

# Service Quality and Customer Satisfaction in Low Cost Airlines: A Critical Review of Extant Literature

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## Abstract

The purpose of the paper is to comprehensively review the extant literature on the level of satisfaction of passengers in India from in-flight quality of services provided – for passengers travelling with different purpose – Business or Leisure in the low cost carriers and the passengers' re-flying intention with the same airlines. A total of 180 research papers related to the study were accessed and only 84 papers were found to be relevant. Most of the studies conducted on airlines services quality are focused on the North American, European and South-east Asian countries, but there are limited studies on the emerging markets of the Asian region like India. SERVQUAL, SERVPERF and AIRQUAL have been used extensively as relevant tools for service quality measurement. The review of existing literature also suggests that statistical techniques mostly used for analysis included Structural Equation Modeling (SEM) and Regression Analysis.

**Keywords:** Low cost airlines, service quality, customer satisfaction, customer loyalty

## Introduction

The history of low cost carrier (LCC) in India goes back to only 16 years when Air Deccan started its operations in 2003 and since then, there have been changes in the dynamics of the industry characterized by the entry of new airlines, exit of certain airlines and also mergers and acquisitions in this period. The year 2007 was a year of consolidation with Jet Airways acquiring Sahara Airlines and Kingfisher Airlines acquiring Air Deccan. Kingfisher, however, got bankrupt in the year 2012 and there have been no takers for the assets of the beleaguered company.

Despite the mergers in the initial years of the advent of LCCs, the airlines sector in India is less concentrated as there has been continuous entry of new players. In the year 2005, five airlines that included Kingfisher, SpiceJet, IndiGo, GoAir and Paramount started their operations in the LCCs segment. Air Asia India, a joint venture of Air Asia Malaysia and Tata, entered the low cost segment in 2014 and Tata-Singapore Airlines venture Vistara made its entry in the Full Service Carriers (FSCs) segment in the year 2015.

The dynamism of the Indian domestic airlines could also be seen from the fact that both full service and low cost carriers from India are expanding in the international markets to stimulate revenues and to overcome stagnant and competitive domestic markets and as a result, the share of domestic airlines in international traffic increased to 39.6 percent in March 2018 quarter compared to 38.5 percent in March 2017 quarter (Directorate General of Civil Aviation, 2017-18). IndiGo operates about 15 percent of its capacity in international markets and by the end of 2019, it will have a reach of 24 destinations. Currently, SpiceJet operates an average of 402 flights daily covering 51 destinations, including seven international ones. According to the estimates from CAPA (Centre for Asia Pacific Aviation), Indian low cost carriers will develop additional capacity for 2 million travellers annually to cities such as New York and Sydney (Live Mint, 2018). In order to generate revenues from different sources, the Indian domestic airlines are also actively engaged in in-flight sales that include food and beverage and consumer goods like watches, eyewear, bags and other gift items.

The airlines industry has a major role in the services sector of any economy and contributes significantly to the growth of the services sector. Globally, the revenues from the airlines industry is an estimated USD 854 billion in 2018, growth of 8.6% over 2017, according to International Air Transport Association (IATA). Accounting for 3.4% of global GDP, the airlines industry is a highly competitive industry, characterized by volatile pricing of fuels, high volume and also low margins (Tsafarakis, Kokotas&Pantouvakis, 2017). Airlines majorly focus on pricing and service quality to remain competitive and the service quality provided can impact the carriers' competitive advantage (Ozment&Morash, 1994).

Many studies are focused on management of service quality in the services sector, but there are limited studies on the quality of services in the aviation sector. Further, most studies conducted on airlines services quality are focused on the North American and European markets (Gursoy, Chen & Kim 2005; Tiernan, Rhoades & Waguespack 2008), but there are limited studies on the emerging markets of the Asian region (Suki, 2014) and very limited studies on the Indian market, as presented in Table 1 and Table 2. The Asian airlines market holds immense significance with the emergence of low cost airlines and the huge growth of air passenger traffic.

The objective of the research paper is to (i) present the advent and dynamism of the Indian low cost airlines (ii) review existing studies and classify the service quality dimensions, measurement model and statistical method of analysis (iii) assess the evaluation criteria used in airlines

service quality in existing studies and (iv) propose a conceptual model for measuring service quality in Indian LCCs.

### Literature Review

The LCC model was pioneered by Southwest Airlines in the USA and was followed by a number of North American airlines such as AirTran, WestJet and JetBlue and in Europe by Ryanair and easyJet. (Graham & Vowles, 2006). The LCC business model developed by Southwest Airlines has been replicated around the world with a number of common features such as minimized inflight services, high capacity utilization, flexible staffing structure and point to point (Ching&Waring, 2010).

