Fly high India

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The aviation is one of the greatest wonders that technology and science has allowed us to discover. Aviation industry is a growing yet challenging industry. The possibilities of the development of air traffic and passenger travel internationally have grown drastically over the years and India is not an exception to this. In fact, India is among the top 10 civil aviation markets in the world. Statistics confirm to have served over 160 million customers during financial year 2017 almost double the size from four years ago. Furthermore, it is expected that India will be one of the top 3 civil aviation markets by 2020.

History of civil aviation in India

The history of civil aviation in India can be traced back to December 1912 and started with the first domestic air route between Karachi and Delhi operated by the Indian State Air services in collaboration with the Imperial Airways, UK that was in existence with the London-Karachi route. After three years, the first Indian airline namely Tata Sons Ltd. started a regular airmail service between Karachi and Madras then (now called as Chennai) without any patronage from the government. At the time of independence, the number of air transport companies, which were operating within and beyond the frontiers of the country, carrying both air cargo and passengers, were nine in all. But it got reduced to eight as Orient Airways shifted to Pakistan. They were: Tata Airlines, Indian National Airways, Air service of India, Deccan Airways, Ambica Airways, Bharat Airways and Mistry Airways. In early 1948, a joint sector company, Air India International Ltd., was established by the Government of India and Air India (earlier named as Tata Airline). The first flight took off on June 8, 1948 on Bombay then (now called as Mumbai) and London air route. At the time of its nationalization in 1953, it was operating four flights a week between Mumbai and London and two weekly between Mumbai and Nairobi. It was headed by J.R.D. Tata, a visionary who had founded India's first airline in 1932 and had piloted its inaugural flight. Undoubtedly, air route is the fastest mode of transport but it is expensive too. One of the reasons for that are initial capital investment requirements, high cost of variable cost such as aviation fuel and some fixed costs e.g. airport charges. These have gone up over the years and with the emergence of new airliners airport management has become a new challenge.

Actually, foreign airliners carrying international passenger traffic to and from India existed long before India's independence in 1947. Their operations are governed by bilateral agreements between the Government of India and foreign governments. During 1980, the number of such airlines was close to 35. It expanded to 49 in1996 due to the Open-sky policy of April 1990. This policy allowed air taxi-operators to operate flights from any airport, both on a charter and a non-charter basis and empowered them to decide their own flight schedules, cargo and passenger fares. In 1990, the private air taxi-operators carried 15,000 passengers. This number increased to 4.1 lakh in 1992, 29.2 lakh in 1993, 36 lakh in 1994 and it grew to 48.9 lakh in 1995. It kept rising over the years. In 1996, private air taxi operators carried 49.08 lakh passengers which amounted to a 41.14 per cent share in the domestic air passenger traffic. Seven operators namely NEPC Airlines, Skyline NEPC, Jet Air, Archana Airways, Sahara India Airlines, Moidluft and East West Airlines acquired the status of scheduled airlines. Also, there were 22 non-scheduled private operators and 34 private operators holding no-objection certificate in 1996. However, due to non-availability of aircraft two out of seven scheduled air taxi operators suspended their operations.

Better Infrastructure, facilities and skills management

Airport Authority of India (AAI) set up on April 1,1995 by amalgamating the international Airport Authority of India and the National Airport Authority of India. AAI was to handle all matters relating to infrastructure for civil air traffic and transport at the international and the domestic airports and enclaves in the country. Indira Gandhi Rashtriya Uran Akademi was set up at Fursatganj to standardize and improve the flying trainings. By 1997, it trained almost 289 pilots on fixed wing aircraft and 20 pilots on rotary wing aircraft.

Development of the Civil Aviation in India

The repeal of the Air Corporation Act from 1 March 1994 enabled private operators to provide air transport services. Six operators were given the status of scheduled operators on 1 February 1995. The Airport Authority of India plans for the construction and up gradation of airports. Budgetary support of Rs.485.50 million was allocated to AAI in 1996-97. In a major policy decision, during August 1996, the government allowed the private sector to set up air cargo complexes in a bid to ensure smooth movement of export cargo. Domestic and foreign investors including NRIs have been invited to participate in the development of infrastructure support at select airports. With a market share of 43% Indian airlines was the biggest player in aviation. Rs 24,710 million have been marked for development of the civil aviation sector in the annual plan for 1997-98.

