CHAPTER 1

PRELUDE TO THE RESEARCH WORK

1.1 INTRODUCTION

With service excellence everyone wins; customers, employees, management, shareholders, and communities. Even the society wins (Parasuraman et al 1990). The service industry plays an important role in the world economy too. India is competing with other nations for an increasing share of the emerging world market. Therefore, improving the quality of Indian goods and services has become a National concern. In order to respond effectively to changes in global service environments, it is required to have a complete understanding of the complexity of applying service quality concepts and assessment instruments.

Concerns about service quality have increased in all types of service organizations (Zeitham and Bitner 1993). Service providers such as, Airlines, Healthcare, Hospitality, insurance, Banking and telecommunication services have concentrated on improving their service quality in order to garner better market share and profitability. Service excellence ahhs become an important organizational response through which organizations differentiate, compete and win (Treacy and Wiersema 1993). Service quality has always been an important factor within service organizations. Service quality is the measure through which organizations have achieved a competitive advantage.
1.2 THEORETICAL BACKGROUND

There has been extensive studies made on the topics of productivity, the role of technology and service quality. The components that contribute to productivity have been the focus of research for almost a century now. Also, there are various studies conducted to impact of technology on any business process. Service quality has been an area of interest among both Marketers and Quality experts. However, rarely do we find any attempt to have been made to study relationship between Productivity, Use of Technology and Service Quality. There is not much literature on establishing a model linking all the three components of Productivity, Use of Technology and Service quality.

In today’s highly competitive scenario, companies are concerned about improving productivity. The role of Technology in improving productivity is also well documented. However, Productivity improvements in service organizations is trickier than in product based organizations, because of the customer involvement in the process of service delivery. Also, extensive use of Technology to enhance productivity, though results in enhanced productivity, may result in poor service quality as perceived by the customer, which will not auger well for the organization. Hence, there is pressing need to model the relationship between productivity, Use of Technology and Service Quality.

The possible reason for not many research work on modeling the relationship between productivity, Use of Technology and Service Quality may be due to the fact that productivity can be expressed easily in quantitative terms using the age old formula for the same, so is it with the use of Technology, which can be easily expressed in terms of money spent in deploying technology but Service Quality is perception based and it is very difficult to put numbers to Service quality. Hence, this basic difference in
expressing Productivity, Use of Technology and Service Quality makes it that much more challenging to explore their relationship.

However, when companies are deploying much amounts of money to improve productivity through the use of technology, it would be a pyrrhic victory if such improvements in productivity end up in poor service quality as perceived by the customer. Hence, there is a need to establish the relationship between the three. The difficulty in studying the relationship can be overcome by understanding all the three from a customer’s point of view rather than as separate entities. If we endeavor to understand the relationship from a customer’s angle, it is indeed possible to relate the three. It is only fair to take this approach because, it is ultimately the customer who is the source of any organization’s revenue. The final justification for any attempts at productivity improvement or use of technology or Service quality will have to come only from the customer, who is the real source of revenue for all these attempts and who is indeed the focal point of all these attempts.

Hence, it would only make sense to establish the relationship between Productivity, Use of technology and Service quality as derived from the perception of customers. By doing so, companies can identify the key areas where productivity improvements will result in service quality improvements and also the areas in which the use of technology will result in enhanced productivity and service quality.

1.3 AN INTRODUCTION TO PRODUCTIVITY, USE OF TECHNOLOGY AND SERVICE QUALITY

Productivity is a relationship between the output and the input. Every organization endeavors to improve productivity to its highest level. Organizations have to identify ways and means to improve productivity to the
highest level possible. Organizations can adopt any one of the following or a combination of the following strategies for improving productivity, namely,

- Increased output for the same input
- Decreased input for the same output
- Proportionate increase in the output is more than the proportionate increase in the input
- Proportionate decrease in the input is more than the proportionate decrease in the output
- Simultaneous increase in the output with decrease in the input.

The meaning of the word technology has evolved over the last two centuries. Two centuries back, the word was not much used in English. The word technology referred to the study of the useful arts. During the beginning of the twentieth century, the word technology was associated with Industrial revolution. By the 1940s, the term "technology" referred not only to the study of the industrial arts, but to the industrial arts themselves. The American sociologist Read Bain said that the word technology includes all machines, utensils, tools, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them." Bain's definition remains popular among social scientists today. It is this definition of Technology that is used in this body of work.

