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The IndiGo STORY

INSIDE THE UPSTART THAT REDEFINED INDIAN AVIATION

SHELLEY VISHWAJEET

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To the spirit of Indian entrepreneurship which keeps blossoming despite many odds!

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Foreword

Indian aviation has arrived and IndiGo has played a big role in rescripting it. The story of IndiGo is certainly a tale worth narrating, and worth reading!

I've personally been witness to IndiGo's growth story since 2006 and I believe its account must be told, albeit with maturity, analytics, balance and along with a sizable portion of reticence. I had also been aware for a while that a book on IndiGo was in the making but I had my own scepticism! And I'll tell you why. For starters, it's very important to identify an author who not only has a deep, intrinsic knowledge of the airline business but also has the ability and maturity to present the IndiGo phenomenon in a clear, insightful manner minus the hype, rhetoric and melodrama—someone who can be a dispassionate business analyst and a lucid writer at the same time.

So I was delightfully surprised when my good friend and industry colleague, Shelley Vishwajeet, a recognized journalist—and someone I've known for many years now—called me one evening informing me that he has been tasked with penning down *The IndiGo Story*. He is one of the few around who could do justice to the IndiGo story. Gladly, I jumped on it with as much support to Shelley as possible.

IndiGo took flight in 2006, which was certainly not the most conducive time to get into aviation business. Against all odds, IndiGo's nonconformist promoters Rahul Bhatia and Rakesh

Gangwal had the self belief to get their airline up and running—and what a journey it has been! What's interesting is not only did they live through the toughest of times, they stood out, won the loyalty, wallet and the heart of the Indian flyers like no other airline till date and lived to tell the tale. IndiGo's story interests, captivates, attracts and fascinates one with awe because it is probably the closest example we've had in Indian aviation of a disrupter who broke biases, myths, absurdities and idiosyncrasies of the industry like no other. At the same time, it was trying to compete with the Indian Railways, closer to when oil had hit $120 on the barrel, on one hand and mightier airline competitors on the other; and yet succeeded with making the best of what it had in its arsenal—akin to Arjuna in Kurukshetra taking on adversaries both mightier and more powerful than himself!

Having been part of the leadership and management with several airlines in the past in India, the Middle East and South East Asia, I can tell you that the cyclical airline business requires patience, resilience, aggressiveness, being lean and agile—all at the same time. IndiGo, in its march to the top, displayed all these attributes in ample measure.

The uniqueness of IndiGo comes with its ability to listen and adapt to what the new generation of Indians want from air travel. Air travel in India till 2005 was mostly tailored to the more mature (and ridged) Baby Boomers, Yuppie, Hippie and GenX. By the time IndiGo came, a new restless demographic cohort called 'millennials' had arrived, and India was on the go. This generation looked at air travel just as another mode of transport, albeit quicker. For this fast-moving generation, air travel was a necessity. IndiGo listened to them and appealed to them. More than a decade later, IndiGo continues to appeal to the newer generation of flyers—the 'swipe-left-right' generation as I call them—and is now busy scripting a new story for itself in the international sky.

The IndiGo Story is a first-of-its-kind book on Indian aviation and you will gain an in-depth understanding of the airline business while uncovering IndiGo's success recipes. I congratulate Shelley for his superlative efforts. I am witness to the extensive hours he put in with research, historic data, fact finding and reviewing documents that

themselves were more than fifteen years old, bringing all this together for us to cherish for years to come.

To close, I am deeply humbled to be asked to write this Foreword and I am sure you will enjoy reading this book—which in its core is a celebration of the ‘never say die’ spirit of aviation and entrepreneurship.

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Introduction

Not many here in India are aware of Vik Kachoria and Anutosh Moitra. Well, Vik is the founder and CEO of a Boston-based company called Spike Aerospace, which is at the forefront of developing the world's first quiet supersonic commercial jet that can cut flight times by half. The first jet of this kind could take off as early as 2023. Anutosh, as Spike's chief technology officer, is leading a big team of top aerospace engineers, both in-house and from its collaborating firms such as Greenpoint Technologies, Siemens, MAYA, Aernnova and Quartus Engineering, to ensure speedy development of this revolutionary new air vehicle.

Vik and Anutosh represent the finest aviation and entrepreneurial spirit of Indians, who have, time and again, proved that given a supporting and enabling environment—and at times even without it—they can be world leaders and truly inspirational. *The IndiGo Story* is also a tale of this spirit.

Indians' fascination with the sky has been immense and since time immemorial. Some of the greatest contributions to astronomy have been made by Indians—from pre-Vedic times till today. Aryabhata, Brahmagupta, Varahamihira, Bhaskar I and II, Lalla, Mahendra Suri and Nilakantha Somayaji in olden times to Maharaja Jai Singh II in the more recent middle age. Somewhere in between, Indians had lost the scientific and exploratory zeal, thanks largely to historical and religious factors. But when opportunities came knocking again, with the sky opening up once again, the hibernating

genes of scientific and entrepreneurship zeal awoke with full gusto. So we saw the rise of brilliant people like Subrahmanyan Chandrasekhar, Satish Dhawan, APJ Abdul Kalam, and NASA stalwarts such as Meyya Meyyappan and Kamlesh Lulla.

Our women too proved that when given wings, they could take to the sky like none other. Tessy Thomas, N. Valarmathi, Anuradha T.K. and Kalpana Chawla, among others, represent the best of this spirit. We definitely need more women in this space.

In aviation too, whether it be air transport service or manufacturing, great pioneers like J.R.D. Tata and Seth Walchand Hirachand have been truly inspirational. When Indian aviation was unshackled after five long decades of the government's monopolistic grasp, Indians again took to aviation like never before.

So what is *The IndiGo Story* all about? Certainly, this is not an exercise in eulogy or diatribe or polemics! This book is a hardcore, analytical account narrated in an easy and readable style. I have deliberately avoided getting into too much number crunching or statistical quagmire to retain the joy of reading but I have done so without compromising on hard facts, relevant information and unbiased scrutiny. A non-linear narrative technique has also been utilized for the same objective.

This book is an endeavour to narrate a fascinating Indian aviation story with IndiGo as the chief protagonist. It will take readers through various phases of Indian and global aviation and its chief landmarks while baring the intricacies of the aviation maze and uncovering the recipe of success in the midst of all odds.

There is no joy like the joy of reading! Happy Reading!

1

Early Days of Indian Aviation

It may surprise many but India has had a long and cherished tradition of aviation entrepreneurship. The first airmail service in the world, demonstrated in 1911, is engraved in the name of India. The period between this landmark year and the year 1953, when air transport was nationalized, can be called the first phase of modern civil aviation in India. The early phase saw many amazing Indians taking to aviation in a big way, whether it was venturing into passenger and cargo transport services or setting up one of the first aircraft manufacturing facility in Asia.

The second phase commenced with the passage of Air Corporation Act 1953,[1] which nationalized all existing scheduled airlines and made almost every air service the sole preserve of government corporations. This phase lasted till 1991 when aviation sector opened once again. The story of these four long decades is one of government corporations' monopoly and Indian aviation's sluggish growth while the world took to it in a massive way.

The Indian sky was liberalized again under the Narasimha Rao government, and with the passage of Air Corporations Transfer of Undertakings and Repeal Act 1994,[2] the monopoly of government corporations finally came to an end. The Indian sky was ready to welcome aviation entrepreneurs once again.

1911–1953: The Pioneering Phase

On 18 February 1911, a French pilot named Monseigneur Piguet[3] took off on a Humber plane from the historic town of Allahabad and flew across the Yamuna River to Naini carrying 6,500 mails. The distance covered was barely 10 kilometres, but by undertaking this short flight, Piguet became the first person in the world to flag off airmail service and he brought India on the global aviation map forever. The record came barely six years later when Wilbur Wright demonstrated the first successful controlled flight aboard—Flyer III—circling for 39 minutes and covering 24 kilometres over Huffman Prairie in Ohio, USA, till the plane ran out of fuel.

The regulations of the Indian sky were still a few years away. The government did draft a sketchy 'Air Rules' in 1912, but the Department of Civil Aviation was set up only in 1927.[4] The scenario changed with the enactment of the Aircraft Act 1934,[5] which continues to be the primary governing legislation for the Indian sky till date, albeit with many amendments. The legislation's preamble declared it to be an 'an act to make better provision for the control of the manufacture, possession, use, operation, sale, import and export of aircraft'. The act vested the power to regulate and control the Indian sky completely in the hands of the central government, whose powers at the time was exercised by governor general-in-council. With this act, the government managed to get a stifling grip over civil aviation, which continues to haunt private aviation enterprise till date.

The Aircraft Act 1934 was more in the nature of announcing the government's overbearing authority and control over the Indian aviation sector, rather than being a facilitating act for the development of the sector. Eight decades and several amendments later, this act is a reminder to private enterprises of the powers that the government holds over the Indian sky and its ability to make or mar an enterprise. Thanks to the Aircraft Act 1934, the Government of India remains the biggest arbiter of an airline's fate till date.

Nonetheless, by that time, many Indian entrepreneurs had started air operations, mainly to provide air service to the empire's vast territories across continents. Till 1935, the India office of the British government had authority over what is now India, Pakistan,

Bangladesh, Burma, as well as Aden and some territories around the Indian Ocean. The Viceroy of India was also the administrative head of Aden and the Indian Ocean territories. So, the British developed the strategically important Delhi-Karachi-London route and introduced airmail services between Delhi and Karachi way back in 1912. This was started by the Indian State Air services in collaboration with Imperial Airways in UK. From Karachi, the air route connected to London via Gulf region and even Northeast African centres to facilitate British supervision over its intercontinental dominion territories.

Not long after, Madras and Bombay were also connected to Delhi via Pune and other centres in between. By 1915, Tata Sons had started a weekly airmail service between Karachi and Madras. In 1924, the construction of an aerodrome began at Dum Dum in Calcutta (Kolkata), Bamrauli in Allahabad and Gilbert Hill in Bombay (Mumbai).

Hence, it was airmail and cargo service which fuelled the initial growth of civil aviation in India.

The Pioneers

Prior to Independence, it largely fell upon flying enthusiasts and courageous entrepreneurs—mostly progressive Indian businessmen and princely rulers—to develop India's civil aviation footprint.

Since there can be no flying in the absence of enabling infrastructure, early aviation pioneers also took upon themselves to develop facilities such as aerodromes, flying clubs, and undertaking training of aviation personnel. The footprints of regional aviation, which is very much the focus of the government now, was laid by the then rulers of Jodhpur, Gwalior, Indore, Mysore and many others like them. The colonial government at the time was inclined to develop aerodromes at only those places which were of administrative and strategic importance to it.

Just like other parts of the world, early aviation pioneers were accorded a hero's status in India as well. And they were indeed heroes to both commoners and the elite. India was fortunate to have exceptional people and institutions, such as J.R.D. Tata, Nevill

Vintcent, Maharaja Umaid Singh of Jodhpur, Grant Govan, Seth Walchand Hirachand, Mirza Ahmad Ispahani, Biju Patnaik and the Bombay Flying Club to lead the development of impressive aviation footprint in India.

J.R.D. Tata and Nevill Vintcent

Nevill Vintcent was a South African aviator and a World War I British Royal Air Force veteran who seeded the idea of starting an air service in the mind of aviation enthusiast, J.R.D. Tata. The duo started Tata Airlines in 1932 in a profit-sharing partnership mode. Nevill was to get one-third of the profit, while all investments were to be borne by Tata Sons. This was about six years before J.R.D. took over as the chairman of Tata Sons—the trust that controlled and continues to control the Tata business empire. Tata, by this time, was well-established as the biggest business conglomerate in India.

In the very first year of its operation, the air parcel service made a handsome profit of ₹60,000 (at the time, $100 was equivalent to ₹319.12). Five years later, at the time of the renewal of the contract, Tata Airline's profit had soared ten times. Legend has it that J.D. Choksi, the legal adviser of Tata Sons then, suggested redrafting the terms of profit sharing which, in effect, would have drastically cut Nevill's profit percentage. J.R.D., after pondering over it for a few days, however, took the conscientious decision to retain the original contractual terms. He opted for the ethical treatment of his partner rather than getting swayed by narrow commercial considerations. That was J.R.D.!

Tata Airlines was renamed Air India in 1946. J.R.D. was offered the chairmanship of the airline when the government nationalized Air India, which he accepted gracefully in the larger interest of the airline and the nation, despite personal and emotional loss and disapprovals from family and friends. He continued to be the chairman of Air India till 1977. In hindsight, the nationalization of airline industry was desirable as it may not have been easy for a private enterprise to compete effectively or survive in the emerging global aviation scenario. Moreover, by remaining aligned with the government, J.R.D. protected the larger slice of the Tata empire from

the government's backlash which was not keen on providing much support to private enterprises.

Maharaja Umaid Singh of Jodhpur

Umaid Singh became maharaja of the state of Jodhpur at the tender age of fifteen, after the untimely demise of his elder brother Maharaja Sumer Singh. He headed the strategic state of Jodhpur for close to thirty years. Among his many legacies, Umaid Singh's contribution in developing the Indian aviation will always be remembered with much admiration and gratitude. The Maharaja was a passionate aviator. The Jodhpur aerodrome that he constructed with fine resting facilities for flyers made Jodhpur an important stop between Delhi and Karachi. A part of the aerodrome (though vastly expanded with time) today serves as one of the most strategic border air bases for the Indian Air Force. The other part has been developed for civilian use. Umaid Singh was a generous host too. It was common to see British, Dutch and German aircrafts carrying royalty and aristocrats frequently land at Jodhpur. The maharaja also founded the Jodhpur Flying Club,[6] which became one of the most distinguished centres for flying and aviation learning. Though Umaid Singh suffered an untimely death in 1947, his aviation legacy lives on.

R.E. Grant Govan

Raymond Eustace Grant Govan was a leading industrialist in India with interest in flour and sugar business. His real love, however, was cricket and aviation. Grant founded the Roshanara Cricket Club in Delhi and later became the founding president of the Board of Control for Cricket in India (BCCI) in 1928.[7]

Grant also founded the Delhi Flying Club in 1928 and Indian National Airways Ltd. in 1933—India's second scheduled airline after Tata Airlines. The airline had a weekly passenger and freight service between Calcutta and Rangoon, and Calcutta and Dhaka. Later, it also commenced a weekly service between Lahore and Karachi. In

1953, it was one of the four major airlines which were nationalized and merged to become Indian Airlines.

Seth Walchand Hirachand Doshi

The founder of Walchand Group was a maverick. Hailing from a Jain family of Wankaner in Gujarat, Walchand had made Solapur—in the erstwhile Bombay Presidency—his home. A restless entrepreneur, he kept giving shape to ideas which were truly pioneering and visionary for their time. Seth Hirachand established India’s first modern shipyard, set up the country’s first car factory—Premier Automobiles (which made Fiat cars in India)—near Mumbai and was also a major sponsor of India’s first homegrown news agency, Free Press of India, which he co-founded with Annie Besant and M.R. Jayakar.

Seth Walchand was also the main founder of India’s first aircraft manufacturing factory, Hindustan Aircrafts Ltd. (HAL), which commenced production on 23 December 1940. This factory later became Hindustan Aeronautics Ltd. (HAL). It was set up with generous assistance from the State of Mysore in collaboration with the American aircraft manufacturer, Harlow Aircraft Company. To begin with, it made Harlow PC-5—a trainer aircraft. As threats of Japanese invasion over India loomed large at this juncture of World War II, the government soon acquired control of this factory but compensated the founders adequately. The factory went on to produce many different types of American military aircrafts and also became a valuable Maintenance, Repair and Overhaul (MRO) centre for the overhaul of American fighter planes till 1960. After this year, the Soviets arrived to facilitate the manufacture of MiG 21. By now, India had moved away from USA and had become a key ally of USSR. With the arrival of Soviets, the American association with our military aviation ended and has not revived till date.

Mirza Ahmad Ispahani

A scion of the illustrious Persian-Bangladeshi ‘Ispahani Family’ which has played a major role in the development of industries and business in Bangladesh, Mirza Ahmad founded Orient Airways in 1946, the only airline started by a Muslim in British India. The airline operated regular service between Calcutta and Rangoon, and Calcutta and Dhaka. Barely months before Independence, the airline had shifted its headquarters to Karachi, but the Ispahani family’s base remained in Dhaka and Chittagong, then East Pakistan. The airline continued to be controlled by the family till 1955 when the Government of Pakistan took control over it and merged it with another airline to form the country’s national carrier—Pakistan International Airline (PIA). Perhaps taking a cue from the Indian government, the Government of Pakistan, under the prime ministership of Muhammad Ali Bogra, also nationalized all air services on 11 March 1955.

Bijayananda (Biju) Patnaik

Not many Indian politicians get an obituary in *The New York Times*. But upon his death, the Pulitzer Prize-winning journalist John F. Burns wrote a four-column obituary in honour of Biju Patnaik, calling him ‘The Daring Pilot-Patriot of India’.[8]

Biju Patnaik, or Biju Babu, as he was popularly called, has to rank amongst the most outstanding personalities that modern India has seen. He was a freedom fighter, a fearless pilot, a successful industrialist, a highly regarded politician and a mass leader, but above all, he was a nation builder.

Patnaik started off as a private pilot, but joined the Royal Air Force during World War II. He also flew on some life-threatening missions during the 1948 Indo-Pak conflict in Kashmir. But his most glorious moment as an aviator came when he rescued two key Indonesian independence leaders, Sukarno and Sutan Sjahrir, who later became the first president and the first prime minister of Indonesia respectively. The duo was airlifted by Biju Patnaik from a remote hideout in Indonesia, where they were hiding to escape capture from their then Dutch colonial masters, and were brought safely to India.[9] For this daring act which played a pivotal role in the

independence of Indonesia, Patnaik was honoured by Sukarno with the title of ‘Bhoomiputra (Son of the Soil)’—Indonesia’s highest civilian award. Biju Babu remains the only non-Indonesian to be honoured with this title till date.

In 1947, Biju Patnaik founded Kalinga Airlines with Calcutta as its primary base. The airlines ran successfully till it was taken over by the Government of India in 1953 as part of the nationalization drive and was later turned into a non-scheduled air service provider. However, following a spate of accidents and non-commercial viability, it was shut down in 1972.

The Bombay Flying Club

Established in 1928, the Bombay Flying Club rightly calls itself the birthplace of civil aviation in India. The Club was informally established alongside the western end of Juhu Aerodrome in Mumbai, and has been the training ground for many aviation legends. J.R.D. Tata became the first person to get his pilot license from this club in 1929, while India’s first women commercial pilots Rabia Futehally and Mohini Shroff[10] are also alumni of this institute. The Club holds the unique distinction of being the only flying club in the world to undertake a cross-country international flight in 1930 from Bombay to London and back, with four Tiger Moths. It continues to be the top centre for training of pilots and aviation professionals in the country.

Post-World War II Scenario

With World War II coming to an end in 1945, there was a sudden spurt in new air service launches. What really fuelled this rush was the availability of cheap, wide-bodied military aircrafts (by the standard of that time) which could be easily converted for civilian use.[11] Aircraft manufacturers laden with overflowing inventory were eager to dispose of their stocks at whatever price they could fetch.[12] So even though the Indian entrepreneurs got their aircrafts cheap, their flight was short-lived—the government had other plans.

Meanwhile, encouraged by the success of Tata Airlines, the business potential and the ‘glamour quotient’, many air services such as Irawaddy Flotilla and Airways, Indian Trans Continental Airways, Madras Air Taxi Services, Indian National Airways and Himalayan Air Transport and Survey took to the sky, but did not last beyond 2–3 years. As it is now, commercial viability of air service was an issue even then. But that never stopped enthusiastic businessmen and aviators from taking the plunge.

By 1953, global aviation had already taken off in a big way. Starting 1950, international air traffic grew in double digits every year till the first oil crisis of 1973. Sadly, India had missed the flight due to its prolonged restrictive policies. Air traffic growth and connectivity remained abysmally low in India. It will take another forty years for the Indian aviation to resurrect again.

2

Aviation Gets Wings

In March 1953, the Indian Parliament passed the Air Corporation Bill, which was legislated into an act in May of the same year. The objective of the act was 'to provide for the establishment of air corporations, to facilitate the acquisition by the air corporations of undertakings belonging to certain existing air companies and generally to make further and better provisions for the operations of air transport services.'[13]

With the enactment of the act, all licences granted for scheduled operations under the Indian Aircraft Act 1934 ceased to be valid. However, non-scheduled operations such as air ambulances, pilot-training and charter services were permitted to subsist. In June 1953, the Government of India nationalized all existing scheduled airlines. At the time, eight private scheduled airlines were in operation. Post nationalization, two airline corporations were formed—Air India Corporation for international scheduled operations and Indian Airlines Corporation, primarily for domestic operations and to also serve a few neighbouring countries. Seven existing airlines—Deccan Airways, Bharat Airways, Kalinga Airlines, Himalayan Aviation, Airways-India, Indian National Airways and Air Services of India—were merged with Indian Airlines, while Air India Ltd. (Tata Airlines had become a public limited company on 29 July 1946, and

was renamed as Air India Ltd.) became a public corporation and the national carrier.

The act also made nationalized corporations completely accountable and dependent to the central government with regards to any capital expenditure such as purchase of aircrafts, creation of new facilities etc.

According to Section 35 of the Act:

> Neither Corporation shall, without the previous approval of the Central Government—(a) undertake any capital expenditure for the purchase or acquisition of any immovable property or aircraft or any other thing at a cost exceeding a [such amount as the Central Government may, from time to time, by order, fix in this behalf.]; (b) enter into a lease of any immovable property for a period exceeding [ten years] or (c) in any manner dispose of any property, right or privilege having an original or book value exceeding a [such amount as the Central Government may, from time to time, by order, fix in this behalf].

The Wave of Nationalization Around the World

The nationalization of Air India is often seen as an undesirable and myopic move by then socialist Prime Minister Jawaharlal Nehru to stymie the growth of private enterprise and unleash his version of socialist economy. The right questions, perhaps, would be: Did the government perform a better job in developing the Indian aviation sector and air services than private enterprises could have? Would Indian aviation be better off if J.R.D. Tata and other private aviation enterprises were provided liberal support by the government? Was a private-public-partnership (PPP) model a better option, given that the Indian officials (of that time) lacked experience and expertise in running air services?

The debate will continue. Yet, the fact remains that post World War II, the air transport sector was rapidly nationalized around the world, across most countries. The process had begun in Great Britain even before World War II. Notwithstanding the commitment of liberal democracies to free market economy and the development of private enterprise, shattered economies, weak financial institutions, frail private enterprises, legacy issues, rising strategic importance of air services and the absence of a robust regulatory framework post-

World War II forced governments to take over and nationalize airline business.

In state-controlled economies such as the erstwhile Union of Soviet Socialist Republics (USSR) or Soviet Union and the People's Republic of China, the government control and ownership was inbuilt. But even the governments in countries such as France, Australia, Argentina and many others found it obligatory to take over the management of airline businesses.

In the October 1946 issue of *Foreign Affairs* magazine, noted British economist Barbara Mary Ward writes:

> Since the end of the war, a large part of the European industry has been either nationalized or earmarked for nationalization. The process has not been uniform and the degree of nationalization varies from country to country, but there is no mistaking the trend.
>
> … In Western Europe the trend toward nationalization is more hesitant, but in France and Holland the central bank has been nationalized and the socialization of heavy industry is under discussion. In addition, the French Government has nationalized mining, public utilities, civil aviation and insurance. Finally, on the western fringe, in Great Britain, the Bank of England, civil aviation and the coal mines are already nationalized and the transfer of transport, public utilities and important sections of the iron and steel industry to public ownership may be completed within the lifetime of the present Parliament.[14]

Going back, the aviation industry had begun taking off just at the end of World War I in 1919. The first airline service KLM began its operation in 1920 by flying from Amsterdam to London. But World War I had a deep impact on the financial condition of the aviation business—as much as it impacted nations' economies. In the mid-war phase, the leading nations of the world also suffered from 'The Great Depression' which began from 1929 while its impact lasted till the end of 1930s. The consequential severe economic slowdown resulted in the shrinkage of the global economy by more than 15 per cent between 1929 and 1932. In many countries, the rich eventually suffered as much as the poor. The entire financial system came under heavy stress while a large number of banks collapsed wiping off a huge chunk of liquidity and capital from the economy and market. With money hit hard, business financing also came under heavy strain.

While the economies were recovering or had just recovered from the impact of The Great Depression, the clouds of World War II started hovering on the horizon. It was rightly believed that in the new emerging order, air force and air transport would play a decisive role. States had little option but to take control of this vital sector—to protect it to protect itself, and to nurture it to dominate others.

As early as 1920, British policymakers had abundantly gauged the future significance of aviation, rightly believing it to be the future of defence and transport. Being a sea-surrounded nation, they were convinced that aviation was going to play as strategic a role for Britain in future as had been played by the navy in the past. Aviation would also help them control their far-flung colonies in a more effective manner. They were thus keen to create an enabling environment where this sector could take off in a big way. This is why they started supporting private aviation enterprise. In line with this policy, the privately funded Imperial Airways was generously subsidized by the British government.[15] The subsidy helped Imperial Airways to become profitable and pay good dividends to its shareholders. On its own, Imperial Airways would not have been commercially viable and would have crashed soon.

The flip side of this arrangement was that the common British public became resentful as they felt they were subsidizing a service with their taxes which was almost exclusively being used by the rich. The rich were getting the service cheap and investors were making money, but the average British citizen got nothing in return. This resentful absurdity became a key reason for the British government to take control of the Imperial Airways in 1939 and convert it into a state airline, rechristening it as British Overseas Airways Corporation (BOAC).

In 1974, BOAC was merged with another state-owned airline, British European Airways (BEA), along with two regional airlines, Cambrian Airways and Northeast Airlines, to create British Airways—Britain's national carrier. British Airways remained a state carrier till 1987 when the Conservative government of Margaret Thatcher privatized it.

France had witnessed the enthusiastic take off of many commercial airlines since SGTA (Société Générale des Transports

Aériens) commenced operation in 1919. Air France was born in 1933 following the merger of five private airlines.[16] But soon after the end of World War II, the French government nationalized air transport following which Air France became a state carrier. The government maintained its control for three decades before diluting its hold and equity. In 2014, Air France merged with Dutch carrier KLM to form Air France-KLM. The French government retains 17.6 per cent equity in the merged entity.

