A STUDY ON SERVICE QUALITY AND PASSENGER SATISFACTION ON INDIAN AIRLINES

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ABSTRACT

This study examines the underlying forces of service quality influences on passengers' satisfaction in aircraft transport. The study examines which dimensions have a positive influence on service quality and which dimensions have the most and least important impact on service quality in international air travel, as perceived by airline passengers. The findings of this study are based on the analysis of a sample of 270 respondents. This study analyzed the data from passengers of three classes, economy, business and premium. The results suggest that there are different factors of in-flight service quality that are important according to the customer seat class. The dimensionality of perceived service quality in international air travel was explored and three dimensions were identified. These dimensions include in-flight service, in-flight digital service and back-office operations. The findings reveal that these three dimensions are positively related to perceive service quality in international air travel and of these dimensions, Cuisines provided, seat comfort safety are the most important dimension in in-flight service quality. Personal entertainment is the most important dimension as perceived by airline passengers in In-flight digital service quality. Online ticket booking is another dimension in back-office operations. In addition, the findings indicate that passengers' satisfaction on different airline companies on basis of the services delivered.

KEYWORDS: Service Quality, Passenger Satisfaction, In-flight services, In-flight digital services, Back-office Operations, Class of Journey, Airline Industry.

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1. INTRODUCTION

The aviation sector has become the most important segment in the economic development of a nation. It plays a vital role in moving people or products from one place to another, be it domestic or international, especially when the distances involved are far. Stiff competition and favorable initiatives of the Government of India added fuel to enlarge both flights and fleets. Air Deccan was the premier airline, which offered low tariff to the domestic as well as international destinations and created a new landmark in aviation sector in India. Now ordinary citizens easily access the aviation service from their respective air terminals. In a highly competitive environment the provision of high quality services to passengers is the core competitive advantage for an airline's profitability and sustained growth. In the past decade, as the air transportation market has become even more challenging, many airlines have turned to focus on

airline service quality to increase service satisfaction. Service quality conditions influences a firm's competitive advantage by retaining customer patronage, and with this comes market share. Delivering high-quality service to passengers is essential for airline survival, so airlines need to understand what passengers expect from their services. Service quality can be defined as a consumer's overall impression of the relative efficiency of the organization and its services. Understanding exactly what customers expect is the most crucial step in defining and delivering high-quality service. Service quality is one of the best models for evaluating customers' expectations and perceptions. The performance of a company leads to passenger satisfaction with a product or service. Passenger satisfaction is fundamental to the practice of consumer sovereignty. Recently many researchers stresses that, customer satisfaction have become an important issue for marketing practitioners because of the rapid business environment. Passenger satisfaction can be defined as a judgment made on the basis of a specific service encounter. Satisfaction and loyalty are not surrogates for each other. It is possible for customers to be loyal without being highly satisfied and to be highly satisfied and yet not loyal. Firms are needed to gain a better understanding of the relationship between satisfaction and behavioral intention in the online environment and to allocate the online marketing efforts between satisfaction initiatives and behavioral intention program. Moreover, the results from this research would assist airline managers to better serve their customers, monitor and develop service quality to achieve the highest level of their passengers' satisfaction.

2. PROBLEM STATEMENT

Passenger satisfaction service arises when a company can provide passengers with benefits that exceed passengers' expectation and this is considered value-added. If customers are satisfied with the product or service, they will buy more, and do so more often. Passenger gratification is an essential goal for each airline providing passenger services. The on board experience is still something special for the customer. The customer has a wide choice to select the suitable airline product according to their requirements. Therefore, airlines are continuously working on the in-flight product development and innovation to differentiate themselves from competitors. During the last few years a variety of in-flight product innovations have entered into the market. This includes the aircraft seat on long haul flights as an important product element which is continuously being improved and renewed according to its life cycle and changing customer requirements. The current development of business class seat roll-outs shows the significance of this product element which influences the buying decision of the passenger especially on long haul flights. If the passenger is not satisfied, due to the negative experience, the client will reconsider the buying decision for further flights and will probably switch to another airline. This kind of situation belongs to the daily business in the passenger airline industry.