Several research studies have validated that IT provides productivity and profitability advantages.

Technology can be most broadly defined as the entities, both material and immaterial, created by the application of mental and physical effort in order to achieve some value. In this usage, technology refers to tools and machines that may be used to solve real-world problems. It is a far-
reaching term that may include simple tools, such as a crowbar or wooden spoon, or more complex machines, such as a space station or particle accelerator. Tools and machines need not be material; virtual technology, such as computer software and business methods, fall under this definition of technology. The term "technology" can also be used to refer to a collection of techniques. Also, technology is the application of mathematics, science, and the arts for the benefit of life.

Like price, quality is a critical dimension of a firm’s competitive strategy (Porter 1980). Service quality has received a great deal of attention from both academicians and practitioners. In the services marketing literature service quality is defined as the overall assessment of a service by the customers. Parasuraman et al defined perceived service quality as "global judgment, or attitude, relating to the superiority of the service". Parasuraman et al (1985) conceptualized service quality as perceptions resulting from the comparison of customer expectations and actual service performance.

Service quality and its measurement have become an important research topic because of its apparent relationship to cost (Crosby 1979), profitability (Buzzell and Gale 1987, Rust and Zahorik 1993), customer satisfaction (Bolton and Drew 1991), and customer retention (Reichheld and Sasser 1990). Service quality is regarded as a driver of corporate marketing and financial performance (Buttle 1996). A sound measure of service quality is necessary for identifying the aspects of service that need performance improvement, assessing how much improvement is needed on each aspect, and evaluating the impact of improvement efforts.

One of the most accepted facts is that service quality in most cases depends on a number of factors or aspects (Parasuraman et al 1985, Johnston and Lyth 1991, Sasser et al 1978, Fitzgerald et al 1991, Collier 1991, Juran et al 1988, Parasuraman et al (1985) identified ten determinants: reliability,
responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the consumer, and tangibles (Parasuraman et al 1985). Later these were reduced to five: tangibles, reliability, responsiveness, empathy and assurance (Parsuraman et al 1988). Grönroos (1988) added a sixth dimension, recovery to these five. This refers to having a clear-cut strategy for removing the unwanted elements of service offer to the satisfaction of the consumer.

All have not universally accepted these dimensions. Various researchers have reported that their research do not support these dimensions. Finn and Lamb (1991) researching on retailing negated the Parasuraman et al’s claim that their instrument is applicable to a wide range of services. They concluded that the five dimensions are insufficient to measure service quality in the retail setting. Similarly, Cronin and Taylor (1992), researching for services like banks, dry-cleaning, etc. found little support for Berry et al’s (1985) five dimensions. They did not have any research sample that confirmed Parasuraman’s five dimensional construct of service quality. Silvestro and Johnston (1989) and Fitzgerald et al (1991) in their studies enlarged Parasuraman et al’s efforts by redefining some of the previous dimensions and enlarging this list to as many as 15 factors. They caution against relying exclusively on the market (or consumers) to determine all the key attributes of service quality. Thus, they maintain that due attention to the specific tasks of operations is also desirable. Among others, Collier (1991) identifies the following service quality attributes: accuracy, volume and activity, convenience, time-oriented responsiveness, reliability, professionalism and competence, friendliness and consumer empathy, atmosphere and aesthetics, security and safety, productivity and efficiency, overall market and performance indicators, technology, and price/value/cost/relationships. Earlier, Juran et al (1988) identified three aspects of services that should be measured: timeliness, consumer well being, and continuity of
services. Armistead (1990) classified the service dimensions as ‘soft’ and ‘firm’. The style (attitude of staff, accessibility of staff, and ambience), steering (the degree to which customers feel in control of their own destiny) and safety (trust, security and confidentiality) are the soft dimensions whereas; timeliness, consumer well being, and continuity of services. Armistead (1990) classified the service dimensions as ‘soft’ and ‘firm’. The style (attitude of staff, accessibility of staff, and ambience), steering (the degree to which customers feel in control of their own destiny) and safety (trust, security and confidentiality) are the soft dimensions whereas; time (availability, responsiveness and waiting), fault freeness (in physical good, intangible activities and information) and flexibility (recovery, customization and augmented services) are the ‘firm’ dimensions.

