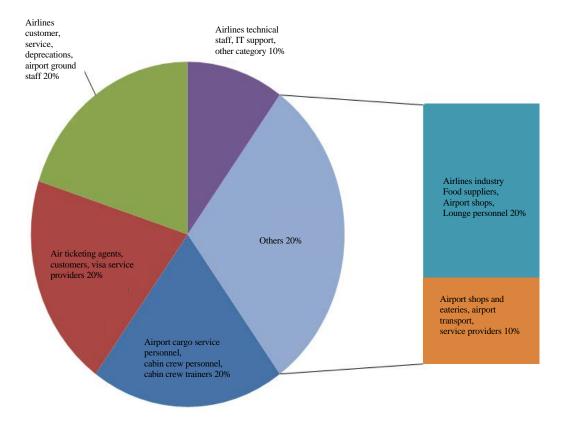


Fig. 3: Focus group data-demographics

production is one of the most helpful for improving quality by reducing wastes, waiting time, costs, etc. Tools and principles of lean thinking have spread beyond manufacturing to service organization.

Six sigma methodologies require a high level of training, compared with basic quality tools. However, according to Antony *et al.* (2007) when applied to services, most problems can be solved using the Six Sigma basic tools of problems solving, such as the process map, cause-effect diagram, statistical process control, pareto analysis, histograms, among others. Several authors report studies on the implementation of Six Sigma in banking institutions (Wang and Chen, 2010). Service-oriented businesses adopting Six Sigma business strategy will have the following benefits (Noone *et al.*, 2010) as given under:

# Six Sigma benefits in service oriented business:

- Improved cross-functional teamwork
- Transformation of organizational culture from fire-fighting mode to fire prevention mode
- Increased employee morale
- Reduced number of non-value added steps in critical business processes

- Reduced cost of poor quality (costs associated with late delivery, customer complaints, costs associated with misdirected problem solving, etc.)
- Increased awareness of various problem solving tools and techniques
- Improved service consistency through systematic reduction of variability in processes
- Effective management decisions due to reliance on data and facts
- Reduction of complaints and increase in customer satisfaction
- Improvement of service delivery and increase of process capability

According to Chartered Quality Institute (CQI), there are a number of approaches to take towards adopting the TQM philosophy. The teachings of Deming, Juran, Taguchi, Ishikawa, Imai, Oakland, etc. can all help an organization realign itself and embrace the TQM philosophy. However, there is no single methodology, only a bundle of tools and techniques.

Airline service planning and flight assignment: Clausen et al. (2010) discusses about the importance of

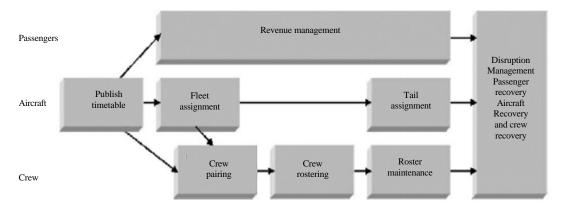


Fig. 4: Air service planning

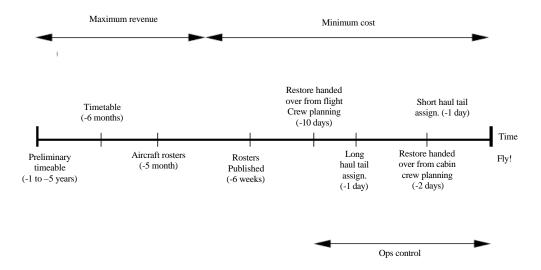


Fig. 5: Timeline of daily operations of an airline

aircraft and crew scheduling; this is in turn viewed as a proactive measure and is a natural complement to disruption management. The three main elements used to provide an air service (Fig. 4) are crew, aircraft and passengers and they must be planned and monitored to obtain operational efficiency. The planning of flight and cabin crew is slightly different and the complete process is illustrated in Fig. 5 (Maenhout and Vanhoucke, 2010).

Crew scheduling is the process of assigning all necessary crew members in such a way that the airline is able to operate all its flights and constructing a roster line (lines of work for 14 days or 1 month) for each employee minimizing the corresponding overall cost for personnel.