The Indian civil airlines sector, monopolized by the government owned Indian Airlines used to be the mode of transportation for the elite class. However, with deregulation, ease of restrictions and lesser cost of operations, the sector witnessed entry of many private players. Ease in FDI regulations led to influx of many scheduled air carriers and thereafter, a spate of mergers and acquisitions followed with Air Deccan-Kingfisher, Air India-India Airlines and Jet Airways-Air Sahara mergers (Amana, 2015).

The Indian low cost airlines are competing primarily on pricing, but the scheduled airlines also known as the full service carriers (Jet Airways, Vistara, Air India) pursue a differential strategy with focus on frequent flier programmes (FFPs), major meals on-board and hub and spoke networks. Many FSCs in India opted for stripping away complimentary or free in-flight meals in short routes to cope with the growing fuel cost (Bansal, S. C., Khan, M. N., & Dutt, V. R., 2008) and also these FSCs have started competing with low cost carriers on pricing as the competition for market share has intensified. This trend is being witnessed in Europe as well as USA, where full service carriers are competing directly with low cost airlines in the short haul routes. However, in long-haul routes, carriers like Aer Lingus and British Airways in Europe and United and Delta in the USA have adopted service differentiation strategy (Rhoades & Waguespack, 2008). Low cost airlines emerged with the concept of providing airlines travel at the low fares with no frills and limited facilities (Kim & Chan, 2014). The low fare charged by the airlines encourages air travel but to cover their operational costs and breakeven, the airlines need high passenger load factor (Jiang, 2007). And in order to bring in more passengers on board an intensely competitive market, the airlines need to provide quality of service that could result in increased customer satisfaction (Hung, 2003).

### Airlines Industry and Service Quality

Service quality has become an important and pertinent corporate strategy for decision makers in the services sector, be it the healthcare sector or the airlines sector, as a result of the intense competition for the share of the market. In the marketing literature, there is a general consensus that service quality is a critical success factor in this era of intense competitive environment (Tsoukatos & Mastrogianni, 2010). And in order to differentiate themselves, service quality is an important tool for organization operating in the service industry (Olorunniwo 2006; Ekiz 2006). And in a very dynamic industry like airlines, there is a need for continuous evaluation of service quality (Ali, Dey & Filieri, 2015).

In the airlines industry, with deregulation and intense competition, it is pertinent for the service providers to improve the quality of services to satisfy their customer (Nadiri, 2008). The service quality attributes which are considered important by airlines passengers include both tangible and intangibles (Gourdin, 1988; Elliott & Roach, 1993). The intangibles include interaction with airlines cabin crew and overall service performance and the tangibles include the comfort of seats, quality of food and in-flight entertainment among others (Rust, Zahorik & Keiningham, 1996).

Further, it is of importance to the academicians and researcher to understand and comprehend the dynamics of the relationship between the quality of services offered, the level of customer satisfaction and the behavioral intentions or loyalty of the buyers (passengers). For the stakeholders, what is important is how the customers (passengers) perceive the quality of services that are offered by the airlines and based on that perception, did it result in customer satisfaction and finally if the customer is satisfied, will he or she take the services of the same airlines for future air travel? (Murti, Deshpande & Srivastava, 2013).

### Service Quality, Satisfaction and Loyalty

The findings of the studies by Cronin & Taylor (1992), Chandrashekar, Rotte, Tax & Grewal (2007) and Curry & Gao (2013) suggest that improvement in the quality of services result in increase in satisfaction which in turn directly leads to favorable outcomes and ultimately increased loyalty. The findings of Curry & Gao (2013) on the low cost carriers operating in Dublin (Ireland) and Manchester (UK) suggest that satisfaction is more influential than quality of services in retaining customers for future travel. Research also suggests that management of low cost airlines has been successful in modifying the customer behavior to accept fewer privileges at lower

prices. However, airlines must strive to improve customer satisfaction. Most of the studies have indicated customer satisfaction as antecedent to customer loyalty as satisfied customers are more loyal to service providers than other customers, in the airlines industry as well as other industries (Saha & Thengi, 2009).

Studies have indicated a positive relationship between service quality and customer satisfaction as well as tendency of repeat purchases (Chen & Hsieh, 2007). However, the effect of service quality on customer loyalty could also be a direct one with consistent and significant relationships between service quality and customer loyalty (Ostrowski, O'Brien & Gordon, 1993). Airlines can improve satisfaction of passengers by improving the quality of services that include training employees to be courteous to the passengers, addressing their issues and responsive to their requirements.