Few remarkable milestones of the Indian Civil Aviation:

- **1911: February 18:** First commercial flight from Allahabad to Naini made by a French pilot Monseigneur Piguet covering a distance of about 10 km and carrying 6500 mails on a Humber biplane. This is considered to be the world's first airmail service and the beginning of civil aviation in India.

- **1912: December**: The first domestic air route between Karachi and Delhi was opened by the Indian State Air services in collaboration with Imperial Airways, UK.

- **1915:** The first Indian airline, Tata Sons Ltd., started a regular airmail service between Karachi and Madras without any patronage from the government.

- **1920: January 24:** Royal Airforce started regular airmail services between Karachi and Bombay.

- **1924:** Construction of civil airports began in India. Construction began at Dum Dum in Calcutta, Bamrauli in Allahabad and Gilbert Hill in Bombay.

- **1927: April**: Department of Civil Aviation was set up to look after all civil aviation matters. Aero Club of India was also established.

- **1932:** Tata Airlines came to being as a division of Tata Sons Limited. It started Air Mail services on the Karachi, Ahmedabad, Bombay, Bellary, Madras routes on 15 October, 1932.

- **Between 1933 and 1934:** Number of Indian airlines – Indian Trans Continental Airways, Madras Air Taxi Services, Indian National Airways etc. commenced operations.

- **1937:** The Indian Aircraft Act was promulgated in 1934 and was formulated in 1937.

> **1940:** Hindustan Aeronautics Limited (HAL) was set up by Walchand Hirachand in association with the then Mysore Government at Bangalore.

> **1941: July:** India's first aircraft, the Harlow trainer was rolled out for test flight in July 1941.

> **1945:** Deccan Airways was founded – jointly owned by the Nizam of Hyderabad and Tatas. Its first flight began inJuly 1946.

> **1946:** 'Air India' came into being when Tata Airlines changed its name to Air India.

> **1947:** At the time of Independence, Nine Air Transport Companies were operational. Later the number reduced to eight when the Orient Airways shifted its base to Pakistan. The then operational airlines were Tata Airlines, Indian National Airways, Air Service of India, Deccan Airways, Ambica Airways, Bharat Airways and Mistry Airways. These airlines were operating within and beyond the frontiers of the company, carrying both air cargo and passengers.

> **1948:** Air India signed an agreement with the Government to operate international services under the name Air India International Ltd. On June 8, Air India inaugurated its international services with a weekly flight between Bombay and London via Cairo and Geneva.

> **1953: March:** The Indian Parliament passed the Air Corporations Act, 1953 and Indian Airlines and Air India International were set up after nationalisation of the entire airline industry. Eight formerly independent domestic airlines: Deccan Airways, Airways India, Bharat Airways, Himalyan Aviation, Kalinga Air Lines, Indian National Airways, Air India, Air Services of India were merged.

> **1953:** Civil Helicopter Services were introduced in the country

> **1972:** The International Airports Authority of India (IAAI) was constituted.

> **1981:** Vayudoot Airlines (a Government owned Airline Company) started operations.

> **1985:** Pawan Hans Helicopters Limited (PHHL) and Indira Gandhi Rashtriya Uran Academy (IGRUA) in Fursatganj, Rai Bareli in Uttar Pradesh for training of pilots were established.

> **1986:** The National Airports Authority was constituted.

> **1987:** The Bureau of Civil Aviation Security was established.

> **1990: April:** The Government adopted Open-sky policy and allowed air taxi- operators to operate flights from any airport, both on a charter and on a non charter basis and to decide their own flight schedules, cargo and passenger fares. East-West Airlines was the first national private airline to operate in the country after almost 37 years.

> **1991: September 20:** Sahara Airlines started its operations.

> **1993: May:** Jet Airways started its operations.