They further pointed out that service quality perceptions are not solely the outcomes of service but it also involves the evaluation of the service delivery process by the customers. Lehtinen (1982) conceptualized service quality as a three dimensional construct viz. "physical", "interactive" and "corporate." Physical quality is the quality dimension which originates from the physical elements of service like physical product and physical support. Interactive quality indicates the interaction between the customer and the service organization. And corporate quality is symbolic in nature and indicates the perception of customers about the image of the organization. Garvin (1988) provided a comprehensive definition of service quality comprising of the attributes viz. performance, features, conformance, reliability, durability, aesthetics, serviceability and customers' perceived quality. Asubonteng et al (1996; p.64) defined service quality as "the difference between the customers' expectations for service performance prior to the service encounter and their perceptions of the service received." Yoo and Park (2007) state that the firm's ability to create and sustain competitive advantage depends upon the high level of service quality provided by the
service provider. They defined perceived service quality as the extent to which a firm serves the needs of its customers successfully. Again, Dabholkar et al (2000) considered service quality as a set of different sub-dimensions like reliability and responsiveness which form the antecedents to customer satisfaction.

SERVQUAL (Parasuraman et al 1988) emerged as an instrument to measure service quality consisting of the five dimensions of service quality viz. reliability, tangibility, responsiveness, assurance and empathy. But it had its own share of criticisms because it was based on the difference between the expectations and performance. Its reliability and validity has been questioned by many researchers (Carman 1990, Cronin and Taylor 1992, Strandvik and Lijander 1994, Babakaus and Boiler 1992). Thus, service quality is conceptualized both as a one dimensional and a multidimensional construct in the literature.

1.4 OPERATIONAL DEFINITIONS

Service: “Any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything”

Service Quality: “Customers’ perception of service delivered against the expectation”

Tangibility: “The physical evidence of service” (e.g. Physical facilities, appearance of personnel, or tools or equipments used to provide service)

Reliability: “Consistency of performance and dependability” (e.g. a firm performing the service at the right time and honoring its’ promise)
Responsiveness: “The willingness and readiness of employees to provide service” (e.g. Timeliness of service)

Assurance: “The knowledge and courtesy of employees of the Airline service provider”.

Empathy: “Caring, individualized attention that a firm provides to its customers”

Convenience: “The extent to which an Airline service provider takes into account the convenience of customers” (e.g. convenient flight timings, ease of booking tickets, Check-in facilities in the Airport).

Airline services: “A service for the transport by air of persons, mails or any other thing, animate or inanimate, for any kind of remuneration whatsoever, whether such service consists of a single flight or series of flights”.

Airline Service Provider: “Any licensed organization which provides Airline services”.

Aircraft: “any machine which can derive support in the atmosphere from reactions of the air other than reactions of the air against the earth’s surface and includes balloons whether fixed or free, airships, kites, gliders and flying machines”.

Airport: “Location that contains all the technical and commercial facilities needed to support air traffic”.

Crew Member: “A person assigned by an Airline service provider to duty on an aircraft during a flight duty period”.
Baggage Check in Counter: “Desk in an Airport where an employee of the Airline service provider checks and weighs passengers’ baggage and issues boarding passes”.

Productivity: “Is a ratio of production output to what is required to produce it (inputs)”.

Technology: “Technology is the making, usage, and knowledge of tools, machines, techniques, crafts, systems or methods of organization in order to solve a problem or perform a specific function”.

1.5 AN OVERVIEW OF AIRLINE SERVICES

Aviation is the development, design, operation, production and use of aircraft. World War II accelerated the development and production of aircrafts. All flights other than military and scheduled airline and regular cargo flights, whether private or commercial come under the category of General Aviation. General aviation refers to non-scheduled civil flying, which includes the following, namely: Business flights, Air charter, Private aviation, Flight Training, Ballooning, Parachuting, Gliding, Hang Gliding, Aerial Photography, Air ambulance, Crop dusting, Police air fighting. Though every country follows the International conventions with regards to regulation of flying activities, each Country has its own set of regulation for flying. General aviation follows those respective regulations. Normally the regulation followed will depend on the type of aircraft involved and the purpose of flying. General aviation usually uses small aircrafts. Cessna, Piper, Raytheon, Cirrus Design are the popular manufacturers of small aircrafts. Today, advanced avionics that were available only for large aircrafts are also used in small aircrafts. The use of composite materials have made the small aircrafts more lighter and faster. General Aviation forms the majority of the air traffic in this world. There are airports meant exclusively for General Aviation.
Air charter is the business of renting an entire aircraft i.e., chartering as opposed to individual aircraft seats i.e., purchasing a ticket through a traditional airline. While the airlines specialize in selling transportation by the seat, air charter companies focus on individual private aircraft and itineraries, urgent or time-sensitive freight, cargo, air ambulance and any other form of ad hoc air transportation. Air charter is also known as air taxi, executive charter, jet charter and is part of general aviation.