Low cost airlines must endeavor to retain its customer base and improving upon the passenger's loyalty to the airlines. If the passengers are not loyal to the airlines, they will easily switch over to other low cost airlines or full service carriers. The low cost airlines must work on improving their loyalty generation strategies such that passengers become less price sensitive. And in order to effectively boost passenger loyalty, airlines should improve upon the in-flight core product performances (cleanness, ambience, food and beverage and in-flight entertainment) and encounter service performance (mutual understanding, meeting customer expectations, appearance of service providers) as suggested in a Cross-National (China/Korea) Study of Travelers Using Low-Cost Carriers (Han, Hyun & Kim, 2014). A study of low cost carriers in South Korea has also pointed out that in-flight physical surroundings and ambient conditions like air quality, temperature, odour, and noise has a significant impact on satisfaction of passengers (Hana & Hwangb, 2014).

In another study that compared the level of satisfaction of passengers who travelled in three full service carriers – Air India, Jet Airways and Sahara Airlines, it was found that the purpose of travel and 'length of usage of airlines' significantly affected the level of customer satisfaction and future usage (purchase intentions). Also, the study that measured service quality on 21 variables, provided recommendations as to which areas the particular airlines should focus on to improve the quality of services. For example, while Jet and Sahara performed strongly in the areas of friendly staff and on-time flights, Indian Airlines was advised to focus more on people related areas to improve on customer satisfaction (Baisya & Sarkar, 2004).

### Phases of Airline Travel

The three main phases of airline traveller include Check-in and boarding (Pre-Flight Phase), in-flight phase and post-flight or leaving the airport (Cunningham & Young, 2002; Kiatcharoenpol&Laosirihongthong, 2006; Jiang 2013). The experience of passengers begins with the pre-flight phase when the passenger enters the airport. The infrastructure of the airport that includes the lounge, the retail outlets (food and non-food), the washrooms, the signage and all kind of amenities that engages the passengers during the stay becomes relevant. A passenger spends a minimum of one hour in the airport and the amenities available in the airport that engages the passenger during the stay leads to the level of satisfaction (Fodness& Murray, 2017). The quality of pre-flight, in-flight and post-flight services has a statistically significant effect on passenger satisfaction.

Most of the research studies carried out on airlines service quality includes all the typical service items offered during pre-flight, in-flight and post-flight phases. This research is focused on the in-flight service quality and aims to contribute to the contemporary understanding of specific in-flight dimensions that impact passenger's satisfaction and loyalty with the services, followed by recommendation.

### Pricing and Brand Image

Previous studies indicate that pricing of ticket along with service quality are the major triggers in choosing airlines (Balcombe, Fraser & Harris, 2009). The idea of low cost carriers emerged from low prices with high fares negatively impact passenger's overall experience (Bowen & Headley, 2007; Bowen et al., 1991; Park et al., 2004, 2009). Many airline companies have focused on service quality on the basis of consumers' perceptions of flight schedule, on-time flights and price (Headley & Bowen 1997; Tiernan et al. 2008; Gnanlet&Yayla-Kullu 2013). However, many airlines are aiming to provide high level of service quality and build an image and brand that can replace the reputation of LCCs as low fare benefit (Holtbrugge, Wilson & Berg, 2006).

The image of the airlines influences the passengers' repurchase intentions and resultant recommendations to friends and business associates (Park et al, 2004). Chen and Tseng (2010) went to the extent of referring brand image as the strongest driver of airlines loyalty. In the long-term airlines should develop a service-oriented corporate culture to develop customer loyalty (Ostrowski, O'Brien & Gordon, 1993).

Many research studies have considered airline pricing or fares as construct for satisfaction and loyalty to the airlines as low cost carriers primarily compete on the basis of pricing. Also, the brand image, a construct of AIRQUAL model, influences the decision making of airline passengers. The dimensions of airline pricing and image have been considered for measuring customer satisfaction and loyalty to the airlines.

### Methodology

A total of 180 research papers were reviewed and among them, 74 papers were related to service quality and customer satisfaction in the context of low cost carriers. The other research papers were related to services industry (e.g. hospital industry, hospitality and retail sectors) but not to airline industry. The research papers were accessed using journal databases like ScienceDirect, Emerald, Sage Publications, Taylor & Francis and Elsevier. The keywords that were used to access the reports included low cost carriers, airlines service quality and Indian low cost airlines. The 74 relevant papers were comprehensively reviewed to identify the country of study, the year of study, selection of constructs and variables, the measurement models employed for determining service quality and also the statistical tools relied upon.