Excellent passenger satisfaction is one of the greatest assets for air business in today's competitive environment. There are many factors that can help an airport to build its customer base, and passenger service and satisfaction can be a determining factor in the success of an entire operation. The research related to service quality and customer satisfaction in the airline industry has been growing in interest because the delivery of high service quality is essential for airlines' survival and competitiveness. A number of studies have conducted in service quality

related theories and methods in the airline industry. Conversely, most previous airline service studies have relied mainly on passenger satisfaction and service quality to describe passenger evaluations of services and have focused on the effect of airline service quality at the aggregate construct level. Although examining the effect of individual dimensions of service attributes has potentially great utility for airline managers, the effects of individual dimensions of airline service quality has not been fully investigated in previous airline service studies. In addition, the findings would enhance the airliners to improve their customer relations management as well as their brand loyalty.

3. LITERATURE REVIEW

Passenger satisfaction in airline operations has become critically important and Dennett, Ineson, Stone, and Colgate (2000) suggest that as competition created by deregulation has become more intense, service quality in the airline industry has also received more attention. Airline companies also attempted to differentiate their services through the use of computerized reservation systems which were also designed to create customer loyalty in the distribution channels (Lee and Cunningham, 1996). However, despite the airlines' efforts to differentiate their services, an extensive survey of frequent fliers conducted by Ott (1993) revealed that consumers did not perceive any difference from one carrier to another.

Cronin and Taylor (1992) originate empirical provision for the idea that perceived service quality led to satisfaction and argued that service quality was actually an antecedent of consumer satisfaction. Bitner and Hubbert (1994) determined that service encounter satisfaction was quite distinct from overall satisfaction and perceived quality. Service quality will vary; the definitions are all formulated from the customer perspective: that is, what customers perceive are important dimensions of quality. Gronroos (1982) and Parasuraman, Zeithaml and Berry (1988) were the pioneers in the conceptualization of the service quality construct, these authors maintained that the overall perception of quality was a disconfirmation of a customer's expectation and evaluation of a services delivered.

Saha and Theingi (2009) pointed out that the emergence of low cost airlines has raised concerns on how satisfied are the customers with the services provided. Doyle and Wong (1998) originate that successful companies have a differential advantage in overall company reputation and communicate it as quality to their customers (Solomon, 1985). Often, they are able to command premium prices (Tepeci, 1999). It is found that the most important criterion for customers selecting a bank is reputation (Boyd et al., 1994; Darby, 1999) while Rogerson (1983) stated that good reputation could increase an organization's sales, attract more customers, and reduce customer departures.

Maintaining quality are the main concerns of business today. Providing quality is not a concern of manufacturing companies alone. The delivery of high-quality service becomes a marketing requirement among air carriers as a result of competitive pressure (Ostrowski et al., 1993). Chang and Keller (2002) argue that quality in airline service is difficult to describe and measure due to its heterogeneity, intangibility, and inseparability, and only the customer can truly define service quality in the airline industry (Butler and Keller, 1992).Previous airline service studies are concentrated in modeling the effect of perceived service quality at the

aggregate construct level, though examining the effects of individual dimensions of service attributes has potentially great utility for airline managers(Patterson & Spreng, 1997).The perceptions of airline service quality are quite diverse and do not seem to fit any single existing quality model such as the service quality (Haynes & Percy, 1994).

4. OBJECTIVES OF THE STUDY

This study is conducted with four objectives.

These are:

- The main objective of this study is to examine the satisfaction of passengers on service quality of different airlines.

- To explore the level of passengers' satisfaction with the service quality on Indian airlines in terms of three dimensions of service quality instrument i.e., in-fight services, in-flight digital services and back office operations.

- To elucidate the relationship between service qualities delivered to passengers and their satisfaction as to different class of journey.

- To examine the demographic profile of the respondents and their satisfaction on the services rendered by the airliners.

5. METHODOLOGY

This study covers a sample of 270 respondents and the survey was conducted at the Chennai international terminal of TamilNadu during May-June 2011. Sampling is done by interviewing randomly selected passengers, at different times of the day, on every day of the week, over a four week period. A structured questionnaire was used for data collection. The questionnaire was divided into five sections, the first section reveals the demographic profile of respondents and second, third and fourth sections are designed to evaluate their overall experiences they received from the airline services and the last is dealing with the passenger preference as to different travel class provided by airline companies. The questions were phrased in the form of statements scored on a 5-point Likert type scale, ranking from 1 "highly dissatisfied" to 5 "highly satisfied". Exploratory Factor Analysis issued for measuring airline service quality to determine the dimension of airline service quality. Factor analysis is a general name denoting a class of procedures primarily used for data reduction and summarization. Average score analysis is conducted to evaluate the different airline services. Service quality satisfaction has been analyzed on the basis of score assigned in the questionnaire, 5 marks is assigned to highly satisfied, 4 mark for satisfied, 3 mark for moderate, 2 mark for dissatisfied and 1 mark for highly dissatisfied. Pie-chart is prepared to check the passenger willingness to travel in economy, business and premium class in different airlines. The variable and substances used in data collection is depicted in Table 1.

