



The growth of India Civil Aviation, challenges, opportunities and the story of Airlines for ‘carrying mail’ to UDAN

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ABSTRACT

Twentieth-century Indian freedom struggle had enveloped the nation towards coming out of the clutches of colonialism. There were revolutions that were happening in the space of business; transportation that would have a bearing on the country as a whole once Independence was achieved. On 18th February 1911 Henry Piquet carried 6500 mails on a Humber biplane from Allahabad to Naini, covering almost a distance of 10km. Civil Aviation had come ‘on page’ in India. The first international flight to and from India was introduced in December 1912 over the route, London-Karachi-Delhi with the collaboration of Indian state air services and UK based imperial airways.

Wind, Sand, and a dream flight brought Wilbur and Orville Wright to Kitty Hawk, North Carolina and after four years of scientific experimentation, they achieved the first successful aero plane flight on December 17th, 1903; this had happened at the Global platform. JRD Tata made a date that Indian Aviation history recorded, for, on 15th October 1932, the flight from Karachi’s Drigh Road Aerodrome to Bombay’s Juhu Airstrip via Ahmedabad was piloted by him, the flight carried 25 kilograms of four-anna airmail letters. Air Corporation Act of 1953, Nationalized the Airlines in India, which led to amalgamation of many private airlines. The Gulf War of 1991, brought about Privatization and new airlines viz., Dhamania, Modiluft, NEPC, Jet Airways (awaits second birth in 2022) and others were born, many wound up quickly. Air India, the Government carrier suffered till it was taken over by the corporate house that started it, the Tata Group on 27th January 2022.

Keywords: Airlines, Privatization, Amalgamation, Mergers, Alliances

Introduction

Mr. N. Chandrasekaran, Chairman of Tata sons in a poignant letter addressed to the “Air Family,” that included not only the employees, associates, partners, the existing guest and off course the future guests as well, spoke of one word that has been on everyone’s lips: “homecoming,” and went on to add, “we are proud to welcome Air India back into the Tata Family, after all these years.” Those of us who are used to traveling by air, and even those who do not, those who are aware of the work the Tata Group has done for the nation, nay the world, considering the Tata group is a global entity in its own right, and just like how, we in India admire the corporate entity, they are admired globally as well. The research paper is not about glorifying the Tata Group for rekindling a hope of transforming an airline, that was started by Mr. JRD Tata in 1932; which for various reasons, was Nationalized and JRD himself was moved out of the airlines’ Chairmanship by a Government for a variety of reasons. The Tata’s were rewriting the History of Civil Aviation in India when the federal government handed over the airline to the Tata Group on 27th January 2022 after they emerged as a successful bidder. Mr. Chandrasekaran aptly concluded the letter with the following words, which are sure to become an important milestone in the History of Indian Civil Aviation, “Our Group has its own storied past. I have learned that to preserve what is best about the past, requires constant change. It is by evolving, adapting and embracing the future that we best honour a glorious history. I am convinced that the golden age of Air India lies ahead. Our journey towards its starts now.”

If we Indians were celebrating Air India going back to the stables of the Tata Group, as mentioned by many; there were others who spoke of the saving on the tax payers’ pocket, “Rupees 20 crores per day: the amount Government pays to keep Air India Flying,” (Mint, 2021); there was another story running and being watched by not only the business elk, but those interested in the economics of air transportation, researchers, and general public who had flown by an airline called Jet Airways were look at an event as if it were a phoenix rise. The fact was, in October 2020, the airline's Committee of Creditors (CoC) approved the resolution plan submitted by the consortium of the UK's Kalrock Capital and the UAE-based entrepreneur Murari Lal Jalan (Economic Times, 2022). Many had written off Jet Airways, which halted operation in April 2019 (The Hindu, 2021) and declared itself bankrupt, as a milestone in history of civil aviation, looked at the fact that, there was an opportunity for the airline to make a comeback and would be considered as a remarkable turnaround and specified by Mr. Jalan, the Lead Member of the Kalrock-Jalan Consortium, “the airline can return to its pre-pandemic scale of operations in five-years” (NDTV, 2021). Having received the approval from NCLT in June 2021, the consortium been working closely with aviation authorities in India (viz, Ministry of Civil Aviation (MoCA), Directorate General of Civil Aviation (DGCA) and others); and as stated by Mr. Jalan, “.....Jet Airways 2.0 aims at restarting domestic operations by Q1-2022, and short haul international operations by Q3/Q4 2022, and have envisaged a plan to have 50 aircrafts in three-years and over 100 in 5 years” (The Hindu, 2021a).

The Air India Story

DH Pai Panandikar, President of a Research Group, RPG Foundation, had quoted, “they (Air India) are overstaffed and it is very difficult to correct that situation unless they (i.e., the Government) come out with bold policies, but that the Government would not want to do.” (Radhakrishnan, 2021). This was apprehension that was shown by many; considering the fact that the Governmental control had ensured a downward trend for the airline. In fact, in 1953 the then Prime Minister, Jawaharlal Nehru, decided to ‘nationalise’ the Tata Airlines which by 1946, at the cusp of Indian Independence had changed its name to Air India. JRD Tata lamented on the betrayal of his ‘friend’ PM Nehru, as stated, “My friend Nehru stabbed me in my back. I can only deplore that so vital a step was taken without giving us a proper hearing,” and had even referred to “...there is an overwhelming case against nationalisation of Indian Airlines,” and finally mentioned, “..... was indignant at the manner in which the government had treated the air transport industry.” (Dutta, Dibakar, 2021). All this despite the fact that the Tatas gave the Government of the day, a proposal to acquire 49% state in Air India Ltd, with a provision to increase the stake to a majority of 51% (Rupees 3 crores in at that point in time and history is what the Government of India spent to acquire the airline) at a later date. The Tata Group was to hold 25% ownership and the rest would be publicly traded. As researchers we can surely state that, the seeds for the death of the airline had been sown, and nationalisation was the last nail.

