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Factors influencing the customer satisfaction for low-cost airlines in India: Assessment from online reviews

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Abstract

India's domestic market is characterized by the heavy presence of Low cost airlines. The business model of low cost airlines had its core as cost reduction, which focuses on providing lower fares, excluding few luxuries and facilities that were usually provided. The airline companies need to focus on its customers with greater sincerity in order to create as well as expand fruitful customer relationships and to stay competitive without compromising on profits. Keeping the customers satisfied has become a challenge due to intense competition and increased customer expectations the research aims at obtaining an enhanced and widespread knowledge about the customer satisfaction in the low-cost airline industry. Therefore, the objective of this study is to find the impact of perceived service quality and price on customer's perception of value-for money towards low cost carriers. The main contribution of this study is to investigate TripAdvisor customer reviews of airlines on the different attributes for the operative Low cost airlines (LCA) in India. The ratings for the different attributes viz. legroom, in-flight entertainment, check-in and boarding, seat comfort, customer service, cleanliness, fooding, and value-for money were analyzed using histogram to understand the frequency distribution of the different ratings. It is observed that the value-for money attribute have a distributed frequency with similar number of ratings for all the values in the Likert scale, i.e, when rated between 1 to 5. The study uses Kano model to measure the relation of different attributes on customer satisfaction. Finally, Importance-Satisfaction Analysis (ISA) was employed to finding that the service qualities that influence the degree of satisfaction for the customers and their perception towards the value for money in the LCA categories. Kano analysis suggests that fooding and in-flight entertainment are indifferent attributes, i.e., customers are not influenced by these two factors in low cost airlines, and are thus considered possible overkill using the importance satisfaction analysis. The attributes for cleanliness and customer service are the most important, and as the mean of the frequency distribution is greater than 3 for these, it is suggested that the airlines maintain these two attributes, while concentrating to check-in and boarding will result in higher customer satisfaction. This study will be helpful to lead the airline industries to renew their service quality policies and providing good quality services to compete in the current market scenario.

1

Introduction

In recent years, the rapid growth and development of India's economy has driven the demand for airline transportation and the requirement of service quality. Airline service in India is no longer solely for high-end business travelers but has gradually been adopted by the general public. India's civil aviation industry has been growing at a frenetic pace of over 7% in this new century. In the 2015–16 financial year, the passenger traffic increased to 104 million from the previous year's 87 million, an increase of 19.5%. It is expected that India will become the third largest aviation market by 2020 after the United States (US) and China (Wang, Zhang, and Zhang 2018).

The airline companies need to focus on its customers with greater sincerity in order to create as well as expand fruitful customer relationships and to stay competitive without compromising on profits. Keeping the customers satisfied has become a challenge due to intense competition and increased customer expectations. Recent economic upheaval has made its impact on customer relationships, and the bonds of customer loyalty have been threatened as well. Aviation players are also facing challenges such as rising ATF cost, internal competition, rivalry with Indian railways in short haul markets, shortage of trained and skilled manpower, increasing labour costs, infrastructural hurdles, and deficiency of airports, airstrips etc.

The business model of low cost airlines had its core as cost reduction, which focuses on providing lower fares, excluding few luxuries and facilities that were usually provided. The usage of point to point service, identical fleets, online system of booking, the charging of catering inflight are few of the characteristics of low-cost airlines in India. Pricing low is part of the low cost airline performance (Turner and Lim 2015) similar to the companies involved in services. The performance of a service company can be improved by furnishing a competitive advantage over a decent quality service or the advantage over price for the consumer. The combination of these advantages will initiate additional sales, satisfaction among customers, and certainly this would help the company to create higher returns. However, contending with price would decrease the company's margin of profit and raising the price for the facility provide reduces the number of customer's (K. Deepa and Ganapati 2018).

The foremost battle for low cost airlines in India is to capitalize on the loyal patrons by drawing and holding extremely lucrative business travelers, and the significance and strength of competition of the Indian low cost airline market makes it an ideal context for this study. Thus, the research aims at obtaining an enhanced and widespread knowledge about the customer satisfaction in the low-cost airline industry. Therefore, the objective of this study is to find the impact of perceived service quality and price on customer's perception of value-for money towards low cost carriers.

For marketers, the emergence and development of social media have radically changed tourism industry marketing practices. Comments on social networking travel sites, such as Tripadvisor, Flytalk, Skytrax, Mouthshut, and Airlineratings provide airlines and other travel-related companies with a better understanding of what their customers like and dislike about them and their competitors. However, the ease of website comparison and strong competition on price encourage online consumers to switch from one service provider to another or to spread positive or negative word of mouth (WOM) to other consumers (Bigne et al. 2018). Therefore, airline companies have to make even greater efforts to satisfy and keep their customers happy in an attempt to develop long-term relationships with them and boost positive reviews (Sanz-Blas, Ruiz-Mafé, and Perez 2014).

The increasing presence of customer engagement in online fora provides a large amount of useful data for airline marketers and researchers. Effective analysis of these unstructured data can enable real-time customer feedback analysis, compared to traditional data analysing techniques. The main contribution of this study is to investigate TripAdvisor customer reviews of airlines on the different attributes for the operative Low cost airlines (LCA) in India.

1.1 Problem statement

Passenger satisfaction service arises when a company can provide passengers with benefits that exceed passenger's 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. Thus, the problem statement is framed as:

- What are the factors which impact the customer satisfaction in case of low-cost airlines in an Indian marketing perspective?
- For low cost airlines, which factors weigh more on customer satisfaction, and which factors can be neglected?

1.2 Need for research

The foremost battle for low cost airlines in India is to capitalize on the loyal patrons by drawing and holding extremely lucrative business travelers, and the significance and strength of competition of the Indian low cost airline market makes it an ideal context for this study. Thus, the research aims at obtaining an enhanced and widespread knowledge about the customer satisfaction in the low-cost airline industry. This study may motivate lower cost airline service providers and future researchers to improve the knowhow on the service quality developments. It will be helpful to lead the airline industries to renew their service quality policies and providing good quality services to compete in the current market scenario.

1.3 Objectives

- To find the impact of perceived service quality on customer satisfaction towards low cost carriers.

2

Review of literature

2.1 Introduction

The literature review discusses: a) study on the emergence of low cost airlines (LCAs), b) customer satisfaction for LCAs, and c) online reviews for assessing consumer perception. The interrelation between the three subsections and there gradual overlapping towards the aim of the current study is emphasized here. These three aspects are discussed in the following.

2.2 The emergence of low cost airlines (LCAs)

The launch of low cost air lines as an innovative model of the airline-business has abridged the gap of reaching an effective growth and gaining more share in the market (Gross and Schröder 2016). The low cost airline business model is simplicity (establishment of low-cost division or airline within airlines, substantial reduction in cost on the basis of its service and operations with minimal modification in the prevailing business model, etc.)(Casey 2010). Low cost carrier operators strive to reduce costs so as to implement a strategy of price leadership in the serving markets (e.g., reduced cost of input, in expensive designing of the product, and low-priced designing of process). According to Bieger and Wittmer (2006) low cost carriers have attracted significant traffic volumes with their point-to-point services.

Government policy and technological progress influence the conditions of supply and demand, which, in turn, can shape market structure and eventually have an impact on conduct and performance. In the airline industry, the structure variables usually include the number of competitors, market concentration, product differentiation (e.g., full-service carriers (FSCs) versus LCCs), and the entry and exit conditions; the conduct mainly refers to airline pricing and non-price competition strategies; the performance indicators can be efficiency, profitability or the overall industry performance such as the potential benefits or welfare implications to passengers (Wang, Zhang, and Zhang 2018). The economic deregulation, competition and privatization policieshave played a key role in shaping the Indian airline markets, in terms of changing the market structure, the airline conduct, and the overall performance of the industry.

From 1953 to 1994, India's aviation market was dominated by two government-owned airlines: Indian Airlines was the main player in the domestic market while Air India primarily served the international market. The Minister of Tourism and Civil Aviation announced that private airlines were allowed to operate charter and non-scheduled services under the Air Taxi Scheme in 1986, subject to some strict restrictions including not publishing time schedules. Following the repeal of the Air Corporations Act 1953 in 1994, six "air taxi" (a name referring to new airlines in India) operators were given permits to operate scheduled services in October 1994. The 1994 reform corporatized Air India and Indian Airlines, and allowed new private companies to provide services as fully-fledged airlines including East West Airlines, Jet Airways, Damania Airways, and ModiLuft. However, only Jet Airways and Sahara Airlines survived and continued to operate into the new century (Jain and Natarajan 2015).

The government-owned Indian Airlines dominated the domestic market until 2001 when Jet Airways surpassed it. In 2003 three private airlines, Jet Airways, Air Sahara, and Air Deccan, carried more than half of the passenger traffic in the domestic market. Jet Airways remained to be the largest Indian airline until 2012 when another private carrier, IndiGo, took the first place. In the 2015–16 financial year, major private carriers such as Jet Airways, SpiceJet, IndiGo, Vistara, AirAsia India, and Go Air carried 82 million passengers and 647,000 tons of cargo, representing a market share of 79% and 77%, respectively.

India's domestic market is characterized by the heavy presence of LCCs. Air Deccan was India's first low-cost airline based in Bangalore. Its commencement in 2003 was a landmark event for the industry (Jain and Natarajan 2015), which spurred the entry of many other LCCs in India between 2005 and 2007, including SpiceJet, IndiGo, GoAir, and JetLite. Jain and Natarajan (2015)noted that the year 2005 was a watershed year for the Indian civil aviation sector as several private LCCs and FSCs such as Kingfisher, IndiGo, SpiceJet, GoAir, and Paramount launched their services. Even the national airline Air India introduced its LCC arm, Air Indian Express in 2005. The private LCC, IndiGo, has become the largest Indian airline since 2012. Its market share exceeded 40% by the end of 2016 as shown in Figure 2.1. The whole industry is currently dominated by LCCs as opposed to 10 years ago when the market was dominated by FSCs.