The Netherlands has the distinction of giving world's first commercial airline—the Royal Dutch Airline or KLM, which is still in operation and going strong. KLM was born out of the vision of a towering personality—Dr Albert Plesman[17]—who together with Anthony Fokker, the founder of Dutch Fokker Aircrafts, gave birth to KLM. Plesman continued to serve on the board of KLM till his death in 1953. It was largely due to his immense persona that the Dutch government, despite its inclination, did not nationalize KLM during his lifetime. KLM and Fokker built a strong, mutually beneficial relationship, and KLM became the chief deployer of Fokker commercial aircrafts. Despite being an excellent aircraft, Fokker hit financial air pockets and its management control was passed on to Daimler-Benz. However, that did not end the woes of Fokker as Daimler remained preoccupied with its own internal problem during this time. In 1996, Daimler pulled out of Fokker and the company had to file for bankruptcy. On 28 October 2017, KLM operated the last flight aboard Fokker 70 displaying a large image of Anthony Fokker as a tribute to this legendary pioneer.

Meanwhile, soon after Plesman's demise in 1953, KLM started experiencing rough weather. The Dutch government moved swiftly to acquire a two-third stake in the airline, thereby effectively and practically nationalizing it.

Much like what happened in India, Japan nationalized its biggest airline, Japan Airlines (JAL), in 1953, merely two years after its establishment.[18] The international routes remained the monopoly of this government carrier till the late 1970s when the process of deregulation began. Its domestic private-sector competitor, All Nippon Airways, was not allowed to fly international routes during this monopoly phase. Between 1972 to 1985, the Japanese

government enforced a policy called 45/47[19] under which it reserved certain domestic and international routes for its national carrier. The deregulation also came partially and slowly before the sector was well and truly opened up and JAL was completely privatized in 1987.[20] But legacy issues soon started surfacing and the airlines incurred its first loss in 1991. In January 2010, JAL (JAP by now) sought protection under the Corporate Rehabilitation Law, the Japanese equivalent of Chapter 11 bankruptcy filing in the United States. The airline survived after major restructuring and recapitalization, but the legacy of nationalization had taken its toll.

The American airline industry, though heavily regulated by both the Federal agency and state governments, never lost its private enterprise independence. The US government didn't really need to take over the airline industry as America remained well-shielded even during the war, notwithstanding the lone attack on Pearl Harbour, which remained the only military assault on its land by an enemy power after the foundation of USA on 4 July 1776. The 9/11 attacks were terror strikes, not military assaults.

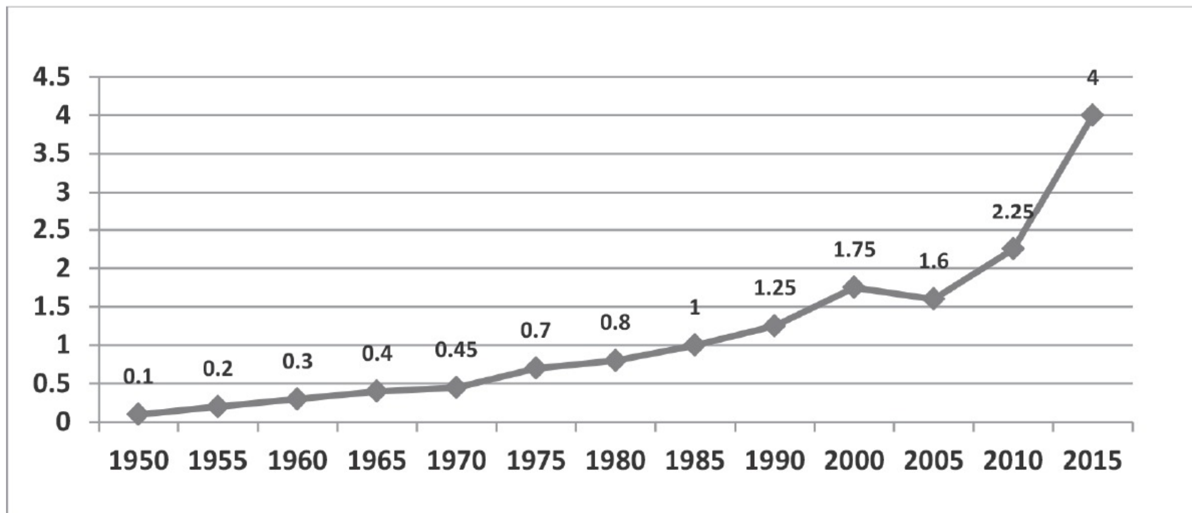
The USA, which is the birthplace of aviation, eventually became the global leader in the aviation industry. From aircraft design to air defence, from aviation development to market innovation, to being the only country to land its men on moon, the USA has made a deeper impact than any other country on the aviation sector.

The Air Traffic Boom: 1950–1990

Global civil aviation soared once World War II formally came to an end in 1945. From the 1950s,[21] global air traffic grew in double digits till the twin successive oil shocks of the 1970s.[22] Though the oil shocks halted aviation's march temporarily, it did not have a crippling impact on the sector. The industry quickly figured out ways to absorb the oil shock and moved ahead.

The massive aviation take off was primarily the result of economic surge that happened between 1950–1970, a period which is also referred to as 'The Golden Age of Capitalism'. During this

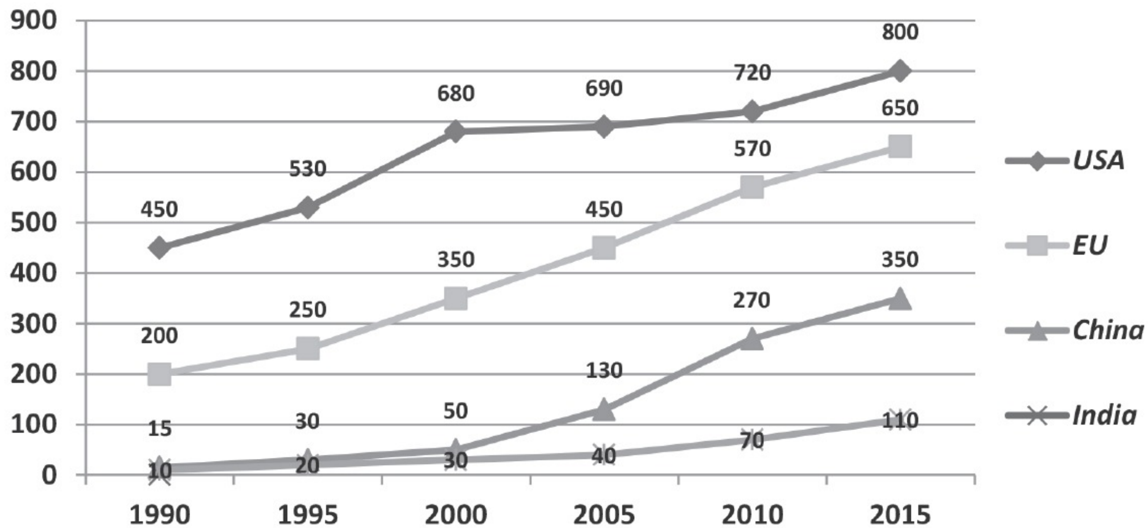
phase, the world economy grew at over 4.5 per cent on average, each year.[23]



Global air traffic growth since 1950 (in billion)
Source: World Bank/IATA

In contrast to Europe, the USA economy was not impacted much by World War II. In fact, by 1940, it had fully recovered from the impact of The Great Depression. The American economy was gaining pace as never before, which soon transformed it into the sole global economic superpower. Post war, Europe also made a quick economic recovery and enjoyed extended decades of rising income and prosperity which resulted in the big boost to international trade and travel.

Britain, France, Sweden, Portugal, Spain, Austria and Poland witnessed impressive economic growth, while Germany enacted an economic miracle. The Russian (Soviet) economy also expanded significantly till the end of the 1960s. After the decade of baby boom period, lasting from 1950 to the 1960s, the fertility rate in Europe[24] declined to less than 2 per cent, thereby stabilizing population in most Western European countries, while Eastern Europe[25] saw negative population growth.[26] This, in effect, meant higher disposable income per European household—which in turn meant more leisure and more travel. And the natural beneficiary was the airline industry.



Air traffic growth (in million)
Source: World Bank/IATA

Japan was an example of the economic miracle in Asia, followed by South Korea and Taiwan. China's economy had not taken off yet. From the 1960s till early 1970s, it had literally hidden itself behind its own version of the iron curtain. But it was not resting idle or just busy building nukes. Cut-off from the world attention, it was silently but vigorously transforming its infrastructure to prepare for the great industrial leap which in later decades would make it the manufacturing hub of the world and help it emerge as the new economic superpower. Once the Sino-US relations thawed, following Richard Nixon's visit to China in 1972, and once Nixon was convinced that China would make the perfect manufacturing backyard for USA, the Chinese economy took off in the most unprecedented way. From the 1980s, the Chinese economy became a major engine for pulling the world economy and had a huge impact on global aviation expansion as well. India's impact on the global aviation would only start to become apparent after the 1990s.

Impact of Innovations

Drastic innovations in aircraft design had a major impact on air travel, starting with the introduction of the turbo-propeller aircraft in the early 1950s. By 1958, transatlantic jets had arrived which made direct flight from the USA to Europe possible.[27] The wide-bodied aircraft and high bypass engines such as Boeing 747[28] or the Jumbo Jet came in 1970. Boeing 747 dramatically increased the number of passengers that could be accommodated in a plane. The 747-400, the Boeing 747's most popular variant, could seat up to 416 passengers in a typical three-class layout, 524 passengers in a typical two-class layout and 660 passengers in a high-density, one-class configuration. The advancement in avionics and other features went hand in hand. Another milestone was the arrival of Airbus 320, the first 'fly-by-aircraft' which radically changed the way aircrafts operations were managed.

The average length of a flight doubled from 903 kilometres in 1950 to 1,816 kilometres in 2000,[29] but it has not changed much since then—with 1,827 kilometres in 2012. Longer flights and expanding passenger numbers generated a strong expansion of total passenger kilometres (pkm) travelled—up to 193-fold from the 28 billion pkm in 1950 to 5.4 trillion pkm in 2012.[30]

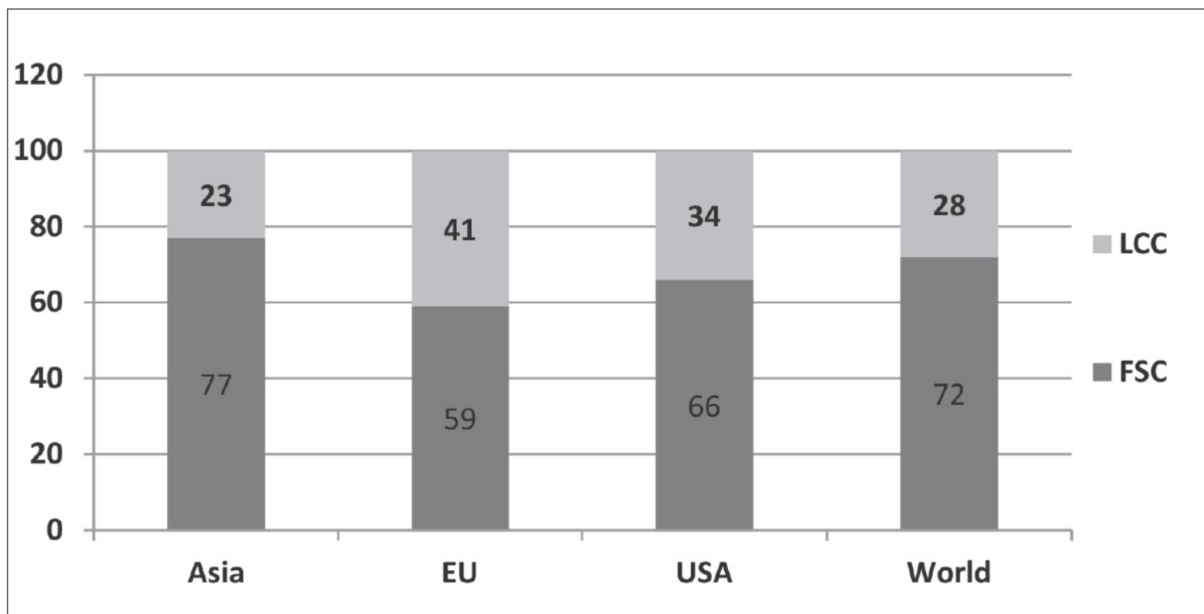
Innovations and technological advancement enabled higher speed, more passengers per aircraft and better cost control, which resulted in lower fares. This combined with increased income and more leisure time had an explosive impact in demand for air travel. But the growth in air traffic till the 1980s was primarily fuelled by the USA and Europe. The contribution of Asian countries only began from the late 1980s. Even in Japan and South Korea, the demand for air travel remained modest till this time. It was yet to take off in a big way in China and India. The low-cost carrier (LCC) phenomenon had also not taken wings in China, India and countries like Malaysia and Indonesia, which limited demand for air travel. Post 1990, the scenario in Asia changed dramatically, and both China and India became the primary catalysts for air traffic growth.

The Rise of LCC Phenomenon

LCCs or no-frill airlines have been a remarkable disruptive game changer in aviation industry. Post the 90s, the growth of LCCs gained momentum and today this model is a pan-global phenomenon commanding nearly one-third share of global air traffic by volume. In the domestic market, the share of LCCs is much greater. Their growth in the last decade has been faster than the legacy or full-service airlines.

A 2017 air traffic report by ICAO pointed out, 'The low-cost carriers (LCCs) consistently grew at a faster pace compared to the world average growth, and its market share continued to increase, specifically in emerging economies.' According to ICAO, the LCCs carried an estimated 1.2 billion passengers in 2017 and accounted for approximately 30 per cent of the total scheduled passengers of the world.[31] LCCs in Europe account for 33 per cent of the total passengers carried, while in Asia and North America, their share is 31 per cent and 26 per cent, respectively. LCCs have been growing at over 10 per cent annually for the last ten years while their seat capacity has tripled to over 105 billion from 575 million seats in 2007 when they accounted for 16.5 per cent market share.

More and more flyers around the world opt for LCCs for short-haul flights, which are typically of less than three-hour duration. As flying has become a necessity, saving wherever one can has begun to make serious sense to flyers—prevailing wisdom being why pay a fat premium for things like a skimpy breakfast or a tiny glass of juice or little bit more of leg space when it's a matter of just one or two hours. Flyers increasingly prefer to stuff themselves at home or enjoy a wider spread at airport lounges than pay a fat sum on-board.



Share of LCC vs FSC, 2015
Source: IATA

It is not only in the emerging markets where LCCs have grown phenomenally. Even in high-income, upmarket regions such as the USA and EU, LCCs have wrested a big slice from full-service carriers (FSCs). Within the USA and Western Europe domestic travel, LCCs have cornered nearly half the market share.

In Asia, a decade ago, there were just a handful of LCCs. Today, their number has soared over fifty. Countries such as Japan, Singapore, Malaysia, Indonesia, the Philippines, South Korea and China have seen a spurt in the launches of LCCs in the last ten years. The success of the LCC model has forced even the true blue FSCs such as Lufthansa or Air France-KLM to have their own LCC subsidiaries. So, we have Transavia from the stable of Air France-KLM, and Germanwings and Eurowings from Lufthansa. In Japan, three new LCCs have come up in the past five years and all of them are subsidiaries of either JAL or Nippon Airways, the FSCs and market leaders. Singapore Airlines now has two LCCs—Scoot and Tiger—while Thai Airways has Thai Smile.

LCC Pioneers—The Fab Four

I. Southwest Airlines

Though the no-frill or low-cost airline model had been tried successfully in the USA before the arrival of Southwest Airlines, it was the swift and unprecedented success of this airline which truly ushered in the era of LCC and changed the rules of the aviation game forever. Southwest Airlines was incorporated in Dallas, Texas, in 1967, but was unable to commence operations till 1971 as it was trapped in legal hurdles by established airlines who, in connivance with the lawmakers, tried every trick in the trade and regulatory loopholes to abort its flight.

Much has also been written about how Rollin King,[32] the main founder and the biggest early shareholder in the airline, explained the concept of Southwest to his partner-to-be—a lawyer by the name of Herb Kelleher[33]—on a restaurant napkin during a dinner outing. Though King denied any such thing in one of his last interviews, he exclaimed that it was 'helluva story' which did immense good for the airline's image. Together with Kelleher, King did create a helluva story in the world of modern aviation.

Southwest has never made a loss in its entire history; not even in the aftermath of 9/11 when air traffic dropped by as much as 30 per cent for three months after the catastrophe, even bankrupting the bigger airlines of the day like United Airlines and US Airways. Today, Southwest is the largest domestic airline in the USA, measured by the number of passengers carried (it vies with American Airlines, the largest airline in the world by revenue, for this honour every year), and the seventh largest airline in the world by the same yardstick. However, it is the only airline among the biggest ten worldwide whose market capitalization is more than its annual revenue, reflecting the robustness of its business model amongst other things. American Airlines had a revenue of $41 billion in 2016, but its market capitalization was only $21 billion; Delta clocked a revenue of $40.5 billion in the same year, but its market capitalization was $34.4 billion; Air France-KLM's valuation has particularly suffered in recent years and in the same period, it was valued at $2.7 billion, despite an impressive revenue of $30 billion. In contrast, Southwest, with revenue of $20.2 billion, was valued at over $30.2 billion in 2016.[34]

What adds more reverence to the Southwest phenomenon is the fact that this airline was not created by some airline professionals with Ivy-league management degrees to boot or by moneybags who would not mind hedging few millions in a promising business venture, but by people who had their basics clear and maths right. There was nothing like a start-up fund or angel funding when Southwest began its innings. King was a relatively wealthy man but not really a moneybag. Kelleher was a bright lawyer, but had no prior experience of the aviation sector or even aviation laws to begin with. But together, King and Kelleher rescripted the airline business for all times to come.

Kelleher had less than 2 per cent stake in the airline when Southwest was formed. He was a member of the company's board and took care of its legal aspects. It was Kelleher's tenacity and legal acumen which ultimately ensured Southwest's flight against many odds. The bigger, established airlines feared that their huge profit per passenger would be severely impacted if Southwest was allowed to operate flights which would cost the passengers almost half of what they were charging. The founders of the nascent airline had all but given up hope of ever commencing operation. But Kelleher's relentless pursuance of the legal bottlenecks for four frustrating years at various forums ultimately won the day for Southwest. On 18 June 1971, Southwest made its first intrastate flight from Dallas Airport. The legend had taken wings.

Kelleher was later elevated as the chairman of the Board and went on to become one of the most successful CEOs in the aviation history, while King slowly exited from the airline he had founded due to increasing disagreements with the Board over the affairs of the airline. Under Kelleher, Southwest clocked twenty-seven years of continuous profitability and network expansion—2017 was its 46th unbroken year of profit.

The Famed Southwest Model

Southwest's much celebrated no-frills, low-cost model has been replicated around the world by numerous LCCs such as Ryan Air, easyJet and AirAsia. IndiGo too owes much of its inspiration to

Southwest. So, what was it about Southwest's model and philosophy that made it a rock star and inspired airlines around the globe?

Let's go back in time to fathom the Southwest phenomenon. By 1953, air travel in the USA had taken over rail travel,[35] though it was still considered a privilege. Like many other aviation enthusiasts, King had also started noticing with keen interest the success of some airlines, particularly the California-headquartered Pacific Southwest Airlines (PSA), which called itself 'America's first discount airlines'. The airline offered just basic flying services without the frills such as free meal, alcohol, etc. Their USP was air transportation from one point to another in a timely and cheap manner. The number of takers for their services was rising. On the other hand, the legacy airline model was based on making travellers feel special about air travel and pampering them with in-flight services such as meals and drinks. But all this came at a price which was ultimately borne by flyers.

Flying had also become a necessity and the need and psychology of flyers was also changing. On a short-haul flight (less than two hours), did an average flyer really bother about a free meal or drink? If they did, how much money would they be willing to pay? King was able to figure out that in the short haul, people basically cared about reaching from one point to another in a timely and safe manner. If they really need a bite, they would buy it.

What also worked initially in favour of Southwest was the fact that Texas is a huge state—the second largest state after Alaska, area-wise, and also the second most populous after California. In terms of size, it is larger than all European countries except Russia. It is over 10 per cent bigger than France and almost twice as large as Germany or Japan. Its top seven cities—Houston, San Antonio, Dallas, Austin, Fort Worth, El Paso and Arlington—are spread far and wide. The longest straight-line distance in the north-south direction is 1,289 km and the widest east-west distance is over 1,219 km. Also, Texas was among the more prosperous states within the USA back then too.

Southwest was initially permitted to fly only within the state. At the time, an airline needed permission from two or more states if it wanted to provide interstate services, while intrastate flight was

permitted by the state concerned. But that did not go against it as Texas in itself had the size and traffic potential to be commercially viable. The huge inland spread (16 states with area over 200,000 square kilometres) and the need for travel opened up further opportunities for Southwest when it did get permissions to fly interstate.

The founders of Southwest understood well that the success of the airline would be defined by the following parameters: (a) People wanted a reliable airline service; (b) they didn't want to pay extra for things they didn't really need or cared about in short-haul flights, and (c) 'no frills' didn't mean cheap or lackadaisical service. Southwest always ensured that its cabin staff and other services were really smart and trendy. Gradually, its takers grew exponentially, ultimately making it the largest domestic airline in the USA.

The company's growth has also been defined by several other factors which include:

- A sharp focus on its low-cost structure while ensuring high return on capital deployed. Though the average operational cost per kilometre for Southwest is nearly double its low-cost counterpart in Europe or Asia, within the USA, it has the lowest operational cost.
- The Southwest management remains financially conservative and believes in maintaining a very robust balance sheet.
- Point-to-point service rather than a hub-and-spoke model continues to be its strong point which allows it to have quicker fleet turnround.
- Majority of its flights continue to fly from secondary airports.
- The airline continues to have faith in a single class of aircrafts—Boeing 737-800 and Boeing 737 MAX 8—only.
- The relatively younger fleet as compared to American or Delta ensures better cost savings on repair and maintenance.
- The airline doesn't believe in hiring people with fancy management degrees for any position, especially freshers. It

believes that real learning happens on the job and not in the classroom.

Southwest's impact was so huge that, with time, even mammoth, full-service, long-haul, legacy airlines such as Lufthansa and Air France-KLM introduced their own version of subsidiary LCCs to retain relevance.

II. Ryanair: Success with Emulation and Continuous Innovation

The dominance of LCCs even in a rich continent like Europe can be gauged from the fact that in 2017, they accounted for six out of the top eleven airline carriers. This feat can be attributed in a large measure to the success achieved by the pioneer in the continent—Ryanair.

From carrying 82,000 passengers in 1985—the first year of its operation—to ferrying 130 million in 2017, the flight of Ryanair has been anything but mind-boggling. Ryanair had become Europe's number-one airline by passenger numbers in 2016,[36] and a year later, it also became the first European airline to have carried over one billion passengers. In 2017, the number-one spot in Europe was taken over by the Lufthansa Group, but that did not happen by way of organic growth. Lufthansa's numbers were largely driven by its January 2017 acquisition of Brussels Airlines supported by strong growth of another group airline—Eurowings, which in turn had benefitted from the demise of Air Berlin. As a stand-alone airline, Ryanair continued to be at the helm in 2017 and is likely to maintain this position in 2018 too. Its achievements are inspiring and are often cited by IndiGo's founder Rakesh Gangwar during the company's pre-IPO meets with investors and journalists.

In 2017, Ryanair operated more than 2,000 daily flights from 215 destinations in 36 countries. It has a fleet of 430 Boeing 737 aircraft and a booked order of another 240 Boeing 737, which is a critical component of its strategy to play with lower fares, gain 200 million customers by 2024 and cement its leadership position. The airline has the industry leading thirty-three-year safety record. Its on-time

performance is outstanding, making it the top performing airline in Europe in this category for many years.

Fair-fare Redefined

Ryanair was founded by Thomas Anthony Ryan, Christopher Ryan and Liam Lonergan in 1985 and was headquartered at Swords, a key satellite town of Dublin, Ireland. The trio had the money, air travel business experience and were driven by the vision to challenge the duopoly dominance of British Airways and Irish carrier, Aer Lingus. They believed that the duopoly was grossly overcharging the passengers and if they could offer a lower fare with the same facilities, they could garner a good passenger share. Thus, 'fair-fare' became the basic tenet by which they wished to carve out Ryanair's niche. The airline's first flight was from Waterford in Ireland to Gatwick, London, and was priced at half of what British Airways and Aer Lingus were charging. This audacious challenge and subsequent confrontation led to prolonged legal backlash by British Airways and Aer Lingus. The duo accused Ryan of indulging in an unfair price war that was detrimental to the entire airline industry. The relief to Ryanair actually came by way of Margaret Thatcher who was keen to privatize British Airways and did not want her government to intervene or take sides in commercial competitions between airlines. Fortuitously for Ryanair, British Airways, which was a government carrier till then, was also busy with its own internal troubles which sped up its privatization in 1987.[37]

Still, it was not smooth sailing for Ryanair for the next six years. The airline kept struggling to keep itself afloat till its maverick financial adviser and board member Michael O' Leary was given the command to sail it to profit zone.

The Turnround Inspired by Southwest

Michael O' Leary, who has been described variously as 'the driving force behind the Ryanair approach—innovative, fast, aggressive and unapologetic—but also as the one who needs little invitation and no

cajoling to provide a stream of invective on just about anything that appears to stand in his way', was convinced that the only way to turn around the loss-making carrier was to overhaul its business model completely. His logic was simple—one could not be charging nearly half of what the others were charging and still make money while providing all the facilities and frills that a full-service airline provided. He figured out that one could not be a FSC and charge LCC price.

O' Leary turned to Southwest for learning. He visited Southwest's Dallas headquarters in 1991 to get a first-hand experience of the airline's operational module and business strategy. Upon return, he started implementing Southwest's strategy at Ryanair, with a vengeance.

One of the core decisions he took was to continue future operations with one type and one class of aircraft in order to cut down on training and maintenance costs. This also strengthened Ryanair's relationship with the aircraft manufacturer while providing a better bargaining power. The choice fell on Boeing 737—the short–medium-haul narrow-body aircraft which had already proved its worth across the globe. This decision proved even more beneficial to Ryanair in the long run as Boeing 737 class of aircrafts offers the largest seating configurations—from 85 to 215.