True the Tatas provided for a phenomenal and organized air transport opportunity for India, but it was an irony that the Government, successively treated JRD in a very negative way, and finally Air India went the

bureaucratic way in India, where the mandarins of the Aviation Bhavan were to manage and they all did it for their own benefit. Considering the fact, Air India was a monopoly by itself, did not alter any fact of success or profitability. Bhargava, Jitender (2013) mentions that the JRD transition over the years post his exit in 1977 is so tragic that from an era of meticulous planning Air India entered a phase where Murphy's Law, 'anything that can go wrong will go wrong,' became applicable in all aspects and facets to Air India. The Unions, the sudden change in livery branding, zero focus on passenger loyalty, the competition in the 1990s, mismanaged priorities both from the bureaucracy and the political class, pilferage (of items like Whiskey), multiple departments, who never heeded to the feedback of the passengers, nepotism – but bringing in relatives and friends; clerical, secretarial and security staff being recruited as cabin crew, created a wedge that no one could fill. The Union of the airline, the administrative orders which were farcical in every which way, the Cabin Crew Movement Control Office issues, ensured the airline was evolving a scrouge, a Frankenstein, that would finish the airline of its vigour and vitalities. Acquisitions of aircraft made at the wrong time, too were much responsible for the financial decline of the airline. The merger (NACIL, 2013) of Air India and Indian Airlines and the creation of the National Aviation Company of India Ltd. (NACIL) and the creation of the brand name through Air India in 2007 was another fiasco that was waiting to happen. Air India steadily slipped down the scale among international airline peers, by then. Such was the phenomena for Air India, which was consulted upon by a multitude of new airlines in its hey-days, was appearing more and more beleaguered and would have to walk on crutches if the Government of the day did not give out the doles at regular intervals (Khan, et.al., 2021). Though on crutches, Air India always stood tall, when it served its nation at the time of need; whether it was the first gulf war and the evacuation of Indians and others in the 1990s, to the *Vande Bharat* Mission (VBM) flights following the Covid-19 lockdown, Air India (The Hindu, 2021b) has operated 11,523 inbound flights to carry 18,19,734 passengers and 11,528 outbound flights and 13,68,457 passengers; Air India stood tall, when the Government of the day called for mission mode activity. This meant, that, Air India, could still be a successful entity, provided there was cohesion, but the accumulated losses are tearing into the economy of the airline. For the financial year 2020-2021 according to provisional figures shared by the Government in Lok Sabha, Air India is likely to incur a loss of INR 9,779 crores (The Hindu, 2021c).

Whatever ill we speak about the airline, the foundation has been strong and the ability to move ahead, is always there. True no Government wanted to hang on to a loss-making entity, riddled with its own innate issues. When the Researchers were working on an earlier project of the Tata Sons and the Air India issue, and got to speak with an employee of Air India Sats (AISATS), the ground service provider at airports, the employee, who did not want to be identified, had said, "we await the day, we will be rechristened as TATA SATS; which will be the period of our glory." Some food for thought, as to what the other colleagues in the Airline would have visualised, though some of the unions were against the selling of Air India to any private buyer. But then the reality of the sale came through, when the Federal Government handed over the airline to the Tata Group on 27th January 2022, and Bhatnagar, Ridhima (2022) wrote, about the, "Maharaja's homecoming...." Which was appreciated by one and all, the common Indian too, appreciated the fact that the now beleaguered airline, as finding a new home. As Researchers, it was celebration of sorts, that each of us went through, when Air India, went back to the rightful heir. The Amul advertisement, is a message that all of us wait for, and after 69 years of being away from the Tata group, Air India was on a journey back to its founders and Amul aptly mentioned on its hoardings, "*Tata rahe mera dil*" (a parody for the 1965 song from film 'Guide,' *Gaata rahe mera dil* (ET Online, 2022) and culminated with a beautiful adage, "Amul, in good hands." (Indian Express, 2022) A symbolic statement that was appreciate by one and all. Very succinctly the Amul cartoon had the Chairman of Tata Sons Mr. Chandra sitting the image of the Maharaja, as the co-pilot to Amul Baby, who had approved of the deal. In simple words call the airline, Air India, Tata Airline, or Tata Air India, the travellers will flock to the service offering without any hesitation, knowing fully well, they are in the safe hands of the Tatas.

One can see that an airline that was taken away from a corporate group for Rupees three crore, by the Government of the day, the same corporate group, here in case, the Tata Sons, have taken back for a phenomenal \$2.4 billion (Li, 2021). So, to get a bird's eye-view, what does the salt to airlines conglomerate, the Tatas have from the Aviation front (Table 1).

Airline	Business Model	Aircraft fleet	Destinations
Singapore Airlines (Long standing Partner of the Tata Group) (Interlining and Code share for international sectors is a strategic manoeuvre)	Full Service	161 (as on 1 st July 2021)	130
AirAsia (Tata Sons have majority stake)	Low-cost	34	20
Vistara (partnership with Singapore Airlines)	Full Service	47	37
Air India	We need to see what strategy will be adopted	118	All across India and the world

Table 1: The number of aircrafts that Tata group can and will be able to connect with. (Note: Showcasing the Singapore Airlines fleet to show how the Code Sharing and interlining agreements will positively benefit the Tata Group and its airlines)

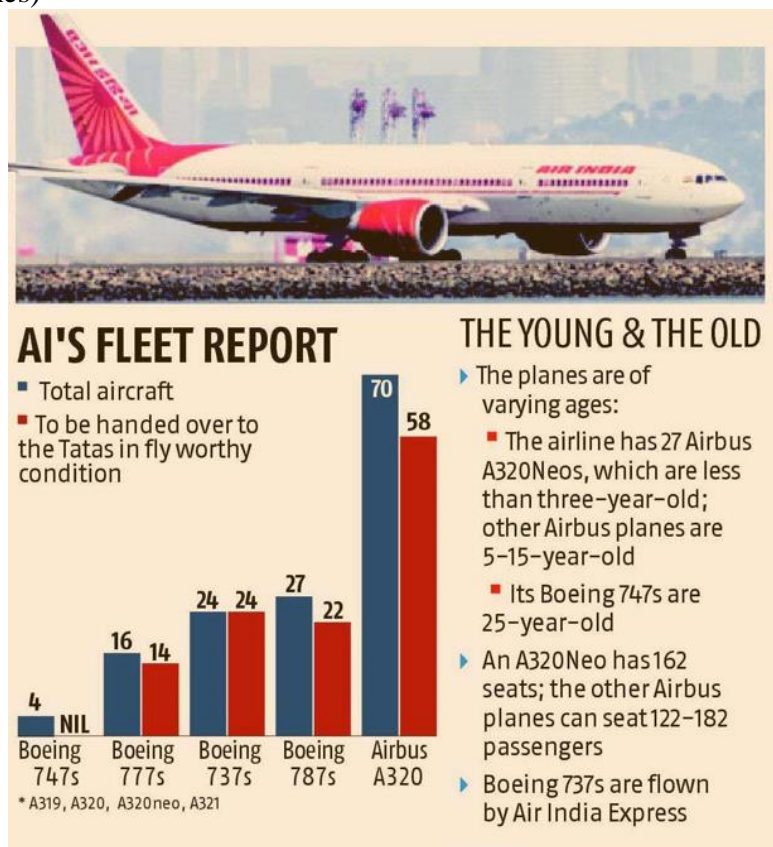


Illustration 1: The Air India Fleet Report (Business Standard, 2021)

Table (1) and Illustration (1) clearly will demonstrate to the general reader, the researcher and the practitioner as to how the Tata group has the mobility to manage and strategize and usher in a qualitative management of the Aviation business and usher in the necessary success.