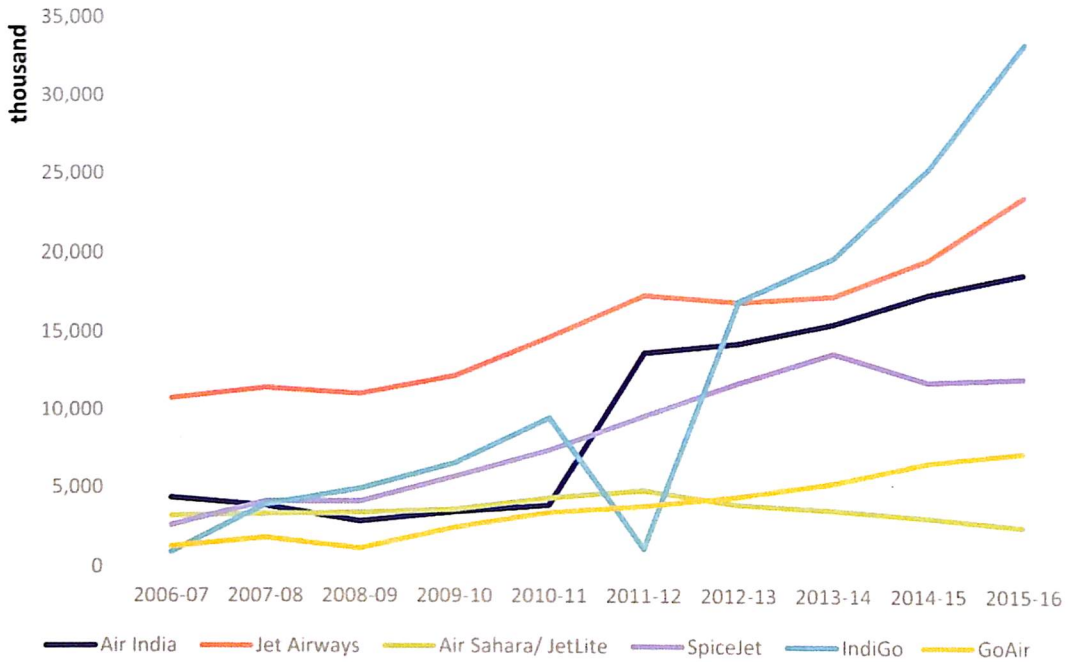


Figure 2.1: Passenger traffic carried by major Indian airlines 2007–2016. Source: Directorate General of Civil Aviation (DGCA)

LCCs has been the only successful airline industry model in India over the long term. With faster turnarounds and lower unit-costs, LCCs dominate the domestic market and are gaining share in short-haul international routes. While we expect profitability to remain levered to fuel (40 per cent of costs), slowing global demand should keep oil prices low, while domestic air-traffic growth should remain decoupled from global trends. Significantly, India's domestic aviation market is the third largest domestic aviation market after China and the US and was the fastest growing market in 2017 at 17 per cent YoY (in terms of domestic RPK, or Revenue Passenger Kilometer) growth. Overall the Indian aviation market has reached a size of $18bn (passenger and cargo industry size) or 183mn passengers as of FY18, and has grown at a CAGR of 18 per cent over the last five years as shown in Figure 2.2. Yet at 117bn RPK at the end of 2018, India's air traffic has only reached where China was in 2003. China's air traffic has increased eight-fold from that level to 951bn RPK at the end of 2017.

While Indigo has announced 30 per cent increase in its capacity in FY2020 (approximately half of which will be for the domestic operations), SpiceJet has announced an increase of 80 per cent. As the airlines continue to expand their fleet, resulting in a gradual correction in the demand-supply imbalance and thus a further moderation in airfares, the domestic passenger traffic growth is

expected to continue to increase. During May 2019, all airlines reported a month-on-month improvement in their passenger load factors (PLFs), while on a Y-o-Y basis, only Air India and GoAir have reported a Y-o-Y improvement in their PLFs. With the capacity expansion planned by the various airlines, the industry is likely to start facing pressure on yields and thus profitability. In this scenario the customer satisfaction is of immense importance for an airline particularly for the LCCs. In the year 2018-19 both in terms of RPK and passengers carried, IndiGo had the maximum market share followed by Jet Airways, SpiceJet and Air India. The LCAs currently operating in India and their profile are discussed in the following.

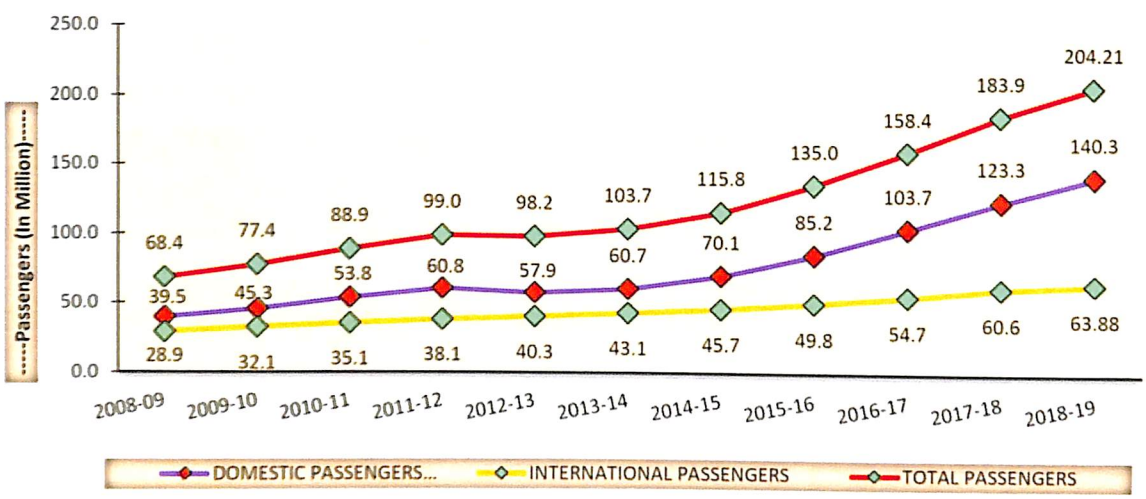


Figure 2.2: Passenger traffic carried by scheduled carriers over the last ten years. Source: Directorate General of Civil Aviation (DGCA)

2.2.1 Indigo

IndiGo is an Indian low-cost airline headquartered in Gurugram, Haryana, India. It is the largest airline in India by passengers carried and fleet size, with a 47.5% domestic market share as of November 2019. It is also the largest individual Asian low-cost carrier in terms of jet fleet size and passengers carried, and the sixth largest carrier in Asia with over 64 million passengers carried in financial year 2018–19. The airline operates 1500 flights every day to 87 destinations – 63 domestic and 24 international. It has its primary hub at Indira Gandhi International Airport, Delhi.

Being a low-cost carrier, IndiGo offers only economy class seating. To keep fares low, IndiGo does not provide complimentary meals on any of its flights, though it does have a buy-on board in-flight meal programme. No in-flight entertainment is available. Hello 6E, the in-flight magazine

published by IndiGo, is available for passengers to read. IndiGo offers premium services, such as a pre-assigned seat, multiple cancellations and priority check-in, to its passengers who are willing to pay a higher fare. In September 2019, the company announced its tie up with SonyLIV on demand video app for providing its fliers with entertainment options at the airport and in flight.

2.2.2 Spicejet

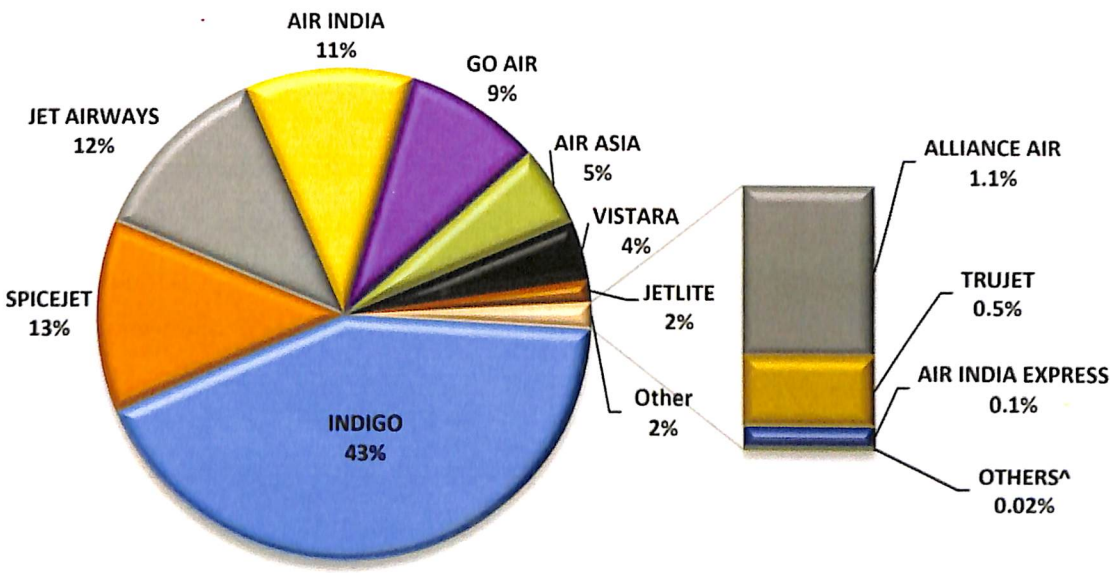
Indian low-cost carrier SpiceJet (SG) is one of the country's biggest airlines when measured by the number of domestic passengers. The airline flies non-stop to about 50 destinations, including more than 40 within India. International destinations include Afghanistan, the Maldives, Nepal, Oman, Sri Lanka, Thailand and the United Arab Emirates. SpiceJet's fleet consists solely of planes with Economy Class seating. Passengers who opt for SpiceMax receive priority check-in and seats with extra legroom. SpiceJet's primary hubs are located at Chennai International Airport (MAA), Delhi's Indira Gandhi International Airport (DEL) and Ahmedabad's Sardar Vallabhbhai Patel International Airport (AMD). The airline operates a fleet of Boeing 737 and Bombardier Dash 8 aircrafts.

SpiceJet has moved away from the typical low-cost carrier service model of economy class-only seating. The airline offers premium services under the name SpiceMax, whereby passengers can obtain additional benefits including pre-assigned seats with extra legroom; meals on board; priority check-in and boarding; and priority baggage handling; at a higher fare. Otherwise SpiceJet does not provide complimentary meals in any of its flights. It does sell full in-flight meals on some flights. SpiceJet operates its frequent-flyer programme but does not provide any in-flight entertainment options.

2.2.3 GoAir

GoAir is an Indian low-cost airline based in Mumbai, India. It is owned by the Indian business conglomerate Wadia Group. In October 2017 it was the fifth largest airline in India with an 8.4% passenger market share. It commenced operations in November 2005 and operates a fleet of Airbus A320 aircraft in all economy configuration. As of March 2020, the airline operates over 330 daily flights to 36 destinations, including 27 domestic and 9 international destinations, from its hubs at Mumbai, Delhi, Bangalore, Kolkata and Kannur. The fleet of GoAir consists of Airbus A320-200 and Airbus A320neo.

Being a budget airline, GoAir does not provide complimentary meals on its flights but offers options for buy on board in-flight meals. The airline publishes an in-flight magazine named Go-getter. GoAir offers a premium service known as Go Business at a higher fare which provides extra services including seats with greater legroom, free meals, increased baggage allowance and priority boarding. In 2011, the airline launched its frequent flyer programme called Go Club, which provided benefits such as lounge access and free upgrade to Go Business. New membership was discontinued in February 2014.



^ ZOOM AIR, STAR AIR, AIR DECCAN, AIR ODISHA, AIR HERITAGE

Figure 2.3: Domestic market share (%) in terms of passengers carried-2018-19 Source: Directorate General of Civil Aviation (DGCA)

2.2.4 Air India Express

Air India Expressis an Indian low-cost airline headquartered in Kochi, Kerala, India. It is operated by Air India Express Limited (AIEL), a wholly owned subsidiary of Indian flag carrier airline Air India. It operates around 649 flights per week to 33 destinations including the Middle East and Southeast Asia. The airline carries around 4.3 million passengers every year connecting 140 city pairs. The airline was launched as a low-cost carrier (LCC) with the objective of providing convenient connectivity, to short-haul international routes, in the Middle East and Southeast Asia for the Indian expatriate community. Air India Express was Air India's response to the growing

popularity of LCCs worldwide and within the region. Being an LCC, the airline operates point-to-point flights with multiple hubs all over India. The Air India Express fleet consists entirely of Boeing 737-800.