**Quality metrics and ratings in airline industry:** The Airline Quality Rating (AQR) was developed as an

objective method for assessing airline quality on combined multiple performance criteria. The airline Quality rating is a weighted average of multiple elements (Table 1) important to consumers when judging the quality of airline services. In air transportation research, metrics for system-wide service quality include Available Seat Miles (ASM), Available Plane Miles (APM) and Revenue Passenger Miles (RPM); Flight frequency (Ghobrial and Kanafani, 1995). The formula for calculating the AQR score is:

$$AQR = (+8.63 \times OT) + (-8.03 \times DB) + (-7.92 \times MB) - (-7.17 \times CC)/(8.63 + 8.03 + 7.92 + 7.17)$$

In a recent study, on comparative analysis of airlines by Bahreini *et al.* (2013) in Iran using factor analysis, it determines seven important Airline service quality factors including physical features (Staff appearance, sanitary

Table 1: Airline Quality Rating Criteria (AQR)

Airline quality rating criteria	Weight	Impact	
OT-On-Time	8.63	+(Positive)	
DB-Denied Boarding	8.03	-(Negative)	
MB-Mishandled Baggage	7.92	-(Negative)	
CC-Customer Complaints	7.17	-(Negative)	

Table 2: Top 5 airlines in india and quality metrics (Jetline Marvel (Marvel, 2015))

	Indigo	Jet	Air	Spice	Go
Airline/Airline metric	airlines	airways	India	Jet	Air
Market share in India (%)	38.50	19.80	16.4	12.30	8.20
Fleet size	97.00	116.00	108.0	34.00	19.00
Passenger load (%)	76.80	80.80	79.3	92.10	75.60
Cancellation rate (%)	0.10	0.96	1.2	0.70	0.44
(Complaints/10,000 passenger)	0.70	1.40	1.7	1.40	1.30
On time performance	83.25	86.38	77.4	76.75	84.20

services), kettering (food quality, menu), pre-flight services (easy boarding pass), ability to respond (flight delays, cancellations), reliability (easy ticket purchases), passenger in-flight service (empathy and virtual passenger services (web based booking, website language customization).

Airline ratings: In the domestic segment in India the various metrics and parameters of quality assessment of top 5 airlines, according to Marvel (2015) report is summarized in Table 2 for understanding of expected and achieved quality metrics.

Skytrax World Airline Rating and airport rating, introduced in 1999 is the leading international Airline and airport rating system classifying airlines by the quality of front-line product and staff service standards. The 5-star airline rating recognizes the highest standards of Airport and onboard product provided by an airline to customers. In the 2015, World Airline Awards, EVA Air from Taiwan was ranked cleanest airline in the world, based on passengers assessing cleanliness standards of seat areas, tables, carpets, cabin panels and aircraft washrooms. The 5-star airport rating recognizes those airports providing excellent facilities for customers which combine with high quality airport staff service.

# Specific quality factors from AIR ASIA success story:

Jeddi et al. (2014) Illustrate the key success factors that have resulted in the superiority of AirAsia (AA) airline among other LCCs airlines in the competitive market of SE Asia. Utilization of Information technology at Air Asia is clearly visible at all management levels and functional areas. IT enabled product and marketing ideas, effective crew scheduling, minimizing customer complaints by providing effective solutions, Effective implementation of Customer retention strategies by using loyalty programs,

Table 3: Preferred airline for overseas travel

Travel purpose	Preferred overseas airline
Family visit, tour	Air Asia, Spice Jet, Air India, Tiger air, Gulf air
Business	Lufthansa, British airways, Emirates, Malaysia
	airlines, Srilankan airlines, Air Mauritius, Etihad,
	air France
Work	Qatar airways, Oman air, Saudi airlines, Singapore
	airlines

waste reduction, cost reduction, financial reporting accuracy, etc. have all contributed to the success story of Air Asia.

The Air Asia family has extended its business model to most of the countries in South East Asia under the same brand umbrella with minor variation. To overcome the LCC barriers of regulatory environment and compliance issues of each country, each Air Asia affiliate is headed by an independent CEO with independent targets for respective operations but still following the same customer centric values and work ethics and adapting to cultural needs of individual routes.