### Analysis of Results

Among the 74 relevant research papers, in 66 studies (around 90 percent), passengers were interviewed at the airports while waiting for the flights at the airport. The journals that covered the maximum papers on low cost carriers and passengers' perceptions and expectations of services provided included Journal of Air Transport Management (6 studies), Total Quality Management & Business Excellence (3 studies), Journal of Services Marketing (3 studies), Journal of Advances in Management Research (2 studies), Cornell Hospitality Quarterly (2 studies), Services Marketing Quarterly (2 studies), Transportation Research (2 studies), and Managing Service Quality (2 studies).

A number of research studies have been conducted in North America, Europe and other countries to examine the effect of service quality offered by airline companies on customer satisfaction. For example, Olorunniwo et al (2006) carried out the study in the US, Namukasa (2013) in Uganda, Gures and Others (2014) in Turkey and Etemad-Sajadi et al (2016) in Germany.

**Table 1: Comprehensive Review of Existing Studies (North America, Europe, Others) from 2000 to 2016**

<b>Scholars (Year)</b>	<b>Country</b>	<b>Sample Size</b>	<b>Unit of Analysis</b>	<b>Measurement Model of Service Quality</b>	<b>Method of Analysis</b>	<b>Airline Service Quality Dimensions</b>
Fareena Sultan et al (2000)	US and Europe	1956	Passengers travelling between US and Europe	SERVQUAL	T-Test	Reliability, Tangibles, Responsiveness, Assurance, Empathy
Jin-Woo Park et al (2005)	Australia	501	Australian international passenger at T3 airport	SERVQUAL	SEM	Reliability, Customer service, In-flight service, Convenience, Accessibility
Festus Olorunniwo et al (2006)	US	311	Employees and MBA students in US metropolitan area	SERVPERF	Exploratory Factor Analysis	Tangibles, Recovery, Responsiveness, Knowledge
Clemes et al (2008)	New Zealand	428	Passengers of international flights	SERVQUAL	T-Test, ANOVA, Multiple Regression Analysis	Assurance, Convenience, Comfort, Timeliness, Meals, Security
Atilgan et al (2008)	Turkey	235	Passengers at Antalya airport	SERVQUAL	T-Test	Food and beverage, Cabin aesthetics, Convenience, In-flight activities
Nadiri, Hussain et al (2008)	Cyprus	583	North Cyprus national airline passenger	SERVQUAL	SEM	Airline tangibles, Terminal tangibles, Personnel,



						Empathy
Vinh Sum Chau et al (2009)	UK and Taiwan	263	Passengers from Taipei and London	SERVQUAL	T-Test	Reliability, Tangibles, Responsiveness, Assurance, Empathy
SteliosTsafarakis et al (2011)	Greece	241	Passengers of Aegean airlines at Athens airport	MUSA (Multi-criteria satisfaction analysis method)	Regression Analysis	Airlines fare, flight schedule, seat comfort, meals, in-flight entertainment, attendants, cleanliness
Gures et al (2014)	Turkey	821	Passengers at 4 Turkish airports	SERVQUAL	SEM	Reliability, Facilities
Korkmaz et al (2015)	Turkey	311	Passengers in Izmin airport	SERVQUAL	CFA, Multiple Regression Analysis	Reliability, Tangibles, Responsiveness, Assurance, Empathy
Reza Etemad-Sajadi et al (2016)	Germany	203	Passengers at Munich airport		CFA, Multiple correlation	Pre-flight service quality, In-flight service quality, Price fairness
Sandada and Matibiri (2016)	South Africa	148	Passengers at Harare International airport	Modified SERVQUAL	SEM	Reliability and customer service, Convenience, Inflight service

*Source: Prepared by the Researchers*

A number of research studies on airlines service quality, customer satisfaction and customer loyalty has been conducted in the Asian countries also and this includes the study by Gour C. Saha and Theingi (2009) in Thailand, Yu-ChiunChiou et al (2010) in China, YuYoung Kim et al (2011) in South Korea, Alok Kumar Singh (2015) in India and Muhammad ShoabFarooq et al (2018) in Malaysia.