The growth of corporate aviation and related air taxi and air charter suppliers, boomed following the close of World War II. With surplus aircraft available, air charter companies entered the business of charter flights for executives, high end travelers, special missions such as organ donor flights, critical auto parts freight, etc, sports teams, entertainers, etc.

An airline provides air transport services for passengers or freight, generally with a recognized operating certificate or license. Airlines lease or own their aircraft with which to supply these services and may form partnerships or alliances with other airlines for mutual benefit.

There are various types of airline personnel involved in the Airline operation. Flight operations personnel including flight safety personnel are responsible for flight operation.

Flight crews are responsible for the operation of the aircraft. Flight crew members include: Pilots (Captain and First Officer), Flight attendants, In-flight security personnel on some airlines.

Ground crew are responsible for operations at airports. The ground crew is the support crew supplying the aircraft with fuel and maintenance, as opposed to the aircrew. In airlines, ground crew members include: Airframe and power plant technicians, Avionics technicians, Baggage handlers,
Rampers, Gate agents, Ticket agents, Passenger service agents (such as airline lounge employees), Flight dispatchers.

Some ground crew members are responsible for clearing the runway and gate area of any debris or garbage, in order to prevent Foreign Object Damage.

When baggage is checked in at the ticket counter or with a sky cap (where it receives a bag tag indicating the passenger's itinerary), it is often placed onto a moving bag belt which carries the baggage to the bag room. This is where numerous checked bags are sorted so that they will be loaded onto the proper flight. The bag tag which was previously affixed to the baggage during check-in is then read by a baggage handler and placed into the proper bag cart.

The International Civil Aviation Organization (ICAO), is a specialised agency of the United Nations. ICAO was created with the signing in Chicago, on 7 December 1944, of the Convention on International Civil Aviation. ICAO is the permanent body charged with the administration of the principles laid out in the Convention. The aims and objectives of ICAO, as contained in Article 44 of the Chicago Convention, are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport.

ICAO has a sovereign body, the Assembly, and a governing body, the Council. The Assembly meets at least once every three years and is convened by the Council. Each Contracting State is entitled to one vote, and decisions of the Assembly are taken by a majority of the votes cast except when otherwise provided for in the Convention. At these sessions, the complete work of the Organization in the technical, economic, legal and
technical cooperation fields is reviewed in detail, and guidance is given to the other bodies of ICAO for their future work.

The Council is a permanent body responsible to the Assembly and is composed of representatives from 36 Contracting States elected by the Assembly for a three-year term. In the election, adequate representation is given to States of chief importance in air transport, States not otherwise included which make the largest contribution to the provision of facilities for civil air navigation and States not otherwise included whose designation will ensure that all the major geographic areas of the world are represented on the Council.

The Council and its subsidiary bodies set the continuing direction of the work of the Organization. One of the major duties of the Council is to adopt International Standards and Recommended Practices and to incorporate these as Annexes to the Convention on International Civil Aviation. The Council may act as an arbiter between Contracting States on matters concerning aviation and implementation of the Convention; it may investigate any situation which presents avoidable obstacles to the development of international air navigation; and, in general, it may take whatever steps are necessary to maintain the safety and regularity of operation of international air transport.

The International Air Transport Association (IATA) is an international industry trade group of airlines headquartered in Montreal, Canada. IATA was founded in Havana, Cuba, in April 1945. When IATA was founded, it had 57 members from 31 nations, mostly in Europe and North America. It is the prime vehicle for inter-airline cooperation in promoting safe, reliable, secure and economical air services for the benefit of the world's consumers. The international scheduled air transport industry is now more
than 100 times larger than it was in 1945. Few industries can match the
dynamism of that growth, which would have been much less spectacular
without the standards, practices and procedures developed within IATA.
IATA represents some 230 airlines comprising 93% of scheduled
international air traffic. The IATA is headed by The Director General. IATA
is present in over 150 countries covered through 101 offices around the globe.