# Focus group study on airline service quality in India: The focus group study conducted on Airline industry and experts, started with very basic queries on gathering available data from the target population and gradually increased the depth of questioning for extracting rich insights on Airline service expectations.

Preferred overseas travel airline: The basic question on preferred airlines for overseas travel from India revealed several important aspects on service quality, especially the varied choices for different destinations and purpose of travel. For Long distance overseas travel, customers don't prefer flight changes as mostly these travel requirements are for family visits, business class and first time work related travelers. Some of the most preferred choices of overseas travel by purpose are given in Table 3.

### Recent trends in tourist destinations and its enablers:

With the demographic change in increased working population in India, there has been and a dramatic proportionate increase in International tours. Major weekly attractions for the young working population in India include Thailand, Singapore, Malaysia, Vietnam, Hong Kong and Indonesia in South East Asian Region and Maldives and Colombo in the South. Also some of the shopping and event destinations include Dubai, Muscat and other Gulf countries. The major motivating factor is low prices, ease of booking and simplified visa processing (Air Asia and Spice Jet). The Indian traveler also utilizes domestic airlines for work and business.

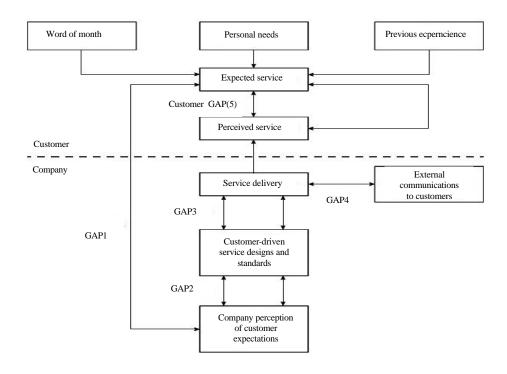


Fig. 6: Gap model of service quality (Parasuraman et al., 1985)

Table 5: Airline service quality expectations, satisfiers and dissatisfiers

Ranks	Airline service quality expectations	Airline service quality-customer satisfiers	Airline service quality-major complaints and dissatisfiers
1	On time performance (explicit)	Airline website quality (information,	Unwanted baggage delay (due to airport inefficiency)
		Ease of use)	
2	Value for money (explicit)	Customer care/toll free support	Delayed flight check in process (delays, no guidance)
3	In-flight entertainment (implicit)	Cabin crew quality (attitude, politeness)	Seat comfort/leg room
4	In-flight Menu (Implicit)	Flight take off and landing quality	Poor in-flight maintenance (cleanliness)
5	Safety (implicit)	Cabin crew appearance	Flight cancellation, rescheduling
6	Amenities (pick up, lounge)	Overall experience	Poor over the counter support in airports
	(explicit)		

Airline service quality expectations, satisfiers and dissatisfiers: From the Focus group study with airline industry people, experts, air travelers and observation of airline service facilities in major airports and other online avenues, the paper summarizes some of the major insights on service quality in airlines industry in Table 5. Air India ranked as one of the worst in customer preference, especially major apprehensions and customer complaints on safety aspects. Whereas, Indigo airlines was reported as one of the most preferred by customers, followed by go air in the domestic segment. From the in-depth interviews and critical incident reports the major expectations and service quality factors helps to identify the service quality gaps in airline industry with specific reference to India. On time performance is ranked the most priority in customer expectations and Airline website quality is found to be one of the major customer satisfaction factors.

Gaps in service quality of airline industry; mapping with SERVQUAL Model: Those variables that describe the level of service quality and its gaps according to SERVQUAL Model are depicted in Fig. 6. (Parasuraman et al., 1985). From the focus group study the study attempts to map the various gaps of SERVQUAL Model and possible solutions, for simpler understanding and serve as a table of reference for experts and airline industry people to serve customers better.

Gap 1: This gap between expected service and company service perception includes the gaps in aspects like on time performance, crew appearance, employee empathy, food quality, airport lounge and website quality and air ticket booking facilities online with ease of use. Also the recent trend towards LCCs does not mean, the airlines can compromise on basic expectations. Almost most of industry experts feel that customer support especially voice support and in person support during times of distress, flight rescheduling, delays, missing luggage is not swift or totally not satisfactory. The airlines management must understand the actual expectation, is that customers want a fulfilling solution for each query and not a helpline number with poor response and a website with FAQs on solving issues by customers themselves.