Ryanair has not only been an emulator but an innovator too. The company was among the first airlines to read the power of the digital revolution, and so, it focused on building its digital footprint. Today, Ryanair has the largest stand-alone online travel site in Europe.[38] Development of robust ancillary revenue streams has been another strong point of Ryanair. Today, over 20 per cent of its revenue comes from ancillary services.

In 2014, Ryanair launched an ambitious running program called 'Always Getting Better',[39] which focused on improvements on every operational front with greater customer satisfaction as the core objective. A wide range of customer service and digital enhancements such as a new website and app, new uniforms and cabin interiors, allocated seating and tailored business, and leisure and family products were launched in the first four years of this programme.

For 2018, the focus is on environment, digital and ancillary initiatives. Over the next five years, Ryanair will eliminate all non-recyclable plastics from its operations. For flyers, it will mean a switch to wooden cutlery and biodegradable coffee cups. It will also introduce a scheme to allow customers to offset the carbon cost of their flight through a voluntary climate charity donation online.

Ryanair keeps reminding flyers that despite all-round improvements it will remain the lowest-cost airline. Ryanair has an open offer in this regard—'Find a cheaper fare and we'll refund the difference + €5 to your "MyRyanair account"!'[40]

Reaching the top is tough, but retaining the leadership position is tougher. Ryanair has ensured its lead through continuous innovations and by offering better services than its competitors.

III. EasyJet: As Affordable As a Pair of Jeans

The greatest challenge to British Airways' supremacy came not from the high-decibel operations of Virgin Atlantic but from the cool and calculated strategy of an LCC founded by Stelios Haji-Ioannou—a young scion of a wealthy British Cypriot family. EasyJet, stylized as easyJet, commenced its operation in 1995 with the motto, 'Making flying as affordable as a pair of jeans'.

The strategy worked, and within fifteen years of operation, easyJet overtook British Airways in 2010 to become UK's top airline by the number of passengers carried. What Sir Richard Branson's high visibility and shrewd mnemonics couldn't do was achieved by the low-profile but steadfast implementation of clearly laid out business plans by Sir Haji-Ioannou.

Right from its inception, easyJet's focus on keeping its operational and structural cost low allowed it to offer more affordable fares as compared to legacy or FSCs. According to its management paper, this cost advantage is created through a combination of factors, including:[41]

- Aircraft configuration enabling a higher number of seats per aircraft.

- Higher load factor and aircraft utilization driven by its point-to-point model.
- Younger and advantaged fleet deal reducing ownership and maintenance costs.

These are the basic ingredients for the success of any low-cost airline. The chances of success depend on how faithfully a LCC management adheres to these principles.

EasyJet's management is also of the view that the airline's strategy of building on its competitive advantages, i.e., an unparalleled network and market positions, efficient low-cost model, well-known brand and strong balance sheet, will enable it to keep delivering sustainable and disciplined growth and handsome returns for shareholders. However, what has also worked for easyJet is that now it is a professional-driven company, as the founders, who are also the largest individual shareholders in the company, are no longer part of the Board.

Path-breaking Decisions

In 2010, the airline's Board took two radical decisions, much to the displeasure of its founder. The first decision—a startling one—was to bring in Carolyn McCall,[42] a person who has had no prior exposure to the airline industry, as the company's CEO. McCall was a media professional and had spent the last twenty-four years at *The Guardian*.

The second decision was to ward off pressure from its founder, who was no longer on the Board, to declare higher dividends.[43] While the Board favoured higher capital reserve for fleet and service expansion, the founder wanted the company to be more rewarding to its investors. The differences between the founder and the Board did create a ripple in the media—much like the Infosys episode back home when its founder Narayana Murthy's ire against the Infosys Board made for big headlines. For easyJet investors and other stakeholders, Sir Haji-Ioannou's opinion did matter. The year 2010 was also the time when the airline industry was generally doing well and easyJet's shares had climbed appreciably—nearly doubling from

the benchmark three years back. The promoters and other investors naturally desired to have higher rewards. The Board went for limited dividend and voted to keep a larger cash and capital reserve for future expansion. If the Board had agreed, investors would have benefitted in the short term but the airline may have been a loser in the long run.

Both decisions proved judicious for easyJet in the years to come. Carolyn Julia McCall, DBE, brought about a transformational change in easyJet. Her initiatives not only helped the LCC up its game, but also forced other carriers to raise their bar.

Interestingly, McCall was born on 13 September 1961, in Bangalore (Bengaluru), to a Scottish father and Irish mother. Her father was looking after a multinational company's operation there while her mother worked for the British embassy. Carolyn's early schooling also happened in Bangalore before her family moved to Singapore. The family finally went back to UK where McCall moved from one field to another before joining *The Guardian*, first as a journalist and then moving on to management roles.

McCall proved to be a highly dynamic CEO who steered the airline to great heights.[44] Before she left easyJet in 2017, she had already etched her name as one of the most successful airline CEOs in aviation history. During her seven-year tenure, easyJet's passenger numbers almost doubled, while shares of the airline jumped four times till a year of her departure. In 2017, when most European airlines in general were not doing too well, easyJet remained the second most profitable low-cost airline in the continent and the third most profitable airline overall, despite a significant fall in profits.

McCall focused on improving better on-time performance—better than before, better than the competition. She told employees that if an airline couldn't keep up with on-time performance, it meant it treated its customers with little respect. To improve its image, particularly among corporate travellers, she introduced attractive plans which forced the competition—including Ryanair—to up their game. She demolished a psychological barrier among Europeans and made travelling LCC a respectful and wise decision, thus making huge inroads in corporate world.

EasyJet still doesn't have a reputation for being a generous dividend payer, but then it has one of the strongest financial books for an airline company. Its current debt-equity ratio of about 1.03 is amongst the lowest for European airlines[45] and the company has maintained a huge cash reserve.

IV. AirAsia: The Asian LCC Phenomenon

AirAsia's rise has been a truly remarkable phenomenon in the Asian sky. The airline began its journey after a faltering airline, promoted by the government-backed investment and management group 'DRB-HICOM Berhad',[46] was acquired by Tony Fernandes with all its rights, assets and debts in 1994.

Fernandes, a self-made entrepreneur, comes from a modest background. His father, a physician, was originally from Goa and his mother Ena Dorothy Fernandes was a lady of Portuguese-Eurasian descendance. Fernandes climbed the ladder of success by dint of sheer hard work, by investing in good education (he graduated from the London School of Economics) and by acquiring a passion for uplifting himself. He was working for Warner Music in Malaysia till the company merged with America Online. Instead of looking for another job, Fernandes decided to give shape to his entrepreneurial ambitions. He applied for grant of licence to operate a new airline but the application was declined. During this time, he happened to meet the legendary prime minister of Malaysia, Dr Mahathir Mohamad, in October 2001, who advised him to take over an existing airline rather than investing in a new carrier. This was more than just a pure advice, as at the time, the Malaysian government was looking to exit from the loss-making AirAsia and perhaps Dr Mohamad saw in Fernandes a man who had the passion to turn around the ailing state carrier.

The airline was transferred to Fernandes at a token money of 1 ringgit (about 26 US cents), but with all debts and liabilities totalling up to $11 million. Fernandes mortgaged his house to raise the working capital for the airline, which had two ageing Boeing 737-300 jets. He succeeded in turning around the carrier within a year and went on to establish its presence in many Asian countries while

becoming a true pioneer of low-cost travel in Asia. The group today has 60 per cent share in the domestic market and 40 per cent share of Malaysia's international traffic.

So what worked in AirAsia's favour? Six key factors contributed to making AirAsia a leader, which include:

- Fortuitous timing.
- A well thought-out and well-executed business model.
- Excellent relationship with the home government.
- Strong relationship with funding and advisory institutions such as Credit Suisse which helped it secure capital for its ambitious expansion plans.
- Faith and reliance on homegrown aviation managers to steer the company.
- Ambition backed by diligence and energy to execute its growth plans.

Fernandes has often commented as to how entering low-cost airline operation after 9/11 actually turned out well for him. Following the turmoil in global aviation post 9/11, there was a sharp drop in aircraft leasing costs, by as much as 40 per cent. Additionally, due to large-scale lay-offs, experienced airline professionals were abundantly available at lower cost. He also assessed that Malaysian travellers were awaiting the arrival of a true low-cost airline to take to flying in a big way. Before the arrival of AirAsia, less than 6 per cent Malaysians had travelled on a plane,[47] but their income had been rising. AirAsia brought with it an opportunity for the majority to fly. Its arrival turned out to be a win-win situation for everyone.

The airline's domestic operations today are owned and managed by an entity called AirAsia Berhad, which is part of the AirAsia Group promoted by Tony Fernandes. AirAsia's long-haul and international operations are largely managed by AirAsia X, which has various subsidiaries and joint ventures in different countries. For example, AirAsia India is a joint venture of AirAsia X and Tata Group. At 2.13 US cents per ASK, AirAsia X also has the lowest operational cost for any airline in the world.[48] Within Asia, the airline has the largest international network and the largest number of international

subsidiaries. Its international operations cover seventeen countries in Asia, including China, Cambodia, Indonesia, India, Singapore, Thailand, Taiwan, Laos, Myanmar, Maldives, Nepal, South Korea, Japan, Saudi Arabia, besides Australia, New Zealand and the USA (Hawaii). AirAsia also happens to be the first low-cost airline in ASEAN to be given approval by the Federal Aviation Administration to operate in the USA.

Unlike Europe—particularly EU, including UK—which has a more homogeneous and predictable legal and regulatory aviation regime, making it relatively easier to obtain flying permissions, route rights and airport slots, each Asian country presents a different set of challenges. Navigating successfully through diverse aviation regimes and establishing a pan-Asian network are the most distinguished achievements of AirAsia's founder.

Low-cost Operation at Home

The growth of LCCs in India has been astounding, particularly after 2005. Air Deccan was the LCC pioneer here, commencing operations in 2003. Today, LCCs account for nearly 70 per cent of domestic market share and their impact has been much deeper. The arrival and success of LCCs has changed Indian aviation in two fundamental ways. One, they have made flying more affordable which has boosted the aviation growth story in India. They have forced FSCs to lower their price in the domestic market to stay relevant. So, an airline like Jet Airways within India could be selling the ticket either at a lower price or at the same price as an LCC. And if a passenger opts to have a meal on board of an LCC, he or she may actually end up paying more than an FSC. They have also made corporate flying more frequent and cheaper. Some of the busiest air routes in India, such as Delhi–Mumbai, Mumbai–Bangalore or Delhi–Kolkata, are all under three hours. A direct flight between Delhi–Mumbai, which also accounts for the highest traffic and highest number of corporate travellers, is performed in two and a half hours while Mumbai–Bangalore is less than two hours. These routes also have a large number of people undertaking a same-day

return travel. LCCs have facilitated the growth of these routes and have been rewarded by cornering a higher share in growth.

Secondly, they have enhanced connectivity phenomenally because of their low-cost model, which has enabled more and more people from tier-II and tier-III cities to fly.

The Big Missing Link

The world over, low-cost flying operations typically presume the existence of secondary airports within a city.[49] All leading LCCs such as Southwest, Ryanair or easyJet have their primary hubs at secondary airports while providing point-to-point connectivity between two secondary airports. But in India, there is no city that has a secondary airport for commercial operations. Secondary airports help bring down operational cost and were major enablers for LCCs in offering lower fare in the USA and Europe. Facility charges such as parking, hangar and shops are also lower at secondary airports. The savings earned by operating from secondary airports in turn enable LCCs to pass benefits to flyers by way of lower fare.

In India, some secondary airports such as Noida International (Jewar), Navi Mumbai, Bhogapuram (Visakhapatnam), Mopa (Goa), Purandar (Pune) and Dholera (Ahmedabad) have been approved but it will take time for them to become operational. For now, the absence of secondary airports means that there is nothing really like a 'true' low-cost operation here. So, to cut down the fare, LCCs here primarily rely on no-frills, minimal free or complimentary services, lower manpower per aircraft, greater seat density and charging extra for all possible products and services which a flyer may need.

LCCs are also evolving with time. Today, in Europe and the USA, more and more LCCs are now flying from primary airports,[50] especially to make themselves more attractive to corporate travellers. In fact, they have also begun to offer twin-seat configuration, creating a hybrid class called 'Business Economy'!

3

Open Sky Once Again

The reopening of the Indian aviation sector began during Rajiv Gandhi's first term as the prime minister (31 October 1984–2 December 1989). In 1986, his government permitted private operators to fly 'On Demand Air Taxi Services'.[51]

However, the 'Open Sky Policy' really began during the time of Prime Minister Narasimha Rao (21 June 1991–16 May 1996) when his government unleashed the momentous 'economic disengagement policy' and opened up a large number of sectors, including aviation, to private sector participation. Many airlines such as East-West Airlines, Archana Airways, Damania Airways, Bharat Airways, ModiLuft and Sahara Airlines, came up between 1991 and 1995. They first functioned as taxi operators and were later given 'private scheduled operator' licences.

The government also ended the monopoly of airline corporations with the passage of The Air Corporations (Transfer of Undertakings and Repeal) Act, 1994.[52] With this, the two existing corporations—Air India and Indian Airlines—were converted into public sector companies and would now compete with the private sector players in the market. By 1995, i.e., within just two years of existence, private airlines had cornered 10 per cent of the market.[53] The Open Sky Policy for air cargo also began in 1990, under which any airline,

whether Indian or foreign carriers, which met specified operational and safety requirements, were permitted to operate scheduled and non-scheduled cargo services from any airport in India with custom and immigration facilities.

Development of Airport Infrastructure: A Big Catalyst for Take-off

The existence of a large number of airports throughout the length and breadth of the country, even if with just basic facilities, was a major facilitator for giving a swift take off to the Indian aviation boom once the sector opened up in the 1990s. In 1990, the total annual air passengers stood at around 11 million which grew to over 17 million by 2000.[54] From 2000 to 2005, the growth remained gradual, but after 2005, there was a dramatic rise in the number of air travellers. From approximately 29 million annual traffic in 2000, the number shot up more than twice to 64.3 million in 2010 and to 120 million by 2015. From sleepy airports handling few flights or even single flights in a week, the growth of traffic was phenomenal. This would not have been possible without a wide network of airports.

As mentioned earlier, aviation had an early beginning in India. The imperial government had its own interest in developing aviation infrastructure—largely to secure and supervise the empire. Many princely states such as Bikaner, Gwalior and Mysore, were enthusiastic airport infrastructure builders. The net impact was that India had a fair footprint of airports. The Ministry of Civil Aviation remained the custodian and manager of airports in the country till specialized agencies were created to manage and develop it. So, first came the International Airports Authority of India in 1971 with the passage of 'The International Airports Authority Act of 1971'. The new agency initially had authority over Bombay (Santa Cruz), Calcutta (Dum Dum), Delhi (Palam) and Madras (Meenambakkam) airports. The list got longer with time.

Domestic airports continued to be managed by the Ministry of Civil Aviation till the establishment of National Airports Authority in 1985 via the passage of the National Airport Authority Act.[55] The act

handed over the management of all domestic airports and civil enclaves, other than the ones managed by IAAI and defence airports, to the new body. The arrangement continued till the passage of the Airports Authority of India Act 1994, which merged the earlier two airport-management bodies into one. The rationale for the new arrangement was better administration and cohesive management of airports and civil enclaves.

Airports Authority of India (AAI) currently manages a total of 125 airports, which includes 11 international airports, 81 domestic airports, 8 customs airports and 25 civil enclaves at defence airfields. AAI also provides Air Traffic Management Services (ATMS) over the entire Indian airspace and adjoining oceanic areas with ground installations at all airports to ensure safety of aircraft operations. AAI ensures air navigation services over 2.8 million square nautical miles of airspace.

Today, India has seven international airports, including Indira Gandhi International Airport, Delhi; Chhatrapati Shivaji International Airport, Mumbai; Kempegowda International Airport, Bengaluru; Chennai International Airport, Chennai; Netaji Subhas Chandra Bose International Airport, Kolkata; Rajiv Gandhi International Airport, Hyderabad; Cochin International Airport, Kochi; Sardar Vallabhbhai Patel International Airport, Ahmedabad, and Pune Airport, which handle more than one million passengers a year.[56] This would translate into handling more than 27,500 passengers on a daily basis. Delhi is the busiest airport in the country; it handled more than 65.5 million passengers in 2017, with Mumbai being next with 48 million. Besides, there are close to thirty airports in the country which handle more than a million passengers a year and the numbers are growing fast. A key point to note in this regard is that airports like IGAI, New Delhi, also cater to large satellite townships such as Gurugram, Noida and Faridabad for domestic travels alone.

The focus today is also on the increase in capacity of major metro airports and modernization of non-metro airports to cater to and fuel future demand. Work to upgrade 35 non-metro airports by providing world-class infrastructure facilities is underway at Ahmedabad, Amritsar, Guwahati, Jaipur, Udaipur, Trivandrum, Lucknow, Goa, Madurai, Mangalore, Agatti, Aurangabad, Khajuraho,

Rajkot, Vadodara, Bhopal, Indore, Nagpur, Visakhapatnam, Trichy, Bhubaneswar, Coimbatore, Patna, Port Blair, Varanasi, Agartala, Dehradun, Imphal, Ranchi, Rajpur, Agra, Chandigarh, Dimapur, Jammu and Pune.

The policy thrust is to go in for PPP model in airport development and management, whether a Greenfield or Brownfield airport. The privatization of airports had begun in 2006 with the handing over of the management control of New Delhi and Mumbai airports to private operators. These airports are now managed via company structures where AAI has a minority stake of 26 per cent while private operators have management control.

List of Airports with 10 Million Plus Annual Passengers

1. Indira Gandhi International Airport, New Delhi
2. Chhatrapati Shivaji International Airport, Mumbai
3. Kempegowda International Airport, Bengaluru
4. Chennai International Airport, Chennai
5. Netaji Subhas Chandra Bose International Airport, Kolkata
6. Rajiv Gandhi International Airport, Hyderabad
7. Cochin International Airport, Kochi
8. Sardar Vallabhbhai Patel International Airport, Ahmedabad

List of Airports With 1–10 Million Annual Passengers

1. Pune Airport, Pune
2. Dabolim Airport, Goa
3. Jaipur International Airport, Jaipur
4. Chaudhary Charan Singh International Airport, Lucknow
5. Lokpriya Gopinath Bordoloi International Airport, Guwahati
6. Trivandrum International Airport, Trivandrum
7. Biju Patnaik International Airport, Bhubaneswar
8. Calicut International Airport, Kozhikode
9. Jay Prakash Narayan Airport, Patna
10. Visakhapatnam Airport, Visakhapatnam
11. Sheikh ul-Alam International Airport, Srinagar

12. Coimbatore International Airport, Coimbatore
13. Sri Guru Ram Dass Jee International Airport, Amritsar
14. Devi Ahilyabai Holkar Airport, Indore
15. Mangalore Airport, Mangalore
16. Bagdogra Airport, Bagdogra
17. Dr Babasaheb Ambedkar International Airport, Nagpur
18. Chandigarh Airport, Chandigarh
19. Lal Bahadur Shastri International Airport, Varanasi
20. Birsa Munda Airport, Ranchi
21. Swami Vivekananda Airport, Raipur
22. Veer Savarkar International Airport, Port Blair
23. Tiruchirappalli International Airport, Tiruchirappalli
24. Jammu Airport, Jammu
25. Madurai Airport, Madurai
26. Agartala Airport, Agartala
27. Maharana Pratap Airport, Udaipur
28. Jolly Grant Airport, Dehradun
29. Vadodara Airport, Vadodara
30. Imphal Airport, Imphal

Fate of Early Birds

When the aviation sector reopened to private sector, there was an influx of all kinds of people wanting to make it big here. They wanted to capitalize on big service gaps that were not being filled by national carriers. And with middle-class income predicted to rise sharply, the aviation market was set to boom. They expected smooth sailing. Glamour was another factor which drew people.

The pre-IndiGo years (1993–2005) turned out to be a phase of high growth and high mortality. As many as eight pan-India and regional airlines that had obtained licenses between 1995 to 2000 had either closed down or had been gobbled by others by 2005. Each had their own tale of failures, but it had least to do with the absence of demand for air travel. Only Jet Airways and Air Sahara (Sahara Airlines rechristened itself as Air Sahara in 2000) were still around in 2005. Thus, ModiLuft was reborn as SpiceJet, while Air

Sahara, after being taken over by Jet Airways, became JetLite, a low-cost arm of Jet.

Airline	*Commenced Operation*	*Ceased Operation*
Archana Airways	1991	1999
Air Sahara	1991	2006 (bought by Jet Airways and rechristened as JetLite, an LCC arm)
East-West Airlines	1992	1995
VIF Airways	1993	1996
NEPC Airlines,	1993	1997
Damania Airways	1993	1997 (sold to NEPC Airlines)
Elbee Airlines	1994	1998
ModiLuft	1994	1996 (rechristened as SpiceJet)
Bharat Airways	1995	1999
Air Deccan	2004	2007 (bought by Kingfisher and rechristened as Kingfisher Red, an LCC arm)
Paramount Airways	2005	2010
Indus Airways	2006	2007
MDLR Airlines	2007	2009

Defunct Airlines

Though there were different reasons for different airlines getting grounded, the common thread that bound them all was the lack of understanding of the airline business. They had been lured by the huge opportunity and had believed that with the government's patronage and deep pockets, they could make a killing. But they had little idea about the grey side of aviation business. Most also mistook flying to be a luxury in which Indians would indulge generously by paying a big premium. They appeared to be unaware of the

phenomenon called LCC taking the world by storm and that it was also the best way to transport people in an emerging economy like India. LCC in India would arrive only with the coming of Air Deccan in 2003.

Most early birds also got embroiled in litigations or serious controversies. The tales of two of them are narrated here.

I. East-West Airlines

East-West Airlines was the first air taxi operator to start commercial operations in India in 1992, just a year after the aviation sector was opened up. The scheduled airline licence was given only in 1994 and all air taxi operators were upgraded as scheduled air operators.

The airline was started by Thakiyudeen Wahid, a Trivandrum-based businessman. Starting operations with three leased Boeing 737-200s, the airline gained from the extended Indian Airlines pilots strike in 1992.[57] The then Minister of Civil Aviation Madhavrao Scindia[58] granted it quick permission to bring in more aircrafts to counter the ongoing strike and to ensure future remedial backup. Two years later, in 1994, it was also granted scheduled operators' status permit.

The airline was doing well. During the three years of its existence, it grew its fleet to 11 aircrafts and was servicing 34 destinations. But doubts about its real source of financing always remained a subject of media musings and just when the airline appeared to be in the safe zone, its founder Wahid was shot dead on 13 November 1995 outside his airlines office in Bandra, Mumbai. Apparently, Mumbai underworld boss Chhota Rajan had ordered Wahid's killing to avenge the murder of his close business associate Omprakash Kukreja by henchmen of his rival Dawood Ibrahim few months ago. Thus, the rumour that East-West Airlines was actually a front for Dawood Ibrahim gained more currency.[59] Within a year of Thakyudeen's murder, East-West airline ceased its operations in August 2006. Its assets were sold to creditors or returned to lessees. A big loser of this development was PLM Equipment, an American aircraft leasing firm, to whom the airline owed $3.3 million towards

lease of three Boeings. The firm wasn't able to recover its money despite court orders.

II. Damania Airways and NEPC Airlines

Started in 1993 by Gujarati Bohra businessman, Parvez Damania, Damania Airways made lot of buzz during its two odd years of existence. The brand's slogan, 'Expect the World of Us', raised the expectations of Indian flyers to a never-before level. The airline served four-course meals with liberal doses of liquor.

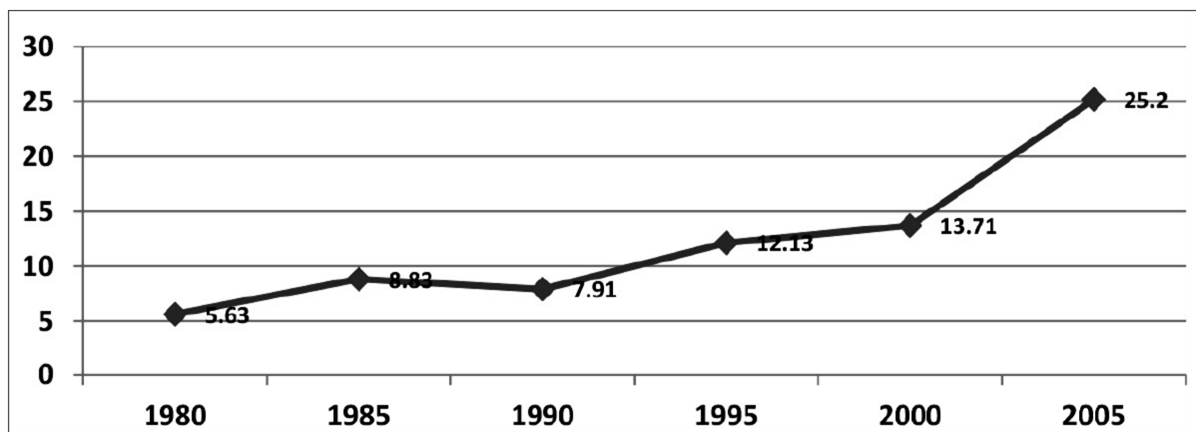
The airline was a trendsetter in many ways, and was a precursor to airlines like Kingfisher Airlines when it came to in-cabin hospitality. Damania had good intentions and he was never accused of profligacy or unscrupulous ways. Though he wanted to ensure the success of his airline, perhaps little prior knowledge of the airline business with the wrong positioning of the product did him in. The final nail in the coffin came from the twin-pronged impact of government regulation which forced private airlines to fly certain non-metro routes. But, at the same time, the government kept sitting on Damania's plea to bring in smaller aircrafts.[60] At the time, Damania Airways was operating out of five leased Boeing 737, which were unsuitable for lower traffic non-metro routes. The twin impact blocked all its chances to fly into the profit zone. Unable to keep it afloat any longer, Damania sold off his airline in 1995 to Ravi Prakash Khemka, the owner of NEPC Airlines for ₹170 crores. Khemka rebranded it as Skyline NEPC.