TABLE: 1 - VARIABLE MEASUREMENT

Measures	Variable	Substances	Scale
Passenger Satisfaction and Service Quality (PSSQ) on In-flight Services	Cuisines Provided In – Flight child care / Bassinets Crew friendliness / Language skills Seat Comfort Staff – grooming Cleanliness of cabin Cleanliness of toilets Newspapers / Airline magazines On – Board catering Provision of Pillow / Blankets etc.	10 Substances	5 Point Likert scale
PSSQ on In-flight Digital Services	Music Inbound – Outbound theatres Personal Entertainment Appliances Audio – Video On Demand (AVOD) Games	5 Substances	
PSSQ on Airline Back office Operations	Discounts / offers Choice of aircraft Online check – in Online seat booking Call center facilities – 24*7 Updating airline website Reservation / Cancellation facilities	11 Substances	

| Tour packages / Holiday packages |
| Frequent flyer program |
| Baggage allowance |
| Handling of delayed flights |

(Source: Primary Data)

6. ANALYSIS OF RESPONDENT'S OPINION

The data acquired from the questionnaires were analyzed in three sections: demographic profile of passengers, level of passengers' satisfaction with service measured thorough factor analysis and the relationship between different airliners and passenger's satisfaction based on average score.

TABLE NO: 2 PROFILE OF PASSENGERS

Attributes	Distribution	Sample Number	Frequency
Gender	Male	194	71.9%
	Female	76	28.1%
Age	18 – 25	13	4.8%
	26 – 35	114	42.2%
	36 – 45	105	38.9%
	46 – 60	34	12.6%
	61 – 99	4	1.5%
Income Level	0 – 3L	61	22.6%
	4 – 5L	146	54.0%
	6 – 10L	50	18.6%
	10 L and above	13	4.8%
Profession	Business	20	7.4%
	Government Employee	14	5.2%

	Entrepreneur	81	30.0%
	Private Employee	102	37.8%
	Student	6	2.2%
	Others	47	17.4%
	Primary	5	1.9%
	Secondary	5	1.9%
Education	UG	124	45.8%
	Diploma	4	1.5%
	PG	128	47.4%
	Doctorate	4	1.5%

(Source: Primary data)

A detailed demographic analysis of respondents is presented in Table 2. Personal and face-to-face interviews of passengers waiting for their flights were conducted in Chennai international airport. Questionnaires were distributed to the passengers who had undertaken at least one international flight in the past 2 years. 270 completed questionnaires were collected from the respondents. Among the sample data, nearly three fourth (71.9%) respondents are male, 42.2% are in the 26 – 35 age groups, 54% respondents are falling under the income level of 3-5 lakhs, 37.8% are working private concerns, and 47.4% are PG degree holders.

TABLE 3: RESULTS OF FACTOR ANALYSIS

Factor	Variable	Factor Loadings	Eigen Value	Cumulative % of Variance
In-flight Services	Cuisines Provided	0.846		
	In – Flight child care / Bassinets	0.823		
	Crew friendliness / Language skills	0.812	11.262	53.686
	Seat Comfort	0.838		
	Staff – grooming	0.797		
	Cleanliness of cabin	0.784		

	Cleanliness of toilets	0.663		
	Newspapers / Airline magazines	0.618		
	On – Board catering	0.569		
	Provision of Pillow / Blankets	0.545		
In-flight Digital Services	Music	0.586		
	Inbound – Outbound theatres	0.629		
	Personal Entertainment Appliances	0.716	6.398	62.239
	Audio – Video On Demand	0.486		
	Games	0.592		
Airline Back office Operations	Discounts / offers	0.756		
	Choice of aircraft	0.534		
	Online check – in	0.678		
	Online seat booking	0.935		
	Call center facilities – 24*7	0.851		
	Updating airline website	0.523	7.832	72.793
	Reservation / Cancellation facility	0.816		
	Tour packages / Holiday packages	0.674		
	Frequent flyer program	0.753		
	Baggage allowance	0.722		
	Handling of delayed flights	0.531		