2.2.5 AirAsia India

AirAsia India is an Indian low cost carrier headquartered in Bangalore, India. The airline is a joint venture with Tata Sons holding 51% stake in the airline and AirAsia Investment Limited holding 49% stake. AirAsia India commenced operations on 12 June 2014 with Bangalore as its primary hub. AirAsia is the first foreign airline to set up a subsidiary in India and the company marked Tata Group's return to the aviation industry after 60 years, having ceded Air India in 1946. As of December 2019, AirAsia India was the 5th largest carrier in India, after IndiGo, SpiceJet, Air India and GoAir, with a market share of 7.0%.

2.3 Customer satisfaction in case of LCAs

In line with that definition, the attractiveness of airlines for potential customers could be defined as the airlines' perceived ability to attract and satisfy potential air passengers (Medina-Muñoz, Medina-Muñoz, and Suárez-Cabrera 2018). There are numerous ways to asses and address customer satisfaction, and behavioural intentions. Managers generally rely on customer feedback both to identify future managerial goals and to monitor the performance of a firm through customer satisfaction and loyalty scores, such as Net Promoter Scores and average customer satisfaction scores (Sezgen, Mason, and Mayer 2019). The International Air Transport Association (IATA) provides a passenger satisfaction benchmarking study called Airs@t. The scale incorporates 70 travel attributes including pre-flight, in-flight and post-flight attributes of overall travel experience.

It is widely accepted that the relationship between the dimensions of service quality and customer satisfaction may exhibit a nonlinear pattern which means that paying more attention to a particular dimension of service quality may not always lead to higher customer satisfaction. Thus, categorizing service quality elements according to their effects on customer satisfaction is also required In the academic context, various service quality frameworks—SERVQUAL, AIRQUAL, Kano and SERVPERF— have been used to investigate the relationship among airline service quality attributes, and satisfaction, and loyalty (Basfirinci and Mitra 2015; Chen and Chao 2015;

Gilbert and Wong 2003; Lim and Lee 2019; Park, Robertson, and Wu 2004; Tahanisaz and Shokuhyar 2020). A large number of airline service attributes identified and used in the literature to analyze how these attributes lead to customer satisfaction, loyalty and willingness to recommend are either based on airline business model and/or service class, or are at an aggregated level. However, there is no agreement reached in the literature on which service attributes establishes service quality and satisfaction (Medina-Muñoz, Medina-Muñoz, and Suárez-Cabrera 2018). It is critical to understand what the key service attributes leading to passenger satisfaction are and how they differ among different airline business models and service classes. the relative importance of an airline's attributes may differ depending on the socio-demographic characteristics of potential passengers.

Passengers contemplate a myriad of factors when selecting an airline; for example, service quality, corporate image, brand recognition, price, and promotional strategy Passengers may also have different considerations based on socioeconomic factors or their purposes for travel (Chen and Chao 2015). To passengers traveling for business purposes, time is money, and they are looking to reach their destination in the most efficient way possible. Punctuality is likely to be one of the most important considerations to them when choosing an airline. To passengers traveling for leisure, reducing the cost of flying may be a priority, and air fare is likely to have the greatest influence on their choice of airline. Understanding the preferences of different types of passengers is essential to airline companies, enabling them to target these customer groups and attract return customers, as well as create new business through marketing.

Alamdari (1999) indicated that the key factors influencing passengers flying for business are reliability, punctuality, schedules, and seating comfort. Passengers flying for leisure indicated that price, seating comfort, reliability, and punctuality are most important to them. In-flight entertainment is a differentiating factor that contributes to satisfaction with airline service. In order to effectively segment the target market, Gilbert and Wong (2003) studied the service constructs most important to outgoing passengers from Hong Kong International Airport, and analyzed and compared differences among passenger expectations of reliability, assurance, facilities, employees, flight patterns, customization, and responsiveness. Results showed that ethnicity, nationality, and reason for travel led to significant differences in service expectations. To gain a better understanding of the decision-making process that leads passengers to purchase tickets from

a specific airline, Park et al. (2004) built and verified a causal relationship model comprising service expectations, service perception, service value, passenger satisfaction, airline image, and behavioral intentions, using data collected from Korean passengers on international airlines. Results showed that service value, passenger satisfaction, and airline image directly affect the decision-making process.

The results from the study by Kim and Lee (2011) indicate that the significant dimensions of customer satisfaction are tangibles and responsiveness. In addition, the study confirms the significant consequences of customer satisfaction including word-of-mouth communication, purchase intentions, and complaining behavior. Lerrthaitrakul and Panjakajornsak (2014) suggested that to ensure good quality service that could satisfy the needs of the passengers, low cost airline management teams should ensure that their flights are always on time and reliable; flying according to their schedules; customers are well taken care of; as well as developing an image of an airline concerned with safety, should become their first priority to attract their customers.

The relationship between the airlines industry and service quality in case of Indian market scenario has been studied by various researchers (K. Deepa and Ganapathi 2016; M. V. Deepa and Jayaraman 2017; Rai and Srivastav 2014; Saranga and Nagpal 2016; Wang, Zhang, and Zhang 2018). Deepa and Ganapati (2018) showed that responsiveness, reliability, assurance, empathy and tangible dimensions have a positive and significant impact on customer's loyalty towards low cost carriers at one per cent level, while, price has a negative and significant impact on customer's loyalty towards low cost carriers. Kaur and Narula (2019) analyzed the impact of customer relationship management (CRM) elements on customer satisfaction and loyalty. The elements examined were customer focus, responsiveness, staff assistance, convenience, post-flight services, other relationship maintaining practices and customization services by means of a structured questionnaire. Yadav and Rai (2019) reported that that customer satisfaction mediates the relationship between service quality and customer loyalty in the case of LCAs. However, Reddy and Sadineni (2019) have argued that satisfaction and loyalty are not surrogates for each other, i.e., it is possible for customers to be loyal without being highly satisfied and to be highly satisfied and yet not loyal.

2.4 Assessment of customer satisfaction from online reviews

The key to staying competitive is to identify the choice criteria (or factors) used by passengers in selecting airlines, and on this basis formulate marketing segmentation and promotional strategies (Chen and Chao 2015). The analysis of online review to get an assessment of customer satisfaction have been previously used in hospitality industry by many researchers. Xiang et al. (2015) demonstrated that guest experience attributes are significantly associated with hotel satisfaction by analyzing hotel customer ratings and reviews from "Expedia.com" using sentiment analysis. Xie et al. (2014) collected 4994 reviews of 843 hotels in five major cities in Texas and showed that overall ratings, ratings of "value for money," variation and volume of reviews, and the number of management responses are all significantly associated with hotel performance. The ability to disentangle the recommendation decision to examine how specific service aspects are being evaluated by prior consumers and how they drive the overall recommendation decision from the online reviews can further inform the stakeholders (Siering, Deokar, and Janze 2018)

Social media play a critical role in the way consumers plan their trips and tourism companies use social media to better promote their products/services to online travelers (Bigne et al. 2018). Social networking travel sites, such as forums, chats, blogs, and travel communities, allow consumers to easily compare the price of a wide range of tourism services, exchange information, and find out about the ratings for destinations and providers (Tham, Croy, and Mair 2013). They foster consumer empowerment through an unparalleled access to information and networking possibilities, promoting electronic exchanges of opinions and knowledge (Johnson and Grier 2013). In this context, Consumer-to-Consumer (C2C) information exchanges are defined as passive or active interactions between consumers that serve as an information source and enhance competency during the purchase experience and also during pre- and post-purchase(Bigne et al. 2018). Consumers trust these exchanges more than traditional communication media, because they consider this information to be reliable, non-biased, and timely.

Lee and Yu (2018) have used reviews at Google Maps and suggested that user-generated online contents can be used as an alternative data source for assessing airport service quality, which effectively complements and cross-validates the conventional service quality surveys. Lee et al. (2018) have recommended that LCAs need to recognize that social platforms provide dual-communication channels, thus managing the feedback from the passengers and developing action

plans are the major challenges for LCAs. Despite the growing number of studies focused on social media, several gaps still remain for research related to LCAs especially in an Indian scenario.

For marketers, the emergence and development of social media have radically changed tourism industry marketing practices. Comments on social networking travel sites, such as Tripadvisor, Flytalk, Skytrax, Mouthshut, and Airlineratings provide airlines and other travel-related companies with a better understanding of what their customers like and dislike about them and their competitors. However, the ease of website comparison and strong competition on price encourage online consumers to switch from one service provider to another or to spread positive or negative word of mouth (WOM) to other consumers (Bigne et al. 2018). Therefore, tourist companies operating online have to make even greater efforts to satisfy and keep their customers happy in an attempt to develop long-term relationships with them and boost positive reviews (Sanz-Blas, Ruiz-Mafé, and Perez 2014).

Despite the growing number of studies focused on social media, several gaps still remain for new research in the tourism arena. Firstly, although social networking travel sites may have substantial and positive implications for tourist companies, little is known about the outcomes of customer participation in these sites. Knowing these outcomes is fundamental for firms and academics, because it would be possible to determine the effect of information obtained on social networking sites on actual consumer behaviour. The participation in social networking travel sites is a key driver of two different outcomes: individual customer behaviour (intentions to purchase travel services) and social customer behaviour (intentions to recommend travel services through offline channels and social networking travel sites)(Bigne et al. 2018).

2.5 Summary

The Chapter deals with the review of literature dealing primarily with the Low cost airlines in India. A brief history of the LCAs in Indian market is provided, next the company profiles and market shares of the operating LCAs in India is presented. The different literature availivable towards the understanding of customer satisfaction for the LCAs that has been carried out both India and abroad are presented, followed by the recent examination of online review system to gather data about customer satisfaction. The literature review directly helps in framing the objectives as well as in the setting up of the procedure for analysis.

3

Research Design, Methodology and Plan

Domestic airlines should pay attention to the passenger's expectations of their services. Airlines need to discover new ways to emphasize essential service items and reduce the time and energy consumed on less important service items. The approach, by which airlines allocate services to their customers in order to increase their satisfaction, has always been a crucial issue for the aforementioned companies. However, not all service dimensions are equally important to all passengers, because no two passengers are accurately alike, especially when demographics; the purposes of travel and ethnic background is considered (Gilbert and Wong 2003).

3.1 Research Methodology

The study is done using the reviews in online website 'tripadvisor.com', where the individual responses on a number of factors are reviewed by passengers. The review on value-for-money is considered as the measure of customer satisfaction. A regression analysis of the reviews is done subsequently. The correlation between the different individual factors namely legroom, in-flight entertainment, check-in and boarding, seat comfort, customer service, cleanliness, and fooding with the reviews on value-for-money are obtained.

The study uses a model to measure and convert different attributes recorded from online reviews into quantitative degrees of customer satisfaction by applying the Kano model. Finally, Importance-Satisfaction Analysis (ISA) was employed to finding that which service quality indicators fall into the "Keep up the proper work", "over-kill", and "Low priority" category for eliciting applicable marketing strategies.

3.1.1 Kano model

Kano (1984) proposed a two-way quality model to elucidate the association between function of a product or service and customer satisfaction. According to Figure 3.1, the x-axis represents the amount of the quality elements (functional presence and dysfunctional absence), and the y-axis indicates satisfaction of customers. In terms of the pattern shown in Figure 2.1, quality categories are divided into five distinct categories, all of which are explained below.