Damania remained a much sought-after man by business tycoons with aviation ambitions. First, he was hired by Vijay Mallya as executive director during the initial days of Kingfisher and was dumped soon too. Perhaps, Mallya thought he had learnt all about the airline business from Damania and there was no need to have a high-profile man along with him in the pilot's seat. Mallya anyway could never share limelight with anyone else. But then, as it turned out, there was nothing much that Mallya had learnt about airline business. Damania later became the director of Sahara Airlines[61] and was in the thick of things during the Jet-Sahara merger deal.

NEPC Airlines was headquartered in Chennai (then Madras) and began its operations in 1993, at about the same time as Damania Airways. Its founder Ravi Prakash Khemka had interests in wind energy farms. NEPC too never had a smooth flight and ceased its operations in 1997. By the time it folded up, the promoters were caught neck-deep in legal troubles, primarily on account of non-honour of payment to creditors of Damania Airways after the takeover. NEPC Airline had an ignominious end. The IATA first suspended the airline for non-payment of dues following which they were taken off the computerized reservation system (CRS). The grounding was followed by court cases by creditors.

The Growth Paradox

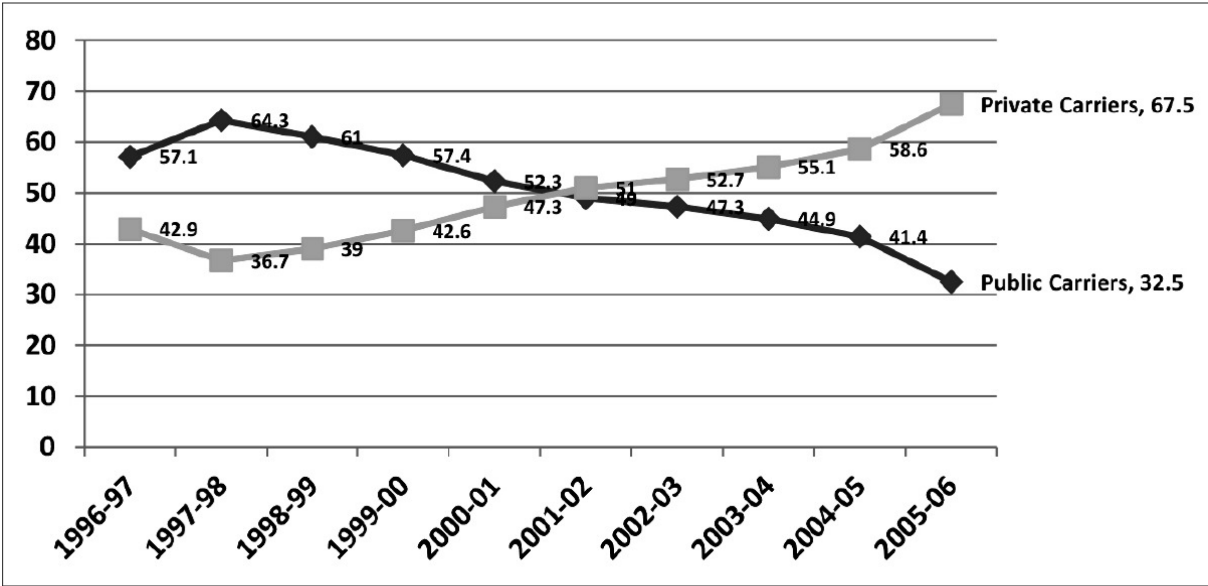
Notwithstanding the fate of airlines, the aviation sector expanded significantly between 1993 and 2000. The number of air passengers grew by double digit each year. The huge dormant demand had been detonated.



Air traffic growth in India, 1980–2005
Source: DGCA

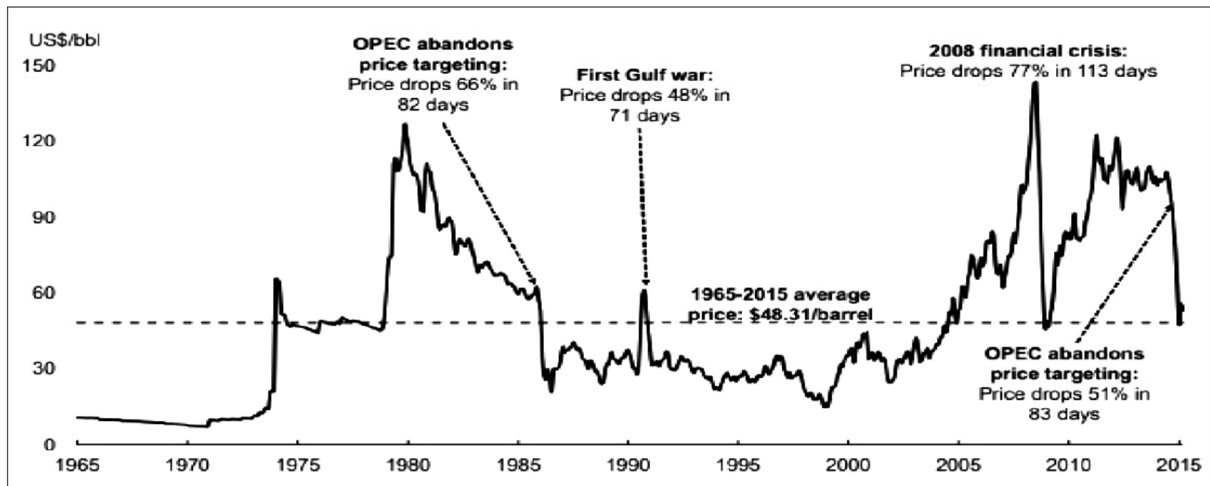
The number of flyers nearly doubled between 1993 and 2000, growing from approximately 9.5 million passengers annually to nearly 17.3 million by 2000. The momentum kept increasing during the next five years, and by 2005, the number of annual flyers had touched 28 million. This translated to an addition of 20 lakh new

flyers every year, and over 1.83 lakh passengers every month. On a daily basis, 6100 passengers were being added each day. Turning this number into demand for new flights was simply impressive. If one takes Airbus 320, which has a maximum seating capacity of 180 at 90 per cent load factor, the daily demand for new flights turns out to over 37 every day during this phase. And by 2001, private carriers had overtaken national carriers in terms of passengers flown! From here on, they will keep widening the lead.



Changing dynamics: Share of public carriers vs private carriers

The 1990–2000 decade was also a period of relative stability for crude oil except for a brief spurt during the Gulf War. Yet, most early airlines were unable to turn the fantastic numbers and fine business environment into profit. The paying capacity of Indian flyers limited premium on pricing, but the demand was huge.



Oil price trend, 1965–2015
Source: World Bank

However, the paradox was that airline after airline kept nosediving. So, while the sector grew at an impressive rate, the downfall of air operators was also swift. Nonetheless, there were important messages from early airlines. They had demonstrated that by offering cheaper airfare and better service than government airlines, private airlines could act as a catalyst for air travel growth. They had also proved that despite government airlines being in a more protected mode, they could still wean away the major chunk of growth from them. As the traffic grew, it was the private airlines that cornered the bigger pie. The share of government airlines remained nearly static during the new competitive phase, even though it would still take a while for any one private airline to overtake government airlines.

Another noteworthy aspect was that despite dramatic growth in air traffic, which was the result of rising income, leading to higher propensity to fly aided by rising tier-II city connectivity, the per capita air passenger had remained very low, well below the global average. This indicated a huge opportunity for airliners in the years ahead.

Clearly, somebody had to do some number crunching and understand the entire matrix of the Indian airlines business to squeeze out a profit. Who would they be? The exercise had to wait till the collaboration of an Indian air travel and hospitality honcho and

a specialist airline number cruncher, who together gave birth to IndiGo Airlines.

4

IndiGo Arrives

Two Men with One Dream

In 2005, two little-known men—Rahul Bhatia and Rakesh Gangwal—decided to join hands and form a company called InterGlobe Aviation Private Limited with an aim to launch a true low-cost airline in India. The airline was to be called IndiGo—India on the go![62] A year later, on Friday 4 August 2006, with just one aircraft—an Airbus A320—in its kitty, which had arrived just two weeks back from Toulouse, IndiGo commenced its maiden flight from Indira Gandhi International Airport, New Delhi, for Imphal via Guwahati. Thereafter, there has been no looking back! In less than six years, IndiGo would emerge as the largest domestic airline and the most consistent and profitable airline in India. By this time, everybody would have heard of its two fabulous promoters.

Rahul Bhatia

Rahul Bhatia's journey from being a reluctant entrepreneur to a man with a vision which ended up creating the biggest proposition in the Indian sky has been quite extraordinary. By his own account, Bhatia had never dreamt of starting an airline, despite his family having

been in the airline travel business for a fairly long time. Bhatia would have been quite content with a teaching job in Canada or the USA, post his engineering degree from the University of Waterloo, Ontario.[63] In fact, he had seriously contemplated taking up teaching after his first venture—making telecom switches—had failed.[64]

Bhatia returned to India in 1985, soon after the completion of his studies and a brief sojourn with sundry jobs in the USA. It was here in the office of US Airways, he met Gangwal, who, two decades later, became his business partner and co-founder of India's most successful airline. But at that time, an airline venture was nowhere part of his scheme of things.

Upon return, Bhatia set up a telecom switch manufacturing unit. This was also the time when the future telecom baron Sunil Bharti Mittal had taken his first plunge in the telecom sector by setting up a handset and fax machines manufacturing unit under the aegis of Bharti Enterprises. However, unlike Mittal, Bhatia's telecom foray never really took off. By 1988, the telecom business was given a quiet burial.

This was the also the time when his father Kapil Bhatia was not in the best of health. Senior Bhatia offered to liquidate his share in an airline ticketing partnership business by the name of Bharat Express, which he had founded and nurtured for over 25 years, and give the funds to Rahul to start afresh. Alternatively, Senior Bhatia offered Rahul to join his business. Rahul didn't have the heart to ask his father to exit a business that was so dear to him. Another catch was that the business, nurtured and supervised by his father, had ten partners and entering a business co-owned by so many people made little sense to Rahul and offered even lesser solace. He also felt his father's position would always remain vulnerable, despite him running the show, notwithstanding the fact that the other shareholders were more or less sleeping partners, interested only in their share of profit. But not everyone was sleeping and the feared coup did happen. Some partners had formed a clique and were quietly buying out other partners. Once they acquired the majority stake, they ejected Senior Bhatia from the helm of affairs.

Some adverse events ultimately turn out to be providential. The shock developments made the father-son duo start afresh, but this

time the venture was to be their sole baby. They started their own travel business—InterGlobe Enterprises (IGE). It did help that Senior Bhatia carried much goodwill among travel business associates and most of his earlier agents decided to join hands with his new firm.

Managing and nurturing the airline travel business gave Rahul Bhatia a deep insight into the aviation business, something that would come handy later, and contributed to making a big success of his aviation foray. As one industry watcher observes, 'Rahul's strong relationship with travel agents became a key strength for IndiGo Airlines when it began its operations.'

The new venture of the Bhatias was a success. Destiny led Rahul to his next calling! He quickly established and expanded his travel business. His assuring personality, down-to-earth approach and the ability to take people along played a big part in ensuring the success of his travel business. Rahul was soon to try his hand in hospitality business too.

As luck would have it, the French hospitality major—Accor S.A.—was looking to establish their hospitality business in India. They got introduced to Bhatia and soon became business partners. It turned out to be a stepping stone for Bhatia to take a successful plunge into the hospitality business. The partnership with Accor remains strong despite some hiccups midway. InterGlobe later got into partnerships with Novotel and Pullman too.

Today, Bhatia's IGE (InterGlobe Hotels) is the owner of India's largest hospitality inventory and has direct operations in four countries, including Nepal, Bangladesh and Sri Lanka, apart from India.[65] Though Bhatia's achievement as Indigo's co-founder has been majorly talked about and documented, much needs to be written about the way he also created an utterly fabulous hospitality business.

With success, Bhatia's ambitions also became bigger. By 2004, he was a restless entrepreneur looking out for new opportunities, perhaps too many at times (for example, he had serious plans to start a university). The success in hospitality and the airline travel business seeded the desire of starting an airline. He was confident of pulling it off despite the pitfalls of the Indian aviation sector. But he still lacked two things—money and the right partner.

It was during these times that the London-based Indian-origin businessman Bhupendra Kansagra had acquired a large equity stake in the grounded ModiLuft and was keen to relaunch it as an LCC. Kansagra approached Bhatia for a name and revival plan. Rahul coined the name ‘IndiGo’ (India on the go) for Kansagra, but the name didn’t really appeal to him. Kansagra opted for a different name, first ‘Royal Airlines’ and finally, ‘SpiceJet’, to relaunch ModiLuft. Rahul bought back the name ‘IndiGo’ from Kansagra for ₹25,000. IndiGo was to be Rahul Bhatia’s baby and destiny.

SpiceJet began flying on 23 May 2005, fifteen months before IndiGo’s first flight. Kansagra exited from the venture in mid-2008[66] after the aviation sector started bleeding heavily, while Bhatia remained glued to his baby and eventually turned it into the undisputed king of Indian sky! In hindsight, the leadership qualities of Rahul Bhatia became evident during his tough days. Rather than ruing his fate, Bhatia took the difficult times as an opportunity to recast his destiny and restore the family pride. He never looked back; he was always on the go! And with each success, his ambitions grew bigger. From a reluctant entrepreneur, Rahul became a dreamer and finally an achiever extraordinaire. And despite having witnessed the darker sides of people and partners, he never let that take away his basic faith in people. He always believed in empowering people who worked with him and raising their bar in the process. The case of Aditya Ghosh, the long-time CEO of IndiGo, is a case in point.

Rakesh Gangwal

When IndiGo arrived on the scene, Rakesh Gangwal was almost a mystery man and remains reclusive till date. But then, it is surprising that in a country like India where people love basking in the reflected glory of Indians who have made it big abroad, one had never really heard of Gangwal till IndiGo took birth. His absence at the time from the list of successful Indians in the USA in public domain is all the more astonishing as he remains perhaps the only Indian CEO of a large non-tech, non-financial company in the land of dreams. Gangwal had been a rising star in the US aviation industry since

mid-80s and was hailed as the 'wonder boy of aviation' by US aviation watchers and media—before gaining fame as the co-founder of IndiGo, which made him the wealthiest Indian-American in the USA,[67] ahead of the tech-pack or venture capitalists like Romesh Wadhwani (founder, Symphony Group), Vinod Khosla (Khosla Ventures, and co-founder, Sun Microsystems), Kavitark Ram Shriram (early investor, Google) or Brian Seth (Vista Equity Partners). Gangwals' crowning moment was being made CEO of US Airways in May 1998, one of the largest and oldest US airlines at the time.

A Marwari by lineage, Rakesh Gangwal was born in Kolkata. After completing mechanical engineering from IIT Kanpur, he went on to pursue MBA from the Wharton School, University of Pennsylvania, with a major in finance. Later, he worked as a number cruncher (financial analyst) and management consultant with majors like Ford Motor and Booz Allen Hamilton, before entering the world of aviation. He joined United Airlines in 1984, where a year later he would meet the man with whom he would go on to co-found India's most successful airline and world's fourth largest LCC.

Gangwal had an impressive rise at United where he went on to become senior vice president (planning) by the time he left the company some ten years later. Thereafter, he served as executive vice president, planning and development, with Air France from November 1994 till March 1996, when he was picked up as its president and COO by US Airways. On 18 November 1998, Gangwal was elevated to the airline's CEO and remained at the helm of its affairs till 27 November 2001.

Gangwals' tenure at the US Airways was quite eventful. In November 1996, the airline placed an order of 400 Airbus A320 aircrafts—the biggest one-time order of aircrafts till then in aviation history.[68] In 1998, a further order for thirty wide-bodied Airbus A330-300 were placed.[69] These orders enabled US Airways to replace older aircrafts with newer, more efficient aircrafts and were part of the plan to rebrand and reposition the airline which began in 1997 when the name of the airline was changed from US Air to US Airways. Along with the change in its name, the airline also introduced a new corporate identity and a new logo. A new colour

scheme was also given to its fleet, painting them deep blue and medium grey with red and white accent lines.

In 1997, the US Airways also introduced Metrojet—a single-class, low-cost subsidiary—to compete with LCCs such as the Southwest Airlines, which had begun eating into its stronghold east market. US Airways was headquartered at Washington National Airport (Ronald Regan Washington National Airport 1998 onwards) and was eager to protect its turf. The very same year, US Airways also bought whatever remained of Trump Shuttle—the short-lived airline founded by Donald Trump which remained airborne for just four years, between 1989–1992.[70]

It was also during Gangwal's tenure as the US Airways CEO that the airline made public its plans to be acquired by UAL Corp, the parent company of United Airlines—the world's largest commercial carrier at the time—for $4.3 billion. The announcement was made on 24 May 2000, but the plan met with stiff resistance from labour unions, consumer advocates and antitrust regulators, forcing UAL to withdraw its purchase offer on 27 July 2001. US Airways extracted a penalty of $50 million from UAL for unilaterally withdrawing from the deal.

The 9/11 terror attacks had a crushing impact on US Airways. The immediate fallout was the decision to shut down Metrojet to control cost. But that didn't help. The airline entered into Chapter 11 of the United States Bankruptcy Code (Reorganization Bankruptcy) on 11 August 2002. The airline was able to stall liquidation procedures in 2003 when it got a bailout via a government-guaranteed loan through the Air Transportation Stabilization Board.

By this time, Gangwal had already resigned (in November 2001) from US Airways, and had moved to the field of private equity and venture capital followed by forays into technology support for airlines.

Gangwal's tenure at the US Airways was not a glorious one as legacy issues such as union troubles and high operational cost mounted while terror attacks had a devastating impact. But to give Gangwal his due, affairs of US Airways, carrying a legacy of sixty years, were deep and long-drawn, beyond redemption by a finance specialist. But like Charles Cornwallis, the British general and later

governor general of Bengal Presidency, who was determined to win India for the crown after his disastrous American campaigns, Gangwal's Indian expedition would succeed in a fantastic manner. His number-crunching skills and frugality (if one discounts his $30 million splurge on a Miami Mansion,[71] Gangwal had always been known for his frugality) would go a long way in making IndiGo profitable even during crunch times. He would go on to prove that given a clean slate, he was indeed the master of (air)craft!

Partnership Structure

Bhatia and Gangwal together formed InterGlobe Aviation in 2005 in which the Bhatia-promoted IGE had 51.12 per cent stake, Gangwal-owned US-based Caelum Investment[72] (Gangwal is a US citizen) had 48 per cent, while 0.88 per cent was owned by others which mainly included close family members of partners. The company went public in 2015. As per the March 2018 regulatory filing, the promoters' shareholding stands this way:

- IGE Pvt Ltd: 37.9 per cent
- Rakesh Gangwal: 14.68 per cent
- The Chinkerpoo Family Trust (Trustee: Shobha Gangwal & J.P. Morgan Trust Company of Delaware): 13.6 per cent
- Shobha Gangwal: 8.41 per cent

Other major shareholders are:

- SBI Magnum: 2.77
- ICICI Prudential: 1.63
- Motilal Oswal: 1.37

The two partners would soon place the biggest and most audacious fleet order in the history of Indian aviation and make the world sit up and take notice.

The First Disruption

On 16 June 2005–the fourth day of the 46th Paris Air Show—Airbus made a stunning announcement. It informed the press that an upcoming airline in India by the name of IndiGo had made a firm order for 100 Airbus A320 family aircrafts.[73] The deal was worth nearly $6 billion at list price. The news made global headlines and the audacity of it all stunned everyone![74] Indeed, till then, no airline in India had ever thought of ordering so many planes at one go—the order was simply audacious. And an order by an airline which was founded by people not known to be moneybags was even more astounding. IndiGo or its parent, InterGlobe Aviation, was considered the weakest player to have got a licence for scheduled operations. All other existing airlines were promoted by people with deep pockets and deeper connections. IndiGo promoters had nothing much to flaunt on both counts.

But people were missing two vital points here. First, it was not an outright purchase. The deal, which only much later came to be fully understood by competition, was on the lines of 'sale and lease back' arrangement, which provided IndiGo a few key advantages. The bulk order had enabled it to bargain a handsome discount over the list price and at the same time, IndiGo had assured itself an uninterrupted supply of planes when the demand was predicted to soar. Moreover, as per the terms of its arrangement with Airbus, any technical glitches or issues with engines were to be taken care by Airbus or the engine supplier. Also, by entering into a 'sale and lease back' arrangement, planes could be sold back as they grew older. This model reduced IndiGo's maintenance cost outgo while its accounts book would also become cleaner when compared to competitors as outstanding capital obligations would go down.

For Airbus, it was a golden opportunity to re-enter the fast-growing Indian aviation market. Airbus's reputation in India had nosedived after the deadly crash of Indian Airlines Flight 605 involving an Airbus A320-231 in February 1990 at Bangalore that had resulted in the death of 92 people.[75] This was the second major accident involving an Airbus A320 since the crash of Air France Flight 296 on 26 June 1988. This was a test flight which left three dead and 133 injured, many of whom were journalists. Another fatal accident involving Airbus took place again on 20 January 1992,

when an A320, owned by French Airliner Air Inter, crashed in northeast France, killing all 87 passengers and crew members.[76]

After the Bangalore crash, the Indian Commercial Pilot Association had opined that the aircraft had severe flaws. Airbus A320 was the first modern fly-by-wire aircraft and it had taken time for pilots to fully understand its working. The preference in India had shifted to Boeing.

With IndiGo's mega order, Airbus was back with a bang. One can thus understand why it was so keen to conclude a deal with an airline which had neither commenced operation nor was known to have deep pockets. It was a win-win deal for both parties.

But what gave Airbus the confidence to enter into a deal with a start-up like IndiGo? The answer can be found in its press release which shows how much faith Airbus had placed in Gangwal's credentials and their mutual relationship which went back to Gangwal's US Airways days. It may be recalled that Gangwal had dealt with Airbus extensively during his tenure at US Airways, and US Airways, despite being an American airline, had become the largest customer of Airbus. The press release on the occasion of IndiGo placing its first mega order with Airbus stated Airbus president and CEO Noël Forgeard as saying:[77]

> IndiGo has committed for 100 firm A320 family aircraft with Airbus, world renowned for the customer friendly features and comfort of its airliners. The venture is being jointly promoted by InterGlobe Enterprises Limited and Rakesh Gangwal, globally recognized for his management skills and expertise in the airline industry. IndiGo is the result of extensive analysis and planning by very experienced airline executives and we are convinced it will be a successful new player in a market that is both large and fast-growing.

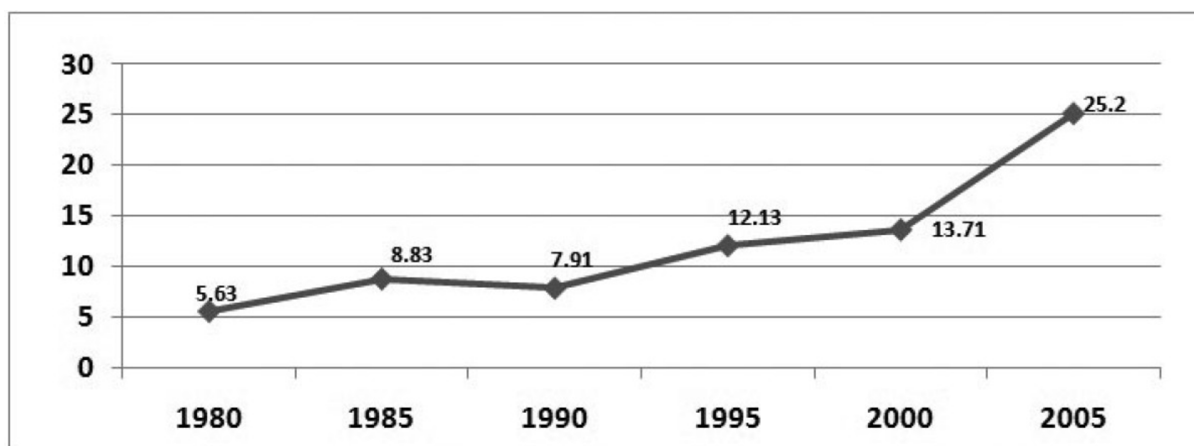
IndiGo got the first delivery of its A320 on 28 July 2006, which was received in Toulouse by its first CEO Bruce Ashby. It would go on to receive five more aircrafts by the end of that year. This audacious order would ensure steady supply of aircraft to IndiGo when others struggled for fleet addition. From here onwards till 2012—when it became the undisputed leader of the Indian sky—IndiGo kept adding one aircraft every forty days!

An even bigger order was to follow few years later which would enable Airbus to overtake its traditional American rival Boeing as the

largest supplier of wide-bodied jets in India. But at that time, there was just one question on everyone's mind: Could an airline really absorb this kind of fleet additions? Would it even survive beyond five years? On the surface, Indian aviation's potential had been bright ever since it opened up but so many had perished and survivors were left with serious battle scars. So what was the scenario like when IndiGo arrived?

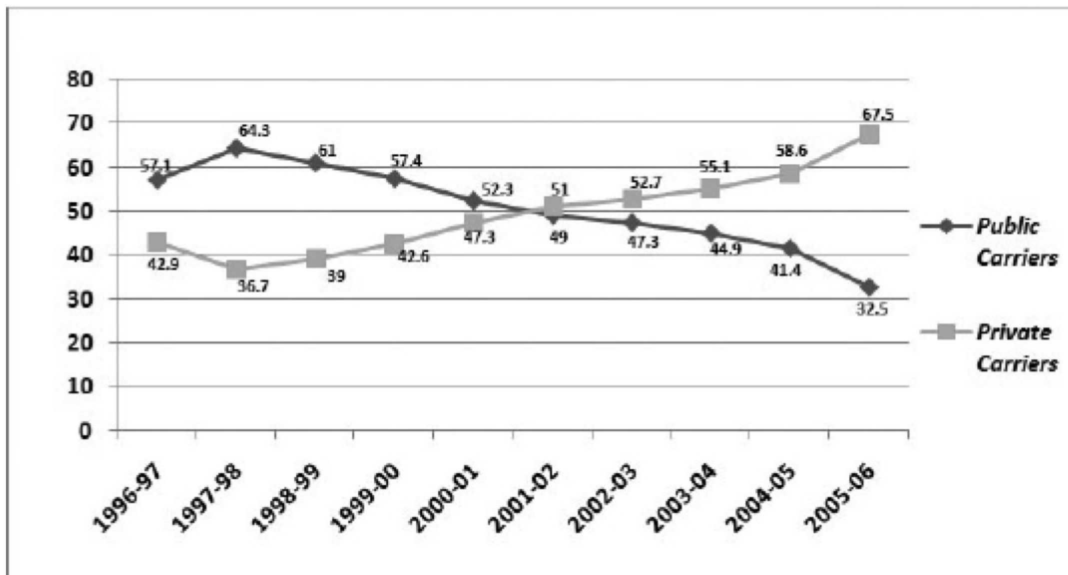
Aviation Scenario: 2005–2006

IndiGo arrived on the horizon nearly fourteen years after the first private sector airline post-liberalization—East-West Airlines—had taken wings. By the time it was airborne, the Indian aviation sector had undergone significant metamorphosis.