IATA does not regulate any airline activity. While IATA provides
many standards and recommended practices it does not regulate its members
in any way. That task is left to government and civil aviation authorities.
IATA’s mission is to Represent, Lead and Serve the airline industry. For
Airlines, IATA Membership is open to both scheduled and non-scheduled
airlines. IATA brings Airports and IATA Member airlines together to
increase the efficiency of the air transport industry. Airline members of IATA
enjoy the support of an internationally renowned organization that represents
leads and serves one of the most dynamic industries in the world. From 57
founding members in 1945, IATA now represents some 230 airlines in over
115 countries from around the globe. Carrying 93% of the world’s
international scheduled traffic, IATA members include the world’s leading
passenger and cargo airlines.

### 1.6 AVIATION MARKET IN INDIA

According to the International Civil Aviation Organisation (ICAO),
the Indian Aviation market ranks tenth amongst the aviation markets across
the world and is projected to be the third largest Aviation market by 2020.
The Indian Aviation market consists of various service such as Airlines
services, Airline support services and Aerospace industry. The Indian Airline
services consists of providing airline services for passengers and Cargo. The
Passenger airline services consist of both Scheduled services and Charter
services. The Airline support services industry consists of services such as Ground handling, Training and Catering. The Aerospace industry consists of Design and Manufacture of aircrafts and Maintenance, Repair and Overhaul (MRO) of aircrafts. The Indian Aviation market structure is shown below

![Indian aviation market structure](image)

**Figure 1.1 Indian aviation market structure**

The key regulators in the industry are Ministry of Civil Aviation, Ministry of Tourism, Directorate General of Civil Aviation (DGCA), Airports Authority of India (AAI).

The Ministry of Civil Aviation is responsible for formulation of national policies and programmes for the development and regulation of the Civil Aviation sector in the country. It is responsible for the administration of the Aircraft Act, 1934, Aircraft Rules, 1937 and various other legislations pertaining to the aviation sector in the country. This Ministry exercises administrative control over attached and autonomous organizations like the Directorate General of Civil Aviation, Bureau of Civil Aviation Security and Indira Gandhi Rashtriya Udan Academy and affiliated Public Sector
Undertakings like National Aviation Company of India Limited, Airports Authority of India and Pawan Hans Helicopters Limited. The Commission of Railway Safety, which is responsible for safety in rail travel and operations in terms of the provisions of the Railways Act, 1989 also comes under the administrative control of this Ministry.

The Ministry of Tourism is the nodal agency for the formulation of national policies and programmes and for the co-ordination of activities of various Central Government Agencies, State Governments and the Private Sector for the development and promotion of tourism in the country.

Directorate General of Civil Aviation is an attached office of the Ministry of Civil Aviation. The Directorate General of Civil Aviation is the regulatory body in the field of Civil Aviation primarily dealing with safety issues. It is responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations, air safety and airworthiness standards. It also co-ordinates all regulatory functions with International Civil Aviation Organization. The headquarters are located in New Delhi with regional offices in the various parts of India. India is participated in ICAO by the Representative of India from the Directorate General of Civil Aviation.

Airports Authority of India (AAI) was constituted by an Act of Parliament and came into being on 1st April 1995 by merging erstwhile National Airports Authority and International Airports Authority of India. The merger brought into existence a single Organization entrusted with the responsibility of creating, upgrading, maintaining and managing civil aviation infrastructure both on the ground and air space in the country. AAI manages 125 airports, which include 11 International Airport, 8 Customs Airports, 81 Domestic Airports and 27 Civil Enclaves at Defense airfields. AAI provides air navigation services over 2.8 million square nautical miles of air space.
1.7 AIRLINE SERVICES IN INDIA

The Indian Airline services are highly organized with the presence of both domestic and international service providers. The Airline service in India started on February 18, 1911, when Monseigneur Piguet flew the first commercial flight from Allahabad to Naini. The first Air route was started between Karachi and Delhi in 1912 by Indian State Air Services. Later, Airmail services were started between Karachi and Madras. The Airline services were nationalized in 1953 with the merger of eleven airlines that were in existence during that time.