**Table 2: Comprehensive Review of Existing Studies (Asia) from 2004 to 2018**

Scholars (Year)	Country	Sample Size	Unit of Analysis	Measurement Model of Service Quality	Method of Analysis	Airline Service Quality Dimensions
Park and Others (2004)	South Korea	592	Korean international passengers	SERVQUAL	SEM	Service value, Satisfaction, Airline image
Ling and Lin (2005)	China and Taiwan	404	Passengers between Taiwan and China	SERVPEX	ANOVA, SEM	Reliability, Tangibles, Responsiveness, Assurance
Nadiri, Hussain et al (2008)	Cyprus	583	North Cyprus national airline passenger	SERVQUAL	SEM	Airline tangibles, Terminal tangibles, Personnel, Empathy
Gour C. Saha and Theingi (2009)	Thailand	1212	Passengers of low cost carriers	SERVPERF	SEM	Tangibles, Schedule, Flight attendants, Ground staff
Yu-Chiun Chiou et al (2010)	China	2000	Passengers of Spring Airlines, China	SERVQUAL	SEM	Ticket prices, Service perception, Service value, Image, Behavioral intention
Ariffin et al (2010)	Malaysia	100	LCC passengers at Kuala Lumpur airport	SERVQUAL	Multiple Regression Analysis	Caring, Tangibles, Responsiveness, Reliability, Affordability
YuKyoung Kim et al (2011)	South Korea	300	Passengers at South Korean airports	SERVQUAL	AMOS 7.0, T-Test	Physical facilities, neat appearance, prompt service, sincere approach of crew members, willing to help, respond to requests

Yu Kyoung Kim, HyungRyong Lee (2011)	South Korea	244	Passengers at three major domestic South Korean airports	SERVQUAL	SEM	Physical facilities, Neat appearance, Prompt service, Willing to help, Respond to requests
Hwa-Kyung Kim (2013)	Asia	181	Passengers of a major international airline in the Asian region	Modified SERVQUAL	SPSS, Factor Analysis	Staff attitude, Clean interiors, Comfortable seats, On time performance, Delicious food
Suki (2014)	Malaysia	300	Passengers in Labuan airport, Malaysia	SERVQUAL	SEM	Terminal tangible, Empathy, Word of mouth, Airline tangibles
Rahim Hussain et al (2015)	UAE	253	Passengers of a Dubai airlines	SERVQUAL	SEM	Reliability, Responsiveness, Assurance, Tangibles, Security and safety, Communications
Faizan Ali et al (2015)	Pakistan	498	Passengers of Pakistan international airlines	AIRQUAL	SEM	Airline tangibles, Terminal tangibles, Personnel quality, Empathy, Image
Alok Kumar Singh (2015)	India	526	Indian domestic full service passengers	SERVPERF	SEM	Airline Image, Perceived Value
Sheik Mohammed et al (2016)	India	320	Passengers travelled by Air India	AIRQUAL	SEM	Airline tangibles, Terminal tangibles, Personnel quality, Empathy, Image
Muham	Malaysia	460	Passeng	AIRQUAL	PLS-	Airline tangibles,



mad ShoaibF arooq et al (2018)			ers travelled with Malaysi an Airlines		SEM	Terminal tangibles, Personnel services, Empathy, Image
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*Source: Prepared by the Researchers*

Table 1 and Table 2 show that the relevant research conducted on service quality, customer satisfaction and customer loyalty in low cost carriers in different countries of the world. The area of research is found to be more popular in countries like United States, Turkey, South Korea and Malaysia. The sample size varies mostly in the range of 300-500. The measurement model of service quality that is mostly used is SERVQUAL, followed by SERVPERF and AIRQUAL. In most of the studies, researchers have used Structural Equation Modeling (SEM), a combination of factor analysis and regression analysis to test their models and to analyze structural relationships and lately it has emerged as the most widely and relevant statistical and data analysis technique (Khan & Adil, 2013).

### **Predictors of Service Quality and Conceptual Model**

#### **Predictors of Service Quality in the Airlines Sector**

Different research studies have used different criteria for evaluation of service quality of airlines. In most studies, the quality evaluation criteria is flight safety, in-flight entertainment, seat comfort, food quality, service attitude of cabin crew and cleanliness among others. Saha&Theingi (2009) selected 21 service quality characteristics that included factors such as seats, air conditioning, dress and appearance of flight attendants and convenience of flight schedule.

Similarly, Su (1995) selected 30 items such as the flight safety, pilot skills, on-time flights, ticket prices, etc. that influenced corporate image. Huang (1996) concluded from his study that friendly attitude, safety, clean and comfortable cabins are important and the least important ones include provision of books, newspapers, neat and tidy apparel and appearance. Hsu et al. (2009) pointed out that the passengers consider safety as the most important parameter followed by comfort, convenience and service attitude.

Archana&Subha (2012) conducted a study on airlines service quality and passenger satisfaction at Chennai international terminal with sample of 270 respondents and three service quality dimensions (in-flight service, in-flight digital service and back-office operations) and 27 variables. The in-flight service quality variables included crew friendliness, cuisines, seat comfort, cabin cleanliness, toilet cleanliness among others. Mohamed & Rani (2016) carried out a study to identify customer satisfaction in airline services. With a sample size of 382 passengers travelling by Air India from Tiruchirappalli airport, the researchers selected the AIRQUAL model presented by Ekiz (2006) with dimensions like Airline Tangibles, Terminal Tangible, Personnel Quality, Empathy and Airline Image.