Domestic passenger growth time series (in million)

The air traffic had nearly doubled from 2000 while private airlines had taken over national carriers in terms of passenger carried by 2001–02. Private carriers had kept widening the lead over public carriers while air traffic was poised to grow even more impressively in the coming years. The sky definitely looked more promising. But the government still remained the big daddy of Indian sky, and it needed to be kept in good humour as the rules and strings of the games were still controlled by it.



Changing dynamics: Share of public carriers vs private carriers

Regulatory Developments

There were some important regulatory developments too that had taken place prior to IndiGo-commenced operations. In 2004, the government announced a policy called 5/20 Rule,[78] which stipulated that private airlines had to complete a minimum of five years of flying and had to have a fleet size of at least 20 aircrafts to be eligible to get permission for international operations. In spirit, the 5/20 Rule was somewhat similar to Japan's 45/47 Rule in the 1970s and 1980s whereby the government had reserved certain domestic and international routes for its national carrier. Similarly, the 5/20 Rule had deep implications for fair competition. It provided a safety net to government airlines in lucrative international operations. It also gave a protective cushion to early licensees, such as Jet Airways, from immediate competition and provided them monopolistic control over international routes.

By 2005, two private airlines—Jet Airways and Air Sahara (Sahara Airlines had rebranded itself as Air Sahara in 2000)—had been given the permission to fly to international destinations. One of the main reasons for Kingfisher going down was the fact that it was in a tearing hurry to start international operations, believing it to be its panacea for its financial woes while also being driven by the

prestige of it. Thus, it stretched itself financially to acquire Air Deccan in 2008 which by then had become eligible for international operations by virtue of its birth in 2003. The price paid by Vijay Mallya to acquire Deccan was well above its real market value and further stretched Kingfisher financially.

The 5/20 Rule remained a bone of contention amongst the operators till it was modified to 0/20 Rule by the Cabinet in June 2016. But the rule's repercussions continue to haunt some people till date.

Political Environment

Overturning political pundits and pollsters' predictions, the Indian National Congress-led United Progressive Alliance, (UPA) I, had a surprising victory over the BJP-led National Democratic Alliance (NDA) in the 14th Lok Sabha elections which took place during April–May, 2004. On 22 May of the same year, Dr Manmohan Singh took charge as the 13th prime minister of India. He went on to serve as the prime minister for the next ten years providing policy stability. Given Dr Singh's record as the 'author of the new economy' during his previous tenure as the finance minister in the Narasimha Rao government in 1991–1995, it was widely believed that this liberal economist would follow a policy more conducive to free market competition and less protectionist of government enterprises. His choice as PM was certainly welcomed by the private sector. However, under the compulsions and compromises of coalition politics, the aviation sector was given to one of the NDA's key ally—the Nationalist Congress Party (NCP). NCP boss Sharad Pawar chose his blue-eyed boy, industrialist-politician Praful Patel—the Bidi King of Vidarbha—to be the new minister for civil aviation. Patel went on to become India's longest serving minister for civil aviation (23 May 2004–18 January 2011), being at the helm of affairs for nearly seven years and overtaking the previous record of Dr Karan Singh (13 March 1967–9 November 1973). Patel's tenure[79] would be remembered as the best of times and the worst of times for Indian aviation![80]

The Competition

At the time IndiGo commenced operations, only two airlines from the early phase were still around—Jet Airways and Air Sahara. However, it was Air Deccan, India's first low-cost airline, founded by Captain Gopinath, that was really making waves. Established in 2003, it had become the third largest domestic airline by the end of 2005, cornering around 19 per cent of market share. It was flying to 55 destinations and had a fleet size of 30 mixed type aircrafts. Air Deccan's golden period was 2006–2007 when it experienced 42 per cent growth in passenger traffic over the previous year which made it the second largest airline in India. But its finances always remained stretched. The airline was also receiving increasing flak for its poor on-time performance and less than desirable customer service standards. In 2008, it was sold to Kingfisher. Vijay Mallya, the new owner, rebranded it as Kingfisher Red—an upmarket low-cost arm of Kingfisher Airline.

ModiLuft, which began its operation in 1993, had been grounded by 1996. By 2004, it was taken over by a consortium of investors led by London-based Indian businessman Bhupendra Kansagra. Ajay Singh, the current promoter and CEO of SpiceJet, was also an important member of the team in its second innings. The new promoters rebranded ModiLuft as SpiceJet, a low-cost airline, which commenced operations in May 2005.

Sahara Airlines, aka Air Sahara, which was amongst the early entrants in India had ambitious plans too, just like the group always has had. But its financials were never in good shape. In 2007, it was taken over by Jet Airways[81] that helped the latter to have a commanding market share of over 30 per cent but caused much financial distress too. Air Sahara became JetLite after the management change.[82]

GoAir, the low-cost airline from Wadia group, had also entered the fray by November 2005. The airline was headed by Jehangir (Jeh) Wadia, the younger son of Nusli Wadia. From its inception, it had been a quiet kind of player, content with slow and steady growth.

So, by the time IndiGo arrived, there were seven major airlines ready to give it competition. The list included one government airline

—Indian Airlines, three full-service private airlines—Jet Airways, Air Sahara and Kingfisher, and three LCCs—Air Deccan, GoAir and SpiceJet. IndiGo appeared to be the weakest among them all.

So what was IndiGo's proposition that gave it the confidence to sail against the known headwinds?

The IndiGo Proposition

Surprisingly, IndiGo has never had a vision or mission statement—it still does not. So what was it that the two partners wanted to offer to Indian flyers?

Commenting on IndiGo's core proposition, its first CEO Bruce Ashby said, 'IndiGo is built for people with things to do, places to be and people to see, who don't want to waste time, money or energy in the process. The team at IndiGo has designed an airline with affordable fares that has cut red tape and hassles, opening up a country full of opportunities.'[83]

The idea of IndiGo was based on three simple but deep-rooted propositions which were neither unique to IndiGo, nor was this airline the first one to have imbibed them into its business philosophy. IndiGo's product proposition and operational strategy has been employed before by airlines such as Southwest, Ryanair, easyJet and AirAsia. In India too, before IndiGo commenced operation, there were airlines such as Air Deccan, SpiceJet and GoAir which had already deployed a low-cost model and had tried to imbibe the philosophy of successful global low-cost peers.

So what did IndiGo do that was different? IndiGo didn't do anything different, but did the same things differently. It was how it went about implementing its basic business strategy that won the day. The three pillars on which IndiGo was built and continues to adhere to are:

(i) On-time performance
(ii) Low-cost connectivity
(iii) High-service standard

Strict adherence to these three promises became imperative to its remarkable success. The low-cost airlines till then had believed that by just providing low-cost connectivity, they could gain passengers. It worked up to a point as cost has always played a big factor in the choice of a service, but as flyers became more mature and demanding, and their expectations rose; they wanted more. Air Deccan, which often offered dirt cheap airfares, had big problems with on-time performance. Its service standards, whether at the counter or inside the cabin, had remained less than desirable.[84] Little wonder then that every time it raised its fare, there was a dramatic fall in its passenger load. Its sloppy service combined with poor on-time performance was a major reason for its inability to entice corporate travellers.

By contrast, IndiGo was always particular about on-time performance, making it one of its key USPs. It also hyped up its punctuality mantra by repeated announcements before landing about how its flight had arrived minutes earlier than scheduled. IndiGo announcers often went overboard on this count but then it helped them build a good reputation in the long run.

Moreover, IndiGo was always conscious to communicate that low cost doesn't mean cheap. So, its cabin crew and support staff were always smart, prim and proper. Further, it was a good decision to get uniforms designed by the brilliant designer duo of Rajesh Pratap Singh (RP, as he is popularly called by his friends) and Sapna Mehra, aided ably by stylist Ambika Pillai.[85]

This is what a fashion website wrote:[86]

> Globally established fashion designer Rajesh Pratap Singh, and stylist Ambika Pillai, have partnered to give IndiGo, India's largest low-fare carrier, a chic, new look. The cabin crew of India's coolest airline is all set to don an international look with their deep blue tunic and IndiGo blue hats! The well-styled, clean cut tunic has been designed by none other than Rajesh Pratap Singh, who has given Indian designs the perfect international touch, making his clothing line one of the most popular ones in the fashion fraternity today. Somewhere between a tennis and a shirt dress, the tunic is bi-colour…navy with a highlight of indigo on the belt. Functional and timeless elegance, the new uniform is 'No nonsense' in line with the spirit of the airline.

RP was the author's hostel-mate during his days at Shri Ram College of Commerce (SRCC), Delhi University. Recalling his

association with IndiGo, RP says that it was fantastic working with the IndiGo team and they even designed outfits for Rahul Bhatia. So, the makeover started right from the top! IndiGo's crisp and stylish uniform went a long way in creating the desired impression—an upmarket feel despite low-cost offering.

Aviation watchers unanimously agree that the consistency with which IndiGo delivered on its three key promises made it the first choice of Indian flyers. Indeed, this consistency has not been replicated by any other airline in India. It was this quality that distinguished IndiGo from its peers.

But were these propositions enough to propel IndiGo into the profit zone and ultimately make it the leader of the Indian sky? Well, IndiGo adopted and implemented every known LCC strategy combined with some homegrown innovations to keep its promises.

5

Redefining the Low-cost Strategy

Barring the first two years of its operation and a marginal hit in 2010–2011, IndiGo has consistently made profit. The year 2018 marks ten continuous years of its profit run. Even during the exceptionally tough phase of Indian aviation, i.e., between 2008 and 2011, when every airline was bleeding due to rising jet fuel cost, IndiGo managed to squeeze out profit. There was some scepticism about its claim of profitability, but once IndiGo went public and its balance sheet became part of the public domain, there was no room for doubt. In fact, much before IndiGo went public in 2015, it had started sharing its financials in the public domain.

IndiGo has been almost frenzied when it comes to cost controls. It knew that if it let loose any end, it could nosedive, never to rise again, given the fact that its promoters were no moneybags and couldn’t afford to squatter away a few hundred crores in fanciful experimentations. It has also been quite diligent with keeping its cash flow sound as it needed money in hand to pay for the lease. This is also what other successful LCCs around the world, such as easyJet or Soutwest had been doing—keeping a bountiful of cash reserve. IndiGo was also equally conscious to never get trapped in high finance cost or unserviceable debts and to always keep its accounts book tidy and clean. Its debt-equity ratio always remained

the lowest in the industry.[87] On the other hand, Kingfisher was trampled because of its mounting debt and rising finance cost while IndiGo ensured stringent operational and financial management and a disciplined execution of its low-cost model.[88]

Airline Industry's Cost Structure

The airline industry's cost structure can be broadly divided into seven verticals, which are mentioned below. All cost components are dynamic in nature and vary from airline to airline (operator to operator), year to year, and differ from country to country depending on numerous factors. So even if the fuel cost per unit may be the same for every airline, per kilometre expense may differ depending on the kind of aircraft being utilized and the amount of lease, rentals and other finance costs one is paying. Again, some airlines may be paying less for leasing and rentals but could have high establishment cost. Costs such as airport charges or pilot's cost vary from airline to airline as well. Successful LCCs undertake microscopic examination of their cost components and optimize every penny, wherever and whenever they can. It calls for meticulous planning and determined execution of goals. IndiGo also understood well that the 'god (of success) was in detail'; it put in place a robust process to control any non-essential costs and was always financially prudent, unlike Kingfisher. A statement from its Annual Report 2016–17 in this regard reads:

> We engineered our processes right from the very beginning so that they are as efficient as possible. We continue to meticulously scrutinize our non-essential costs without compromising passenger safety, security and quality of service in order to maintain our cost leadership. The result is that IndiGo enjoys one of the lowest costs, as measured by CASK (excluding fuel expenses) compared with other publicly-listed LCCs globally. This has enabled IndiGo to emerge among the most profitable (as measured by RASK[89] minus CASK)[90] low-cost carriers in the world. This cost advantage also allows us to be successful across business cycles, evidenced by our nine consecutive years of profitability, which includes periods where there were downturns in the overall economic activity. This is a strong platform that will allow us to confidently execute on our next phase of growth—be it building on our leadership in the domestic market or participating in the long-haul international business through organic or inorganic growth.[91]

Cost Heads and Their Impact

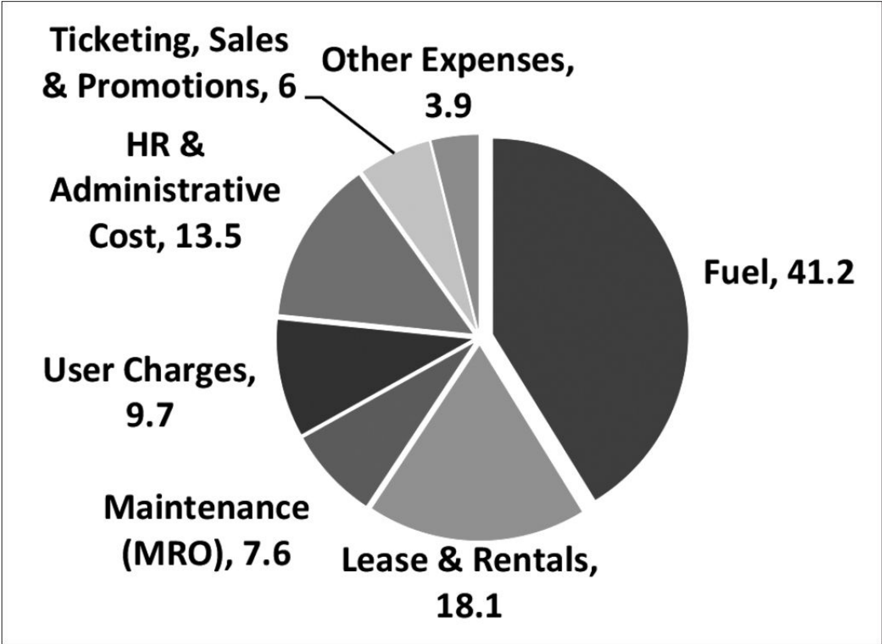
The major cost heads of airline operations and their relative floating weightage are as follow:

A. Fuel cost (ATF): 35–45 per cent
B. Lease and rentals (finance cost): 15–20 per cent
C. Maintenance (MRO): 7–12 per cent
D. User charges (airport charges + passenger services): 10–15 per cent
E. HR + administrative cost: 10–20 per cent
F. Ticketing, sales and promotions: 5–10 per cent
G. Other operating expenses (miscellaneous): 5–10 per cent

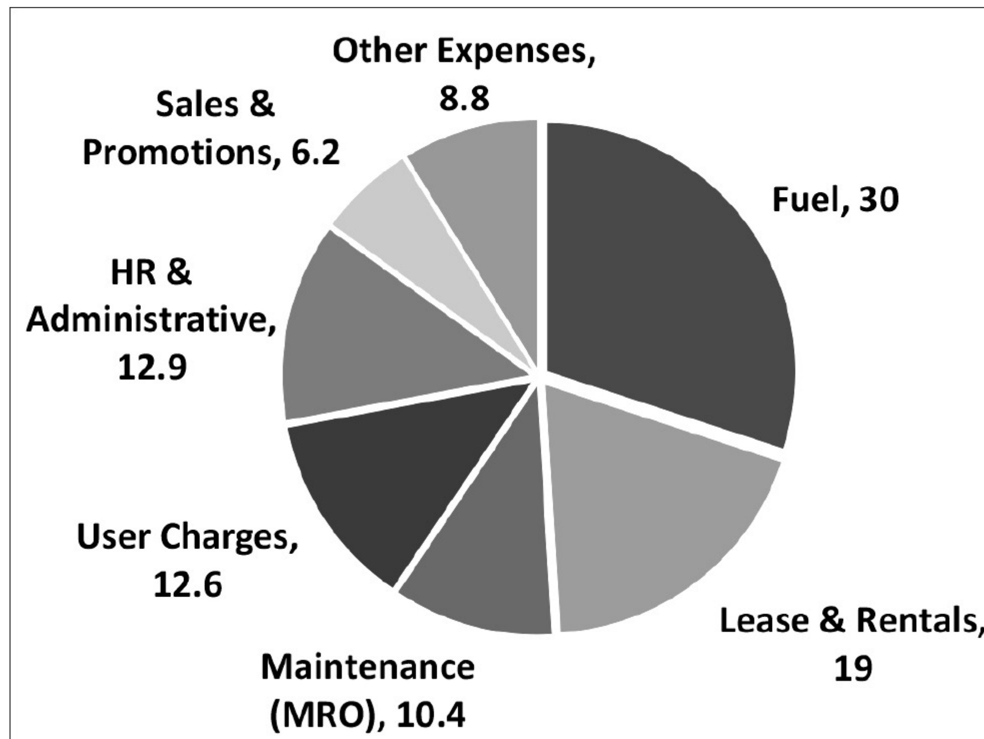
Now supposing the ideal cost for achieving break-even is to keep the operational cost at ₹100 per kilometre of run. If an airline manages to bring down its per kilometre cost to below ₹100, it will end up making profit, but if its operational costs exceed this benchmark, it will start incurring loss. Now, if an airline is meticulous or fortunate enough to keep all its costs vertical at the lowest end of the above given range, its operational cost will come to ₹87; thus, it will end up making a profit of ₹13 on every kilometre its aircraft flies. If its costs are exactly in the middle, its operational cost will come to ₹109.5 per kilometre and it will still end up making a loss of ₹9.5 for every kilometre of run. At the upper end of this range, it will incur a monumental loss of ₹32 for every kilometre of run. And as we will go along, we will see this is exactly what happened with Kingfisher which was unable to control any of its cost heads while IndiGo was diligent with cost control. And during tough days when the price of ATF (aviation turbine fuel is the largest component of airline's operational cost) shoots up, things can become really troublesome, especially if other cost verticals are also not in control. Jet Airways did manage to march into the profit zone in 2016–17 when jet fuel price had plummeted, but as soon as the price firmed up, Jet again slid into the red zone because almost all its cost heads are on the heavier side.

The charts below, based on Indian airlines' average cost for two different fiscals (FY 2013–14 and FY 2016–17), will demonstrate how various cost heads can vary. It may be noted that jet fuel cost

had shot up appreciably in 2013–2014 picking up at ₹76 per litre in Delhi[92] while average per litre price remained in the range of ₹50–55 per litre in 2016–2017.[93]



Average operational cost components of Indian carriers, 2013–14 (in percentage)
Source: DGCA



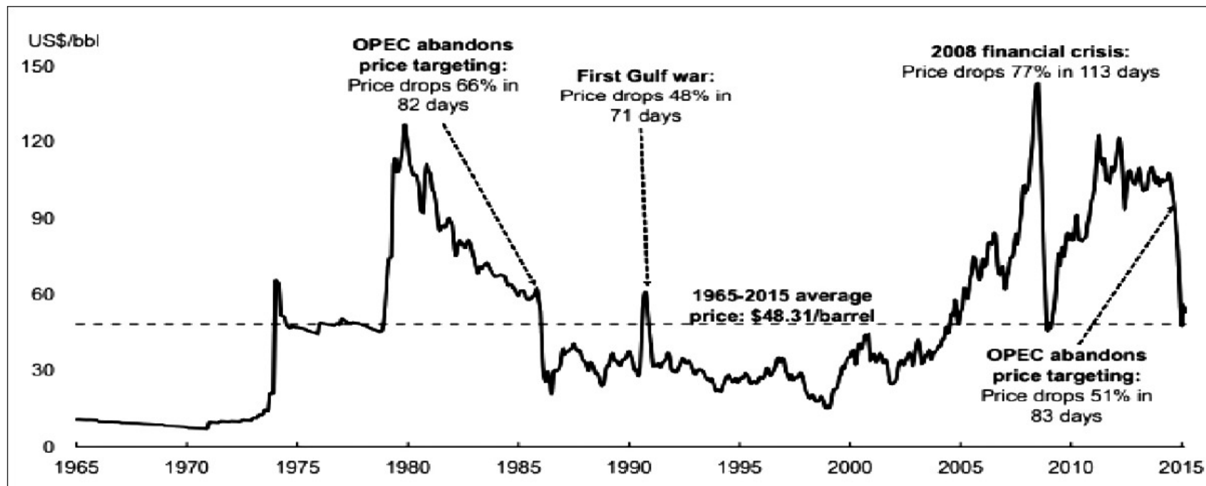
Average operational cost components of Indian carriers 2016–17 (in percentage)

IndiGo's better overall financial performance was ultimately a result of various measures working in tandem, which required keeping the cost of major overheads within check on one hand while enhancing the operational efficiency of its machines and human resources on the other. Let us run through how this was achieved.

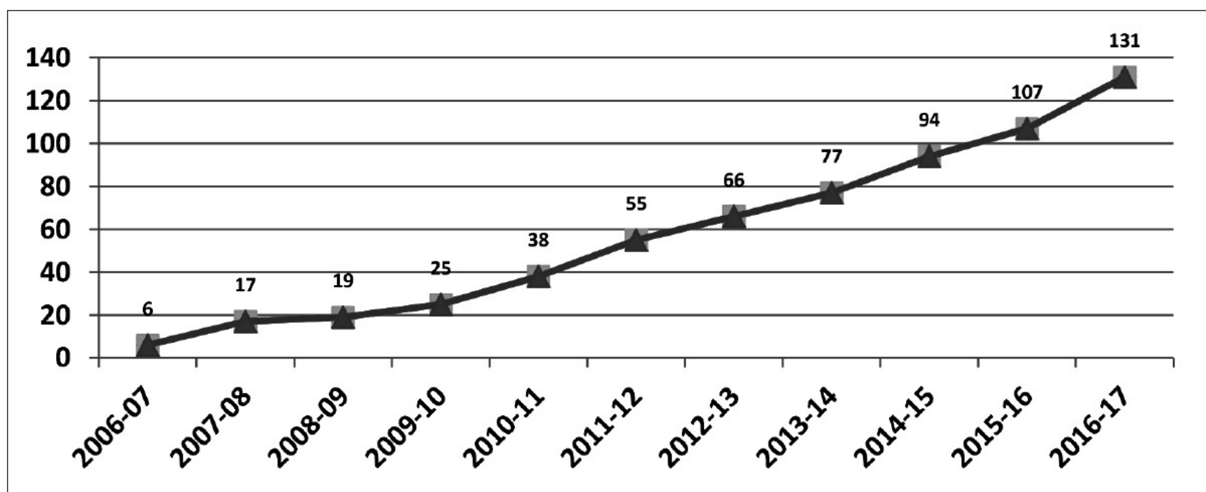
Fleet and Fuel Synergism

IndiGo's choice of its fleet—Airbus A320—was a well thought of exercise to keep its finance and operational costs down. It was not based simply on the initial cost of acquisition, but factored in the entire life-cycle operational, maintenance and finance cost of fleet. It began by deciding to have a single class of aircraft to reduce maintenance costs and other hassles associating with owning multi-class fleet, and to build a better relationship with the aircraft supplier. The first bulk order of 100 aircrafts did give it an unprecedented acquisition cost advantage over the competition as it lowered its initial finance burden and spread the payment over a fairly long

period of time, while ensuring a steady supply of planes even when demand for planes picked up. In contrast, the competition's cost of aircraft acquisition shot up due to absence of forward planning and innovative thinking or simply lack of self-belief. The choice of Airbus A320 fleet offered other benefits too.



Year-wise fleet* development
Jet Airways includes fleet strength of JetLite



Fleet growth timeline, IndiGo

The Airbus A320 is regarded as the most fuel-efficient commercial aircraft[94] in its class and this is one edge Airbus doesn't wish to cede to Boeing at any cost.[95] So, IndiGo did not opt for Airbus A320

simply because they were getting a good bargain, but largely because it was the cheapest aircraft to fly. According to Airbus, 'The A320 family is the world's best-selling and most modern single aisle aircraft family. With proven reliability and extended servicing periods, the A320 family has the lowest operating costs of any single-aisle aircraft.' A320 can also accommodate more seating configurations than its competition, Boeing 737.

Lighter Aircrafts

Lower weight translates into higher fuel efficiency. So, to make its aircrafts as light as possible, IndiGo opted for lighter seats in its fleet. A passage from its annual report reads:

> Fuel consumption is directly proportional to the weight of an aircraft. The Company has sought to reduce the weight of the aircraft by selecting lighter seats and by choosing to not have in-flight entertainment system.[96]

Other fuel cost control measures: As fuel can constitute any where between 35–45 per cent of a commercial aircraft operational cost, controlling fuel cost is a priority for any low-cost airline. IndiGo has adopted conservation of fuel consumption policies which are inculcated in all pilots and engineering staff training procedures.

i. The Company provides adequate fuel for sectors after evaluating various traffic trends thus avoiding any additional/unnecessary fuel upliftment, installing software for accurate flight planning which provides accurate maps and most efficient flight path, restricting the use of auxiliary power units, employing continuous descent approaches and economy cruise speeds, minimising aircraft weight by removing unnecessary equipment and optimising engine settings for take-off and climb.

ii. Additionally, the Company has also adopted fuel policies designed to reduce costs on the ground including the use of the Eco-Power Engine Wash process for our engines, the use of ground equipment in place of aircraft auxiliary power units which consumes more fuel, use of single engine for taxing on ground and other engineering/operations protocols. These policies are all designed to optimise fuel consumption, reduce carbon footprint and thereby finally reducing costs.[97]

Benefits of a Young Fleet

Even in 2017, over eleven years after it started its first flight, IndiGo has one of the youngest fleets of any LCC globally.[98] So, what does this imply? More fuel efficiency and lower maintenance costs. It also means better high flight dispatch reliability and higher passenger appeal. A young fleet has not only helped IndiGo control costs, but has enhanced its brand appeal for flyers.