Civil Aviation Milestones in India¹

Year	Activity
1911	Official mail flown by an airplane was sent from Allahabad to Naini on February 18, 1911 during the Maha Kumbh. Mail from people across the region was gathered at the Holy Trinity Church and the first airmail flight was piloted by French pilot Henri Pequet (1888-1974) (Ganz, n.d.), who flew 6,500 letters a distance of five miles (India Today, 2016)
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 as an extension of the London to Karachi flight of Imperial Airways. (Indian Mirror, n.d.)
1915	Tata Sons Ltd, started regular airmail service between Karachi and Madras without any patronage and support from the government of the day (Travel Radar, 2019).
1920	January 24, Royal Airforce (RAF) started regular airmail services between Karachi and Bombay (Gilbert Hill) (Agarwal, 2011) and Madras (Krishnaswamy, 2011)
1924	Construction of Airports in Calcutta (Dum Dum), Allahabad (Bamrauli) and Bombay (Gilbert Hill) (Krishnaswamy, 2011)
1927	April: Department of Civil Aviation was set up to look after all civil aviation matters. Aero Club of India was also established. (Krishnaswamy, 2011)
1929	JRD Tata awarded the first pilot license by Federation Aeronautique Internationale on behalf of the Aero Club of India and Burma. Aga Khan announced a solo air race between London and Bombay, three participants in the air race: JRD Tata, Man Mohan Singh and Aspy Merchant. (Race won by Man Mohan Singh) (Agarwal, 2011)
1931	Lt. Col. Shelmerdine appointed first Director General of Civil Aviation (DGCA), to look into Civil Aviation Regulations.
1932, OCT 15	The giant step (Krishnaswamy, 2011) in Indian Civil Aviation when JRD Tata, flew the deHavilland Puss Moth and flew from Karachi to Bombay via Ahmedabad and landed at Juhu with airmail. Neville Vincent, a RAF pilot flew the aircraft further via Bellary to Madras (APAO, 2012). (Tata Airlines was based out a hut with palm thatched roof at Juhu Aerodrome (Agarwal, 2011). The First India woman, Urmila K Parikh got a pilot licence in 1932 (Noronha, 2008) and flew a Gypsy Moth wearing a saree. (Think change India, 2016)
1933 - 1934	Other Airlines viz., Indian Trans Continental Airways, Madras Air Taxi Services, Indian National Airways started operations. The Indian Aircraft Act promulgated in 1934 (Chakravarthy, 2011)
1936	Sarla P Datt another of the early women pilots gets a license (Noronha, 2008) Foundation Stone for a passenger terminal laid at Begumpet by Princess Durru Shehwar as part of the Nizam's Silver Jubilee Celebrations (Shahid, 2014)
1937	Indian Aircraft Act formulated (Chakravarthy, 2011)
1939	Routes extended to Trivandrum, Delhi, Colombo, Lahore and intermediate points (Britannica, n.d.).
1940	December 23, Hindustan Aeronautics Limited was incorporated in Bangalore by Shri Walchand Hirachand in association with the Government of Mysore (HAL, n.d.)
1941	(March) Government of India became a shareholder in HAL (HAL, n.d.)
1942	Government of India took over the management of HAL and in collaboration with Continental Aircraft Company of USA started the manufacture of Harlow Trainer, Curtiss Hawk Fighter and Vultee Bomber Aircraft (HAL, n.d.). The stakes of Walchand Hirachand and other promoters was taken over in a buy-out on April 2, 1942 (Agarwal, 2011).
1945	The Tatas and the Nizam of Hyderabad joined set up the Deccan Airways (Chakravarthy, 2011), the first airline to be promoted by a native state (Shahid, 2014).

¹ Collated from multiple sources

1946	<p>'Air India' came into being when Tata Airlines changed its name to Air India on July 29, 1946. (APAO, 2012) (Chakravarthy, 2011)</p> <p>Deccan Airways: first flight (Agarwal, 2011)</p> <p>Jamair, a privately owned non-scheduled and scheduled airline based initially in Jamnagar, when it was financially backed by Maharaja Jam Sahib of Nawanagar. The airline commenced operations with James B Muff and Eddie Quinn of China National Aviation Corporation (CNAC).</p> <p>Kalinga Airlines based in Calcutta was found by Biju Patnaik, who was also the Chief Pilot.</p> <p>Mistri Airways was established by Rusi Mistri and operated flights between Bombay, Nagpur and Calcutta as a Charter.</p>
1947	<p>Independence of India.</p> <p>Prem Mathur became the first woman to obtain a commercial pilots license. and started to fly Deccan Airways.</p> <p>Ambica Airlines, based out of Bombay, began local services on March 10, 1947, was a subsidiary of Shri Ambia Steam Navigation Company. Operated flights between Bombay and various destinations in Gujrat (Vadodara, Ahmedabad, Bhuj, Rajkot, Jamnagar and Morbi).</p> <p>Mistri Airways changed its name to Indian Overseas Airlines</p>
1948	<p>Air India signed an agreement with the Government to operate international services under the name Air India International Ltd. The Government of India acquired 49% (with an option to purchase an additional 2%) (Agarwal, 2011).</p> <p>(June 8) Air India inaugurated its international services with a weekly flight between Bombay and London via Cairo and Geneva in aircraft with the name Malabar Princess (40 seat Lockheed L-749 Constellation) and flew over 8,047km. JRD himself was on the flight. (Pal, 2017). The flight arrived in London on 10th June 1948 (Garg, Arjit, 2020)</p> <p>Prem Mathur became the first woman commercial pilot, when she started flying for Deccan Airways.</p> <p>Himalayan Airlines was established. They started with chartered flights, over time had night mail services and scheduled passenger flights.</p>
1949	<p>Ambica Airlines, ceased to operate on account of insufficient traffic and litigation in December.</p> <p>James B Muff and Eddie Quinn bought over the shares of the Maharaja of Nawanagar and moved Jamair to Calcutta.</p> <p>Indian Overseas Airlines gets license to operate on following routes: i) Nagpur-Hyderabad-Bangalore-Madras and ii) Nagpur-Jabalpur-Allahabad-Kanpur-Lucknow.</p>
1950	<p>Air India International increased its service to Nairobi, Kenya via Aden.</p> <p>Darbhangha Aviation started by Maharaja Kameshwar Singh of Darbhanga with the purchase of three former military aircrafts (Douglas DC-3).</p> <p>Himalayan Aviation ran the first ever international flight from Gauchar (Nepal) to Calcutta on February 20, 1950.</p> <p>Indian Overseas Airlines, shuts shop by end of 1950 on account of financial problems.</p> <p>The Government of India set up the Air Transport Enquiry Committee to investigate the working of Airlines in India</p>
1951	<p>(January) HAL placed under the administrative control of the Ministry of Defence, Government of India (HAL, n.d.)</p>
1953	<p>Indian Parliament passes the Air Corporations Act of 1953 and Indian Airlines and Air India were set up after the Nationalisation. (Considered as a 'Black day' in Indian Aviation. (Agarwal, 2011).</p> <p>On August 25, 1953, the Government of India, exercised its option to purchase a majority stake in Air India International.</p>