The predictors that are most commonly used in research studies on airlines service quality, satisfaction and behavioral intentions include tangibles (seat comfort, food and beverage, clean interiors, in-flight entertainment) and service encounter with crew members (prompt service, willingness to help, knowledge, communication skills etc). As observed in Table 3, the predictor that is most researched in different studies include on-time arrival and departure (22 times), comfortable seats (13 times), food quality (11 times), reasonable fares (11 times) and clean interiors (8 times).

**Table 3: Service Quality Evaluation Criteria of Airline Companies**

Constructs	Factors	Adapted from Source (Time)
	<b>Factor 1: Tangibles</b>	
Service Quality	The aircraft had clean interiors	Elliott & Roach (1993), Disney (1999), Saha&Theingi (2009), Street (1994), Cronin et al. (2000), Gilbert & Wong (2003), Sultan & Simpson (2000), Chen, Tseng & Lin (2011)
	Internal decoration of the airline visually appealing	Disney (1999), Chen, Tseng & Lin (2011)
	The airline had comfortable seats	Elliott & Roach (1993), Ostrowski et al. (1993), Rust et al (1996), Huang (1996), Tsai and Hsu (1997), Gourdin (1988), Lu and Tsai (2004), Chen (2008), Chou C-C et al (2010)
	The food in the aircraft was fresh and delicious	Elliott & Roach (1993), Ostrowski et al. (1993), Truitt & Haynes (1994), Gourdin (1988), Disney (1999), Huang, Kung & Yu (2000), Hanan A. Jambi (2003), Lin (2006), Cheng-Lung (2007), Shannon Anderson et al (2008), Chen (2008)
	Air conditioners in the planes were comfortable	Lin (2006)
	The airline had magazines, newspapers and other entertainment facilities	Elliott & Roach (1993), Rust et al (1996), Huang (1996), Tsai and Hsu (1997), Gourdin (1988)
	Crew members were well dressed and had neat appearance	Lin (1996), Huang, Kung and Yu (2000), Chang and Chang (2000), Cronin et al. (2000), Gilbert and Wong (2003), Park et al. (2006), Saha and Theingi (2009), Chou et al. (2011)
	<b>Factor 2: Reliability</b>	
	The airline is safe	Su (1995), Huang (1996), Lin (1997), Tsai and Hsu (1997), Huang, Kung and Yu (2000), Yeh (2003), Liou et al (2007)
	Provides its services at the time it promises.	Yu Kyoung Kim, HyungRyong Lee (2011)
	Flight attendants initiatively take care of passenger needs	Huang (1996), Tsai and Hsu (1997), Disney (1999)
	<b>Factor 3: Assurance</b>	
	Crew members had the	Gilbert and Wong (2003), Park et al.

	knowledge to answer passenger's queries	(2004), Saha&Theingi (2009)
	Crew members have required communication skills.	Chen (2008), Tseng Lin (2011)
	Crew members were courteous, polite, and respectful	Chen (2008), Chou C-C et al (2010)
	Crew members of the flight were professionally trained	Lin (1996), Liou, Yen &Tzeng (2008), Huang, Kung & Yu (2000), Chang & Chang (2000)
	Crew members always have a warm smile and practice hospitality culture.	Chen (2008)
	<b>Factor 4: Responsiveness</b>	
	Crew members of the airline company gave prompt service	Chou C-C et al (2010), Yu Kyoung Kim, HyungRyong Lee (2011)
	Crew members of the airline company were always willing to help	Sultan and Simpson (2000), Gilbert and Wong (2003), Park et al. (2004), Park et al. (2006), Saha and Theingi (2009), Yu Kyoung Kim, HyungRyong Lee (2011)
	Airlines handles passenger complaints well	Huang (1996), Tsai and Hsu (1997), Lin (1997)
	Airlines management make genuine effort to improve services	Keating, Rugimbana, and Quazi (2003), Erdil and Yıldız (2011)
	<b>Factor 5: Empathy</b>	
	Employees of the airline company gives individual attention	Yu Kyoung Kim, HyungRyong Lee (2011)
	The airline had on-time departure and arrival	Elliott & Roach (1993), Ostrowski et al. (1993), Truitt and Haynes (1994), Su (1995), Gourdin (1988), Yeh (2003), Gilberta and Wong (2003), David Wessels et al (2006), Clemes et al (2008), Chen (2008), Prakoso et al (2010), Santorizki (2010), Zhang (2011), Chou et al. (2011), Hwa-Kyung Kim (2013), Purnama and Raditya (2011), Hidayat and Saptarini (2011), Shahin and Nekuie (2011), Champbell& Ellis (2011), Soomro et.al (2012), Manivasugen& Nova (2013), Khuong&Uyen (2014), Lerrthaitrakul et al (2014)
	The airline offers flights at the right times of day and night	Clemes et al. (2008), Saha (2009), Hwa-Kyung Kim (2013)
	Crew members provide adequate assistance to elderly and infants.	Keating, Rugimbana, &Quazi (2003), Erdil and Yıldız (2011)