Fleet choice is important. But what one does with the fleet is even more important. IndiGo has done almost everything right and better than others when it comes to fleet management.

Sharklet's Impact

As a further measure to control cost, IndiGo's new batch fleet will have factory-fitted Sharklets. These are innovations in wing tip design whereby curved angular tips are used at the end of airframe wings instead of the conventional straight horizontal slant. Boeing calls it Winglets, while Airbus calls it Sharklets.[99] The curved wing tips have been proven to enhance fuel efficiency by offering better aerodynamics due to lower air drag.

The development of winglets owes its genesis to the oil crisis of the 1970s when the US government tasked NASA to design more fuel-efficient aircrafts. Thus was born NASA's Aircraft Energy Efficiency (ACEE) programme. In the EU, the development started in 2002 with EU funding a four-year programme called AWIATOR (Aircraft Wing with Advanced Technology Operation) for development of energy-efficient technologies. The programme brought together 23 European manufacturers, universities and research institutes. Airbus contributed 60 per cent of the programme's €80 million budget.

Boeing had a lead over Airbus in the development of this technology. In 1988, Boeing 747-400 became the first commercial aircraft to fly with winglets. Its inspiration came from Gulf Stream II, which had already inducted this design and had demonstrated a significant rise in fuel efficiency. Airbus, however, had to navigate a series of litigations and legal hurdles in the USA before it was permitted to launch its own version of winglets which they christened 'Sharklets'.

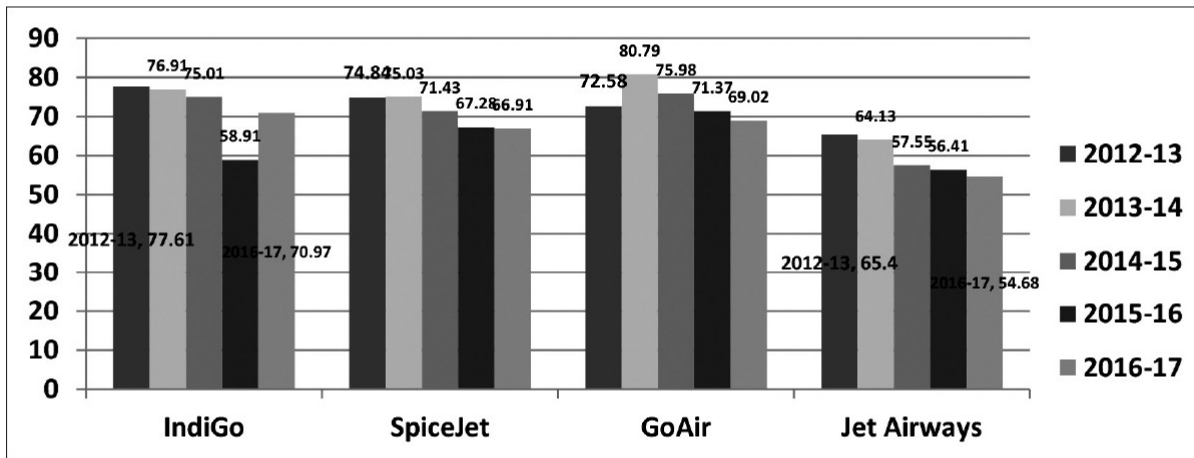
Sharklets are supposed to reduce fuel burn by up to an additional 3.5 per cent on long routes of around 3000NM. Sharklets bring additional advantages such as payload-range benefits, increased lift-to-drag ratio, higher available take-off weights, better take-off performance and better rate-of-climb among others.[100]

According to theflyingengineer.com which calculated the fuel cost saving in IndiGo's Mumbai-Singapore flight for A320neo, it could be as much as $300,000 (Singapore dollars) in a year on this single route alone.

> The greatest savings will be on long routes. Indigo's Mumbai-Singapore is 2180NM, with an average trip fuel of around 13100 kgs. This will translate to a conservative estimated saving of around 400 kgs per flight and 292,000 kgs per aircraft per year. Considering the cost of fuel at Mumbai (S$1520.5/T) and Singapore (S$993.36/T) as of end December 2011, this translates to a saving of around S$367,000 per aircraft per year, on just one sector. But if we consider a somewhat realistic aircraft utilisation, the savings can touch S$400,000 per year, per aircraft. With such savings, in the Indian scenario, the winglets pay back for themselves in around two and a half years or sooner in the event fuel prices rise further.[101]

IndiGo and AirAsia are among the first airliners to get the delivery of the initial A320s with Sharklets. IndiGo has ordered 430 Airbus A320neo aircraft, 22 of which have been delivered by June 2017. The current controversy over engine troubles apart, if we just take into account the fuel savings, A320neo offers great advantages.

But did IndiGo really gain much over the competition by these measures of lowering down its fleet cost, at least till 2012–2013? If we take the fleet cost as cumulative cost of (a) flight operations, (b) flight equipment maintenance and overhaul and (c) depreciation and amortization cost, then IndiGo did not really gain much advantage over competition on this account. Its operational cost related to purely fleet and flying expenses were nearly the same as other LCCs such as SpiceJet and GoAir, while Jet Airways had a much lower cost. One possible reason for Jet's significantly lower cost could be that it had already paid off much for the fleet being in the market for much longer.



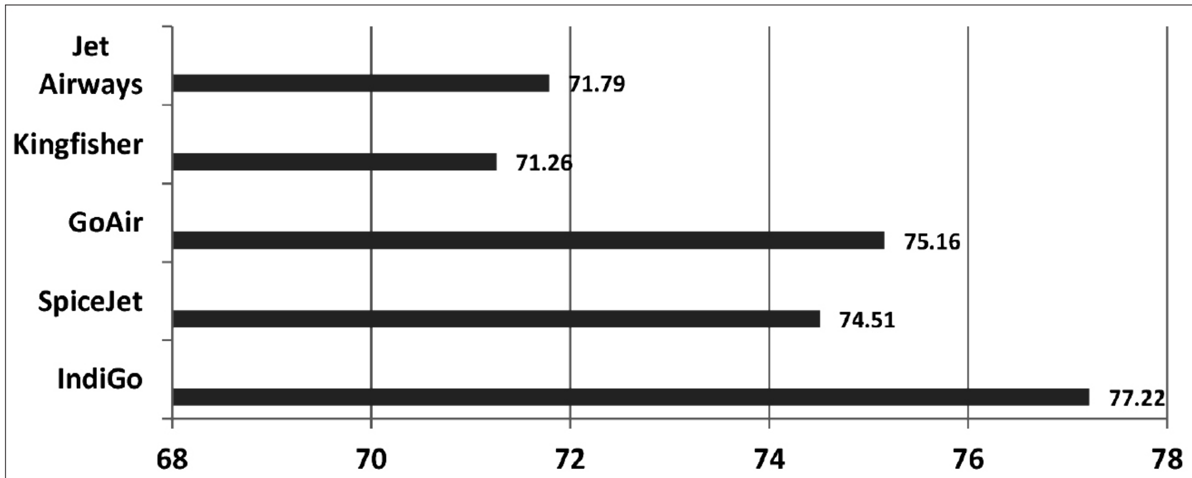
Fleet Cost* as percentage of overall expenses
Fleet Cost includes (a) flight operations (b) flight equipment maintenance and overhaul (c) depreciation and amortization expenses

Fleet Utilization

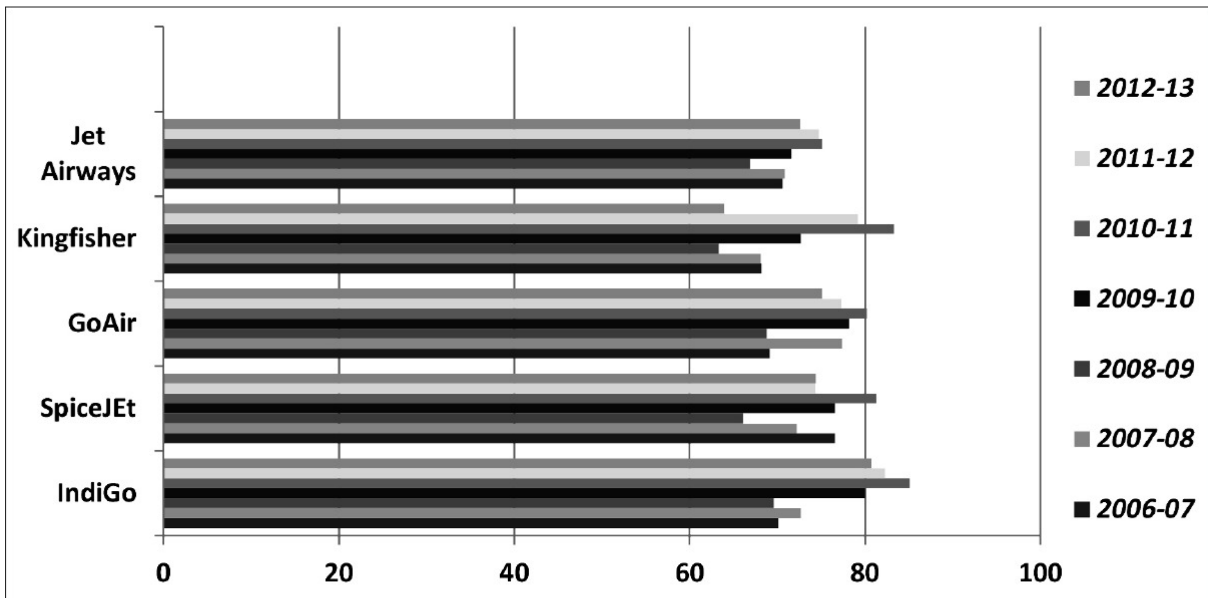
Aircrafts are the core revenue earning assets for an airline. Everything else revolves around it. Higher the number of flying hours or higher the fleet utilization, higher will be the revenue; assuming other factors to be constant. Higher fleet utilization is a combination of two factors. On one hand, there has to be higher passenger load factor (PLF) per flight, i.e., more number of revenue passengers per flight means more revenue for the airline. If one airline is flying with 70 per cent passenger capacity and the other with 80 per cent on the same route and charging the same fare, the one with higher seat occupancy will earn more from the flight.

The second factor relates to the number of hours the flying machine is working every day. Because more it runs, more money it will make, with the other things being the same.

Analysis of DGCA data for the six-year period from 2006–07 till 2012–13 reveals that IndiGo's average PLF was higher than all its competitors. On average, its PLF was 77.22 per cent while FSCs such as Jet Airways and Kingfisher trailed significantly. So, it was able to make more money from each flight as compared to the competition.



Average PLF from 2006–07 to 2012–13

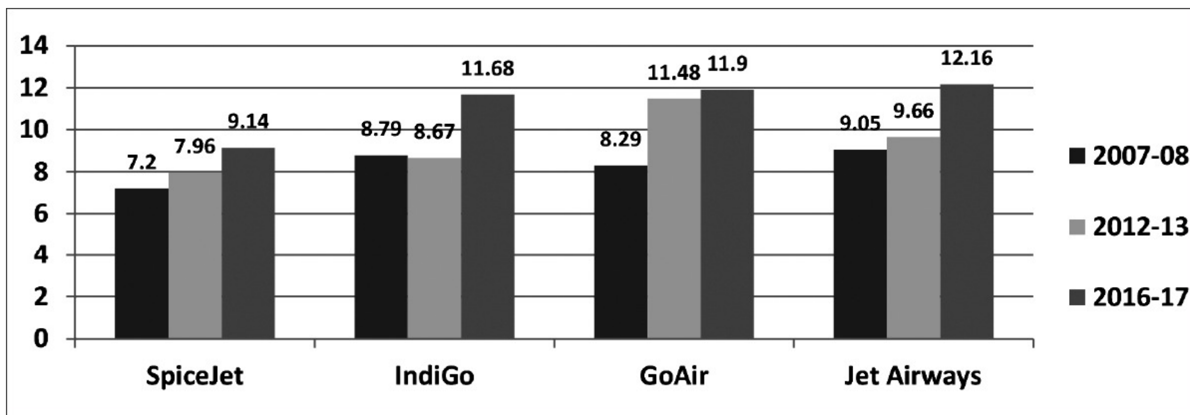


PLF, year-wise

Coming to flying hours per day, a higher run requires faster turnround time. Here, IndiGo has diligently followed the proven practices employed by successful LCC peers around the world, which requires the flight to receive guests in as little time as possible for the next flight. This calls for very efficient coordination between the ground staff, cabin crew and technical support at the approaching airport. From the very beginning, IndiGo employed a technology called Aircraft Communications Addressing and

Reporting System (ACARS),[102] which not only helps it in ensuring on-time performance but also in faster turnround. The automated real-time flight status is triggered the moment its aircraft takes off on the handheld devices of the arrival centre. So, its staff knows the exact flight status in real time and is ready for the next action. IndiGo has trained its staff well for swift onboarding and deboarding. Typically, its staff can get the flight ready for the next departure within 25 minutes. This expertise came in handy when its planes started flying longer hours.

But did IndiGo really utilize its aircrafts more than the competition, as has oft been reported?[103] Well, the DGCA data does not necessarily support this contention. The graph below shows that in the first three years of its run, IndiGo's fleet utilization was almost at par with the industry. But as it added more routes, the average flying hours for its fleet became longer. There also came a time when it was reported that its planes were flying for as much as 14–16 hours a day! Well, those may be exceptional days. GoAir and Jet Airways have had a better fleet utilization record.

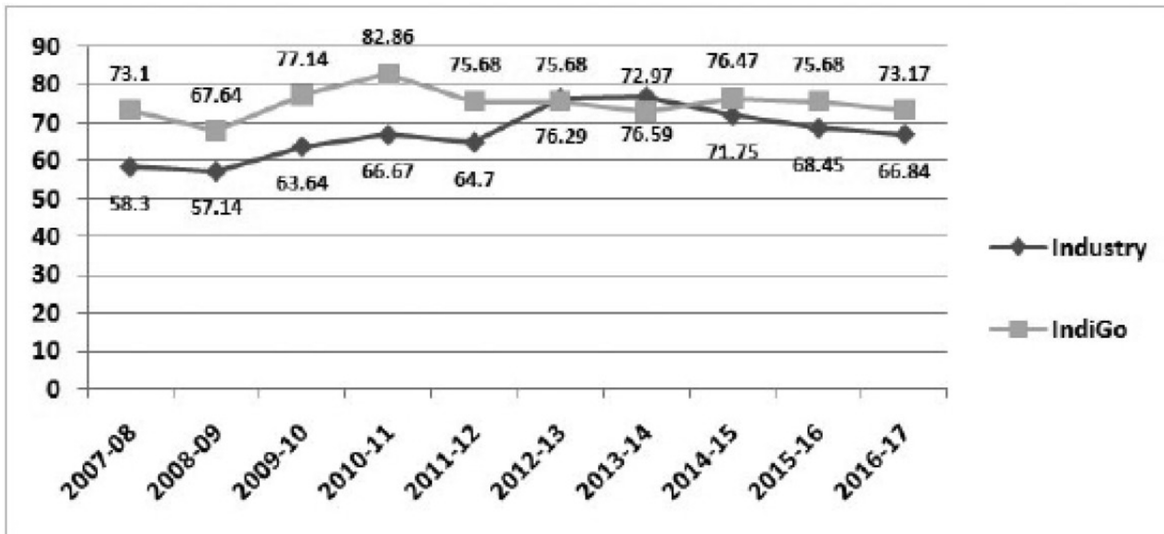


Average fleet utilization/hours per day
Source: DGCA

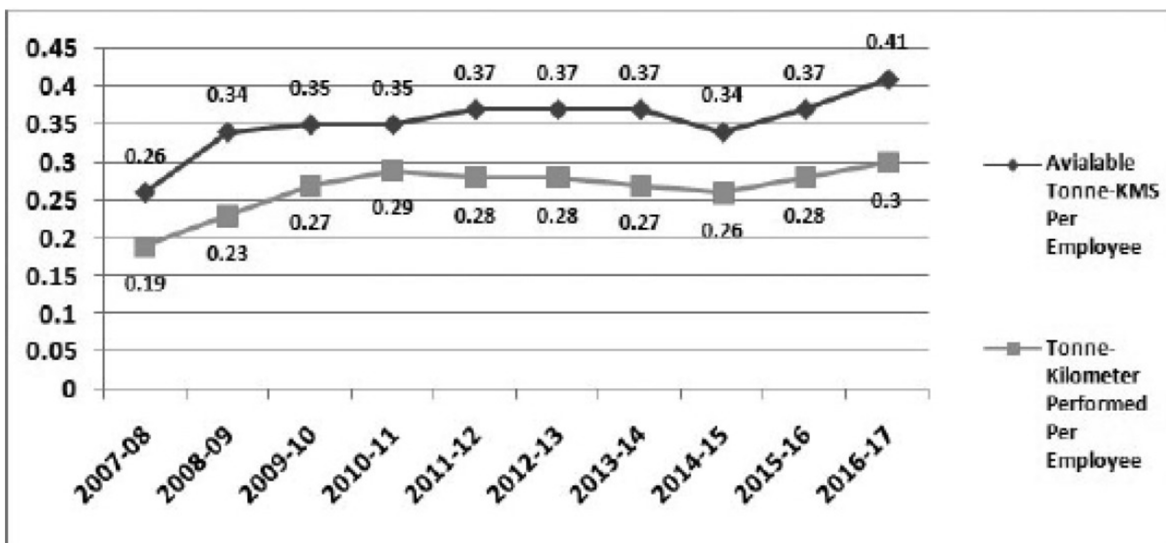
Employees' Productivity

Personnel cost is a key component of an airline's operational cost and IndiGo has managed to do more with less. Lesser heads and lower salary outgo per aircraft will make an airline more financially

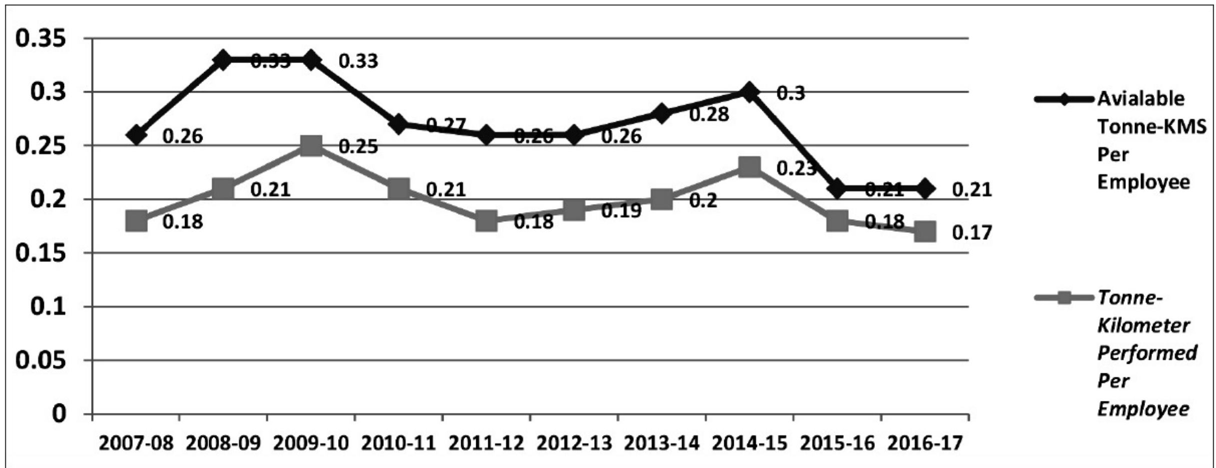
efficient. But this ratio cannot be stretched beyond a point, as it will have repercussions on passengers' convenience, staff morale and overall efficiency. And while many of the functions can be migrated to technology, not everything can be taken care by technology and machines.



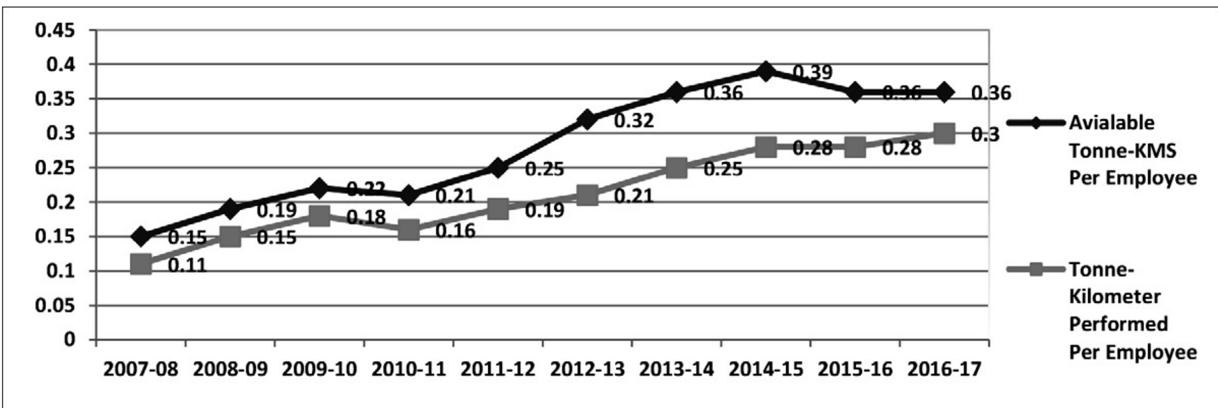
Average employee productivity*, IndiGo vs industry (in percentage)
**Average ton-kilometres per employee/ton kilometres performed per employee x100*



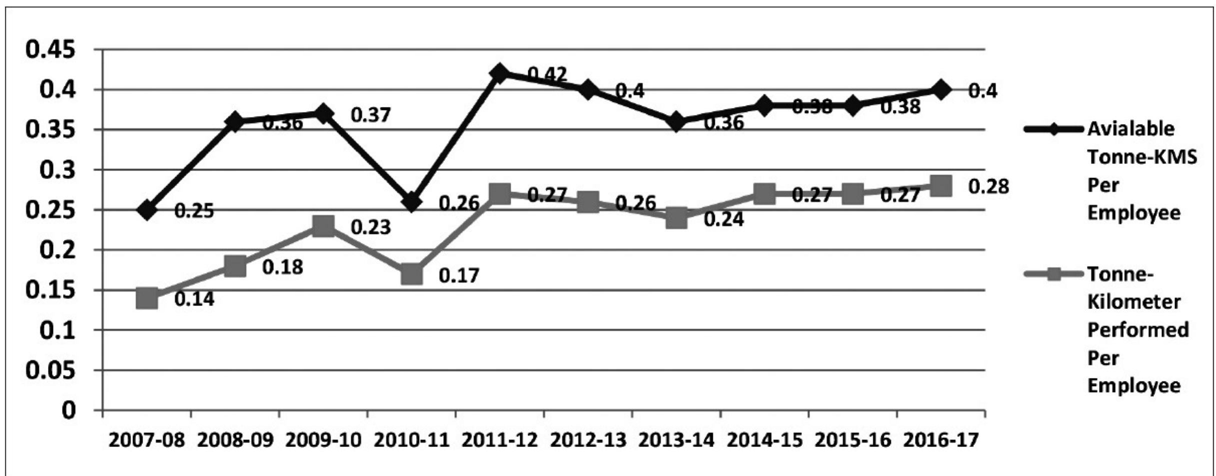
Employees' productivity, IndiGo



Employees' productivity, SpiceJet

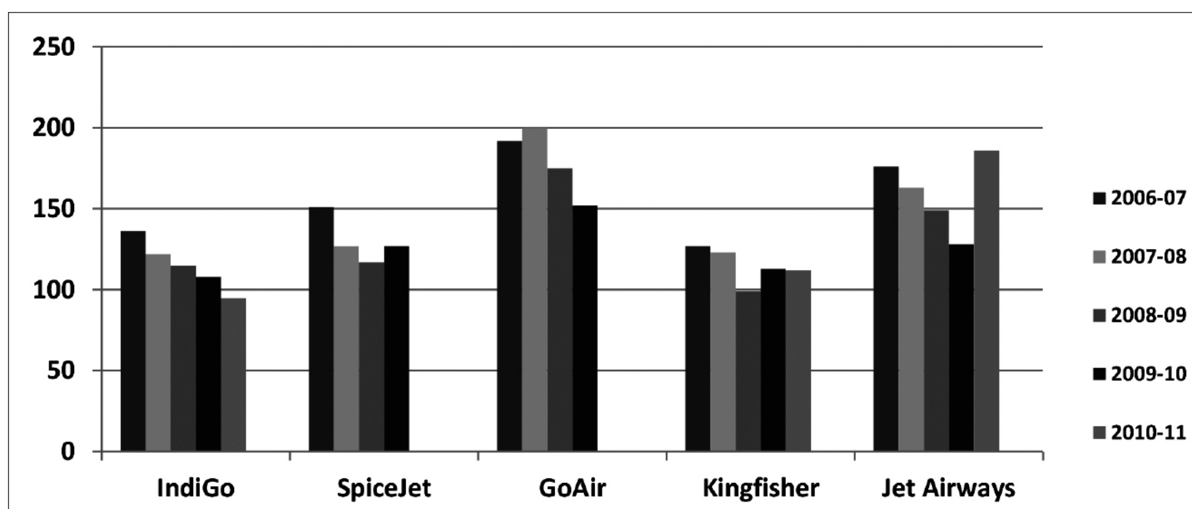


Employees' productivity, GoAir



Employees' productivity, Jet Airways

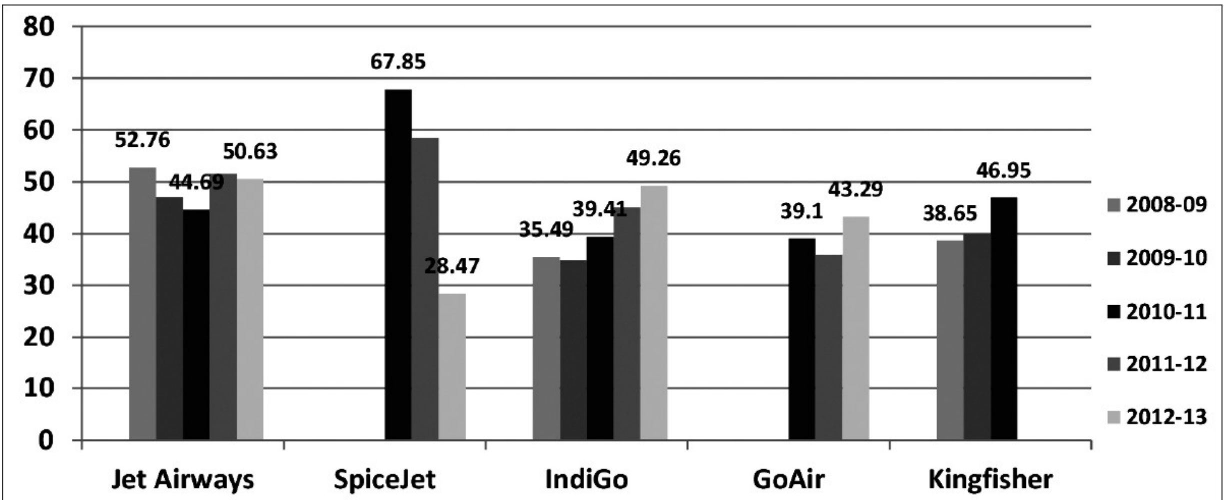
IndiGo has the lowest count of employees per aircraft at 110. SpiceJet and Jet Airways have more than 140 employees per aircraft, while GoAir has 120. Now, whether this is stretching too far depends on how well-trained the employees are and how smooth are the other functions. Though IndiGo appears to be stretching this a bit too far, it does give itself the required savings.