	Seven independent domestic Airlines: Deccan Airways, Airways India, Bharat Airways, Himalayan Airways (Aviation), Kalinga Air Lines, Indian National Airways, Air Services of India were merged into Indian Airlines. The airlines were merged to form the new domestic National Carrier: Indian Airlines Corporation (Agarwal, 2011). Indian Airlines had a fleet of 99 aircrafts which included 74 Douglas DC-3 Dakotas, 12 Vickers Vikings, 3 Douglas DC-4s and other aircrafts. Civil Helicopter services introduced (APAO, 2012). Jamair reverted to being a private charter company.
1956	Ms. Durba Banerjee first woman pilot in Indian Airlines was inducted.
1957	Kalinga Airlines restarted operations as a non-scheduled charter operator and flew passengers and cargo.
1960	The Jet Age starts with the introduction of Boeing 707-437 (Gauri Shankar) into the Air India fleet and USA was connected to India. On May 14, 1960, the National Carrier commenced operations to New York City via London.
1962	June 8, 1962, the airlines name was officially truncated to Air India. On June 22, 1962, Air India became the world's first all-jet airline (Agarwal, 2011). Darbhanga Aviation ceased to exist on account of air crash of its aircraft at Rajshahi, Bangladesh.
1971	Delivery of its first Boeing 747-200B named Emperor Ashoka. This coincided with the introduction of the 'Palace in The Sky' livery and branding. A feature of this livery is the paintwork around each aircraft window (Agarwal, 2011)
1972	Kalinga Airlines ceases to operate from February 1972. International Airport Authority of India (IAAI) constituted to develop, operate and manage Airports at Bombay, Calcutta, Delhi and Madras. (NITI Aayog, n.d.).
1976	The first three Airbus A300 wide-body jets being introduced in to domestic service with Indian Airlines which has always maintained a close relation with the European Air craft manufacturer, Airbus (Agarwal, 2011).
1977	Jamair, ceased to exist after a decade of tumultuous litigations, accidents leading to a shrinking fleet, labour unrest, raising fuel costs, competition, to mention a few.
1978	Emperor Ashoka crashed on January 1, 1978 whilst performing duties as Air India Flight AI-855 about 3 km (1.9 mi) off the coast of Bandra, Bombay.
1981	Vayudoot Airlines (Government of India) started operations to service the North-Eastern states of India, considering the fact that the area had a mountainous terrain.
1982	Enactment of the 50 th Anniversary of the JRD flight of 1932. He carried messages from the Mayor of Karachi to the Mayor of Mumbai and also the President of Pakistan to the President of India. (Pal, 2017)
1985	(October) Helicopter Corporation of India started operations (Economic Times, 2018) Air India flight AI-182 (Boeing) (Emperor Kanishka) crashes whilst on a flight from Montreal to New Delhi following a mid-air bombing over the Irish Sea.
1986	Private Players permitted to operate as Air Taxi Operators (ATO) National Airport Authority was constituted. First All women flight from Kolkata to Silchar, when Saudamini Deshmukh and co-pilot Nivedita Bhasin and two air hostess took to the air. (Noronha, 2008)
1987	Helicopter Corporation of India rechristened as Pawan Hans Helicopters Limited (PHHL) (Economic Times, 2018) Indira Gandhi Rashtrya Uran Academy (IGRUA) established in Fursatganj, Rae Bareli, Uttar Pradesh for training pilots. The Bureau of Civil Aviation Security (BCAS) was constituted following the mid-air bombing of Emperor Kanishka.
1989	Indian Airlines inducts the Airbus A320, earliest Airline in the world to do so. Captain Saudamini Deshmukh commanded the first Boeing all-women crew flight in September 1989 on the Mumbai-Goa sector (Agarwal, 2011).
1990	11 th April 1990, the Government of India adopted the Open-sky policy and allowed Air Taxi Operators (ATOs) to operate flights from any airport, both on a charter