Factors analysis was employed to measure the airline overall service quality on the service provided to satisfy the passengers. The principal factor component analysis with variable rotation was carried out. The overall pattern of rotated factor loadings suggested a three dimensional solution and the factors are re-titled as in-flight services, in-flight digital services and back-office operations. While checking in-flight services cuisines provided and seat comfort

is biggest factor to select aircraft to fly. Personal entertainment is important factor in flying decisions of passenger. Online seat booking, call center facilities and reservation/cancellation is highest influencing factor in flying decisions of the passengers. The overall cumulative percentage of variance is 53.686 to in-flight service, 62.239 to in-flight digital service and 72.793 to back-office operations presented in table 3.

FIGURE 1: PASSENGERS SATISFACTION ON SERVICE QUALITY OF IN-FLIGHT SERVICE
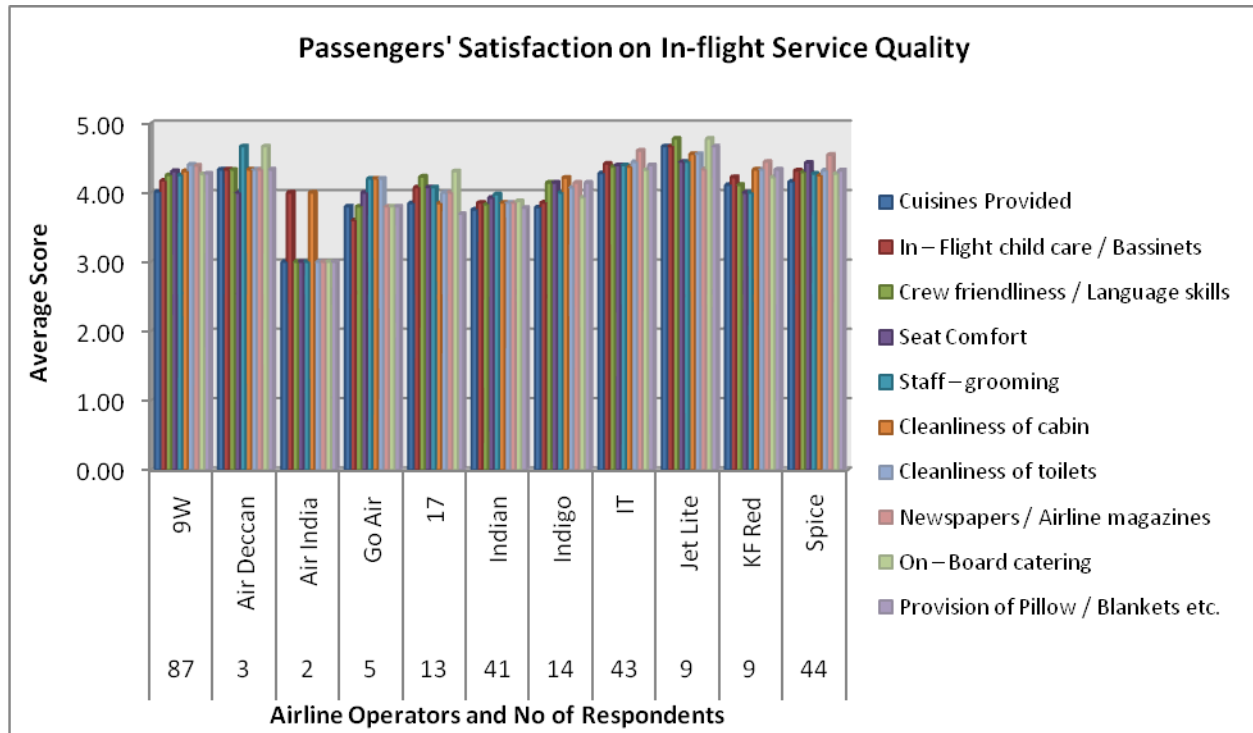
It is evident from the figure 1, average score analysis have been conducted to test the passengers satisfaction on in-flight service quality. According to Likert 5 point scale, 5 point awarded for highly satisfied services, 4 point awarded for satisfied services, 3 point for moderate services, 2 point for dis-satisfied services and 1 point has been given to highly dissatisfied service. The overall performance is very high in Jet Lite, all parameters in in-flight service quality stood in more than 4 point mark. Followed that IT, Air Deccan, 9W, Spice and KF Red crossed 4 point mark and placed as 2, 3, 4, 5, and 6 rank respectively. Indigo performance placed as 7th rank, revealed by the 14 respondents. Likewise two or three factors in Go Air and 17 reached the 4 point mark. From all Indian and Air India in-flight service quality is not touched satisfied mark and many of this service are moderate, this was exposed by 41 and 2 respondents respectively.