Later, in 1992, during the regime of the then Aviation Minister Madhavarao Scindia, the Airline services were again privatized. As part of privatization, the Government introduced the Open Sky Policies which gave unrestricted access to any Indian Airline service provider into the Sovereign territory of the country. Since then, the Indian Airline services have seen unprecedented growth in terms of passengers carried, number of flights and geographical areas covered. The huge Diaspora of people of Indian Origin living across the globe have been ably assisted by the Indian Airline service providers. The industry carried around 17 million passengers in 2010.

Since the days of globalization and privatization, India has had a rapid growth in travel industry. Because of rapid economic growth and Technological advancements, the Standard of living of Indian has also improved. Hence, The number of Indian using the Airlines services both for leisure and business purposes has increased. Hence, now all major cities of India such as Mumbai, New Delhi, Kolkata, Chennai, Bengaluru, Hyderabad and Ahmedabad are well connected with each other through a network of flights provided by the Airline operators. It is not just the metros of India that are well connected even Tier II cities such as Kochi, Jaipur, Coimbatore,
Patna, Vishakhapatnam, Mangalore, Nagpur and Guwahati are now well connected. The increased number of domestic airline service between Metros and Tier-II cities have made traveling a lot easier. In this modern era, people are juggling to balance the fine line between professional and personal life. The larger network of Airline services between various Cities has been a boon for them.

Also, increase in low cost Airlines and Online booking has domestic air travel affordable and convenient. This has further increased the demand for domestic airlines. The Indian domestic airline services is indeed looking forward to period on increased growth both in terms of number of Cities served and the number flights operated.

1.7.1 An Overview of Major Indian Airline Service Providers

The major Airline service providers now are Air India, Jet Airways, Kingfisher Airlines, Spice Jet, Paramount Airlines, GoAir, IndiGo and Jet Lite.

Air India is India’s oldest and largest airline service provider. Air India is India’s national flag carrier. Air India was started in the July 1932 and commenced operations from October 15, 1932. It is an enterprise of the Government owned National Aviation Company of India Limited. Air India has its Corporate office in Mumbai and its main domestic hubs are located at Delhi and Mumbai. The logo of the Air India is a red colored flying swan with the `Konark Chakra' in orange, placed inside it. Mr. Rohit Nandan is the Chairman and Managing Director of Air India. Air India has a fleet of twenty seven wide bodies aircrafts and ninety four narrow bodied aircrafts. Apart from providing service to all the major metros of India, Air India provides services to Agartala, Agatti, Aizawl, Allahabad, Aurangabad, Bhopal,
Bhubaneswar, Chandigarh, Coimbatore, Dirburgarh, Dimapur, Goa, Gaya, Gwalior, Imphal, Indore, Jabalpur, Jammu, Jamnagar, Kanpur, Kochi, Kozhikode, Leh, Lucknow, Madurai, Mangalore, Nagpur, Patna, Pathankot, Raipur, Rajkot, Ranchi, Shillong, Silchar, Srinagar, Tezpur, Tirupathi Udaipur, Varanasi and Vishakhapatnam. Air India has the best network of services in India.

New Delhi is the major hub of Air India. After the inauguration of a new terminal, T-3 in New Delhi, Air India is serving seventy one destination per day from New Delhi. Air India has on offer almost 10400 seats per week to all destinations in India from its major hub, New Delhi.

Air India has a Frequent Flyer Programme branded "Flying Returns". Through this programme, customers can accrue miles while flying on not just in Air India but also on Code share partners such as Lufthansa, or Singapore Airlines. Through tie-ups with other partners such as credit cards, hotels and telecom companies, members of the Flying Returns programme can earn and transfer miles to Flying Returns Programme. "Flying Returns" has a membership of nearly 9,00,000 members worldwide.