Gap 2: Most LCCs have wrongly specified customer expectations or have not developed a system that will deliver the needed service. For example in almost all LCCs there is no free meal, instead it has to be bought at higher price inside the flight. The LCC customer can be provided with some basic amenities like free drinking water and quick bites at low prices which can lead to customer delight. Even the basic entertainment services like music are not properly maintained in most LCCs or missing which can add value and boost customer satisfaction.

Similarly, the public transportation connectivity is lacking in some of the new travel destinations in LCC routes. The LCC operators can network and collaborate with low cost private players to operate from new airport terminals and also liaison with public transport department of respective countries for better service.

Gap 3: This gap deals with actual service delivery issues by the employees due to poor training or other issues. Whether it is a domestic or International LCC, the crew has to comprise of personnel being multilingual and from diverse cultural backgrounds. The domestic LCC cabin crews lack cross cultural sensitivity in comparison with most of the international LCC crews. The impression factors of politeness and smile is lacking in most of the domestic cabin crews. Depending on the frequently travelling passenger data, people density in select routes and their demographics, the airlines can attempt to introduce smart devices for language translation, multilingual name and sign boards inside the aircraft and their respective airport lounges.

The service delivery procedures and guidelines are not followed fully into practice by employees. This could be a result of low quality Training and developmental strategies for the Communication skills of the employees. The employees may need further training in understanding service concepts like listening to customers.

Gap 4: With increased traffic and customer density in LCC routes, faster check in time and luggage delivery time is almost impossible in domestic LCCs compared to international LCCs. The lacuna is probably due to poor coordination amongst the airline personnel and airport personnel (customs clearance, shortage in airport luggage handling personnel/poor luggage automation and other factors). Amidst the increase in leisure travelers, work and family related travel has increased in these LCC routes. Though provisions like self check in is provided, most of the LCC travelers carry luggage, since they buy back home gifts and home needs.

Gap 5: Since, the gap 5 is found to be the overall effect of the above gaps, the customer perceives the airline service as satisfactory or not satisfactory, if at least some of the basic requirements are fulfilled. Successful LCCs score better by giving attractive prices. But some of the basic elements like cleanliness and safety cannot be compromised. There is a huge gap between the airport authorities and airline industries in providing and maintaining clean and safe amenities inside the airport especially domestic terminals. There is a long way to go to fill this gap, where in the airlines operating out of these terminals can have a healthy dialogue with the airport infrastructure authorities for providing better amenities (Appendix A and B).

# RESULTS AND DISCUSSION

From the two staged study conducted, some of the major findings of the research paper is summarized in forthcoming section. Customer loyalty and retention strategies is a major area to be focused for upcoming airline companies, as the past studies significantly reflect better financial performance in such companies (Air Asia) and also service quality is found to directly impact customer loyalty. The Airline ratings and focus group study indicate some of the priority areas which includes, on time arrival performance, crew appearance, onboard flight services (food quality), cleanliness, airport lounge, ease of taking boarding pass, faster baggage collection, etc. as the major indicators of service quality in airline industry. The top domestic airline service providers in India like Indigo, Go Air, Jet Airways fair better on these service quality indicators.

Also there seems to be a problem in addressing the multilingual and multicultural sensitivity needs of airline travellers when the LCCs operate in different geographies, regions especially India. Adoption of common language

like English and the local language together or using multilingual translation means is yet to go a long way for making passenger announcements, information display, sign boards and is a major grey area in service design.

Response mechanism of LCCs especially is very poor in event of flight delays, cancellation, disaster (floods, terror threats) which may be either due to poor training, poor service design or lean employee structures.

Shift towards LCCs alliances and partnerships: In contrast to Full Service Carriers (FSC), the product of (LCCs is mostly unbundled, both to enable lowest ticket prices for promotional use and to ensure additional non-ticket revenues (Gillen and Morrison, 2003; O'Connell and Williams, 2005). Manzano (2010) found that a passenger flying with a low-cost carrier is more likely to use public transport which indicates that LCC users are most likely to be non-premium customers. Major airlines are selling increasing numbers of interline itineraries in which flights operated by two or more airlines. Casanueva et al. (2014) shows that mobilization of the destinations of the partners through code share alliances has a positive influence on the performance of airlines. Wang (2014) in their study on International airline alliances found that for highly involved passengers, the effect of airline alliances on brand equity and brand preference on purchase intention is significant.