FIGURE 2: PASSENGERS SATISFACTION ON SERVICE QUALITY OF IN-FLIGHT DIGITAL SERVICE
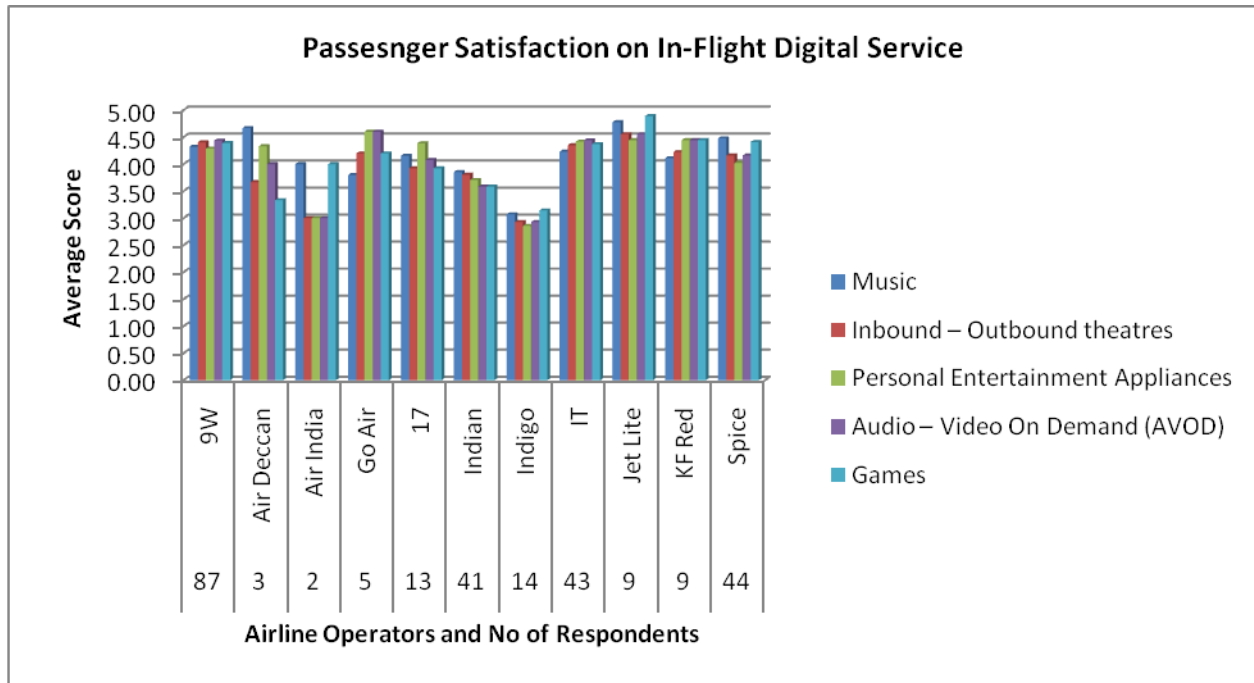
Subsequently figure 2 reveals; passenger satisfaction of in-flight digital services is examined with the same average score testing. Again Jet Lite placed first in all parameters, followed that Go Air, KF Red, 9W, IT, Spice ranked in 2, 3, 4, 5, and 6th place respectively. The performance of digital services is marked as satisfied level to the passengers travelled in the same aircraft. Music, entertainment appliances are in satisfactory level to the Air Deccan flyers and the remaining services are moderate. Similarly, Indian, Indigo are offering moderate digital services in their aircraft.