	<p>and a non-charter basis and to decide their flight schedules, cargo and passenger fares. This move marked the reversal of a process that began in August 1953 when eight private airlines were nationalized (Guha, 1990). East-West (APAO, 2012) Airlines became the first National Private Airline to operate in India after almost thirty-seven years of Government Airlines.</p> <p>Air India entering the Guinness Book of World Records when it conducted the largest evacuation effort by a single civilian airline flying over 111,000 people from Amman, Jordan to Mumbai over 59 days operating 488 flights, just prior to the first Gulf war (Agarwal, 2011).</p> <p>Captain Nivedita Bhasin of Indian Airlines becoming the youngest commander of a jet aircraft at age 26 (PIB, 2022). She subsequently became the first female check pilot on an Airbus A300 aircraft.</p>
1991	Sahara Airlines started operations (September 20, 1991)
1993	<p>Jet Airways started operations</p> <p>Kochi International Airport Society (KIAS) found by the Government of Kerala to plan for an International Airport under Public Private Partnership (PPP) (ICAO, 2015)</p>
1994	Air Corporation Act of 1953 was repealed. ATOs allowed operating as Scheduled Airlines
1995	<p>Modiluft, Damania Airways, East-West Airlines, NEPC, Sahara Airlines, Archana Airways, Jet Air granted Scheduled Airlines status</p> <p>Private Airlines accounted for 10% of the domestic traffic.</p> <p>Airport Authority of India (AAI) constituted with the merger of International Airport Authority of India (IAAI) and the National Airport Authority (NAI).</p> <p>Gujarat Airways (estbd February 1994) commenced operations in July 1995, operating in Gujarat (Ahmedabad, Bhavnagar, Bhuj, Jamnagar, Kandla, Keshod, Porbandar, Rajkot, Vadodara), Andhra Pradesh (then united, Hyderabad), Diu, Karnataka (Belgaum and Bangalore), Madhya Pradesh (Indore) and Maharashtra (Mumbai, Nagpur and Pune).</p>
1996	Modiluft shuts operations {gets re-incarnated as SpiceJet in 2005} (Agarwal, 2011)
1997	Damania Airways, East-West Airlines, NEPC shut down operations. Jet and Sahara continue
1999	First private airport under the Public Private Partnership (PPP) model comes up in Cochin/Kochi, Kerala. The President of India inaugurates the airport on May 25, 1999, commercial operations start from June, 1999 (Varkey, n.d.).
2000	<p>Sahara Airlines rebranded as Air Sahara.</p> <p>Archana Airways went out of business on account of two accidents and credit crunch. Subsequently Archana Airways, was taken over by Ascent Pinnacle Capital Limited, but nothing much is heard about.</p>
2001	Gujarat Airways, ceased operations, across the destinations.
2003	Air Deccan Starts operations as India's first Low-Cost Carrier (LCC) by Captain GR Gopinath
2004	<p>June: GoAir starts operations as an LCC</p> <p>Jet and Sahara allowed to fly to SAARC countries, started with flights to Sri Lanka (MoCA, Annual Report 2003-04). (NOTE: In December, 2004, private airlines 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 (Agarwal, 2011).</p> <p>Kingfisher, SpiceJet, Indigo, Go Air and Paramount Airways start operations</p> <p>Private greenfield airports at Hyderabad and Bangalore received Governmental approval.</p>
2005	<p>Indian Airlines rebranded as Indian. The Indian Government designated Air India, Indian Airlines, Jet Airways and Air Sahara to operate International services.</p> <p>(May) Kingfisher Airlines launches Full-Service Carrier (FSC); SpiceJet commenced operations as LCC.</p>

	Air Dravida promoted by Premier Tours and Travels, Chennai and Zircon International of Malaysia formally launched the entity in Novemer 2005 and shut it down immediately (Kannan, n.d.).
2006	(August) Indigo started operations as LCC Government approves the restructuring and modernization of Mumbai and Delhi Airports through PPP initiatives. Indus Air (estb 2004) commenced operations on December 14, 2006 to four destinations viz., Amritsar, Chandigarh, Delhi and Mumbai. It was based out of Ghaziabad.
2007	Civil Aviation Consolidation: Air India and India Airlines merge → Air India. New entity called National Aviation Company of India Limited (NACIL) established, into which both Air India (along with Air India Express) and Indian (along with Alliance Air) will be merger. (merger remains incomplete) (Agarwal, 2011) Jet Airways acquires (13 th April for INR 1,450 Crores) Air Sahara rechristens the acquired airline as Jet Lite Kingfisher acquires (June, for INR 1000 Crores, 46% stake) Air Deccan. MDLR Airlines (Murli Dhar Lakh Ram Group) starts operations on March 14, 2007, with New Delhi as a Hub. Indus Air ceased to operate in April 2007.
2008	(April) Path breaking greenfield airport policy of the Government of India ensured the commencement of Bangalore and Hyderabad under the PPP model. (August) Simplifly Air Deccan rechristened as Kingfisher Red Parliament passes the Airports Economic Regulatory Authority (AERA) Bill.
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. MDLR Airlines ceases to exist on November 9, 2009
2010	SpiceJet starts International Operations. Airport Economic Regulatory Authority Appellate Tribunal (AERAAT) established. Pawan Hans started the Sea Plan service, <i>Jal Hans</i> (GK Today, 2015) Terminal 3 (T-3) integrated terminal was inaugurated at New Delhi's Indira Gandhi International Airport (Agarwal, 2011).
2011	Indigo Operates International flights. Kingfisher exits LCC segment (Kingfisher Red shuts operations). Air Mantra established by Religare Group with Chandigarh as the operating base. Air Odisha was incorporated on January 25, 2011 with a hub at Biju Patnaik International Airport.
2012	Foreign Direct Investment (FDI), the Government of India allows Foreign Airlines to hold a 49% stake in scheduled and non-scheduled air transport services. Non-Resident Indians (NRI) permitted to hold 100% equity in Airlines. Air Mantra launched revenue flights on July 23, 2012 between Amritsar and Chandigarh. Chhattisgarh Air Link, a subsidiary of Chhattisgarh Aviation Academy, was a private non-scheduled airline based in Raipur, Chattisgarh. It started operations in December 2012, and connected Raipur, Jamshedpur, Bhubaneswar, Rourkela, Jharsugda, Bilaspur, Raigarh and Jagdalpur with its eight aircrafts. (The Airlines is currently non-functional).
2013	Singapore-based Tiger Air enters into an Interline agreement with SpiceJet Air Carnival set up as a Charter Airline (Kumar, 2019). Found on January 9, 2013, and inaugurated on June 15, 2013, Kairali Airlines with Trivandrum as a hub was to start operations to Kochi, Kozhikode, Mangalore, Agatti in the first Phase and in the second to Mysore, Coimbatore and Kannur. (was never launched into operations).

	Air Mantra shut shop on March 31, 2013 on account of poor bookings was subsequently liquidated. Headquartered in Vijayawada, based out of Chennai, Air Costa commenced operations on October, 15, 2013.
2014	Air Asia (a JV between TATA Sons, Malaysia's Air Asia Berhard and Arun Bhatia's Telestra Tradeplace) and Vistara (a JV between TATA Sons and Singapore Airlines) enter the Indian Skies. Etihad Airways of Abu Dhabi purchases 24% stake in Jet Airways. Premier Airways (estb 2005) got an approval from MoCA in June 2014 (Shukla, 2014) to operate Easy Air as a LCC based in Chennai. But the airline never took off.
2015	Indigo launches one of the Larger IPOs in India History. New Civil Aviation policy put in place.
2016	Jet Airways to merge with Jet Lite and exit the LCC segment completely. UDAN: Ude desh ka aam nagrik launched under regional connectivity scheme (RCS). Air Carnival a started operations with its hub in Coimbatore (July, 18, 2016) (CAPA, n.d.).
2017	Air Carnival ceased its operations on April 4, 2017 amid talks of stake disinvestment and liquidation (Kumar, 2019). Air Costa ceased its operations on February 28, 2017 (ch-aviation, 2017).
2018	Air Odisha receives license to commence scheduled operations from February 13, 2018 (valid till February 12, 2021). But the Airline was considered to be out of business (ch-aviation, n.d.)
2019	April Jet Airways Suspended its flights (Gandhi, 2020)
2022	January 27, 2022, Secretary, Department of Investment and Public Asset Management (DIPAM), Government of India announces the hand over of Air India to Talace, the successful bidder and the consideration amount (INR 2700 crores and debt of INR 15,300 crores has been retained) was received (The Print, 2022). Night landing and take off facilities in Srinagar Airport