Major solutions: Aviation infrastructure investment and economies of density: The supply side solution to flight delay is to add more capacity to the existing aviation infrastructure, either through deploying new technologies or building new physical infrastructure. Such an approach of implementing latest technology based solution in US by the Federal Aviation Authority includes transforming all ground based systems into satellite-based system and physical infrastructure improvements (reconstruction and extension of runways). Economies of density refer to airline's declining average cost from denser traffic within a given network. The existence of the economies of density has been empirically identified at both airline and route levels (Brueckner et al., 2013).

# CONCLUSION

The research paper on Airline service quality has best addressed the research questions framed. The initial literature review throws and deliberates on the various service quality frameworks and need for adoption of industry specific framework and quality metrics. The rationale for choosing airline industry is best justified and the desktop study serves as a starting point and focuses on matters of service quality in Airline industry. Customer focus, retention and loyalty are directly dependent on Service Quality. The recent success stories of Spicejet and AirAsia best reflect the importance of Customer retention strategies. Information technology is best utilized in these companies in service design, information sharing, customer profiling, customer support, cost reduction and cross functional support especially in the LCC segment. The first level desktop study throws light on service quality dimensions from other industries like manufacturing and banking. Also the use of six sigma, Lean methodology and TQM tools is advocated for solving the airline service quality issues and reducing the service quality gaps identified in the research paper.

The focus group study enables to provide and identify specific gaps of service quality metrics and the SERVQUAL Model is utilized to map these gaps. Amongst the various gaps, Gaps 1-3 predominate the areas to be addressed which includes gap between expected service and company perception, actual service design and company perception, service design and actual delivery.

Gap 1 issues are mainly due to key metrics like on time arrival performance (explicit), onboard services, food quality (implicit), crew appearance which can be addressed by proper planning and redesign of the service delivery process at the top management level in order to enhance customer satisfaction.

Gap 2 needs to be addressed with use of more information technology tools in service design process to meet the customer expectations. Also application of LEAN tools, six sigma can be applied and assessed in select routes to find out areas of improvement. This enables waste reduction, better cross functional performance, lesser customer complaints, better customer profiling.

Gap 3 is related to service delivery and can be addressed using TQM tools which identify issues (Root cause analysis), enhance employee morale; audit of Service delivery process. And also employee training is one major area which enables to deliver exactly the service expected.

Also, there seems to be a lot of poor coordination issues between airline operations and that of airport infrastructure operations. The service quality can be enhanced when these two areas are better integrated at the service design level itself. Also the airport related amenities like better lounges; better connectivity to public transport seems to impact the service quality perception of Airline services. With increased utilization of LCC services, customers are in great demand for allied service like low cost staying and transport options from in and around the airport.

It is crucial in the technologically advanced industry to differentiate e-services from traditional services, creating loyal customers and sustaining market-share and profitability (Kayabasi *et al.*, 2013; Wu, 2011). Customers are placed as co-creators of their own value (Vega-Vazquez *et al.*, 2013; Gronroos, 2008, Yoshida *et al.*, 2013). This new development in service quality which emphasizes customer's participation in the experience of the service is indispensable for a particular value creation and for the strategic role of any business.

### RECOMMENDATIONS

Pyrialakou et al. (2012) in their study find that LCC are based on seasonal demand and highly impact

the airport operational efficiency. Also there is a lack of in-depth analysis on airport efficiencies in order to accommodate the newly evolved LCC Models and increased air traffic due to LCC operations. Also, there are still unexplored areas and application of technology solutions for better customers experience in LCC operations (Low cost technology based flight entertainment services, multilingual customer service).

Many past research papers discuss about the transferability of LCC models and its features to Long haul and full service carriers (Francis *et al.*, 2007). But still there is a long way to go find out hybrid solutions in giving best priced airline service to the end customers. Most of the studies focus on cost, pricing and success factors of new airline business models and there is huge gap in studies focused on employee welfare, morale and Human resource management focused issues in airline industry.