(1) Attributes of attractive quality (A): If these features exist, Customers experience a positive satisfaction while if these features lack, customers are not dissatisfied at all.

(2) One-dimensional quality attributes (O): Customers will be satisfied when the attributes are met, and if they are not fulfilled, customers will be dissatisfied.

(3) Must-be quality attributes (M): The features that won't lead to more satisfaction, but customers will be dissatisfied when they are absent.

(4) Indifferent quality attributes (I): Whether these features lack or exist, they won't have an effect on satisfaction.

(5) Reverse quality attributes (R): If these features are met, customers will be dissatisfied, and if they are not met, it will lead to customer satisfaction.

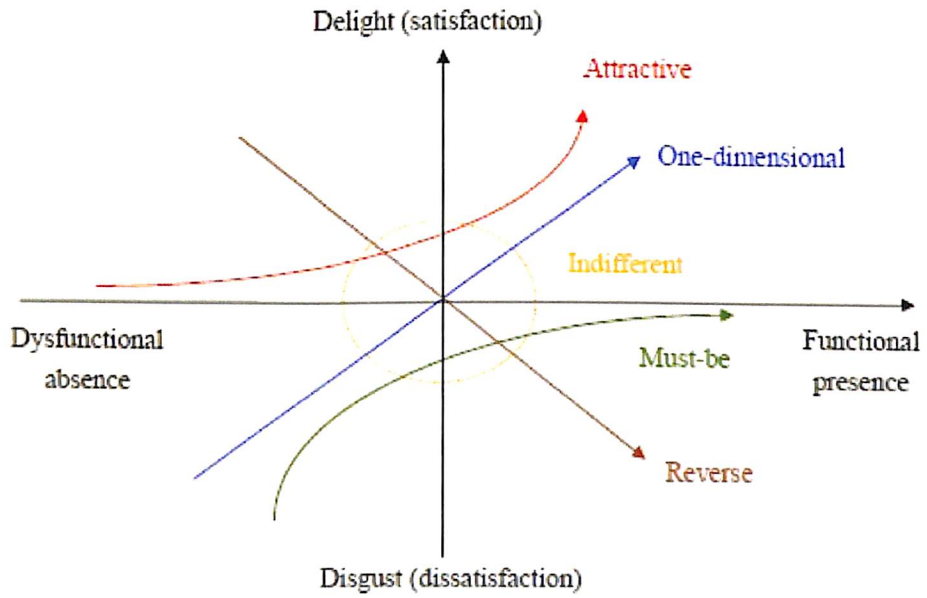


Figure 3.1: Original Kano model

Kano (1984) presented a functional and dysfunctional questionnaire. Functional question encapsulates customers' feelings when quality attributes are offered by a product or service, while dysfunctional question functions when quality attributes are not offered. Either way, customers' answers are recorded on a one-to-five scale. Product/service quality elements are classified into five categories mentioned by Kano (Tahanisaz and Shokuhyar 2020), as shown in Table 3.1.

Table 3.1: An illustrated questionnaire applied to Kano model (Tahanisaz and Shokuhyar 2020)

KANO questionnaire		Dysfunctional form of the question				
		1)I like it that way	2)It must be that way	3) I am neutral	4)I can live with it that way	5)I dislike it that way
Functional form of the question	1)I like it that way	Q	A	A	A	O
	2)It must be that way	R	I	I	I	M
	3) I am neutral	R	I	I	I	M
	4)I can live with it that way	R	I	I	I	M
	5)I dislike it that way	R	R	R	R	Q

3.1.2 Importance-performance (satisfaction) analysis

Tahanisaz and Shokuhyar (2020) have used a Importance-performance (satisfaction) analysis ((IPA) first proposed by Martilla and James (1977) to shed light on product or service attributes, through which a company can achieve customer satisfaction or finish valuable resources. A two-dimensional matrix is plotted. Horizontal axis represents the degree of performance, and vertical axis shows the degree of importance. Four distinct strategies for customer satisfaction management are derived from the matrix shown in Figure 3.2.

Attributes in Quadrant I. They are in an area high in both satisfaction and importance, and are representatives of competitive advantage opportunity.

Attributes in Quadrant II. They are in an area low in satisfaction but high in importance, and are representatives of the points requiring concentration and if ignored, a great threat takes place.

Attributes in Quadrant III. They are in an area low in both satisfaction and importance, and are representatives of the points which do not need allocation of additional efforts.

Attributes in Quadrant IV. They are in an area high in satisfaction and low in importance, and are representatives of "low priority" attributes. Resources allocated to such attributes can be more efficient if they are employed in other attributes.

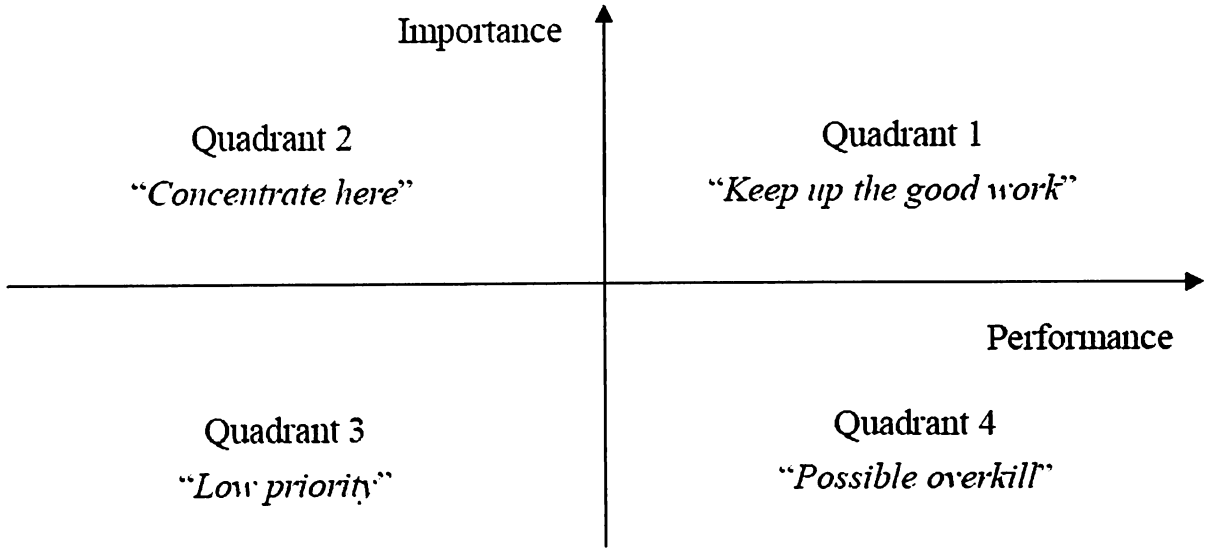


Figure 3.2: Importance-performance analysis (IPA)

3.2 Source of data

The data is generated from the reviews in tripadvisor.com for the different LCAs operating in India. The reviews are in a scale of 1 to 5. This helps in quantifying the response. The reviews on legroom, in-flight entertainment, check-in and boarding, seat comfort, customer service, cleanliness, fooding, and value-for money are collected.

Tripadvisor, Inc. is an American online travel company that operates a global platform with user-generated content, price comparison tools, and online reservations for transportation, lodging, travel experiences, and restaurants. Its flagship brand, Tripadvisor.com, reached 490 million average monthly unique visitors in 2018. The website has versions in 48 markets and 28 languages worldwide. It features approximately 730 million reviews and opinions on approximately 8.1 million establishments—including 1.3 million hotels, inns, bed and breakfasts and specialty lodging, 875,000 rental properties, 4.9 million restaurants, and 1.0 million travel experiences worldwide. The company's other websites include Airfarewatchdog, Bokun.io, Bookingbuddy.com, Cruise Critic, Familyvacationcritic.com, FlipKey.com, Thefork.com (including Lafourchette.com, Eltenedor.com, and Iens.nl), Holidaylettings.co.uk, Holiday

Watchdog, Housetrip.com, Jetsetter.com, Niumba.com, Onetime.com, Oyster.com, SeatGuru.com, Smartertravel.com, Tingo.com, Vacationhomerentals.com, and Viator.com (U.S. Securities and Exchange Commission 2018). Tripadvisor js mainly used by travelers to compare low prices on hotels, flights and cruises, book popular tours and attractions, as well as reserve tables at great restaurants. Tripadvisor is available in 49 markets and 28 languages. TripAdvisor is to travel as Google is to search, as Amazon is to books, as Uber is to cabs – so dominant that it is almost a monopoly (Kinstler 2018).

A typical review of passenger for rating the airlines based on the different parameters is shown in Figure 3.3.

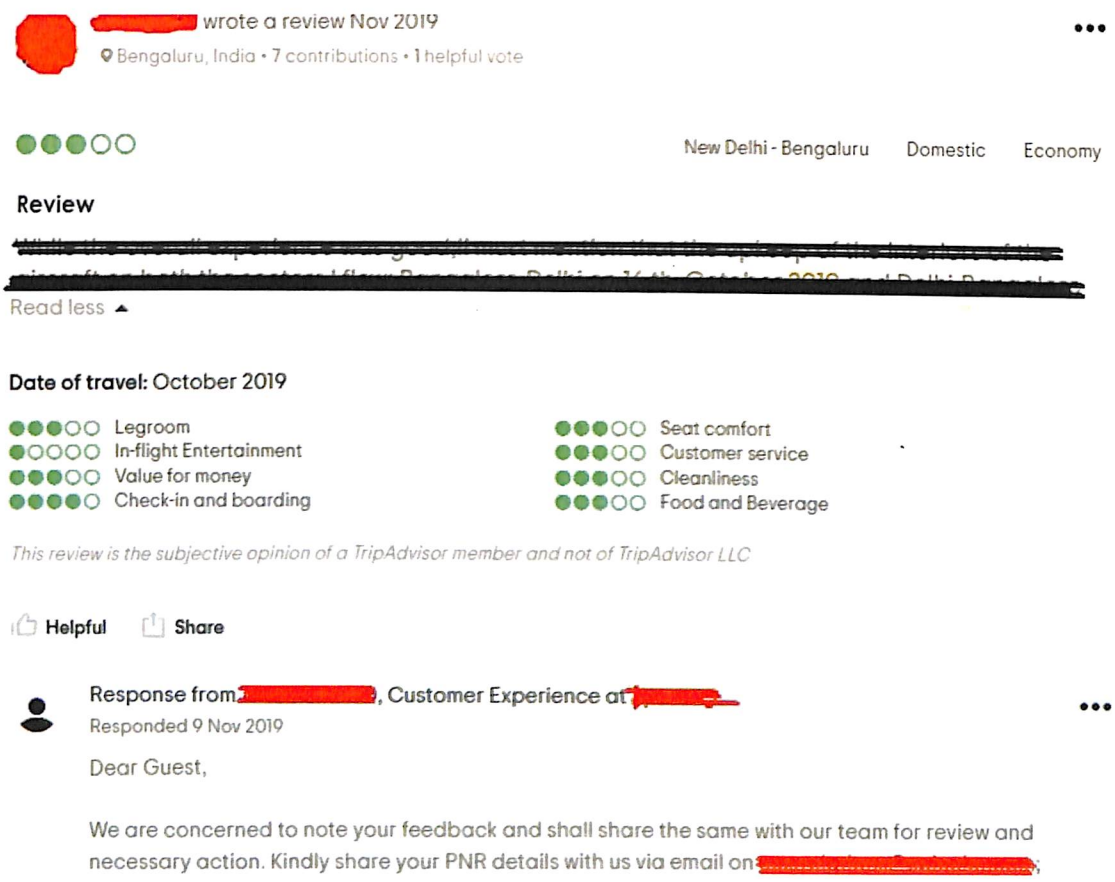


Figure 3.3: Sample review in Tripadvisor for rating of airlines

3.3 Sampling

Sampling is a process used in statistical analysis in which a predetermined number of observations are taken from a larger population. The methodology used to sample from a larger population

depends on the type of analysis being performed, but it may include simple random sampling or systematic sampling. Two advantages of sampling are lower cost and faster data collection than measuring the entire population. Moreover, like in the case in this study where all the passengers' review cannot be examined, it becomes mandatory to go for sampling. Sampling is thus appropriate when the population size is large and if the cost and time associated with obtaining information from the population is high. It is one of the most important factors which determines the accuracy of your research/survey result. If anything goes wrong with the sample, then it will be directly reflected in the final result. There are lot of techniques which help us to gather sample depending upon the need and situation.