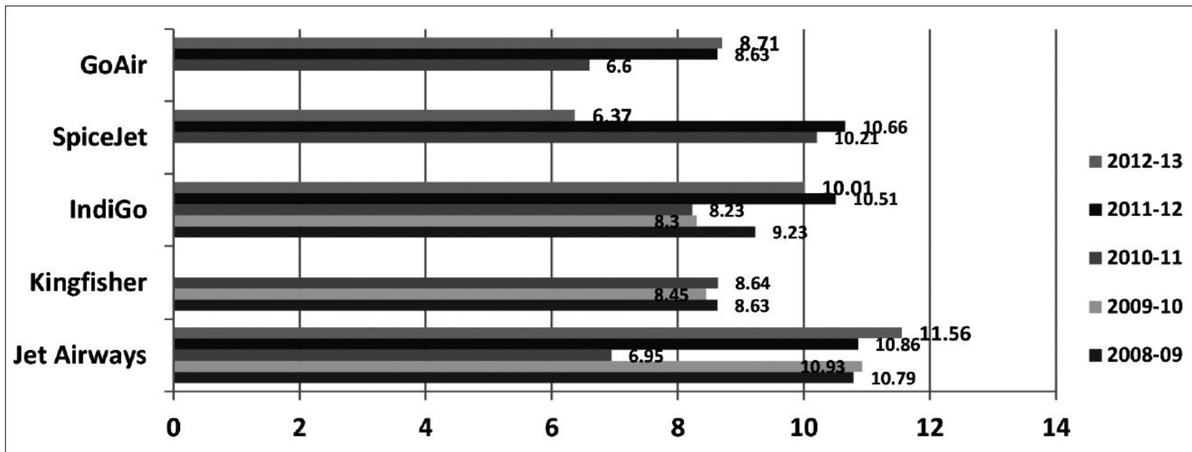
Average number of employees per aircraft, year-wise times series

Cost Per Employee (Average Payout)

While IndiGo may be saving on the number of employees per aircraft, it’s average outgo per employee was in fact more than Kingfisher for all comparable years. In the initial years, it did pay modest salary to pilots, but as it gained market share and financial muscles, its payout to pilots improved too. But there is a catch. Compared to other airlines, IndiGo has always had a sizeable number of highly paid senior professionals. This could be raising IndiGo’s average payout, making it look quite respectable.



Average pilot's salary per year (in lakh)

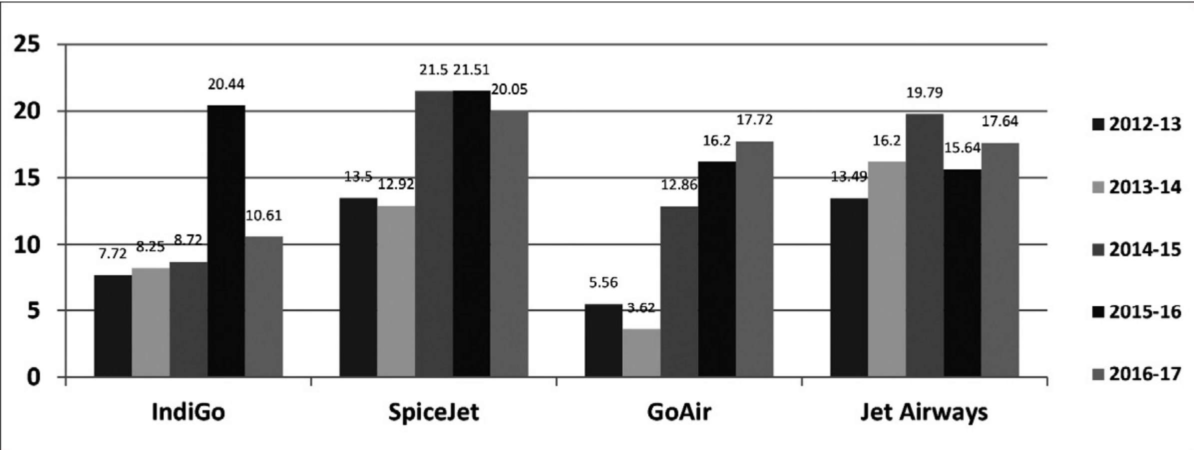


Average cost per employee per year (in lakh)

Establishment and Other Costs

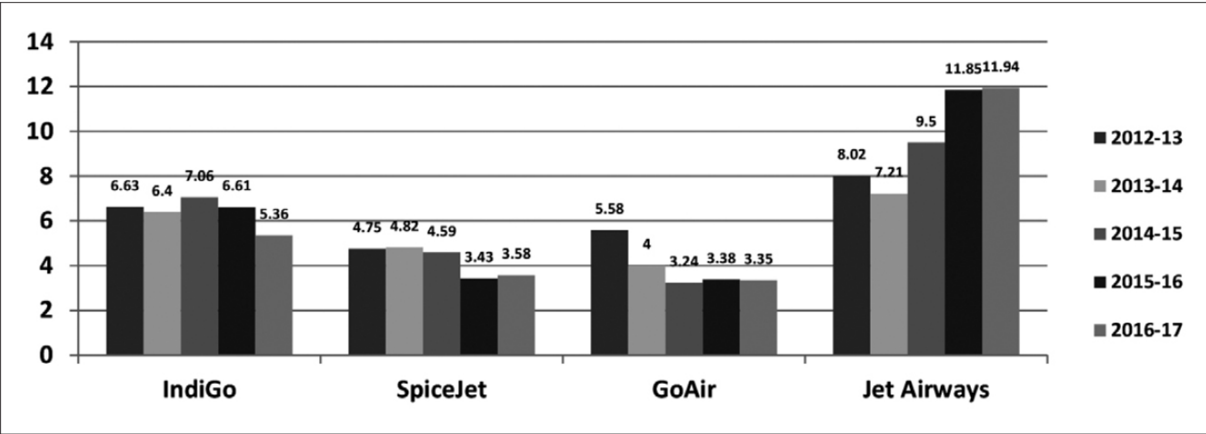
This is one head where Indigo appears to have done exceedingly well in keeping the cost down. Though the data is not available separately for fiscal before 2012–2013, an analysis of data from 2012–2013 to 2016–2017 reveals that IndiGo's average expenditure on this head was 11.01 per cent of overall operational cost, while SpiceJet, GoAir and Jet Airways spent 17.9, 11.2 and 16.55 per cent, respectively, during this phase. The lower expenditure on this account by IndiGo when it had become the leader indicates that it

was able to keep this cost on a lower side even during its initial years.



Establishment cost (general administration + miscellaneous expenses) of overall operational cost (in percentage)

The chart below reveals IndiGo's expenditure on ticketing and sales promotions as compared to other airlines. IndiGo knew where to spend to make a greater impact on PLF.

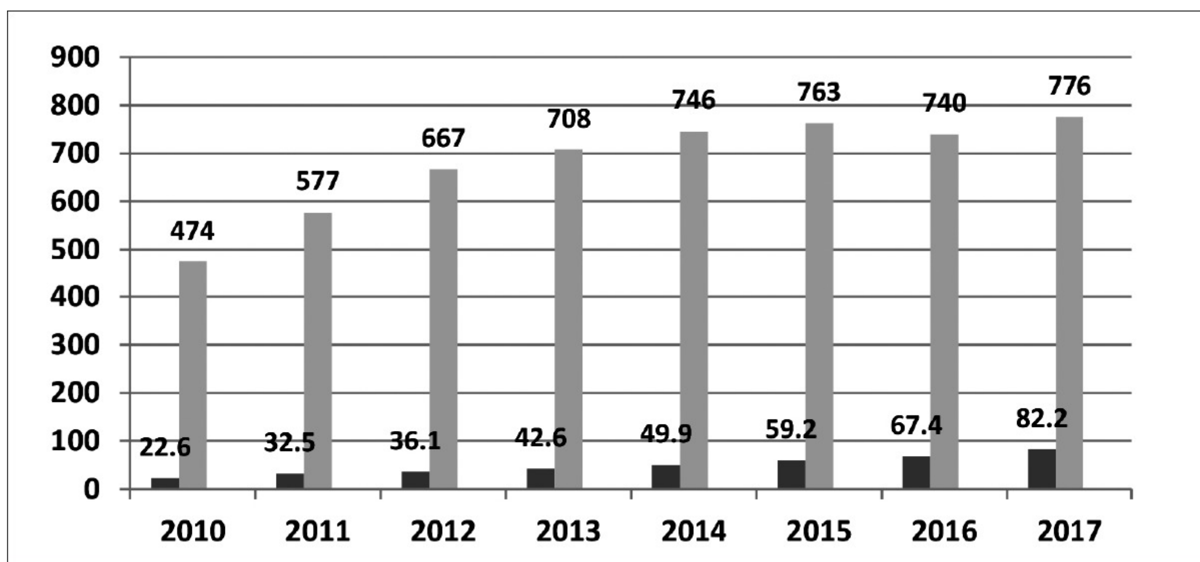


Ticketing, sales and promotion costs as percentage of overall expense

Ancillary Revenue

The world over, airlines are focusing on increasing the revenue from ancillary streams to top up their overall revenue. For an LCC,

increasing ancillary revenue share is all the more critical because they have very limited leeway to play with the passenger fare.

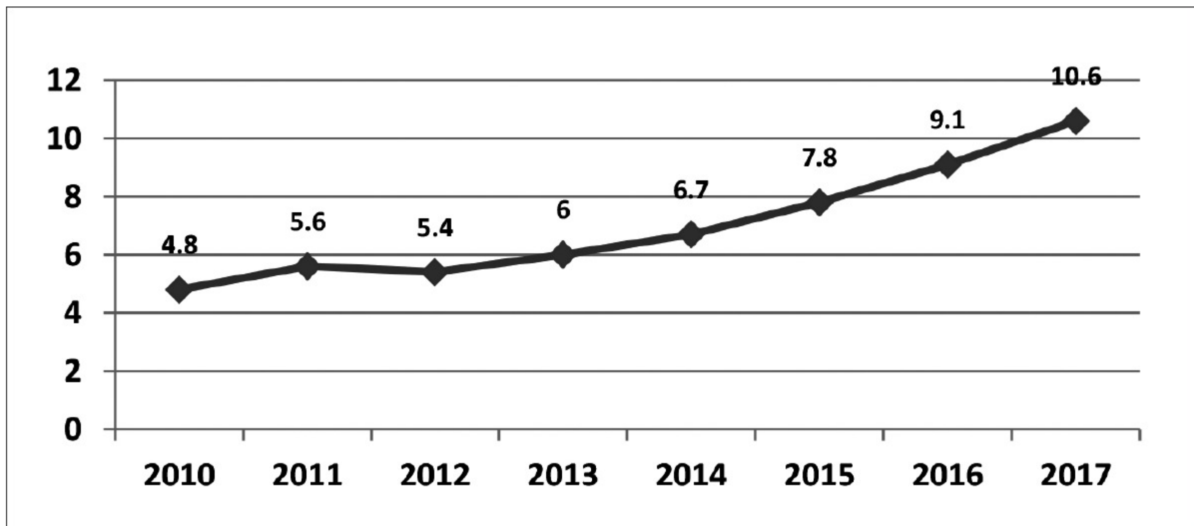


Global overall revenue vs ancillary revenue* (in billion)
Source: CarTrawler WorldWide
**Ancillary revenue includes all revenue streams other than passenger fare i.e. (a) ex-baggage (b) freight (c) mail (d) other operating revenue*

Ancillary revenues include, but are not limited to, items such as freight revenue (both passenger freight and belly freight), loyalty programmes, mails, in-flight meals, premium for preferred seats and easy check-ins, and the likes.

A joint study conducted by IdeaWorks Company and CarTrawler[104] estimated global airline ancillary revenue to reach $82.2 billion in 2017 which was a 22 per cent increase over the 2016 figure and a whopping 264 per cent over 2010 number.

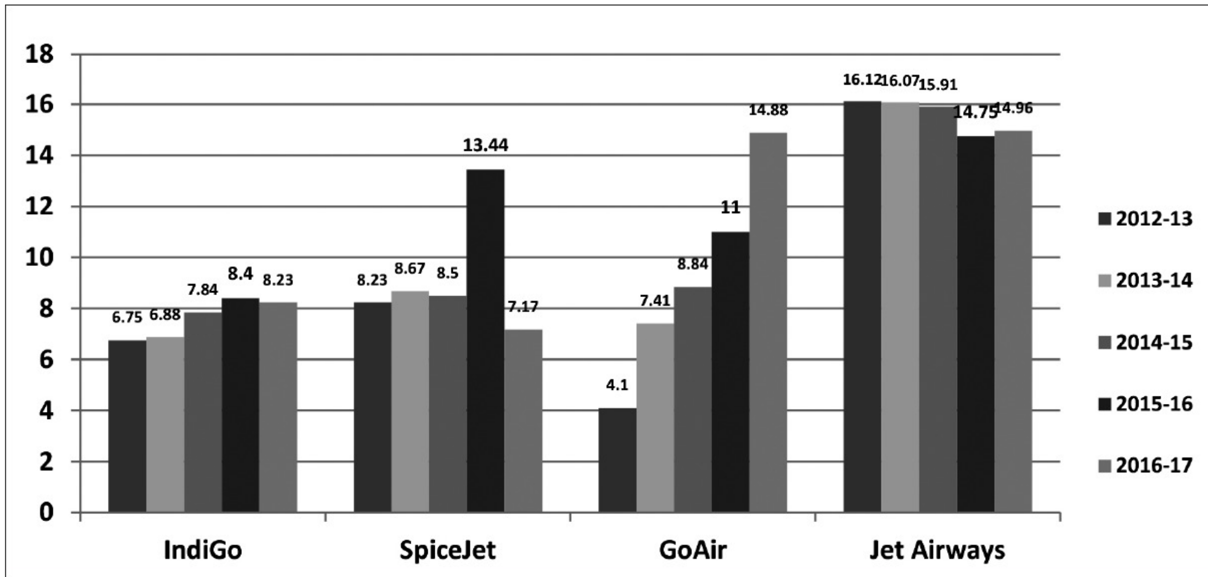
With growth in tourism, the combo offer of travel and accommodation termed as ‘from airline to resort service’ has emerged as the new, big revenue stream for airlines. American low-cost airline Allegiant Air owned by Allegiant Travel Company has broken new grounds, with this combo model which also helped it emerge as the ninth largest commercial airlines in the USA within a relatively short span of time. Apparently, Allegiant generates over 30 per cent of its revenue from ancillary streams.[105]



Global overall ancillary revenue* (in percentage)
Source: CarTrawler WorldWide
**Ancillary revenue includes all revenues streams other than passenger fare i.e. (a) ex-baggage (b) freight (c) mail (d) other operating revenue*

Budget airlines such as Southwest, Ryan and easyJet have been quite innovative on this front. In 2015, Southwest generated nearly $2.5 billion from ancillary revenues, which was approximately 8.5 per cent of its overall revenue that year.[106] LCCs in India have also been generating this revenue ratio from ancillary sales, while FSCs like Jet Airways have been doing better on this front. The accompanying graphs reveal the respective ratio of ancillary revenues (ex-baggage + freight + mails + other operating revenue) to total revenue for 2016–17 for IndiGo, SpiceJet, GoAir and Jet Airways as 8.23 per cent, 7.17 per cent, 14.87 per cent, and 14.93 per cent, respectively.

However, there is little doubt that LCCs in India will have to focus more on this front in the future, and IndiGo, being a well-integrated company (as its parent IGE is well-immersed in the hospitality sector), is in a better position to grow ancillary revenue.



Ancillary revenue as percentage of overall revenue
Source: DGCA

A low-cost operation presumes a very efficient, tight cost structure and maximum utilization of its resources. In India, there are no secondary airports, so the cost optimization has to be achieved on other fronts such as greater utilization of fleet, higher fleet occupancy (high load factor), low HR cost, low selling and distribution cost, and higher money from ancillary services, among others.

A statement by Aditya Ghosh, former CEO, sums up IndiGo's cost and operational strategy aptly:

> The core tenet of this model is to have a very efficient cost structure. We placed one of the largest aircraft orders in history, helping us negotiate favourable terms with our suppliers, resulting in a long-term structural cost advantage. It is also important that our planes continue to fly for as long as possible so that we maximize revenue opportunity from the assets that we have invested in. We optimised the utilisation of our assets at a level comparable to that of the best airlines globally. This has been made possible because we have invested in a modern and fuel-efficient fleet, which enhances aircraft reliability and improves the technical dispatch reliability. In fact, we have achieved the highest of operational reliability according to Airbus, which awarded benchmarks us its Best Operational Excellence Award in the large-fleet category for the second consecutive time.

Leveraging the Synergy of the Group's Complimentary Verticals

Amongst all airlines in India, IndiGo is by far the best integrated company—forward and backward, vertically and horizontally. While much has been written about its exterior strengths, it is IndiGo's enviable back-end support that provides it with that extra muscle and extra punch to lord over the competition. This has been largely because of its parent company—Rahul Bhatia's nurtured IGE.

IGE,[107] which began as a travel and hospitality outfit, is today a huge conglomerate, an umbrella corporation, having eight diversified but complimentary business verticals:

(i) Aviation
(ii) Hospitality
(iii) Travel commerce
(iv) IT and BPM
(v) Airline management
(vi) Advanced pilot training
(vii) Aircraft maintenance and engineering
(viii) Real estate

Together, the group employs more than 25,000 professionals and has 126 offices in 60 cities globally. All divisions are managed by well-qualified professionals, who have been given a fair degree of management autonomy to achieve well laid out objectives and goals.

All these verticals compliment and support each other in one way or the other, directly or indirectly, and IndiGo has been the biggest beneficiary of its combined strength and synergy.

InterGlobe Technology Quotient (ITQ), is the official distributor of Travelport in six markets across Asia Pacific region, including India and Sri Lanka. The NYSE-listed Travelport[108] is the world's leading Travel Commerce Platform providing distribution, technology, payment and other solutions with an annual revenue of over $2.1 billion. It aggregates content from approximately 400+ airlines, 650,000 hotels, and 35,000 car rental locations. IndiGo had signed an agreement with the company in September 2016 whereby its content (fares and ancillary products) were to be distributed

worldwide via Travelport. ITQ[109] has network across 500 cities, has 20 dedicated offices and 14 REPs, and reaches out to over 36,000 agency terminals. This association enabled IndiGo to provide its content via the more efficient API connection, rather than the more traditional fare filing methods. In addition, this distribution partnership has enabled IndiGo to reach out to travellers in international markets in a more efficient and real-time basis. Now that IndiGo's next growth plan focuses majorly on expanding international operations, this kind of association provides it with the necessary tool to remain one up on competition.

In an interview with the magazine *Aviation World*, just after Travelport and IndiGo had announced their global tie-up, Rabih Saab, president and MD, Europe, Middle East, Africa and South Asia, Travelport, had pointed out that the Travelport-IndiGo partnership will enable the airline to sharpen its edge over competition.

> For IndiGo, Travelport's unique airline merchandising capabilities provide real benefits that weren't previously available through the traditional GDS platform. These include the ability to display and differentiate IndiGo's brand attributes and offering in a similar way as they do on their own website, and being able to better explain their products and services to travel agencies as well as direct to the end traveller through OTAs. Travelport provides a significant opportunity for IndiGo to reach new travellers both in domestically and internationally markets. Our main goal is to support customers' familiarization with IndiGo's brand proposition. Travelport's Travel Commerce Platform will help IndiGo increase revenues, lower costs and efficiently reach travel buyers in every channel on nearly every continent.[110]

With Travelport tie-up, IndiGo's content got rolled out in 180 countries!

Today, more and more leisure and business travellers are looking at a consolidated package with a good deal on air ticket and accommodation. Now, if an airline can offer a better package than its competitors, then it has a better chance of its seats being sold out. IGE also has the largest inventory of business and leisure rooms in the country, owing to its partnership with hospitality major Accor. InterGlobe Hotels is a joint venture between IGE and Accor Hotels. The Accor Group owns, operates and franchises 3,700 hotels across five continents, representing diverse brands and offering travellers

the world over a gamut of stay options. The association goes back to 2004 when Accor approached Rahul Bhatia for the development of the Ibis network of hotels in India, Nepal, Sri Lanka and Bangladesh. The company maintains that this partnership is the single largest financial commitment in the mid-market hospitality segment by any Indian corporate entity and an international chain. As of now, sixteen Ibis hotels are operational while seven are under development. Ibis has presence in Gurugram, Delhi Airport, Mumbai Airport, Navi Mumbai, Nashik, Pune, Bengaluru, Coimbatore, Jaipur, Chennai, Hyderabad, Goa and Kochi. By 2022, Ibis will have a portfolio of 4,000 rooms in India. No other budget airline in India has direct linkages with hospitality properties.

With 15 state-of-the-art global delivery centres, InterGlobe Technologies (IGT) has emerged as a leading provider of IT, business process management and digital solutions. IGT specializes in providing comprehensive and customizable solutions for a differentiated customer experience, enhanced business process management and domain driven technology management. As per the company, IGT processes over 10 million PNRs and issues more than three million tickets annually. It has expertise on six GDS (Global Distribution System) across 30 plus travel processes and 100 plus travel technologies. This division also provides multichannel customer services across voice and non-voice in over 20 international languages including Cantonese, Mandarin, Japanese, Korean, Thai, Urdu, Arabic, Spanish, Russian, German, French, Polish, Dutch, Norwegian, Sinhalese and more.[111] The airline management division of IGE specializes in providing market entry strategy, sales and marketing, legal and regulatory support, recruitment and staffing as well as cargo management. It has offices in three countries including UAE, Qatar and the UK.

In the UAE, this division is called ‘The Navigator Tourism and Travel LLC (Navigator)’. It currently handles the General Sales Agent (GSA) of IndiGo and Sonhando, a Destination Management Company (DMC) based out of Portugal. In Qatar, this division operates through its wholly owned subsidiary called InterGlobe Air Transport Limited W.L.L. In the UK, its subsidiary InterGlobe Air Transport Limited (IGAT) focuses on airline consolidation and serves

the B2B and ethnic Indian market. IGAT's sales network caters to 3.5 million kg of export cargo and 2.6 million kg of import cargo per month. In India, this division is amongst the leading GSAs with a client portfolio of ten of the world's leading international airlines, river cruise and car rental company.[112]

Not long ago, Indian pilots had to go abroad, to mostly expensive European centres, to undertake advanced type rating pilot training. Often, an airline had to bear the entire cost or part of the cost, thus making MRO services and pilot's training a major expense for an airline. Here too, IndiGo gets in-house support, which helps it train and pick up the best candidates for cabin support and ground handling.

IGE was the first airline owner to establish its own training centre, the CAE Simulation Training Private Limited (CSTPL),[113] in partnership with CAE Inc., a world leader in modelling, simulation and training for civil aviation and defence in Greater Noida, a satellite town within Delhi NCR. CSTPL is now the largest Airbus A320 approved training centre in India. With its six simulator bays, the centre trains over 10,000 aviation professionals every year. The facility is open to other airlines such as GoAir foreign nationals and attracts pilots from neighbouring countries such as Nepal, Bhutan, Bangladesh and Myanmar due to convenience of nearness and relative cost saving. At this facility, existing pilots can also get their licences renewed.

Given the scarcity of quality pilot training centres in India and growth projection for pilots' requirement, this division has excellent prospects. When it wanted to raise a fund of $9.32 million (₹63.00 crore) for setting up this project, the leading rating agency ICRA had assigned 'A' rating (stable outlook) to its bank credit line request.[114]

The School for Aircraft Maintenance Engineering (SAME), InterGlobe's latest venture, is a DGCA-approved school offering a three-year Aircraft Maintenance Engineering Course in the Mechanical and Avionics stream. SAME aims to be the finest school for Aircraft Maintenance Engineering in India, offering world-class education and practical knowledge through job training. Its 25,000 sq. ft campus in Greater Noida boasts of state-of-the art infrastructure with 12 well-equipped workshops. It also has an in-built

hangar with a Hawker HS 125-700 aircraft to impart the highest level of practical training and skills. The first batch started from July 2017.

InterGlobe Real Estate (IGR) manages funds and commercial real estate assets in excess of $300 million seeded by the parent, IGE. According to the company:

> IGR plans to follow a core plus real estate strategy with flexibility to make select investments in the value add and opportunistic spectrum while acquiring and building quality commercial real estate assets pan-India. IGR aims to create one of India's leading real estate portfolios of high grade yielding assets by adding more to the current portfolio of a million sq. ft.