> **1994: March 1:** Air Corporations Act, 1953 was repealed and was replaced by Air Corporations (Transfer of Undertaking and Repeal) Act, 1994 thus enabling private operators to operate scheduled services and number of private players including Jet Airways, Air Sahara, Modiluft Airlines, Damania Airways, NEPC Airlines and East West Airlines commenced domestic operations.

> **1995:** India's six private airlines accounted for more than 10% of domestic traffic. Many foreign airlines started providing international services. In 1995, 42 airlines operated air services to, from, and through India.

> **1995: April 1:** Airport Authority of India was constituted by merging the International Airport Authority of India with National Airports Authority.

> **1997:** Policy on Airport Infrastructure of India was developed for the use and development of airport infrastructure.

> **1999: June 10:** CIAL Airport was the first airport in India which was built with public-private participation and was made operational. The process for development of CIAL as a private airport began in 1993.

> **2000: October 2:** Sahara Airlines was rebranded as Air Sahara.

> **2003:** Entry of low cost carriers. Air Deccan started its services

> **2004:** Government approved setting up of private Greenfield airports at Hyderabad and Bangalore.

> **2004: June:** Low Cost Carrier – GoAir started it operations.

> **2004: December:** Indian Scheduled carriers with a minimum of 5 years of continuous operations and a minimum fleet size of 20 aircraft, were permitted to operate scheduled services to international destinations.

> **2005:** Indian Airlines was rebranded as Indian. The Government designated Air India, Indian Airlines, Jet Airways and Air Sahara to operate international services.

> **2005, May:** Kingfisher Airlines (Full Service Carrier) and Spice Jet (Low Cost Carrier) commenced operations.

> **2006, August:** Low Cost Carrier – Indigo started its operations.

> **2006:** The government approved the restructuring and modernization of Mumbai and Delhi brownfield airports through the public-private partnership model.

> **2007:** The Regional Airlines Policy was announced wherein licenses were given for operation of airlines within a particular region. Besides, in this year, Indian aviation saw three mergers :

  1. AI-IA merged and was cleared by Empowered Group of Ministers on February 21, 2007.The Cabinet approved it on March 1, 2007 and was effective from August.

  2. Jet Airways acquired Air Sahara for Rs 1,450 cr on April 13, 2007. Air Sahara was renamed JetLite.

  3. Kingfisher Airlines acquired Air Deccan for Rs 550 cr on June 2007. In October 2007, Air Deccan was renamed Simplifly Deccan and the old logo was substituted by the Kingfisher logo.

> **2008: April 24:** The path breaking Greenfield Airport Policy of the Government was announced.

> **2008: August:** Simplifly Deccan was renamed as Kingfisher Red.

> **2009: May 12:** AERA was established to regulate the economic aspects of airports. It is an autonomous body set up by an Act of Parliament.

  2010: Airport Economic Regulatory Authority Appellate Tribunal (AERAAT) was established.

> **2015:** New Civil Aviation Policy Put in Place

  2016: UDAN (Ude desh ka aam nagrik) launched under regional connectivity scheme

Precisely, we look at some of the important events:

- 1932: Tata Airlines (first commercial airlines of India) was founded by J.R.D. Tata.
- 1946: Tata Airlines became Air India.
- 1953: Indian Airlines Corporation was established and to begin its operation.
- 1981: Vayudoot was founded as a joint venture between Air India and Indian Airlines.
- 1993: Vayudoot was merged into Indian Airlines in 1993.
- 1996: Alliance Air (now Air India regional) was formed as a subsidiary of Indian Airlines.
- 2005: Indian Airlines was re-branded as "Indian".
- 2011: Indian (formerly Indian Airlines) merged with Air India. Post merger, Alliance Air was renamed as "Air India Regional."

At present, India is the 9th largest aviation market in the world with 90 operational airports, 1,180 aircrafts, 303 helicopters, 11 operational scheduled airlines and 133 non-scheduled operators. By 2020, it is expected that India will be among top 3 Civil Aviation Markets in the world handling about 300 million passengers. Also, it is hoped that the air cargo industry both, domestic and international will continue to rise.