FIGURE 3: PASSENGERS SATISFACTION ON SERVICE QUALITY OF BACK-OFFICE OPERATIONS
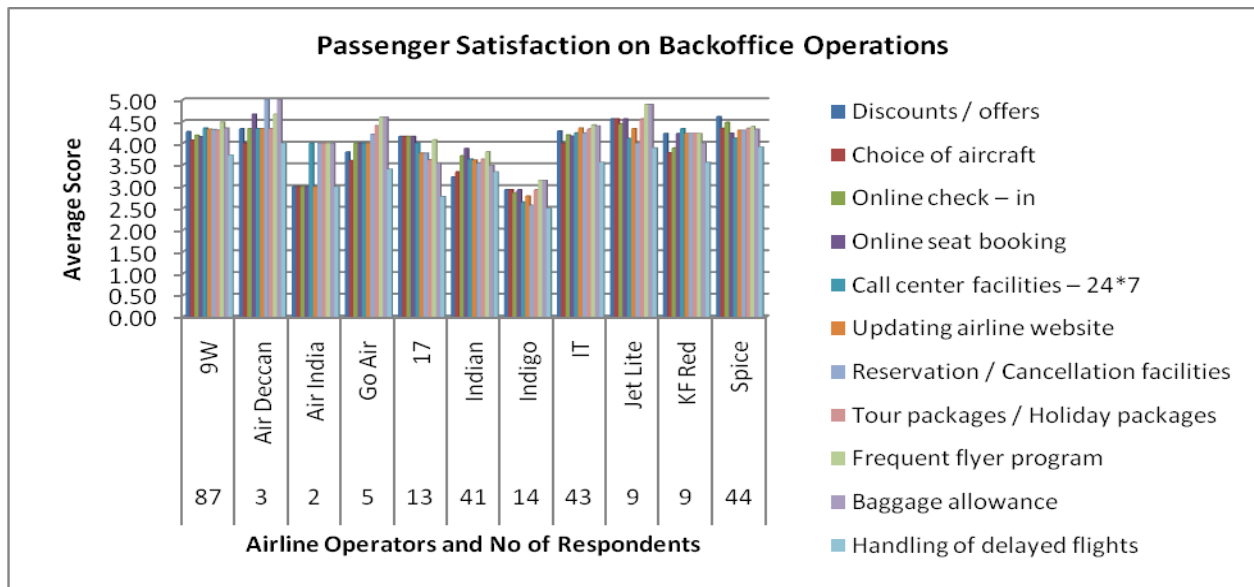

Figure 3 reveals the back office performance of sample companies engaged in the aviation services. Here the first preference is given to Air Deccan in terms of reservation/cancellation facility and baggage allowances are marked highly satisfied level, then all other factors are marked as satisfied category. Jet Lite, 9W, IT, KF Red and Spice are offering satisfied back-office services to its passengers. Rest of sample companies' back-office services is moderate.