Current considered sample size is 114, which have been randomly taken from the reviews on the LCAs operating in India. The reviews considered are taken as given in between January,2019 and January 2020. The reviews which mark all the attributes as highest or lowest are neglected. Typically, all the attributes having very low values have arisen due to cancellation of flights or the passenger not allowed to board the flight. In both the cases customer services could have been better, but, they have not been considered for the sake of clarity in the study. The reviews giving all as highest values have not been considered as the reviews might be biased, or the reviewer is new to the rating systems.

The reviews do not consider the gender of the passengers or their economic background. The sampling also cannot ascertain whether the review was made on a business travel or a travel intended for leisure like tourism or family visit. The spring also do not account for the age of the reviewer. Another thing that has to be kept in mind is that typically many customers do not provide review if they are satisfied, but will definitely provide a feedback if something goes wrong. Thus. It is quite natural to have reviews which are in the negative side mostly. The number of reviews for the different LCAs is illustrated in Figure 3.4. The number of reviews is highest for Indigo, followed by Spicejet and Goair, the number of reviews in Tripadvisor , as well as that considered in this study follow the trend of the number of passengers transported by the respective airlines as already shown in Figure 2.3.

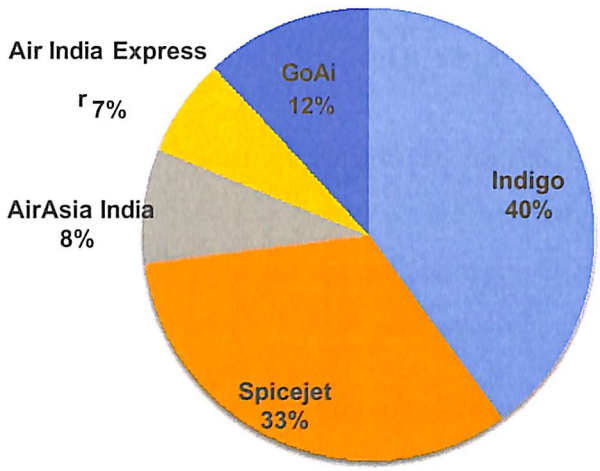


Figure 3.4: Percentage of reviews considered in this study for each of the LCAs operating in India

3.4 Summary

This Chapter discusses the research methodology followed in this study. The study uses Kano model to measure the relation of different attributes on customer satisfaction. Finally, Importance-Satisfaction Analysis (ISA) was employed to finding that the service qualities that influence the degree of satisfaction for the customers and their perception towards the value for money in the LCA categories.

4

Analysis

This Chapter deals with the analysis of the data obtained from the Statistical analysis of the online reviews about the customer satisfaction collected from tripadvisor.com. The individual reviews for each of the attributes are collected and the link between the ratings to individual attributes and the that for the valve-for-money are explored here using regression analysis.

4.1 Frequency analysis of individual attributes

The individual attributes whose ratings are available in the website tripadvisor.com are: legroom, in-flight entertainment, check-in and boarding, seat comfort, customer service, cleanliness, fooding, and value-for money. The total responses of 114 persons on the different attributes based on their experience after a travel has been analysed and are presented.

4.1.1 Legroom

"Legroom" is the general term used in place of the more accurate "seat pitch"—which is the distance between a point on one seat and the same point on the seat in front of it. In general though, the seat pitch measurement is a good indicator of how much room your legs have between one seat and the seat in front of that; typical range is roughly 30–31 inches. Note, however, that while a higher number can mean more legroom, it's not always a direct correlation—if the seat back is thicker, for instance, that means less legroom even if the seat pitch number might be higher.

International flights, or "long-haul" flights, often have more legroom than domestic "short-haul" flights, though that, too, varies by airline and plane type. Bulkhead rows do have plenty of legroom, but that perk may come at a different cost. Those seats may be located near a galley or bathroom or have armrests you can't move. What's more, with no seat in front of you, there's no seatback TV or space to stow a bag on the floor (all bags must go in the overhead bin during take-off and landing).Exit row seats also generally have more legroom, though these may not recline much (or at all).

Since 2015, India's aviation regulator has allowed airlines to sell all seat assignments for money. This has been inferred differently by different airlines, all of whom have taken to charging their fliers one way or another. Some carriers leave one-third of the plane at the back for free

assignment, while others charge money for everything till the second-last row, adding to their own work at the airport since people wait the last minute to get a free seat assigned. The Economic Times (2015) compared the different seats of four airlines operating in India available in Seatguru.com , and published their comparison as given in Figure 4.1.

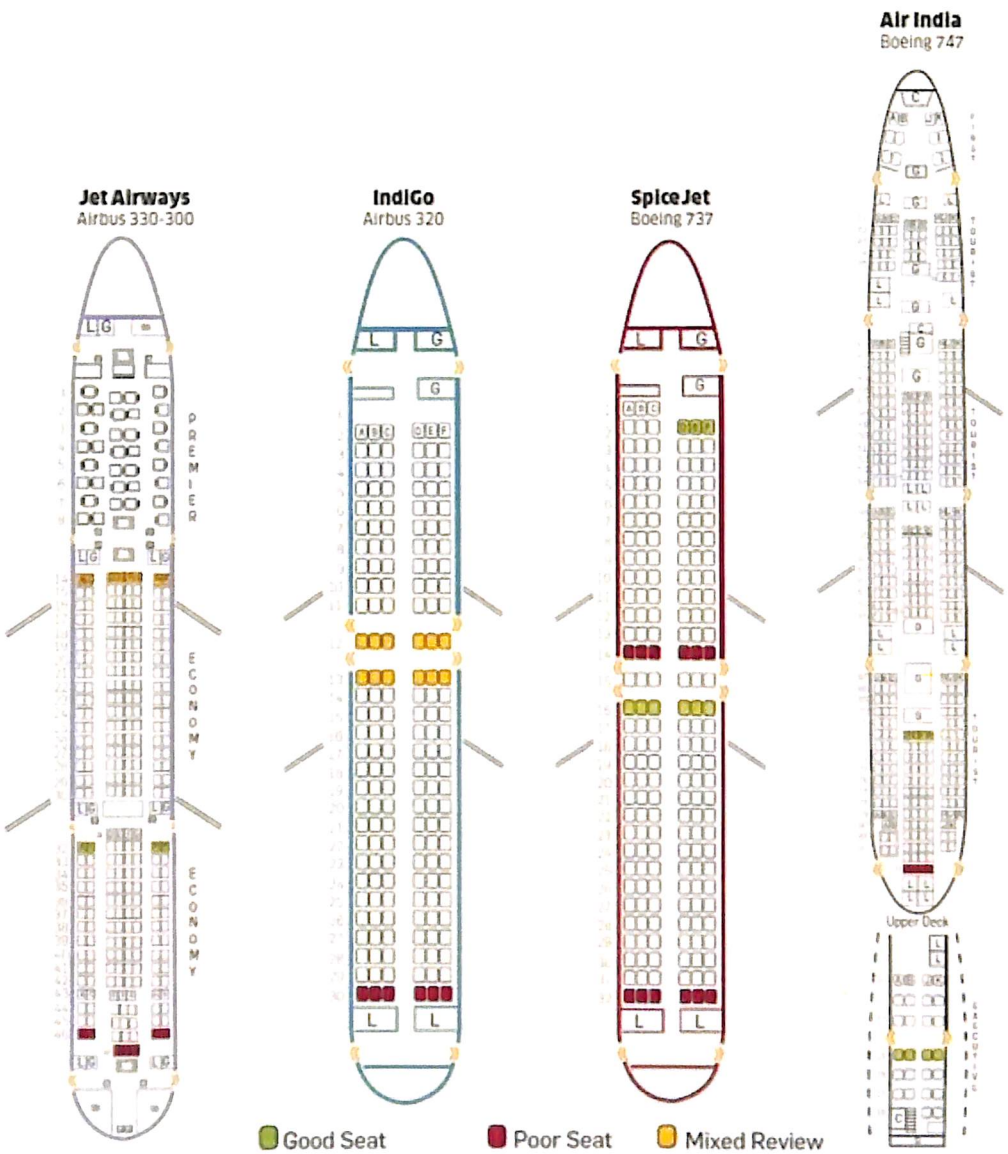


Figure 4.1: Best and worst seats of Indian carriers like Jet Airways, SpiceJet, Air India and IndiGo (*The Economic Times* 2015)

Notes : All the carriers except Indigo use two or more types of Aircraft.
First class sets of Air India were not considered in the study.
Indigo's front row seats did not make the cut because of the proximity to the lavatory and the reduced seat width due to tray table at the arm rest.
Mixed reviews indicate extra legroom but reduced recline (*The Economic Times* 2015)

IndiGo has a straightforward process to allocate the seats on their website. On their A320 jets, payment of Rs600 per passenger for extra leg-room seats marked as XL seats, or Rs200-300 for sitting in the front or middle section of the plane (through row 20) had to be made. Seats at the back of the plane are free to pre-assign, but usually run out quickly. SpiceJet has allocated five rows of extra legroom seats, three in the front and two in the middle of the plane. They charge up to Rs1,000 for these seats, labelled as SpiceMax. But they also provide a host of services on buying SpiceMax, including a meal on the plane, priority check-in and baggage handling. For other seats, they make you pay Rs99-300 for seats all the way till the second-last row of the plane. The only way to get a free seat without paying for it, is to arrive at the airport and get one. A SpiceClub member (SpiceJet's rewards program) can get into a queue which is almost empty all the time, and hence get a shot at better service and seat assignments.

GoAir sells the first two rows as Business Class, but row 3 onwards to select a seat, one would have to pay ahead. Emergency Exit rows are charged at Rs600 online, and Rs800 if booking at the airport. All their seat selection charges are here. Other seats can cost anything between Rs99 to Rs300. Air Asia India sells a Hot Seat (extra leg room seats or emergency exit rows) in the domestic flights; seat charges range from Rs660 for the Hot Seats to Rs100 for the standard seats at the back of the plane.