#### APPENDIX A

# Open ended questionnaire for air line industry personnel and industry experts

- Which Airlines are mostly preferred for booking for overseas travel? Why?
- What are the ideal tourist destination flying airlines?
- What are the repeatedly visited tourist destinations?
- Which airlines and LCCs are used for travelling to most popular and frequently visited tourist destinations? Why?
- Which category of visitors has increased use of Airline ticket booking in recent years? Business/Tourist/work?
- What is the general expectation of customer service of air travelers? Implicit/explicit?
- Mention some of the major satisfying comments and stories of customers from your experience
- What are the major customer's complaints in air travel in past 5 year?
- As an airline industry expert or airline industry person suggest your valuable insights on airline of your choice on their service uniqueness and quality that impressed you?
- · Other areas of improvement in airline service quality?

### APPENDIX B

	Focus	Focus	Focus	Focus	Focus	Focus
Service quality expectations	group 1	group 2	group 3	group 4-8	group 9	group 10
Preferred overseas travel airline						
Preferred tourist LCCs						
Recent trends in tourist destinations						
Most preferred tourist airlines and LCCs						
Shift in traveler's						
trend-business/tourist/work						
Implicit and explicit expectations of air travel						
service quality						
Major satisfiers and service quality factors in						
airline industry						
Service quality issues and major customer						
complaints in airline industry						
Unique service quality factors						
of airline industry						
Other areas of service quality improvement						

### REFERENCES

- Antony, J., F.J. Antony, M. Kumar and B.R. Cho, 2007. Six sigma in service organisations: Benefits, challenges and difficulties, common myths, empirical observations and success factors. Intl. J. Qual. Reliab. Manage., 24: 294-311.
- Bahreini, K., A.S.S. Ali, N. Azad and M. Izadi, 2013. Measuring service quality and a comparative analysis in airline industry. Manage. Sci. Lett., 3: 275-280.
- Brady, M.K. and J.J. Cronin Jr., 2001. Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. J. Market., 65: 34-49.
- Brueckner, J.K., D. Lee and E.S. Singer, 2013. Airline competition and domestic US airfares: A comprehensive reappraisal. Econ. Transp., 2: 1-17.
- Casanueva, C., A. Gallego, I. Castro and M. Sancho, 2014. Airline alliances: Mobilizing network resources. Tourism Manage., 44: 88-98.
- Chen, P.T. and H.H.S. Hu, 2013. The mediating role of relational benefit between service quality and customer loyalty in airline industry. Total Qual. Manage. Bus. Excellence, 24: 1084-1095.
- Clausen, J., A. Larsen, J. Larsen and N.J. Rezanova, 2010. Disruption management in the airline industry-concepts, models and methods. Comput. Oper. Res., 37: 809-821.
- Evans, J.R. and W.M. Lindsay, 2002. The Management and Control of Quality. 5th Edn., South Western Publishing, Ohio, USA., ISBN-13: 9780324066807, Pages: 838.
- Fitzsimmons, J.A. and M.J. Fitzsimmons, 2000. Service Management: Operations, Strategy and Information Technology. McGraw-Hill, Boston, Pages: 605.
- Francis, G., N. Dennis, S. Ison and I. Humphreys, 2007. The transferability of the low-cost model to long-haul airline operations. Tourism Manage., 28: 391-398.
- Ghobrial, A. and A. Kanafani, 1995. Future of airline hubbed networks: Some policy implications. J. Transport. Eng., 121: 124-134.
- Gillen, D. and W. Morrison, 2003. Bundling, integration and the delivered price of air travel: Are low cost carriers full service competitors?. J. Air Transp. Manage., 9: 15-23.
- Gronroos, C., 1998. Marketing services: The case of a missing product. J. Bus. Ind. Market., 13: 322-338.
- Gronroos, C., 2008. Service logic revisited: Who creates value? And who co-creates? Eur. Bus. Rev., 20: 298-314.
- Han, S., S.S. Ham, I. Yang and S. Baek, 2012. Passengers' perceptions of airline lounges: Importance of attributes that determine usage and service quality measurement. Tourism Manage., 33: 1103-1111.