List of Major Airlines in India:

- **Air India (National Carrier)**
- **Sahara Airlines** (now **Jetkonnect**) became operational in 1993. It was founded in 1991.
- **Jet Airways** began its operation in 1993.
- **GoAir** started its operation in 2005.
- **SpiceJet** became operational in 2005.
- **Indigo** became operational in 2006.
- **Air Costa** commenced scheduled operation in 2013.
- **Air Asia India** commenced its operation in 2014.
- **Vistara** (joint venture between Tata Sons and Singapore Airlines), Fly Easy, TruJet, and Air Pegasus became operational in 2015.

FULL LISTING is seen below:

Airline	Commenced	Headquarters	Type
Air India	1932	Delhi	Flag Carrier | Full Service

Jet Airways	1993	Mumbai	Full Service
IndiGo	2006	Gurgaon	Low Cost
Air India Express	2005	Kochi	Low Cost
SpiceJet	2005	Gurgaon	Low Cost
GoAir	2005	Mumbai	Low Cost
AirAsia India	2014	Bengaluru	Low Cost
Vistara	2015	Gurgaon	Full Service
Alliance Air	1996	Delhi	Regional
TruJet	2015	Hyderabad	Regional
Air Odisha[1]	2012	Bhubaneswar	Regional
Ventura AirConnect	2011	Surat	Regional
Zoom Air	2013	Gurgaon	Regional
Supreme Airlines	1993	Mumbai	Regional
Blue Dart Aviation	1995	Chennai	Cargo
Quikjet Airlines	2016	Bangalore	Cargo
Chhattisgarh Air Link	2012	Raipur	Charter
Club One Air	2005	Delhi	Charter
Confident Airlines[2]	2005	Bangalore	Charter
Deccan Charters	1997	Bangalore	Charter
Jagson Airlines	2005	Delhi	Charter
Jal Hans	2010	Port Blair	Charter
Pawan Hans	1985	New Delhi	Charter
Spirit Air	2012	Bangalore	Charter
TajAir	1993	Mumbai	Charter
Titan Aviation	2010	Bangalore	Charter

List of planned airliners (in future):

Airlines	Headquarters	Type
Air Kerala	Kochi	TBA
FlyEasy	Bangalore	Hybrid Low Cost
Easy Air	Chennai	Regional
Fly Hornbill	Guwahati	Regional
Zav Airways	Kolkata	Regional

List of defunct airliners (in the past):

Airline	Commenced operations	Ceased operations	Headquarters
Air Carnival	2016	2017	Coimbatore
Air Costa	2013	2017	Vijayawada
Air Pegasus	2015	2016	Bangalore

JetKonnect	2005	2014	Kolkata
Air Mantra	2012	2013	Delhi
Air India Cargo	1954	2012	Mumbai
JetLite	2006	2012	Kolkata
Kingfisher Airlines	2003	2012	Bangalore
Kingfisher Red	2003	2012	Bangalore
Deccan 360	2009	2011	Bangalore
Indian / Indian Airlines	1953	2011	New Delhi
Aryan Cargo Express	2005	2010	Delhi
Paramount Airways	2005	2010	Chennai
MDLR Airlines	2007	2009	Delhi
Air Deccan/Simplifly Deccan	2003	2008	Bangalore
Air Dravida	2004	2008	Chennai
Indus Airways	2006	2007	Delhi
Sahara Airlines/Air Sahara	1991	2006	Mumbai
Crescent Air Cargo	2000	2006	Chennai
Gujarat Airways	1995	2001	Vadodara
Archana Airways	1991	1999	Delhi
Bharat Airways	1995	1999	Mumbai
Elbee Airlines	1994	1998	Mumbai
NEPC Airlines	1993	1997	Chennai
Damania Airways	1993	1997	Mumbai
Vayudoot	1981	1997	Delhi
Vijay Airlines	1981	1997	Chennai
VIF Airways	1993	1996	Hyderabad
ModiLuft	1994	1996	Mumbai
East-West Airlines	1992	1995	Mumbai
Pushpaka Aviation / Pushpak Airlines	1979	1983	Mumbai
Jamair	1946	1977	Kolkata
Kalinga Airlines	1946	1965	Kolkata
Darbhanga Aviations	1950	1962	Kolkata
Transportes Aéreos da Índia Portuguesa	1955	1961	Goa
Airways (India)	1945	1955	Kolkata
Orient Airways	1946	1955	Kolkata
Jupiter Airways	1948	1953	Chennai
Air Services of India	1936	1953	Mumbai
Himalayan Aviation	1948	1953	Kolkata
Deccan Airways	1945	1953	Hyderabad
Indian Overseas Airlines	1947	1950	Mumbai
Ambica Airlines	1947	1949	Bombay
Indian Transcontinental Airlines	1933	1948	Kolkata
Tata Airlines	1932	1946	Mumbai
Indian National Airways	1925	1945	Delhi