As ticket prices drop, airlines are trying to charge the passengers via other routes to keep up their revenues. However, the legroom ratings in LCAs typically has a mean of 3, which can be thought as satisfactory, as shown in Figure 4.2. Moreover, very few passengers are completely satisfied with the legroom, along with the number of passengers who think that the legroom is too low, as indicated by the number of ratings of 1 and 5 respectively.

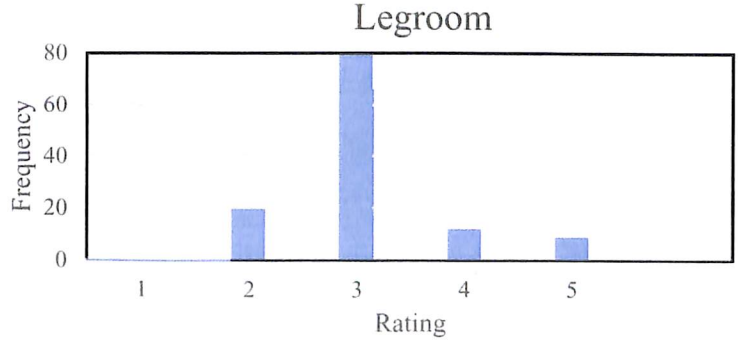


Figure 4.2: Frequency distribution of the reviews on legroom

4.1.2 In-flight entertainment

The quality of the in-flight entertainment service can be affected by a number of different things, such as the size and quality of the screen that it is displayed on, or the variety of content available such as having movies, TV shows, podcasts, music and games as opposed to just films. Similarly, within each category, it is good to have a wide range of genres, such as romance, dramas and comedies so that they appeal to all audiences. Planes are also places to watch the latest blockbusters, so the date that these films were released is also a good sign of good entertainment if they are recent. However, different airlines will provide different standards for in-flight entertainment. Traditionally, full-service airlines would typically have the best in-flight entertainment service, with ultra-low-cost carriers cutting on this to keep costs down.

Several full-flight airlines like Emirates, Delta Airlines, Qantas Airlines are known for their inflight entertainment options. Emirates, for example, has been ranked by Skytrax as the number 1 airline in the world for best in-flight entertainment in 2019. The entertainment is delivered on its new Ice system, which offers over 2500 entertainment options from movies, TV shows, music and games. The airline was also great for attracting the global customer, as it offers this entertainment in multiple languages. In addition, the airline offers these with audio description and closed captions, making is suitable for passengers who are visually or audibly impaired. The ice system features high-spec widescreen personal devices, making for the best experience. Their most original entertainment option is the ability to learn or brush up on language skills, which features Arabic, French, German, Italian or Spanish.

Among the Indian LCAs, SpiceJet had introduced its latest In-Flight Entertainment (IFE) services for its passengers on 2018 called "SpicEngage", free-of-cost for all SpiceJet flyers. The low-cost carrier has introduced this service for the travellers, wherein they are able to stream content on their personal electronic devices (PED). It is noteworthy that Jet Airways and Vistara had announced its latest in-flight streaming services called JetScreen and Vistara World on some of its aircrafts also on 2018.

IndiGo, entered into a partnership with video-on-demand platform SonyLIV, operated by an Indian-subsidiary of Sony Corporation, to provide mobile entertainment services on its domestic flights on 2019. To avail the same, passengers will be provided with a link, which upon payment,

can be utilized to get a short duration subscription to the video streaming platform. Once on board, the passenger can watch this content on their devices.

Even after introduction of different in-flight entertainments in the LCAs in India, the basic problem lies in their quality. The different IFEs have been introduced only in some of the aircrafts, meaning most passengers don't get the benefits. Thus LCAs have a very low ratings in this attributes, more than 50% passengers have rated only one as seen in Figure 4.3.

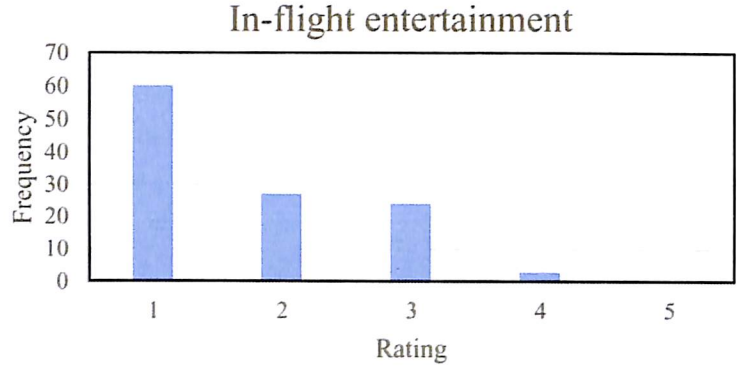


Figure 4.3: Distribution of the reviews on in-flight entertainments for LCAs.

4.1.3 Check-in and boarding

Check-in is the process whereby passengers are accepted by an airline at the airport prior to travel. The airlines typically use service counters found at airports. The check-in is normally handled by an airline itself or a handling agent working on behalf of an airline. Passengers usually hand over any baggage that they do not wish or are not allowed to carry in to the aircraft's cabin and receive a boarding pass before they can proceed to board their aircraft.

Check-in is usually the first procedure for a passenger when arriving at an airport, as airline regulations require passengers to check in by certain times prior to the departure of a flight. This duration spans from 15 minutes to 2 hours depending on the destination and airline (with self check in, this can be expanded to 24 hours, if checking in by online processes). During this process, the passenger has the ability to ask for special accommodations such as seating preferences, inquire about flight or destination information, accumulate frequent flyer program miles, or pay for upgrades. The required time is sometimes written in the reservation, sometimes written somewhere in websites, and sometimes only referred as "passengers should allow sufficient time for check-

in". The airline check-in's main function, however, is to accept luggage that is to go in the aircraft's cargo hold and issue boarding passes.

At the time of check-in, one of the agent's primary duties is to check for valid documents. This includes tickets, passports, visas, letters of consent, and in some cases, passengers' address and contact details to comply with immigration requirements. At the time of check-in, the passenger hands over baggage which is checked by the airport security and may be sealed (subject to the security regulations in that country). Anything that is above the weight limit or which is not allowed to be carried by the passenger themselves in the aircraft cabin is usually handed over to the agent at the time of check-in. The baggage allowance, if any, is prescribed by the airline and anything in excess will warrant additional surcharges. Some airlines have a self-check-in process allowing passengers with bags to check-in at Self Bag Drop machines. Passengers then attach the baggage tag and drop the bag at the baggage drop belt.

Online check-in is the process in which passengers confirm their presence on a flight via the Internet and typically print their own boarding passes. Depending on the carrier and the specific flight, passengers may also enter details such as meal options and baggage quantities and select their preferred seating. This service is generally promoted by the airlines to passengers as being easier and faster because it reduces the time a passenger would normally spend at an airport check-in counter. Some airlines, however, would still require passengers to proceed to a check-in counter at the airport, regardless of preferred check-in method, for document verification (e.g., to travel to countries where a visa is required, or to ensure the credit card used to purchase is genuine and/or matches the identity of the person who made the purchase). If passengers need to continue the check-in process at the airport after performing an online check-in, a special lane is typically offered to them to reduce wait times unless all desks are designated as baggage drop-off points. Furthermore, online check-in for a flight is often available earlier than its in-person counterpart.

Recently, the LCA operators like Indigo and Spicejet started charging for web check-ins (Majumder 2018) directed to boost ancillary revenue of the airlines; ancillary revenue consists of charges like baggage fees, seat selection fees, cancellation charges. Flyers argued that this will lead to increased congestion at major airports like Delhi and Mumbai as more people will now turn up in airport counters for check-in.

Customer face problems related to check-in mainly for 2 reasons: a) late check-in, and b) excess baggage. Most of the low ratings are due to the above two reasons. This is why the reviews on this attributes seems to be spread among all the 5 ratings as seen in Figure 4.4.

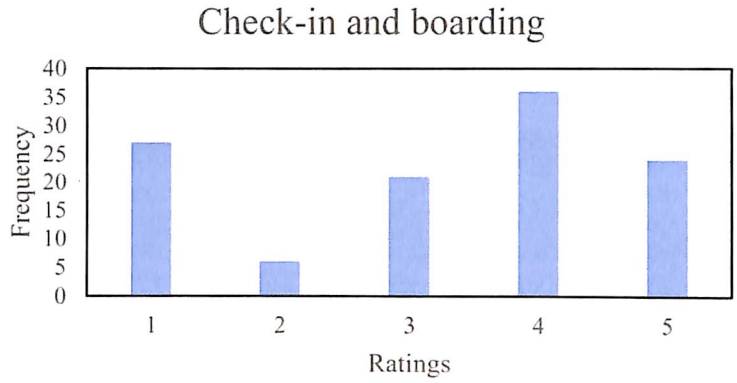


Figure 4.4: Distribution of the reviews on check-in and boarding.

4.1.4 Seat comfort

The ratings on seat comfort is typically related with legroom. However, other factors like seat width, reclining features, softness of the seat, seat rest, and armrest also influence the perception of comfort for the passengers. Speaking in the domain of LCAs, it is typical that the comfort is not the highest priority, and thus the number of highest rating is usually low as observed in Figure 4.4. However, the maximum ratings for the median value of 3 indicates that the passengers are usually satisfied with the seat comfort in LCAs. The LCAs usually charge for better seat, the typical example is the availability of SpiceMax seats in Spicejet, with at least 6 inches more leg room compared to standard seats, a lot more personal space to work or relax.

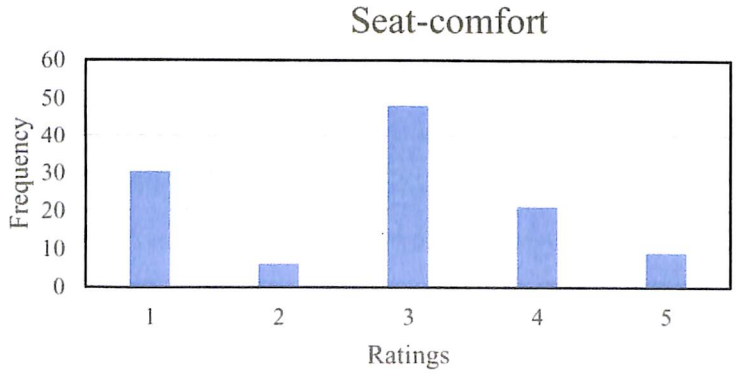


Figure 4.5: Distribution of the reviews on seat comfort.

4.1.5 Customer service

The ratings on the customer service attribute mainly covers services provided by ground staffs and services provided by flight attendants. The service provided by ground staff are the issuing of boarding passes, collection of baggage, and check-in. The service provided by flight attendants cover the services mainly inflight, like cart for food and drink. Provision of Pillow / Blankets etc., child care / Bassinets by flight attendants also reflect on this attribute This feature sees a larger portion with unsatisfactory rating as indicated in Figure 4.6. This may be due the altercations between the ground staff during check-in. or for the information related to passenger queries during flight delay or cancellations. As such this attribute also covers the customer service on call also, where passengers usually contact on flight cancellation, or delay, or when they are late for check-in.

Figure 4.6: Distribution of the reviews on customer service.