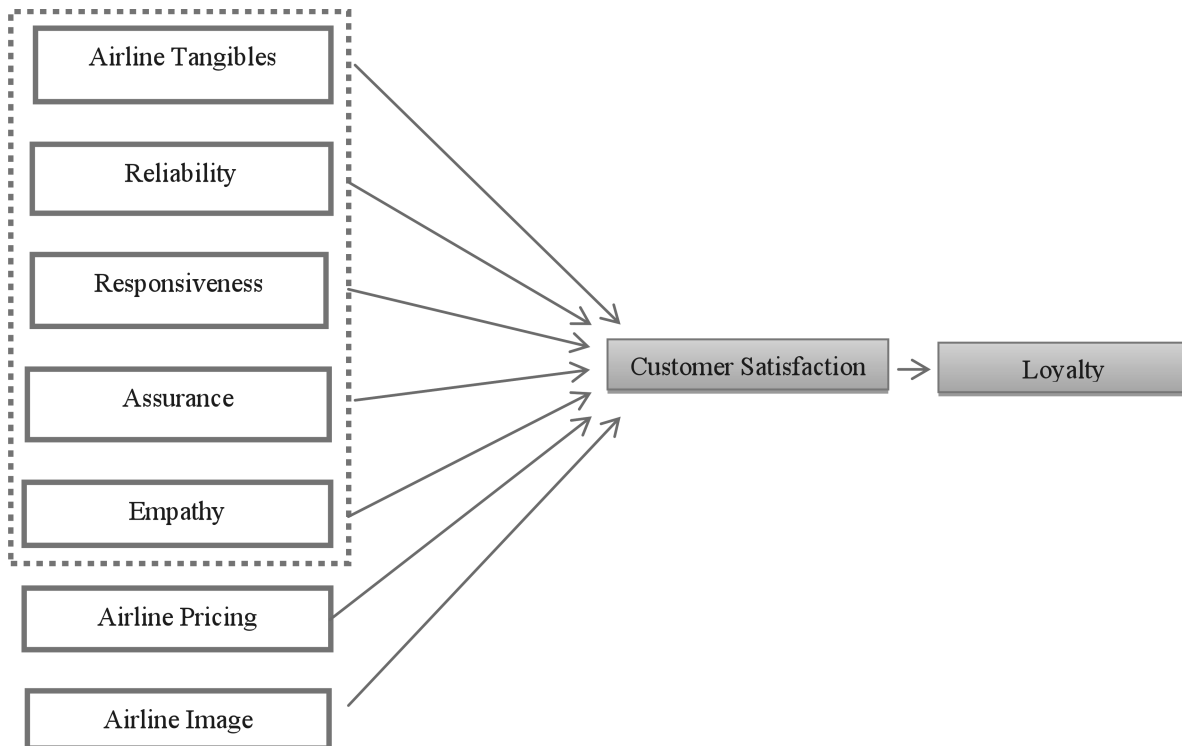
Airline Pricing	Flights of this airline are reasonably priced	Elliott & Roach (1993), Su (1995), Gourdin (1988), Yeh (2003), Park et al. (2004), Han & Ryu (2009), Boetsch, Bieger & Wittmer (2011), Chung & Petrick (2013)
	The flights of this airlines is economic and cheap	Rao and Monroe (1989), Lehmann and Winer (2005), O'Connell and Williams (2005), Teichert, Shehu and vonWartburg (2008), Forgas et al. (2010)
	Flights of this airline is competitive compared with other airlines	Santonen (2007)
Airline Image	Passengers willing to pay more to fly on an airline with a better reputation	Graham and Bansal (2007); Yulianto (2010), Kee and Ghazali (2011), Subagio and Saputra (2012), Khuong and Uyen (2014)
	In my opinion, this airline has a good image in the minds of passengers	Nha Gaston (2001)
	I believe that this airline has a better image than its competitors	Nha Gaston (2001)
Customer Satisfaction	I am satisfied with my overall experience with this airline	Oliver (1980), Liao and Chuang (2004), Han and Ryu (2009), Jin Woo Park et al. (2004, 2006), Park et al. (2006)
	My choice to use this airline was wise one	Oliver (1980), Westbrook & Oliver (1991), Cronin et al. (2000), Liao & Chuang (2004), Park et al. (2004, 2006)
	Services delivered were worth the price I paid for the ticket	Varki and Colgate (2001)
Customer Loyalty	I would not hesitate to select the provider again	Lin (2016)
	I consider the airline company my first choice for air transportation	Caruana (2002), Dehghan and Shahin (2011), Chung and Petrick (2013), Nadiri et al. (2008)
	I will first consider this airline even if another airline provides the same quality of service	Liao and Chuang (2004), Saha & Theingi (2009)
	I would recommend the airlines to all my friends and business associates	Holmes & Lett (1977), Swan and Oliver (1989), Brown et al. (2005), Babin et al. (2005).