Irawaddy Flotilla & Airways	1934	1939	Chennai
Himalayan Air Transport & Survey	1934	1935	Kolkata
Indian State Air Service	1929	1931	Kolkata

Now, let's look at some of the benefits of aviation.

- The expansion of air traffic has made the world look very small, indeed. It is possible to make a round-the-world trip in a modern aircraft in the course of less than two days.
- One of the obvious results of the progress in aviation has been long distance flying made comfortable on international routes with new products and services.
- It is now possible for different peoples of the world to exchange their thought and ideas in diverse spheres more frequently because of the vastly increased facilities for contact provided by air communication and the greater such facilities are, the closer will be the cultural and intellectual understanding among the different nations of the world.

However, like any other industry sector, there are problems and challenges in aviation too. They are as follows:

- Aviation related infrastructure. Indian airports are in need of upgrade to make them world class facilities. With Technological advancement bringing in new aircraft like Dreamliner, A380 Indian airports need to build ecosystem to support these advanced technologies.
- Fuel cost and supply – India, having very small supply of indigenous petroleum, has to depend on foreign sources for fuel, especially for aviation purposes. Whenever there is any bottleneck in the regular supply of aviation fuel, even the regular scheduled services, have to be cut off temporarily.
- Bilateral and open borders.
- Competition due to emergence of national and international carriers.
- Demographic shift.
- Evolution of different (and new) models of businesses for aviation.
- Globalization giving rise to trade free environment that is attracting foreign direct investments.
- Economic growth to support air travel
- Skilled staff shortage – lack of fully trained pilots and technicians.

The future of Aviation Industry in India

The future of Indian Aviation Industry is bright. In fact, India is set to become one of the top aviation markets by 2020. The latest report on civil aviation predicts an overall improvement in air traffic. The passenger mind set has also changed and in most cases they have realized the value of time as against money. Earlier, this was only the case with business class but now people fly domestic as well as international for festivals and family get together as well. They prefer an economy class ticket as against a long distance train travel. Moreover, there are offers from airliners to promote frequent flying. As a result, the Indian aviation sector is expected to fly high. However, to achieve that India needs to

overcome the challenges. Some of the immediate challenges in airport management and operations today are the evolution of Open Skies between US and Europe and global alliances – joint venture partnerships and airliners going cross borders for investments. The world has seen financial crises / 911 and experienced the shift of economic activity Europe to US and now Asia. For e.g. China overtaking Japan and globally countries prospering economically like India. Besides, there has been lot of MNC's that have come up and set up in different parts of the world. As a result, transportation and logistics has increased as well. Cargo has changed. For e.g. Asia was growing and Europe was getting slow down and thus the Asian population is growing richer. Moreover, the middle income earning groups have increased and Asia now has largest number of billionaires. Flying has increased inter-Asia and also from Asia to Europe and US-Canada. The visas requirements has bit relaxed by few countries for Asia. Lot of new airliners and low cost carriers has come up. Few has disappeared too. Restructuring within the airliners has happened and their ownership has shifted gradually. Additionally, airliners have got into cost issue and global alliances like one-world, Star alliance have come together. They fight the issues as one group. Point to point traffic started growing. Etihad and Emirates have emerged and Easy Jet and Air Asia have grown too. Virgin has a franchise for US, Australia and other parts of the world. Private jets on demand have come up. To secure the future of civil aviation, some crucial areas need to be focused. They are:

- Safety first – customer safety and security on ground and in the air is the top most priority when it comes to commercial flying. Planes like A380 and B747-8 / Dreamliner offers comfort. Newly designed airports like the Mumbai international airport offers ease in travelling and better immigration experience.