4.1.6 Cleanliness

The significance of cleanliness and hygiene cannot be overlooked by any business nowadays, and for air travelers the topic of cleanliness has become an increasingly important factor by which customers judge their experience. Cleanliness of onboard washrooms can be a factor across all cabin types, be it First, Business or Economy Class. Whilst customers may expect a more proactive cleaning service from cabin staff in the premium cabins, this is seldom the case in Economy Class – particularly at peak times after meal services and pre-arrival when customer usage is intense, and cabin staff are often busy completing other duties.

Passengers usually rate the standards and quality of cleanliness in the aircraft cabin for airlines. cleanliness and presentation of seat areas, tables, carpets, cabin panels and washrooms. The

cleanliness of tray tables, seat-back entertainment screens, arm rests and seat-back pockets, head rest and aisle are what is visible to the passenger. Pillows are normally provided unpackaged, and similar to headrest covers the only real indicators a product is not fresh is human hair and other unexplained marks or stains.

The armrest table storage space used on bulkhead seats in Economy Class and across many Business Class cabins is often a hotbed of crumbs, wrappers and other debris from previous flights. Seldom cleaned properly by maintenance staff it is worth paying extra attention. Usually this is taken care by flight attendants when complained, but it reflects poorly on the cleanliness aspect.

Badly stained or marked seat covers are very clear but quite rare amongst most airlines. Problem zones tend to be carpet areas around seat legs/struts which attract a lot of crumbs and debris and are often overlooked during transit cleaning. Headrest covers are probably not noticed by many passengers, but are the sure way to check for cleanliness. Strands of hair, stains, marks, tears etc are all good indicators that a headrest cover hasn't been changed and when your flight is delayed because of a late arriving aircraft it is sometimes here that maintenance staff may try to shorten the turnaround time by leaving previous covers in place. The ratings on cleanliness indicate most customers are satisfied about the cleanliness in the aircrafts as more than 80% ratings are above 3, as seen in Figure 4.7.

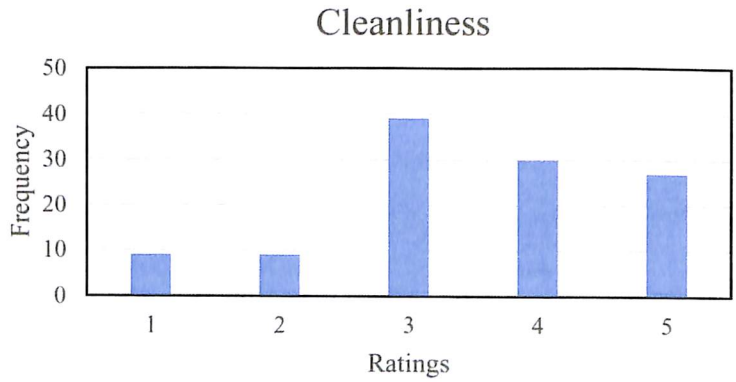


Figure 4.7: Distribution of the reviews on cleanliness.

4.1.7 Fooding

In-flight food service has been the most popularly recognised demarcating line between a low-cost carrier and a full service airline. In-flight meal is served to passengers on board; these meals are

prepared by specialist airline catering services and normally served to passengers using an airline service trolley. These meals vary widely in quality and quantity across different airline companies and classes of travel. They range from a simple snack or beverage in short-haul economy class to a seven-course gourmet meal in a first class long-haul flight. The types of food offered also vary widely from country to country, and often incorporate elements of local cuisine, sometimes both from the origin and destination countries.

Kingfisher Red (Air Deccan before its makeover) in 2008 was the first among the LCAs operating in India to start on-board catering service(Manju 2008). Currently all the LCAs provide on-board fooding, but it is usually charged at a higher price. The option for pre-booked food is also available for the LCAs. However, most of the passengers seldom buy food in the low-cost airlines, the usual low rating is typically understandable as is observed in Figure 4.8. The rating also reflects the quality and taste, hygiene, amount and availability of choice. Even in a chargeable basis, the fooding reviews does not look satisfactory as more than 60 percent of the reviews are below a rating of 3.

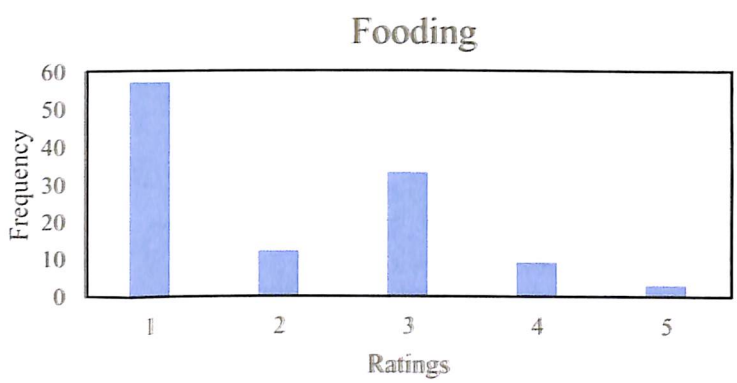


Figure 4.8: Distribution of the reviews on fooding.

4.1.8 Value-for money

The value-for money attribute is considered as a representation of customer satisfaction in this study. This is vastly true particularly for LCAs, where, the low cost of tickets inherently dictates compromising on some of the services typical for full-service airlines. In that case the perception that the customer has been given what is deserved or that the service is value-for money is directly linked with customer satisfaction. As observed in Figure 4.9, the reviews collected in this study shows the distinct spread in the frequency; the number of passengers giving a particular rating are

comparable to one another. This trend is unique and not found in other attributes. This is the reason the underlying cause behind the variation of the review this attribute is to be correlated with other attributes to get an insight into what the passengers think as value for money. The LCAs will try to obtain a rating of greater than 3 in this attribute as value-for money is the largest selling point. In that scenario, if the passengers feel that a particular LCA is not fulfilling this attribute, then it is imperative that the marketing and operational strategy have to be analysed and changed.

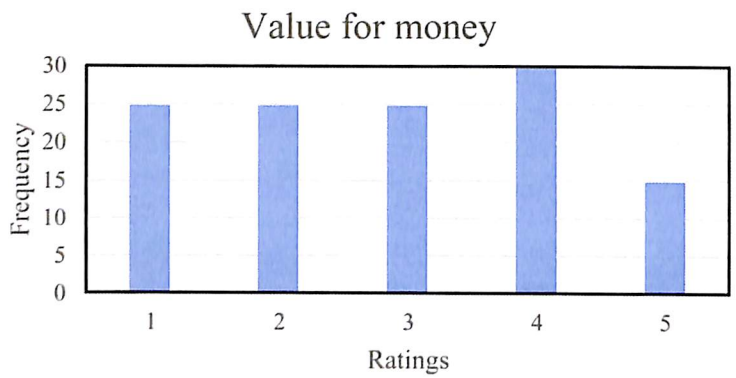


Figure 4.9: Distribution of the reviews on value-for money.

4.2 Link of ratings to individual attribute to the perception of value-for-money

Typically, the understanding of the correlation between two parameters is quantified by the Pearson's coefficient R. However, when the data is of Likert scale type, as in the present study, Pearson's correlation does not bring out the essence of correlation between the different variables. This section attempts to correlate the ratings for the different attributes on the rating for value for money. The reviews are in a scale of 1 to 5, 1 being Very Bad, to 5 being Excellent. Pearson correlation coefficient measures only a linear relationship between two variables, it does not work for all data types. The Spearman correlation is the nonparametric version of the Pearson correlation coefficient that measure the degree of association between two variables based on their ranks. Spearman Rank Correlation evaluates the monotonic relationship between the ranked values. In a monotonic relationship, the variables also tend to change together, but not necessarily at a constant rate.

The Spearman correlation analysis is to be used in any of the following circumstances when the underlying assumptions of the Pearson correlation are not met:

1. If the data exhibit a non-linear relationship or are not normally distributed.

2. If at least one variable is ordinal. If the values can be placed in "first, second, third..." order, then one is dealing with ordinal data.

If there are significant outliers.,unlike the Pearson correlation, the Spearman correlation is not sensitive to outliers because it performs calculations on the ranks. So the difference between actual values does not have meaning. In statistics, the Spearman correlation coefficient is represented by either rs or the Greek letter ρ ("rho"), which is why it is often called Spearman's rho. The Spearman rank correlation coefficient measures both the strength and direction of the relationship between the ranks of data. It can be any value from -1 to 1, and the closer the absolute value of the coefficient to 1, the stronger the relationship:

1 is a perfect positive correlation

-1 is a perfect negative correlation

0 is no correlation

For tied ranks, i.e same score for multiple data, the full version of Spearman correlation formula has to be used, which is a slightly modified version of Pearson's r

$$\rho = \frac{\frac{1}{n}\sum_{i=1} (R(x_i) - \bar{R}(x)).(R(y_i) - \bar{R}(y))}{\sqrt{(\frac{1}{n}\sum_{i=1}^{n} (R(x_i) - \bar{R}(x))^2).(\frac{1}{n}\sum_{i=1}^{n} (R(y_i) - \bar{R}(y))^2)}} \quad \text{Eq. 4.1}$$

Where: R(x) and R(y) are the ranks of the x and y variables, andR(x) and R(y) are the mean ranks

Intuitively, the Spearman correlation between two variables will be high when observations have a similar (or identical for a correlation of 1) rank (i.e. relative position label of the observations within the variable: 1st, 2nd, 3rd, etc.) between the two variables, and low when observations have a dissimilar (or fully opposed for a correlation of −1) rank between the two variables.

The magnitude of the Spearman's Coefficient for correlation between the different attributes to the rating for value-for money is presented in Table 4.1. It is found that all the magnitude of ρ is greater than zero meaning there is positive correlation among the different attributes with the rating of value-for money,.i.e, if the customers is satisfied with any of the attributes, then the perception for valuefor money for the passenger also increases leading to better customer satisfaction. However,

the degree of correlation is different for different attributes. The maximum correlation coefficient magnitude is 0.87 for customer service, while the minimum is 0.61 for in-flight entertainment in the different attributes among the low cost airlines. This indicates the different attributes have different influence. This will be discussed in the forthcoming chapter in details using the Kano model and ISA analysis.

Table 4.1: Spearman's ρ for the different attributes and the rating for value-for money.

Legroom	In-flight entertainment	Check-in and boarding	Seat comfort	Customer service	Cleanliness	Fooding
0.71	0.61	0.78	0.71	0.87	0.80	0.62

4.3 Summary

This chapter details the findings from the data collection from the online reviews from tripadvisor.com. The ratings for the different attributes viz. legroom, in-flight entertainment, check-in and boarding, seat comfort, customer service, cleanliness, fooding, and value-for money were analyzed using histogram to understand the frequency distribution of the different ratings. It is observed that the value-for money attribute have a distributed frequency with similar number of ratings for all the values in the Likert scale, i.e, when rated between 1 to 5. Thus Spearman's correlation was estimated among the different attributes to that for the value-for money. The maximum correlation coefficient magnitude is 0.87 for customer service, while the minimum is 0.61 for in-flight entertainment in the different attributes among the low cost airlines. This indicates the different attributes have different influence

5

Interpretation of Results

This section attempts to interpret the results of the analysis of the online reviews. The frequency distribution of all the attributes is summarized in Figure 5.1. The ratings of value-for money appears to spread among all the ratings, even when the other attributes seem to be biased towards one of the extremes. The correlation of the ratings for the different attributes to that for value-for money was discussed in Section 4.2 and summarized in Table 4.1. However, the Spearman's coefficient of correlation indicated that all the attributes influence the rating for value-for money differently, the magnitude of correlation coefficient is highest for cleanliness and customer service, while lowest for in-flight entertainment, and fooding. Here, the analysis of data is extended to fit in the Kano model and the Importance Satisfaction Analysis.