Civil Aviation in India

Civil aviation was a monopoly till the late 80's; when in 1986 the Indian Government granted permission to the private sector to provide for Air Taxi Operators/Operations (ATO) services. It was the 1990 Aviation policy, known as the Open Sky Policy and the Air Corporations (Transfer of Undertakings and Repeal) Act of 1994 that ensured the monopoly of the National carrier actually came to an end. It was literally the reverse of the amalgamation of the eight literally provincial based airlines of 1953, that by 1995, the Indian skies had East-West (APAO, 2012) Airlines became the first National Private Airline to operate in India after almost thirty-seven years of Government Airlines. The others who followed were: Sahara Airlines (1991); Jet Airways (1993), Modiluft, Damania Airways, NEPC, Archana Airways, Paramount Airways; all of whom got the Scheduled Airlines status after the complete repeal of the Air Corporation Act of 1953. Thus the scheduled Airlines could announce a timetable and ensure flights as per a rooster. The irony of the phenomenal was that, barring Jet Airways and Sahara Airlines; Modiluft, Damania Airways, East-West Airlines, NEPC, Archana Airways, , all shut shop because of a multitude of reasons. Whilst Jet Airways commanded a position as a Corporate Airlines, Sahara Airlines, later rechristened as Air Sahara, functioned as literally as a common people airlines. From 2003 till 2021, we have had new airlines coming into the Indian skies: Air Deccan (2003), GoAir, Kingfisher, SpiceJet, Paramount Airways all start operations in 2004. It was simply told that Airlines were the blue-eyed boys of business. Even the Government branded Indian Airlines as "Indian" in 2005. 2006 it was Indigos' opportunity to come into the limelight; by 2007 it was the time for 'business combinations' as theorised by Gomes-Casseres (2015). The following mergers, amalgamations, joint-ventures happened in the skies of India:

1. Air India and India Airlines merge → Air India
2. Jet Airways acquires (13th April for INR 1,450 Crores) Air Sahara → Jet Lite
3. Kingfisher acquires (June, for INR 1000 Crores, 46% stake) Air Deccan → Simplify Deccan, and rechristenes Air Deccan as Kingfisher Red.

The era of consolidation, as one could see, would ensure a better opportunity for the Air Transport sector in India, but it was not to be. Some called it consolidation, but surely there was a strong undercurrent, that one could not see. The airlines were falling of the skies as they took off. Was it the management, or the mismanagement of the airlines, that was ensuring the failure of the airlines?

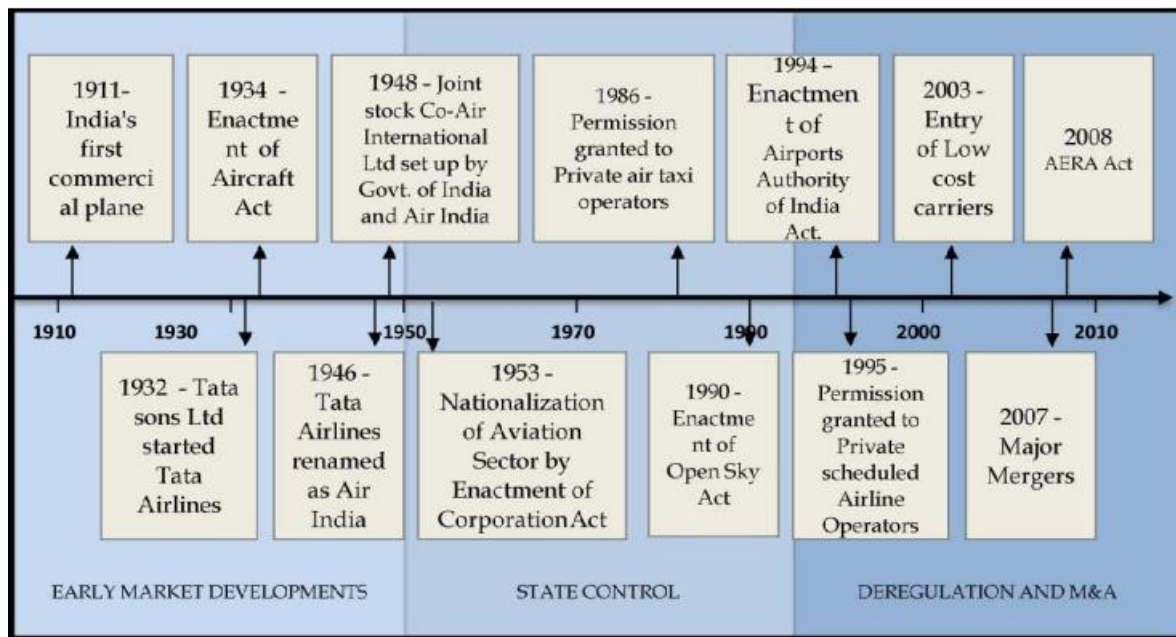


Table 2: Developments in the Indian Aviation Sector, a bird’s eye-view (Nathan, 2012)

If one were to look into the historicity of the airlines and its management in India one can see in the example of ModiLuft, which had an excellent record for three years until it shut down in 1996, was later acquired by Ajay Singh, who launched it as SpiceJet in 2005 along with NRI businessman Bhulo Kansagra. As SpiceJet faced difficulties, Kansagra sold his stake to US distress investor Wilbur Ross in 2008, who sold it to Sun Group’s Kalanithi Maran in 2010. The airline was teetering on the verge of closure when it was again acquired by Ajay Singh in 2015, who turned it profitable (Verma, 2019). Off course the dispute between Mr. Singh and the Marans has reached the Judiciary in India, but SpiceJet has been run, with efficiency and efficacy.