- Customer satisfaction – the civil aviation should provide excellent customer service and facilities at the airport. In this sense, they should offer world class products in terms of in-flight and ground services.

- Staff training and skills development – Training empowers smooth functioning of operations. With a skilled workforce any organization could enhance the performance and civil aviation is not an exception to this.

- Better infrastructure – civil aviation needs to consider building new airports (Including Heliports), update current airports, offer solutions for Air traffic congestion and ensure smooth flow of operations with wider space for all.

- Financial stability – the government need to have measures that commercial flying could offer a profitable business. For example, attracting foreign tourists, domestic flying could also be a wonderful experience.

- Other areas include taking care of the environment sustainability, regulations and bilateral traffic rights and ease of immigration.

Unconstrained Demand Potential - ~430 MPPA
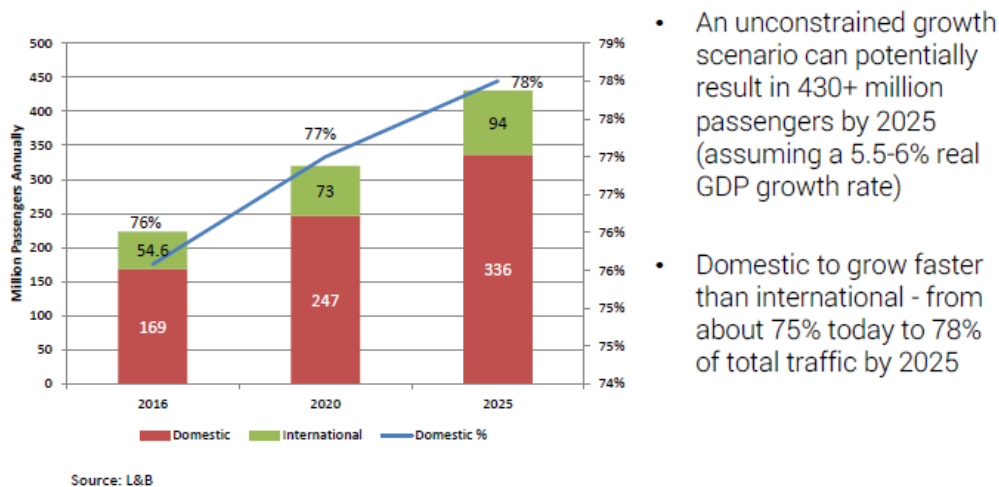
- An unconstrained growth scenario can potentially result in 430+ million passengers by 2025 (assuming a 5.5-6% real GDP growth rate)

- Domestic to grow faster than international - from about 75% today to 78% of total traffic by 2025

Source: L&B

The graph depicts the unconstrained demand potential that is anticipated to happen by 2025. In a diverse country like India, where the need changes depending on the location, the possibilities of aviation are immense. Also, the government is in process of making it and putting its best by inviting private operators to manage airports, e.g. at Mumbai, New Delhi, Hyderabad etc. and building world class, facilities, network and all that is required to attract domestic as well as international travellers. In this sense, over the years the Mumbai and Delhi International Airports have become the hub of tourists when they think of tourism, shopping and pilgrimage.

Conclusion

India has witnessed a remarkable progress for civil aviation and is competent enough to face the challenges as far as flying is concerned. In few cities, it has well-built airports to cater domestic as well as international travelers and major airliners fly to and from India on a daily basis. It is already among the top 10 aviation markets serving over 160 million passengers annually and expected to climb the ladder and being the 3rd in the world by 2020. Some of the major changes in the flying experience are technological advancement / new planes like B 787 and A 380, paperless travel – ease of purchase of airlines' tickets, and innovation in-flight and ground services. Furthermore, the volume of air traffic both in terms of passenger and cargo is also increasing significantly. Civil Aviation in India has shown speedy growth and this applies for both, long haul and short haul flights.

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