- Heritage, J., 2005. Conversation analysis and institutional talk. Handb. Lang. Social Interact., 2005: 103-147.
- Jeddi, A.R., N.G. Renani, A. Khademi, V. Shokri and M.Y. Noordin, 2014. Low-Cost Strategy Factors in Airline Industry: The AirAsia Case. In: Advanced Materials Research, Kurniawan, D. (Ed.). Trans Tech Publications, Switzerland, pp: 652-657.
- Kayabasi, A., B. Celik and A. Buyukarslan, 2013. The analysis of the relationship among perceived electronic service quality, total service quality and total satisfaction in banking sector. Int. J. Human Sci., 10: 304-325.
- Kovach, J., L.D.L. Torre and D. Walker, 2008. Continuous improvement efforts in healthcare: A case study exploring the motivation, involvement and support necessary for success. Intl. J. Six Sigma Competitive Advantage, 4: 254-269.
- Langer, J., 2001. The Mirrored Window: Focus Groups from a Moderator's Point of View. Paramount Market Publishing, Ithaca, USA.,.
- Maenhout, B. and M. Vanhoucke, 2010. A hybrid scatter search heuristic for personalized crew rostering in the airline industry. Eur. J. Operat. Res., 206: 155-167.
- Manzano, J.I.C., 2010. The city-airport connection in the low-cost carrier era: Implications for urban transport planning. J. Air Transp. Manage., 16: 295-298.
- Noone, B.M., K. Namasivayam and H.S. Tomlinson, 2010. Examining the application of six sigma in the service exchange. Managing Serv. Qual. Intl. J., 20: 273-293.
- O'Connell, J.F. and G. Williams, 2005. Passengers' perceptions of low cost airlines and full service carriers: A case study involving Ryanair, Aer Lingus, Air Asia and Malaysia Airlines. J. Air Transport Manage., 11: 259-272.
- Parasuraman, A., V.A. Zeithaml and L.L. Berry, 1985. A conceptual model of service quality and its implications for future research. J. Market., 49: 41-50.
- Parasuraman, A., V.A. Zeithaml and L.L. Berry, 1988. Servqual: A multiple item scale for measuring consumer perceptions of service quality. J. Retailing, 64: 12-40.
- Pressman, R.S., 2005. Software Engineering a Practitioners Approach. 6th Edn., Mcgraw Hill Book Co., New York, pp. 258-259.
- Pyrialakou, V.D., M.G. Karlaftis and P.G. Michaelides, 2012. Assessing operational efficiency of airports with high levels of low-cost carrier traffic. J. Air Transp. Manage., 25: 33-36.
- Rahman, M.S., A.H. Khan and M.M. Haque, 2012. A conceptual study on the relationship between service quality towards customer satisfaction: Servqual and gronroos's service quality model perspective. Asian Social Sci., 8: 201-210.

- Sayed, N., 2013. Ratify, reject or revise: Balanced scorecard and universities. Int. J. Educ. Manage., 27: 203-220.
- Shostack, G.L., 1977. Breaking free from product marketing. J. Market., 41: 73-80.
- Urban, W., 2010. Customers' experiences as a factor affecting perceived service quality. Econ. Manage., 15: 820-826.
- Vega-Vazquez, M., M.A. Revilla-Camacho and F.J. Cossio-Silva, 2013. The value co-creation process as a determinant of customer satisfaction. Manage. Decis., 51: 1945-1953.
- Wang, F.K. and K.S. Chen, 2010. Applying lean six sigma and triz methodology in banking services. Total Qual. Manage. Bus. Excellence, 21: 301-315.
- Wang, S.W., 2014. Do global airline alliances influence the passenger's purchase decision?. J. Air Transp. Manage., 37: 53-59.
- Wu, C.H.J., 2011. A re-examination of the antecedents and impact of customer participation in service. Serv. Ind. J., 31: 863-876.
- Yoshida, M., J.D. James and J.J. Cronin, 2013. Value creation: Assessing the relationships between quality, consumption value and behavioural intentions at sporting events. Int. J. Sports Market. Sponsorship, 14: 126-148.