If we are to analyse further one can see the Airlines and the number of aircrafts that they possess, which clearly foresees the opportunity that exists in India. Statista (2022) provided for a March 2020 data of aircrafts possessed by Indian Airline Operators, which is a clear indication.

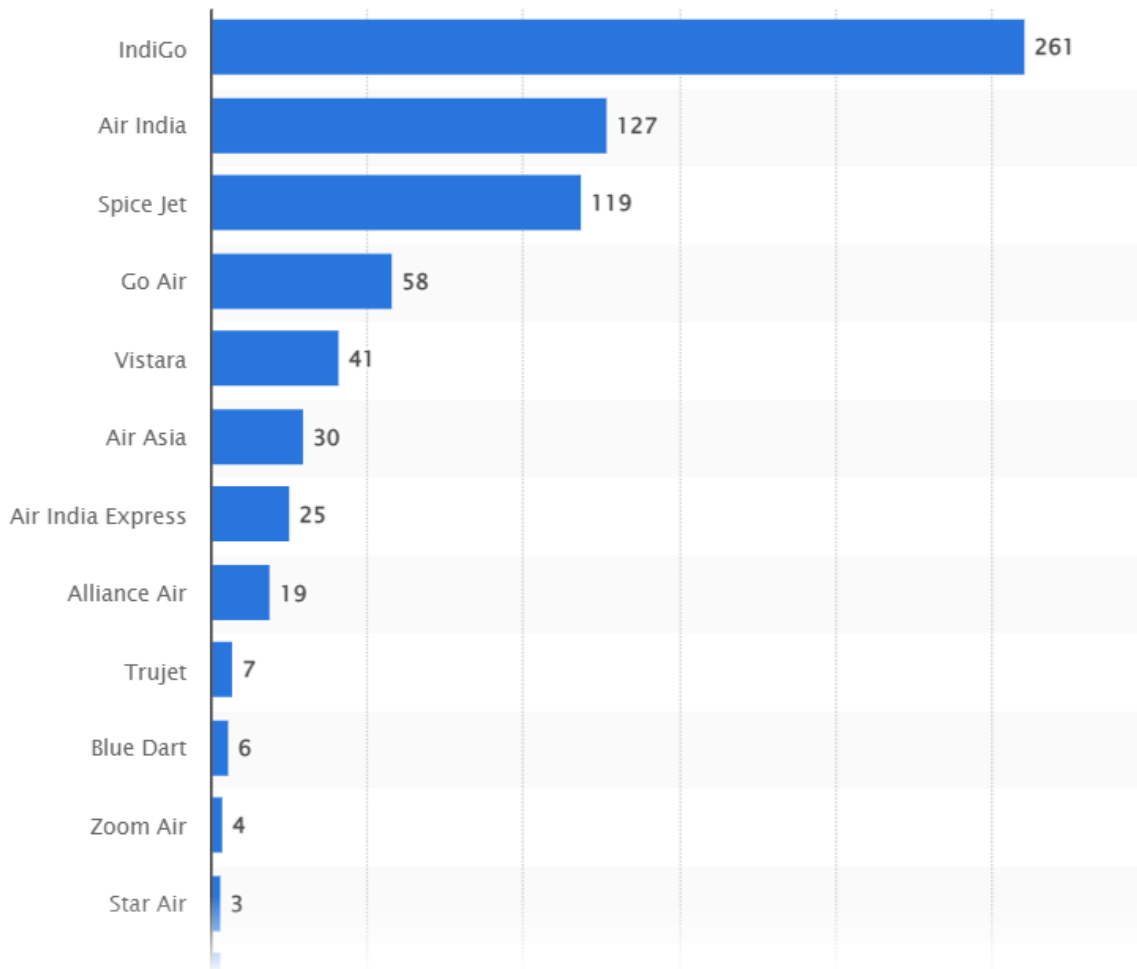


Table 3: Number of Aircrafts possessed by Airlines in India (Statista, 2022)

The data at Table 3, is a clear indication that there is an opportunity for more airlines to come in offer quality service. The skies will not be crowded after all, but one needs to keep tab on the management of the same. Kundu (2019) had provided for data which clearly showed, the opportunity that existed for the airlines in India. Table 4 will help any student or professional of business and economics to understand the nuances.

	Airline	Market share	The actual number of passengers
1	IndiGo	49%	59.80
2	SpiceJet	14.8%	18.03
3	Air India	13.5%	16.53
4	GoAir	11.1%	13.55
5	AirAsia	6.3%	7.68
6	Vistara	4.7%	5.79

Table 4: Passengers handled in May 2019 by Airlines in India (Kundu, 2019)

NOTE: Air India, AirAsia and Vistara have been shown as separate

The growth rate of air traffic and connectivity was surely low till the resurgence occurred in the early nineties (Shelley, 2018).

UDAN (*Ude Desh ka Aam Naagrik*), Regional Connectivity Scheme (RCS)

“Enhancing regional connectivity through fiscal support and infrastructure development,” was the key objective of National Civil Aviation Policy (NCAP) 2016, which was released by the Ministry of Civil Aviation (MoCA),

Government of India (GoI). The RCS had cited the International Civil Aviation Organisation (ICAO) (www.icao.int) and stated the following:

As per an ICAO study - “Economic benefits of civil aviation: ripples of prosperity”, the output and employment multipliers of aviation are 3.25 and 6.10 respectively. This implies that every 100 Rupees spent on air transport contributes to 325 Rupees worth of benefits, and every 100 direct jobs in air transport result in 610 jobs in the economy as a whole. In fact, the study attributes over 4.5% of the global Gross Domestic Product (GDP) to civil air transport (RCS, 2016).

From a generic facet, UDAN is expected to usher in the following (Byju, n.d.)

- The need for regional connectivity schemes in areas that are not under the Aviation map.
- The regulatory changes that might be required for implementation (this is always a challenge in India)
- Job generation through increased connectivity both in the infrastructure sector as well as ancillary services (this is the core of the multiplier effect that has been visualised)
- Focus on location, traffic, load and financial factors (the various tourism schemes would get juxtaposed with UDAN and ensure a success for the Aviation sector)

Under UDAN, the following was to be achieved

- The Civil Aviation Ministry has set a target of operationalizing as many as 100 unserved and underserved airports and starting at least 1,000 air routes. (Nag, 2021)
- The Ministry of Civil Aviation has celebrated the UDAN day on the 4th anniversary of the UDAN Scheme. The GoI has acknowledged the contribution of the scheme and has identified 21st October as UDAN Day, the day on which the scheme document was first released (PIB, 2020)
- The Civil Aviation Ministry has approved 78 new routes under the 4th round of Regional Connectivity Scheme UDAN. So far, 766 routes have been sanctioned under the UDAN scheme (PIB, 2020). Of the 78 routes, the North-East which for various reasons had been neglected by earlier Governments, got a phenomenal boost. Small destinations were to come on the map and ensure not only faster modes of travel but the multiplier effect that would help in the economic development and growth was also ushered in.