Air India Express is Air India’s budget International Airline. It was launched in April 2005. Air India Express operates 200 weekly flights on its network between 17 Indian cities namely, Ahmedabad, Amritsar, Chennai, Delhi, Hyderabad, Jaipur, Kochi, Kolkata, Kozhikode, Lucknow, Mangalore, Mumbai, Nagpur, Pune, Srinagar, Thiruvananthapuram and Tiruchirapally and 14 international stations viz. Abu Dhabi, Al Ain, Bahrain, Bangkok, Colombo, Dhaka, Doha, Dubai, Kuala Lumpur, Kuwait, Muscat, Salalah, Sharjah and Singapore. Air India Express caters mainly to the Middle East and Southeast Asian destinations while operating mainly from Kerala with the city of Kochi operating has its main hub.
Air India uses Technology in a very big way to serve its customers. It uses Technology for Ground Handling, providing Check-in facilities at the Airport and for Booking of Tickets. It also provides a Toll free call center facility for its customers through the number: 1800 180 1407.

Jet Airways was started in 1993 by Mr. Naresh Goyal. Mr. Naresh Goyal has over 39 years of experience in the Civil Aviation industry and is the recipient of several national and international awards. Jet Airways operates to and from fifty two domestic destinations and connects twenty four International destinations. Jet Airways has twenty wide bodied Aircrafts and sixty one narrow bodied Aircrafts.

The Mission Statement of Jet Airways states that it wants to be the most preferred domestic Airline in India and set standards which other competing Airlines will seek to match. It has Code share agreement with Qantas, Air Canada, Brussel’s airlines, United Airlines and Etihad. It has been declared the winner in the category “Domestic Commercial Airlines Sector” for Customer and Brand Loyalty at the fifth Loyalty Awards that was given on 3rd February, 2012. It has been declared the ‘Favorite Full-Service Airline’ at the OUTLOOK TRAVELLER AWARDS 2011 in New Delhi. Mr. Belson Coutinho, Senior General Manager- eCommerce & Innovations, Jet Airways, was conferred the prestigious ‘Excellence in E-Commerce & Innovation in Digital Marketing’ at the 5th Excellence In Innovation Awards 2012 held at the Indira International Innovation Summit.

The Frequent Flyer Programme of Jet Airways is called “JetPrivilege”. With JetPrivilege, members enjoy a truly rewarding experience with unique privileges across five membership tiers: Blue, Blue Plus, Silver, Gold and the exclusive Platinum. JetPrivilege members can expect to earn more miles, enjoy more benefits, quicker tier upgrades, easier tier renewal and
easier redemption. JetPrivilege has won Freddie Awards, which is considered as the 'Oscars' of frequent flyer programmes across the world, for five consecutive years including the most coveted 'Program of the Year' Award 2007 and 2006 for the Japan, Pacific, Asia and Australia region.

Jet Airways operate a 24 hour help desk for its customers and provides Telephonic check in facilities to its customers. It uses Technology in a big way to help customers with missing baggage.

JetLite, is a fully owned subsidiary of Jet Airways India Ltd. Jetlite is positioned as a Value Based Airline, which offers value for money, economical fares. It also offers other services such as 'JetCafé' in-flight meals and 'JetShoppe' in-flight shopping. JetLite provides services to thirty one domestic cities and operates over 120 flights every day. It has a fleet size of Nineteen Boeing 737 Aircraft. It also offers a frequent flyer programme called JetPrivilege of Jet Airways. It also offers round the clock contact centre access to its customer through a Toll free number: 1800 22 3020.

JetLite provides check in for its flight from 48 hours to 1 hours before the scheduled departure time. They also have multiple check-in options, such as checking in on jetlite.com or on mobile phone using SMS service.

Kingfisher Airlines was started by the Liquor Baron Mr. Vijay Mallaya, who has a passion to deliver world class service. The Vision of the Airlines is to consistently deliver a safe, value-based and enjoyable travel experience to all its customers. However, Today Kingfisher Airlines is in the news for all the wrong reasons. Today, it is facing huge losses and has huge debts to pay. The Oil Marketing companies which supply Aviation fuel have
started to stop the supply of fuel. This has resulted in cancellation of flights. Now, Kingfisher Airlines is looking forward to the Government of India for a bailout package. Kingfisher Airlines is the example of all that can go wrong for an Indian Airline Service provider.

IndiGO Ailines has fifty Air Bus 320 in its service. Indigo Airlines was started by Mr. Aditya Ghosh. It operates five hundred domestic services across all metros and other Their II Cities. It’s Citizen’s Charter states that IndiGO is built for People with things to do, places to see and who won’t waste time, money or energy in the process. It endeavors to minimize the cost, time and tension of Air travel. It uses the best hardware, software, interface design and personnel from around the world to provide Air travel that is safe and simple.