FIGURE 4-6: PASSENGERS WILLINGNESS TOWARDS CLASS OF JOURNEY

Figure: 6
Premium Class
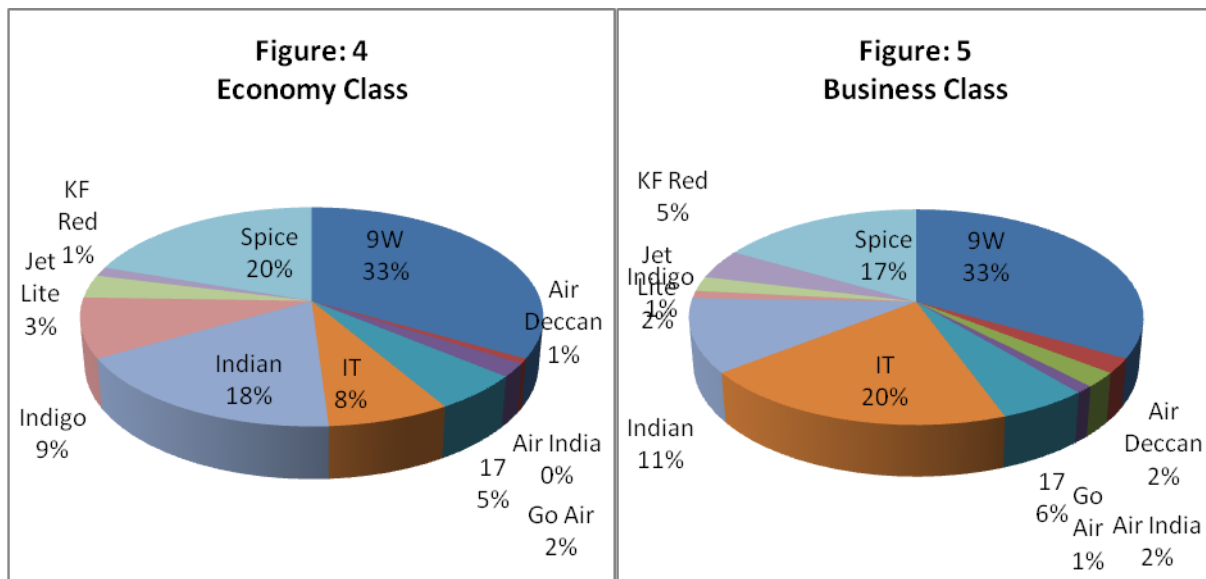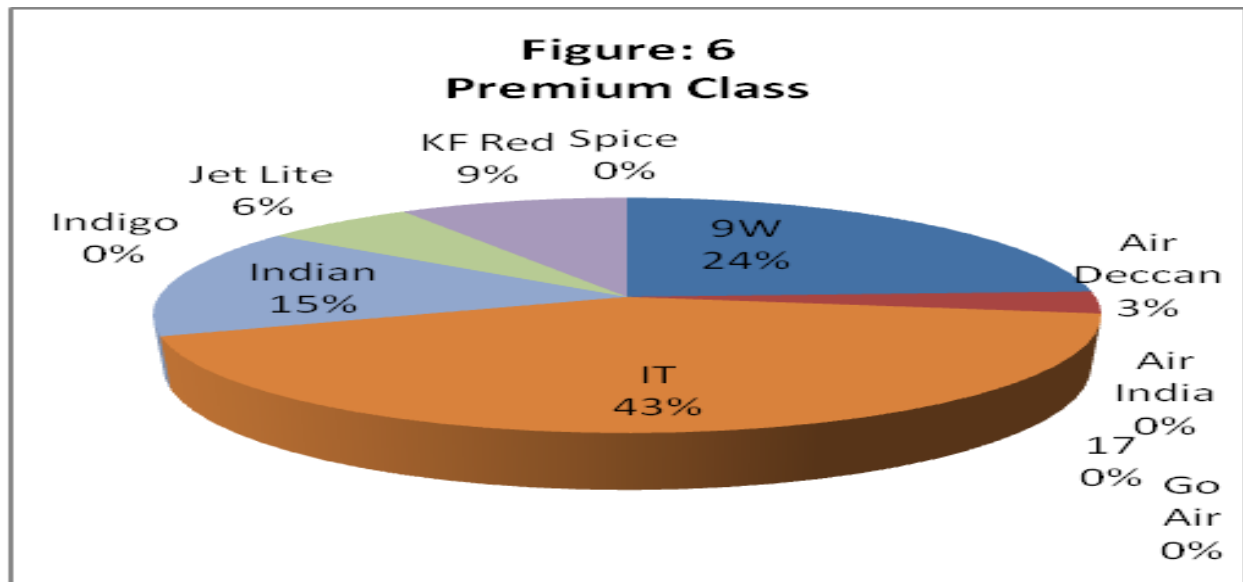
It is evident from the Figure 4, from the sample of 270 respondents, 147 respondents are showing priority to fly with economy class. 33% of respondents are showing interest to travel in 9W and 20% and 18% of respondents interested to fly in Spice and Indian. Figure 5, narrates totally 90 respondents are preferred to travel in business class, 33% of respondents are showing interest to travel in 9W and 17% of respondents interested to travel in Spice. Only 33 respondents are interested to fly in premium class presented in figure 6, from that 43% of respondents are showing interest to IT, then next choice given to Spice by the 24% respondents.

CONCLUSION

The purpose of this study is to investigate the impact of the in-flight service quality on passenger satisfaction. This study entails that airline marketing managers has to develop various policies to provide guaranteed quality services to passengers. Airline service dimensions were found to have significant and positive influences on airline image and passengers' satisfaction intentions. In this study, passengers are satisfied to the service provided and overall facilities delivered by the airline companies. The passengers are satisfied with the services quality delivered in in-flight service, in-flight digital service and back office operations. From three kinds of class of journey options, the passengers are highly rated to 9W airlines. While analyzing demographic profile of the passengers, educated and high income passengers are using flights more frequently. Failure to provide quality services to passengers may damage the formation of airline image and cause negative impact on passengers' behavioral intentions. These findings imply that airline companies' in-flight service quality depends upon the different delivery strategies deployed.

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