The researchers would like to make an observation wherein, historically it can be seen that, many smaller airlines, operating in a given area, spread between two to three provinces proved that it was viable for operations with good management practices. The same can be said of the present scenario; using UDAN as a policy and as an opportunity, airlines for economies of scale should focus on a specific region or two and ensure success for themselves and make the so called ‘non-viable’ sectors ‘viable’ from a business perspective. As on January 21, 2022, a total of 65 RCS (UDAN) (AAI, 2022) airports have been operationalized with a total of 403 UDAN routes under Phases 1, 2, 3 and 4 of the policy (Chhabra, 2022). Though there have been hindrances at the state government level on account of land acquisition for the airports;

	State	Number of Airports under UDAN	Names of the locations
1	Uttarakhand	8	Pantnagar, Pithogarh, Sahastradhara, Chinyalisaur, Gaucher, New Tehri, Srinagar, Haldwani
2	Gujrat	7	Bhavnagar, Jamnagar, Kandla, Mundra, Statue of Unity, Sabarmati River Front, Porbandar
3	Uttar Pradesh	6	Agra, Allahabad, Kanpur (Chakeri), Hindon, Bareilly, Kushinagar
4	Karnataka	6	Belgaum (Belagavi), Hubli, Mysuru, Bidar, Vidyanagar, Kalburgi (Gulbarga)
5	Maharashtra	5	Jalgaon, Kolhapur, Nanded, Ozar (Nashik), Sindhudurg
6	Assam	4	Jorhat, Tezpur, Lilabari, Rupsi
7	Punjab	4	Adampur, Bhatinda, Ludiana, Pathankot
8	Himachal Pradesh	4	Kullu, Shimla, Mandi, Rampur
9	Rajasthan	3	Bikaner, Jaisalmer, Kishangarh
10	Chhattisgarh	2	Jagdalpur, Bilaspur
11	Andhra Pradesh	2	Kadapa, Kurnool

12	Arunachal Pradesh	2	Tezu, Passighat
13	Meghalaya	1	Shillong
14	Nagaland	1	Dimapur
15	Bihar	1	Darbhanga
16	Kerala	1	Kannur
17	Tamil Nadu	1	Salem
18	Odisha	1	Jharsuguda
19	Pondicherry	1	Pondicherry
20	Daman and Diu	1	Diu
21	Madhya Pradesh	1	Gwalior
22	Haryana	1	Hissar

UDAN, a good scheme, a true economic multiplier effect policy (RCS, 2016)

This scheme is a part of the NCAP, 2016 and is funded jointly by the GoI and the state governments. The following are its salient features:

- The scheme duration is for ten-years
- Airlines participating in UDAN are selected through a competitive bidding process
- The Central government will provide the following:
 - Subsidy to cover Value Gap funding (VGF) for participating airlines
 - Concessional GST on tickets booked using the scheme
 - Code sharing for flights under the policy
- State Governments will extend the following measures:
 - GST reduction to 1% for 10 years
 - Coordination with oil companies to facilitate refuelling facilities
 - Provide land for airport and ancillary development
 - Trained security personnel
 - Utilities at subsidised rates
 - 20% of VGF
- Airport operators such as AAI will provide the following concessions:
 - No parking, landing and storage charges at participating airports
 - Nil TNLC (Terminal Navigation Landing Charges)
 - Allow ground handling by the airline selected through the bidding process
 - RNCF (Route Navigation and Facilitation Charges) will be discounted to 42.4% of normal rates by the Airports Authority of India

Value Gap Funding is not provided to cargo airlines. All other terms and conditions remain the same as passenger airlines. The fares are graded based on distance and flight hours for both fixed-wing and rotary-wing services. The RCS subsidy is funded by a levy of Rs 5000 per flight on major routes. Flights regulated under this policy framework can be booked from the UDAN website and major travel portals by passengers. For a consumer, the cost works out as follows: The fare for regional domestic flights are capped at Rs. 2500/- per hour of flight for a fixed wing aircraft. One hour of flight can cover about 500 Kilometers, hence, the fare is about Rs. 5 per kilometer, way cheaper than most cab services in the country. For journey on a helicopter, the fare is capped at Rs. 2500/- for every 30 minutes, i.e., Rs. 5000 per hour (Chhabra, 2022).

Conclusion

The Civil Aviation is a phenomenal opportunity in India and as a Nation, we can ensure a qualitative growth of the sector. Considering the fact, the historical growth and the participation of the private sector from times immemorial has ensured a multitude of economic and business opportunities to the investors, the customers and all stakeholders who fall within the ambit. Despite bumpy rides and choppy skies at times, the political issues, both domestic and global, issues of pandemic, no-fly zones, as seen in the current scenario (of wars and or politics between Nations), aviation world in India is at the cusp of a revolution that one can fathom as leading to a huge success. Though many players have exited, but new ones, with a different mind-set, a mind-set of optimism have been investing. One can see this in four phenomenal cases of:

1. The Tata Group taking over Air India,
2. The investments being done by Mr. Ajay Singh of SpiceJet to retain control on the airline,
3. The efforts being put by Mr. Jalan and the Kalrock group to revive a ‘fallen hero’ in the form of Jet Airways,
4. By placing an order for 72 Boeing 737 Max Planes, with a strategy to connect the metros with Tier II and III cities (Mint, 2022a), Akasa Air, promoted by Rakesh Jhunjunwala has marked itself to be the most dependable airline in India, offering warm and efficient customer service, reliable operations and affordable fares (Akasaair, n.d.). The Government in all its wisdom is facilitating a smooth take-off for the new airline, which will take to the skies in May or June, 2022 and by March 2023 will have a fleet of 18 aircrafts.

With Air India, now firmly in the Tata stables, will look towards stability and profitability, Jet Airways, the famous 9W will come back to the markets and the launch of Akasa Air, will surely be a boost to the aviation economy in India, which can and will move towards a glory, that many envisage. With the Government of India, along with the state Governments facilitating infrastructure development in the form of airports and providing an opportunity for the Airline business with concessions, the businesses will move towards creating a qualitative business opportunity, that will usher in the much-needed revolution in the Indian Civil Aviation business.

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