The mission of SpiceJet is to become India’s preferred low-cost airline, delivering the lowest air fares with the highest consumer value. Key management personnel of SpiceJet are all senior, seasoned professionals and have significant international experience in both launching and managing low-cost airlines. SpiceJet has a fleet of new-generation Boeing 737-800s with winglets and Boeing 737-900ER. These aircraft allow for safe, comfortable and efficient flying and are ideally suited for short to medium-haul flights in Indian conditions. SpiceJet also has a few Bombardier Q400 which are designed for short haul routes, and are known for their fuel efficiency and comfort.

SpiceJet operates to twenty nine local destinations and to two destination abroad. SpiceJet has been given the highest Satisfaction ratings on key parameters covering the efficiency of ground services and in-flight services. The survey was conducted by MaRs Consumer survey on behalf of The Hindustan Times and was conducted across ten cities.
GoAir is the aviation foray of the Wadia Group, which launched its operations in November 2005. GoAir is a low-fare Airline launched with the objective of commoditizing air travel. It offers airline seats at marginal premium to train fares across India. The airline currently operates across 21 destinations 156 daily flights and approximately 1060 weekly flights. GoAir is currently servicing the airports at Ahmedabad, Bengaluru, Chandigarh, Cochin, Delhi, Goa, Guwahati, Jaipur, Jammu, Kolkata, Leh, Lucknow, Mumbai, Nagpur, Nanded, Patna, Port Blair, Pune, Ranchi and Srinagar. Through this route network, GoAir ensures a smart value-for-money option for both business and leisure travelers, without compromising on either safety or service factors.

GoAir has convenient online booking options of on its web site www.GoAir.in wherein the passenger or his associate can book GoAir tickets 24x7, 365 days a year from the comforts of his home. GoAir is based on 'punctuality, affordability and convenience' business model. The airline has also partnered with Radixx International, a leading technology provider of automated aviation and travel related software solutions, for the use of its Air Enterprise. The adoption of such technology solutions enables GoAir to achieve superior process efficiency, thereby helping transfer a greater portion of time savings to its passengers. GoAir has a fleet of eleven aircrafts.

Paramount Airways is promoted by Mr. Thiagarajan who is a Pilot and a keen Aviation enthusiast. He hails from an illustrious Industrial family from South India that have been Pioneers in the field of Textiles. Paramount Airways is the first Airline in India to launch the New Generation Embraer 170/190 Family Series Aircrafts. The vision of the company is to be a premium Service Schedule Airlines that will not be present in the congested Metros but in other hubs in India offering competitive rates.
The market share of the various airline service providers as on May 2011 are as follows:

![Market share of Indian Airline service providers](image1.png)

*Figure 1.2 Market share of Indian Airline service providers*

Source: Centre for Asia Pacific Aviation

The below table gives us details of domestic airline passenger traffic as on September 2011.

*Table 1.1 Domestic Airline Passenger Traffic*

<table>
<thead>
<tr>
<th>Airlines service provider</th>
<th>Traffic carried (in 000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingfisher</td>
<td>1099.2</td>
</tr>
<tr>
<td>Indigo</td>
<td>1093.7</td>
</tr>
<tr>
<td>Jet Airways</td>
<td>1016.8</td>
</tr>
<tr>
<td>Air India</td>
<td>725.5</td>
</tr>
<tr>
<td>SpiceJet</td>
<td>780.4</td>
</tr>
<tr>
<td>JetLite</td>
<td>417.7</td>
</tr>
<tr>
<td>GoAir</td>
<td>362.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5496 (in 000s)</strong></td>
</tr>
</tbody>
</table>

Source: Centre for Asia Pacific Aviation
In this chapter a prelude to the Research Work is given which covers introduction about Service Quality, Use of Technology and Productivity. This chapter also covered the theoretical background for the research work. A brief about the Aviation market in India and the role of various Indian Airline Service providers were also given.

The next chapter, under the heading “Review of Literature”, presents the retrospect of research work done on various aspects of Service Quality, Use of Technology, Productivity. Also, there is a collection of work done on Use of Technology, Productivity and Service Quality in Airline Services.