Source: Prepared by the Researchers

### Conceptual Model for Measuring Service Quality in Indian LCCs

Based on the review of the previous research studies with regard to service quality, airline prices, airline image, customer satisfaction and loyalty, a conceptual model has been developed to study the effects of airlines service quality on satisfaction and loyalty for passengers of low cost carriers. Most of the studies have selected the

dimensions of Tangibles, Reliability, Responsiveness, Assurance and Empathy adopted from Parasuraman et al. (1985, 1988) to measure the airline service quality. Besides these five service quality dimensions, we have identified Airline Image and Airline Pricing as important variables as customer behavior may also be determined by these variables (Bloemer et al., 1998; Andreassen&Lindestad, 1998; Nguyen LeBlanc, 1998; Oh, 1999; McDougall & Levesque, 2000; Varki& Colgate, 2001).



*Source: Prepared by the Researchers*

Airline Image dimension has been adopted from AIRQUAL model developed by Hussain&Bavik (2006) and the dimension of Airline Pricing adopted from Chen et al (1994). The variables like Pricing and Image have often been ignored in previous studies on service quality of low cost airlines and considering these important variables in this study may raise the predictive power of the conceptual model. Therefore, it is necessary to consider important new variables that can explain the behavioral intentions of customers accurately and also to contribute to the knowledge of airlines services in the future.

For measuring customer expectations, perceptions and overall satisfaction in service industries, a number of scales have been proposed in the past, but SERVQUAL and SERVPERF are the most prominent. For this study,

SERVPERF scale, developed by Cronin & Taylor will be used as it is considered a better measure of service quality, especially in emerging countries such as India (Jain & Gupta, 2004; Adil, 2012). The survey, designed for airline setting will be conducted at the domestic terminal of New Delhi airport and the survey questionnaire is based on multiple items, adopted from previous research. For this study, five constructs (service quality, airline pricing, airline image, customer satisfaction, customer loyalty) will be measured using a set of 35 items in the questionnaire with seven point Likert-type scale. This will involve airline tangibles (seven items), reliability (three items), assurance (five items), responsiveness (three items), empathy (four items), pricing (three items) and airline image (three items). Customer satisfaction is to be measured using three

items as proposed by Westbrook & Oliver (1991) and customer loyalty using four items, adopted from Caruana (2002) and Dehghan&Shahin (2011).

### Conclusion

Across the world, the research on airlines service quality has generated tremendous interest as the delivery of high quality of services is essential for airline companies to compete and survive in this highly capital intensive business (Archana&Subha, 2012). The airlines industry is highly capital intensive and fiercely competitive and in order to sustain in this industry, the companies should endeavor to provide excellence in their services by continuously improving upon them as comparatively better service quality results in customer satisfaction, retention, revenue, market share and profitability (Paparoidamis, Chumpitaz& Ford, 2015).

Jan Carlzon, turned around the fortunes of the ailing Scandinavian Airlines when he became the CEO of the problem-ridden airlines in 1981. And when Carlzon left the company in 1994, he turned the airlines around by focusing on what he later called "moments of truth'. 'Moments of Truth' is about the importance of responding to a changing marketplace. And the Indian domestic airlines industry is very dynamic with major changes happening in its landscape. In the Indian domestic airlines industry, new players enter the market (e.g. Vistara, Air Asia) and old players also get defunct (e.g. Kingfisher Airlines). It is imperative for the airlines companies to understand the level of customer satisfaction from the services provided in the flights so that they could develop strategies and execute those to retain their customers in the future travel.

The most direct airline service to customers is in-flight service by in-flight attendants, as passengers tend to evaluate airlines based on their degree of satisfaction with the in-flight service. Accordingly, improving the in-flight service quality is one of the most critical success factors of airline companies. Also, the relationship between ticket prices and other constructs such as customer satisfaction and airline image will also be investigated and this will be a significant factor for airline companies to assess their pricing strategies. The relationship between these variables has been overlooked in airline studies especially for Indian low cost carriers.

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