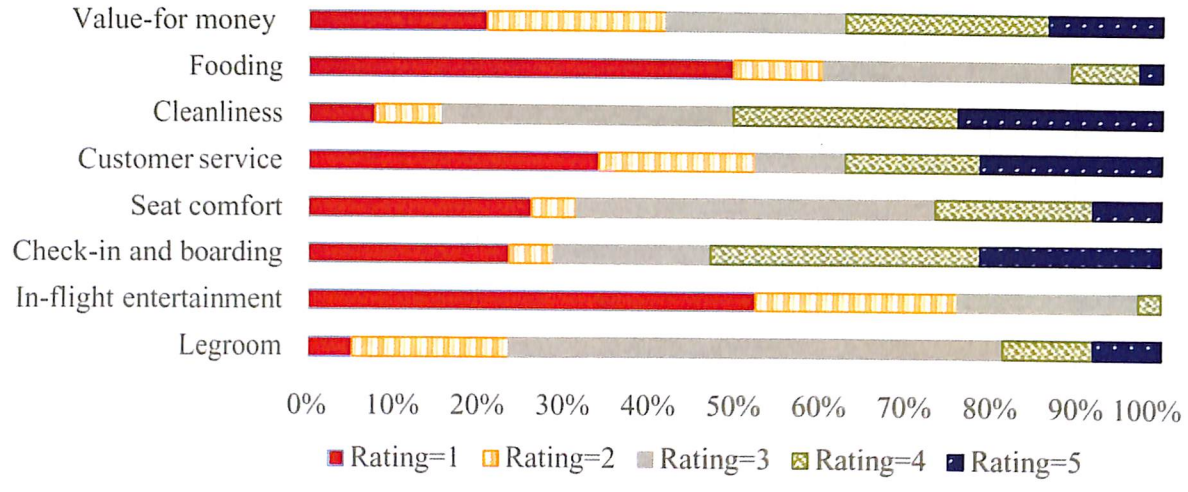


Figure 5.1: Frequency distribution for the ratings of the different attributes for low cost airlines from the online reviews

5.1 Kano analysis

The response for the question related to the fitting the data to Kano's model requires the interpretation of the functional and dysfunctional attributes and is generally done using questionnaires. Functional question encapsulates customers' feelings when quality attributes are offered by a product or service, while dysfunctional question functions when quality attributes are not offered.

In the present study the positive delight and the negative dissatisfaction are measured using the online reviews by setting the questions as:

- What percentage of reviews of an attribute having lower than 3 results in a value-for money review lower than 3?
- What percentage of reviews of an attribute having higher than 3 results in a value-for money review higher than 3?

These two analysis helps in identifying the attributes which are Attributes of attractive quality, One-dimensional quality attributes, Must-be quality attributes, and Indifferent quality attributes as elaborated in Section 3.1.1 using Figure 3.1. The study does not consider any Reverse quality attributes as all the attributes show positive correlation to value-for money as discussed in Section 4.2. The results of the analysis are given in Figure 5.2. The negative values indicate the fraction of review which has received a rating lower than 3 and resulted in the rating of lower than 3 for value-for money, while the result to the right in blue and positive axis indicate fraction of positive rating for an attribute which has resulted in a rating of more than 3 for the rating of value-for money. The results of the analysis are interpreted based on Kano model using this method, whose results are given in Figure 5.2.

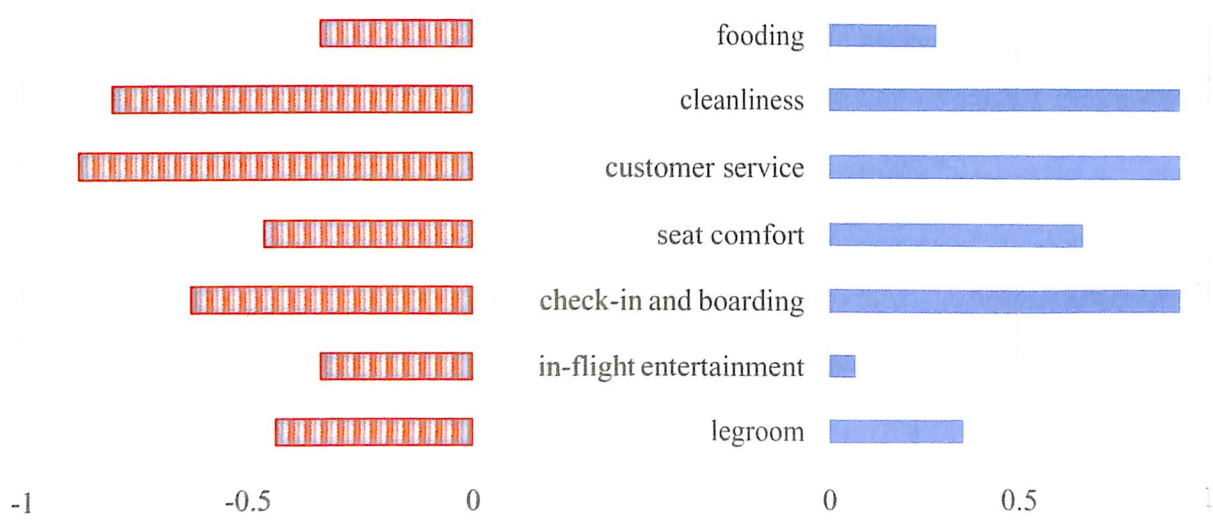


Figure 5.2: Analysis for Kano model

It shows that the ratings on fooding improve the value for money in only 30%, and that for the in-flight entertainment improve it in only 10%. Again a low rating on these two attributes do not affect the value-for money much as only around 40% with rating low than 3 result in value-for money rating lower than 3. Thus these two attributes can be thought to be indifferent quality attributes according to Kano model. Similarly, if cleanliness attribute is rated low, then value-for money is also rated low. All the attributes according to Kano classification are summarized in Table 5.1.

Table 5.1: Classification of different attributes according to Kano model

Attributes of attractive quality (A)	If these features exist, Customers experience a positive satisfaction while if these features lack, customers are not dissatisfied at all	Seat Comfort Legroom
One-dimensional quality attributes (O)	Customers will be satisfied when the attributes are met, and if they are not fulfilled, customers will be dissatisfied	Cleanliness, Customer service Check-in and boarding
Must-be quality attributes (M):	The features that won't lead to more satisfaction, but customers will be dissatisfied when they are absent.	
Indifferent quality attributes (I):	Whether these features lack or exist, they won't have an effect on satisfaction.	Fooding In-flight entertainment
Reverse quality attributes (R):	If these features are met, customers will be dissatisfied, and if they are not met, it will lead to customer satisfaction	-

5.2 Importance-Satisfaction Analysis

In order to extract applicable results for low cost airlines, the results of the correlation study in Section 4.2 and that in obtained fitting the response to Kano model are evaluated based on Importance Satisfaction Analysis (ISA) and is summarized in Table 5.2. The ISA, as described in Section 3.1.2, discussed how the attributes are put in one of the quadrants. For example, the quadrant 2 denoting of the attributes where the LCAs ought to concentrate more for a positive

perception of value-for money is obtained by comparing the correlation data in Table 4.1 and the attribute description according to Kano model as given in Table 5.1.

Table 5.2: Importance satisfaction analysis of the online reviews for the different attributes for low cost airlines

Quadrant		
1	Keep up the proper work	Cleanliness, customer service
2	Concentrate here	Check in and boarding
3	Low priority	Seat comfort, legroom
4	Possible overkill	Fooding, in-flight entertainment

Cleanliness and customer service have a very high correlation according to Spearman's ρ (value of >0.8), and fall under One-dimensional quality attributes according to the Kano model, thus fall in quadrant 1, where continued good work is required. Similarly, the ISA suggests that for LCAs, fooding and in-flight entertainment are not required. This is especially true, as passengers usually take LCAs for short duration flights, and in those scenarios, the cost reduction by curtailing this attributes do not affect the passengers. Moreover, Seat comfort and legroom are attractive and must be qualities as seen from Kano analysis, but the review suggests that the passengers are satisfied what is provided already, and thus it is low priority for developing better customer experience.

5.3 Summary

This chapter interprets the results from the reviews and fits the data into the Kano model and subsequently in the Importance Satisfaction analysis. Kano analysis suggests that fooding and in-flight entertainment are indifferent attributes, i.e., customers are not influenced by these two factors in low cost airlines, and are thus considered possible overkill using the importance satisfaction analysis. The attributes for cleanliness and customer service are the most important, and as the mean of the frequency distribution is greater than 3 for these, it is suggested that the airlines maintain these two attributes, while concentrating to check-in and boarding will result in higher customer satisfaction.

6

Conclusion and Scope for Future Work

This Chapter highlights the major conclusions arising from the study. The inferences based on the analysis of the response from the online reviews are presented. The influence of the ratings of different attributes like fooding, in fight entertainment, seat comfort, legroom, customer service, cleanliness, and check-in and boarding on the customer satisfaction was analyzed using frequency distribution, Correlation study, fitting the data in the Kano model. To improve the customer satisfaction, the different attributes were classified based on the importance-satisfaction analysis. The future scope of the study is also discussed.

6.1 Major conclusions

The major conclusions from this study are:

- The value-for money attribute have a distributed frequency with similar number of ratings for all the values in the Likert scale, i.e, when rated between 1 to 5.
- The maximum magnitude of Sprearman's correlation coefficient is 0.87 for customer service, while the minimum is 0.61 for in-flight entertainment in the different attributes among the low cost airlines when correlated with the ratings for the value-for money.
- Kano analysis suggests that fooding and in-flight entertainment are indifferent attributes for LCAs.
- The attributes for cleanliness and customer service are the most important and are to be maintained highly.
- Concentrating to check-in and boarding will result in higher customer satisfaction
- Seat-comfort and legroom are low-priority, meaning customers are not dissatisfied if they are not proper, but are satisfied if these attributes are improved.

6.2 Future scope

This type of study may be extended to consider the factors influencing customer satisfaction for full service airlines. Similar studies may be conducted to understand the need of passengers based on the type of travel like tourism, business etc. Larger studies considering several other factors like complaint redressal, timing of flights, ticket purchase options, etc. May be incorporated using

website reviews or questionnaires may provide more meaningful insights into the mind of the passengers.

Similar studies may be extended to other industries for e.g FCMG, low cost insurance policies, mass tourist companies, medium scale catering, which also depends on the mass volume for its revenue. The balance between the customer satisfaction and perception of value for money will decide the growth in these industries

6.3 Recommendations

It is essential to focus on customer service, cleanliness and the check-in and boarding in the low cost airlines for improved customer satisfaction. The management should direct their attention to upgrade passenger comforts like better seats, extra legroom, when the another attributes have been properly looked into. For low-cost airlines where cost of the flights is reduced and the customer knows that they have to adjust with some services, the fooding and in-flight entertainment does little to improve customer satisfaction. In order to be able to acquire and retain customers thus increasing the overall profitability for the companies for the present and in the long term the customer service, cleanliness and the check-in and boarding have to be focused on.

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