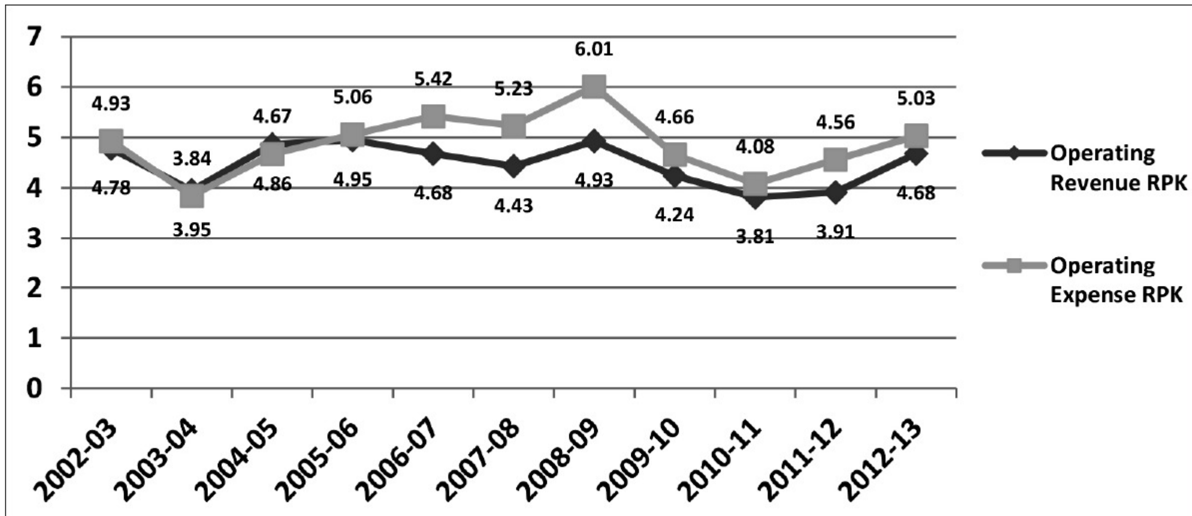
Going by the wide array of activities that IGE is involved in and given the fact that Rahul Bhatia is always looking out for more businesses to get into, one never knows, tomorrow, he could be building airports too!

So What Really Worked in IndiGo's Favour?

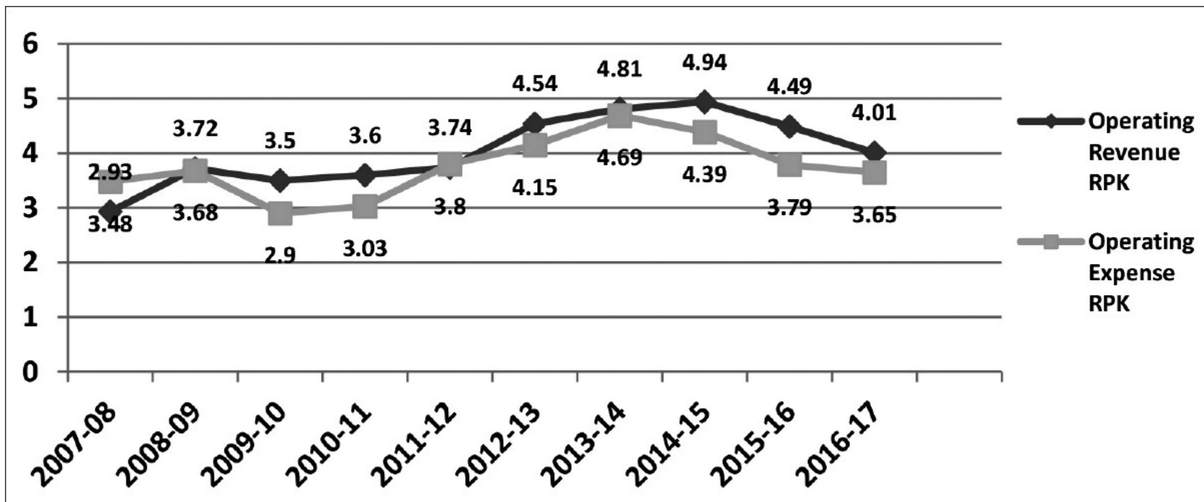
Three things stand out in the case of IndiGo which catapulted it ahead of competition: (a) Steadfast adherence to cost optimization goals (b) Consistency of performance (c) Managing to do more with less.

Right from the beginning, IndiGo ensured industry-leading on-time performance which gained it respectability among flyers. And it ensured that despite being a low-cost offering, it was never seen as cheap or sloppy in any of its interfaces with flyers. Its staff was smartly dressed, courteous and enthusiastic, things on which LCC pioneer Air Deccan had severely floundered. All this resulted in making IndiGo a preferred airline and its financial performance better than the competition.

In the charts given below, comparing IndiGo's operating revenue per kilometre vs operating expenses per kilometre will make this fact evident.

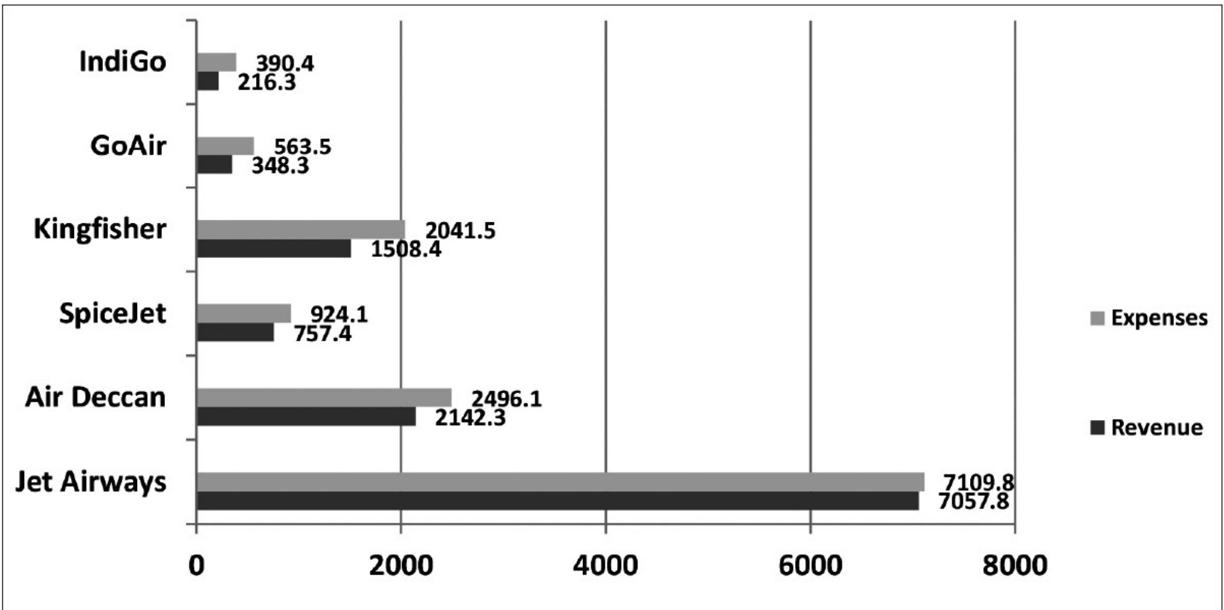


Indian airline industry's average operating revenue and average operating expense (in Rs)
Source: DGCA

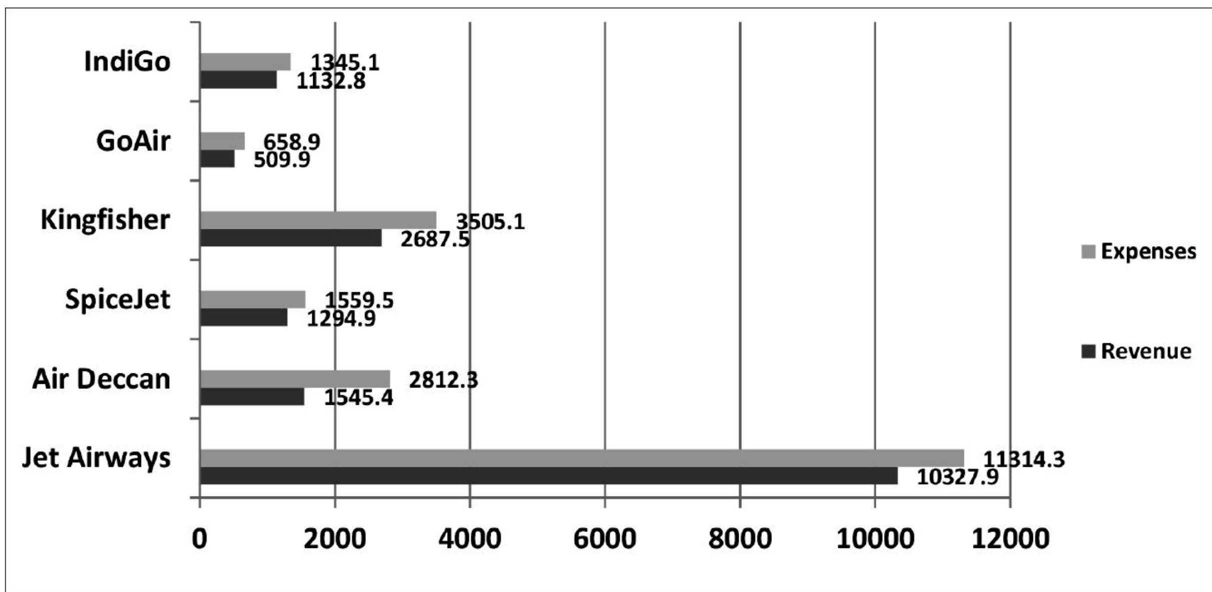


IndiGo's average operating revenue and operating expense (in Rs)
Source: DGCA

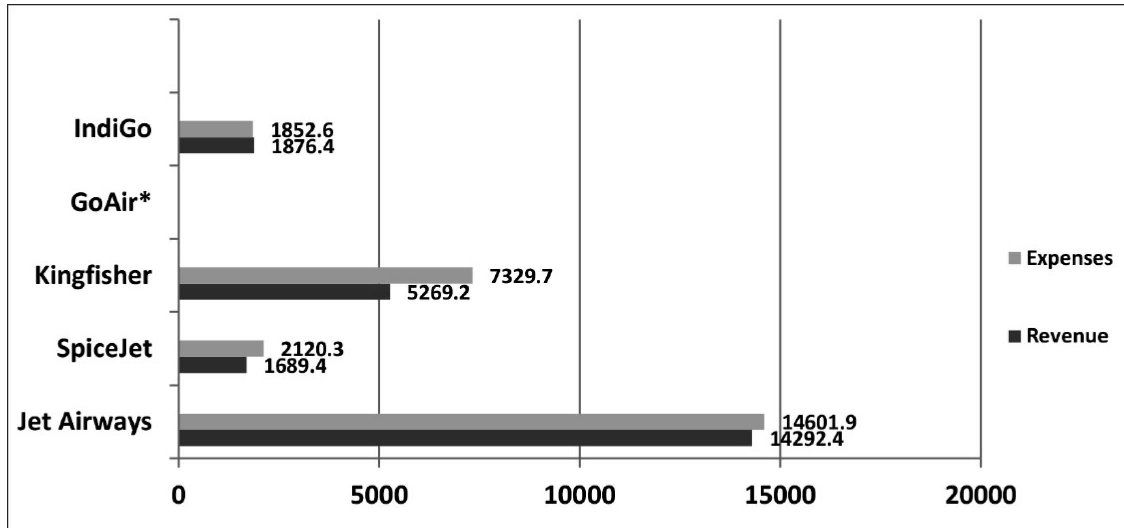
Charts below show IndiGo and other airlines' annual revenue vs annual expense from 2006–2007, the year when IndiGo commenced operations till 2012–2013, the year when IndiGo became the market leader in domestic market, highlighting its prudent financial management.



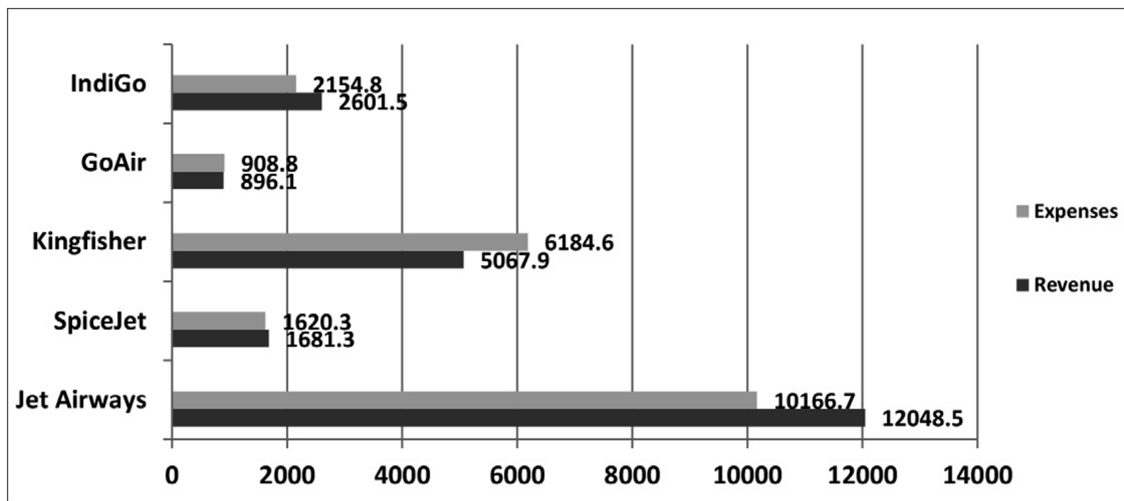
FY 2006–07 (in crore)



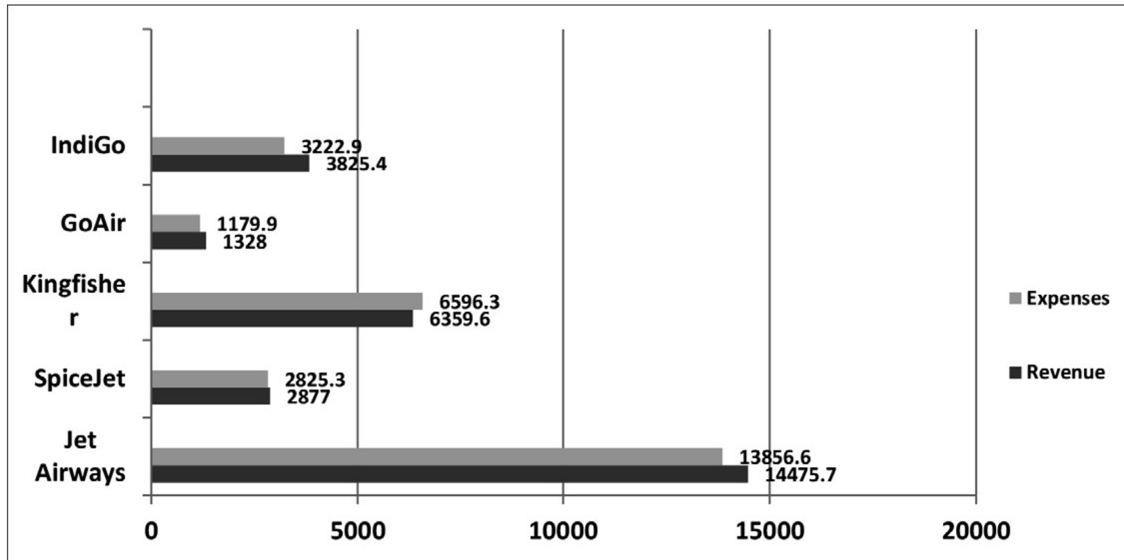
FY 2007–08 (in crore)



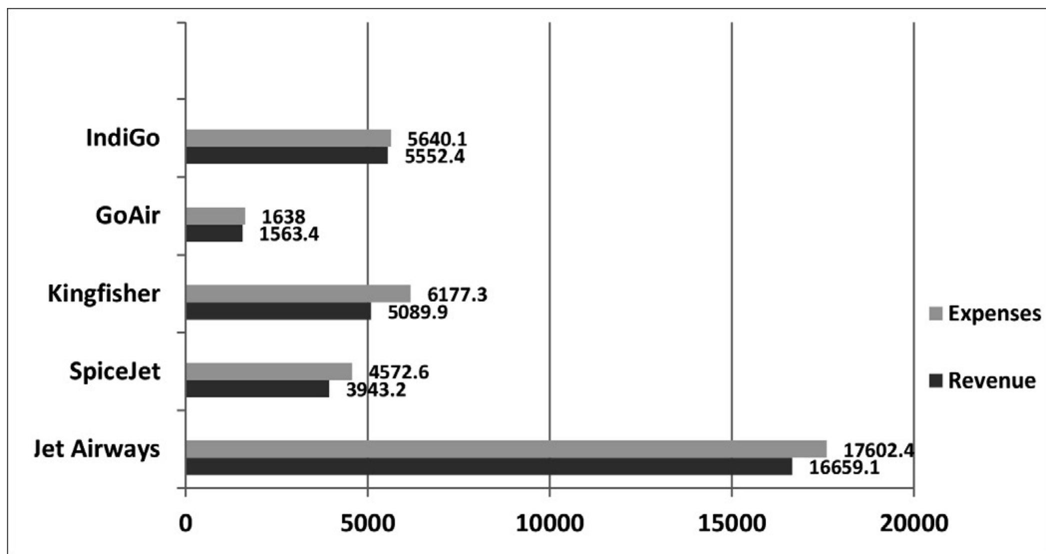
FY 2008–09* (in crore)
**GoAir's data is not available for the year*



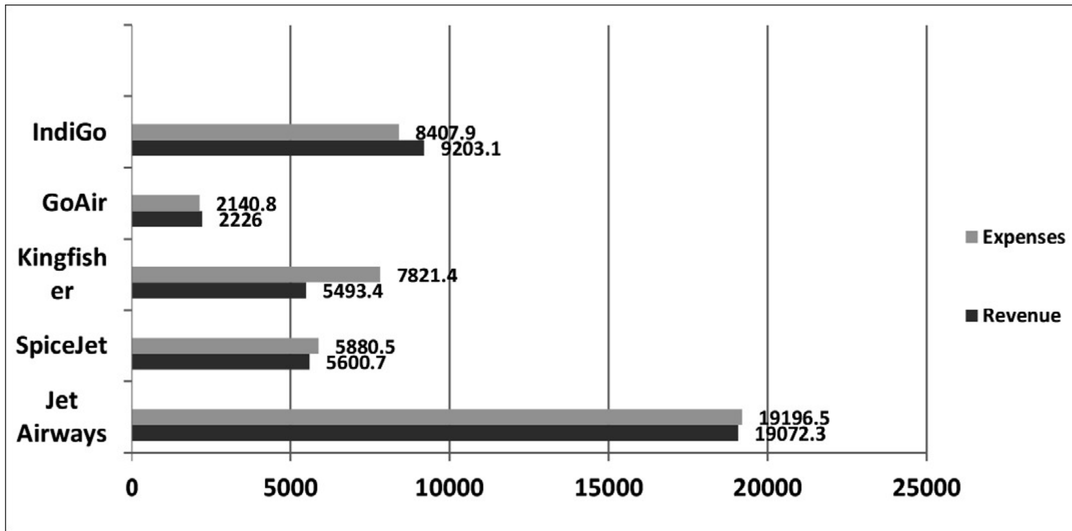
FY 2009–10 (in crore)



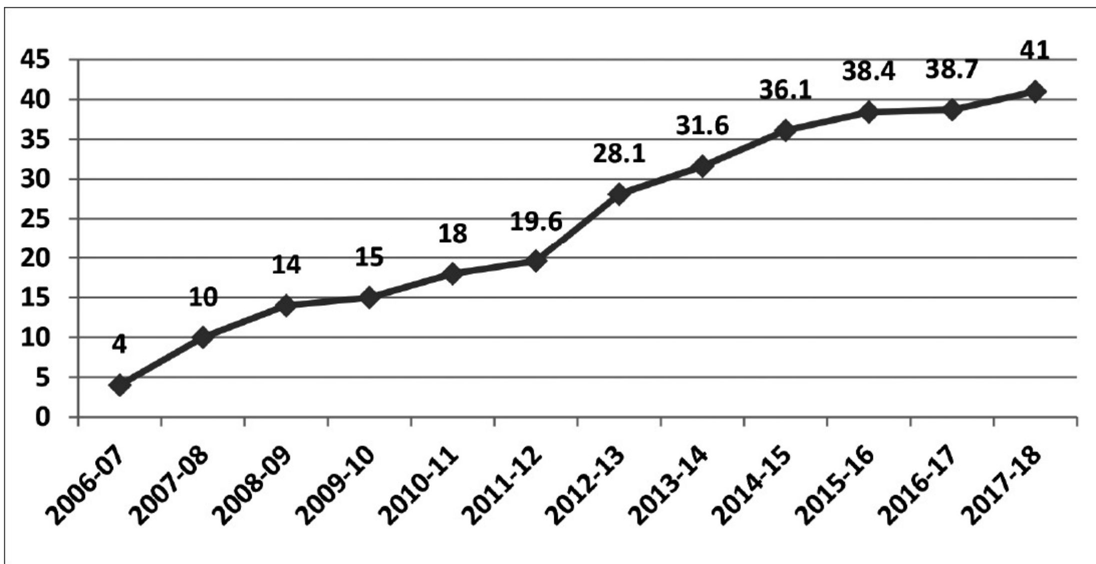
FY 2010–11 (in crore)



FY 2011–12 (in crore)



FY 2012–13 (in crore)



IndiGo market share growth over the years (in percentage)

6

The Competition, as IndiGo Gained Altitude

When IndiGo entered the scenario, there were six private carriers—Jet Airways, Sahara Airlines, Deccan Airways, Kingfisher, SpiceJet and GoAir—who were around, besides public carriers—Air India and Indian Airlines. Vistara and AirAsia India came much later. Here is how IndiGo's competitors fared during the time of its entry while it was gaining altitude. Just to refresh, Sahara merged with Jet Airways, while Deccan was taken over by Kingfisher.

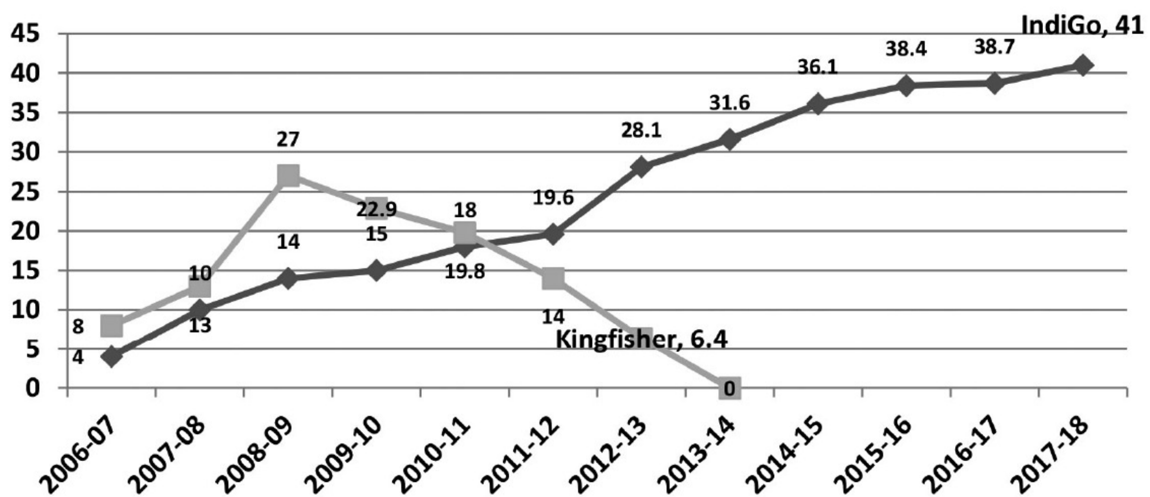
Kingfisher: As It Nosedived, IndiGo Soared!

From being the market leader in 2009 to crashing by 2012, the Kingfisher saga will continue to baffle aviation watchers and investors alike. With the benefit of hindsight, there are many reasons one can think of for Kingfisher's nosedive, but few will weigh in more than others.

IndiGo gained most from Kingfisher's fall and became the top domestic airline.[115] Often the subject of ridicule and scepticism by Kingfisher's flamboyant founder, Vijay Mallya, IndiGo ultimately had

the last laugh.[116] IndiGo more than any other airline was in the best position to wrest the grounds being ceded by Kingfisher in its last two years of flight.[117]

As Louis Pasteur said, ‘Chance favours the prepared mind’, IndiGo was the best prepared to seize the chance opportunity. It had the necessary fleet delivery in the pipeline which made it well-prepared to fill in the slots vacated by Kingfisher. No other airline, neither Jet nor Spice had the fleet readiness, the business plan or the financial bandwidth at that time to fill in the vacuum created by Kingfisher as quickly as IndiGo.



Market share (in percentage)

During its entire eight years of operation, Kingfisher never made profit and with each year, its financial costs kept on mounting.[118] There came a time when it became obvious that it would never recover from its financial burden. Its last bait to lure and pressurize the government to bail it out also failed. By 2011, Mallya had less than 10 per cent stake in the venture. Majority of its stocks had been pawned with a consortium of public-sector banks led by SBI.[119] So, he knew well that more than him, it was the public-sector banks which would be hurt by Kingfisher’s shutdown. But was Kingfisher big or vital enough for the Indian aviation sector to have made the government bail it out even at the cost of suffering public backlash?

Writings On the Wall

Kingfisher's financial situation became more precarious from early 2011 even as Mallya was busy expanding its international operations. The writing on the wall was becoming clearer. It also didn't help that Praful Patel was left the aviation ministry in January 2011. Yet, it is surprising that even at the end of 2011, when troubles for Mallya had really mounted beyond redemption, there were still a few aviation experts and financial analysts who were unwilling to write off Kingfisher—they probably believed Mallya could pull off another rabbit from the hat by leveraging his influential friends within the government.

Mallya's own public image—that of a man who loved ostentatious show of wealth and high-profile parties but remained insensitive and apathetic to the woes of his airline and staffers—also didn't help. By the end of the Kingfisher saga, it was clear that Mallya had no real stake in saving Kingfisher other than the fact that his image and personal standing could take a big hit.

What is also tormenting about the Kingfisher episode is the conduct of public sector banks.[120] Taxpayers of this country will always be baffled at the fact that banks kept refinancing Kingfisher again and again. Was there a total lack of understanding of the airline business or were they acting under the direction of some powerful invisible hands within the government? Whatever it was, by the end, the entire Kingfisher story had become more a saga of financial scandal than a tale of business failure.

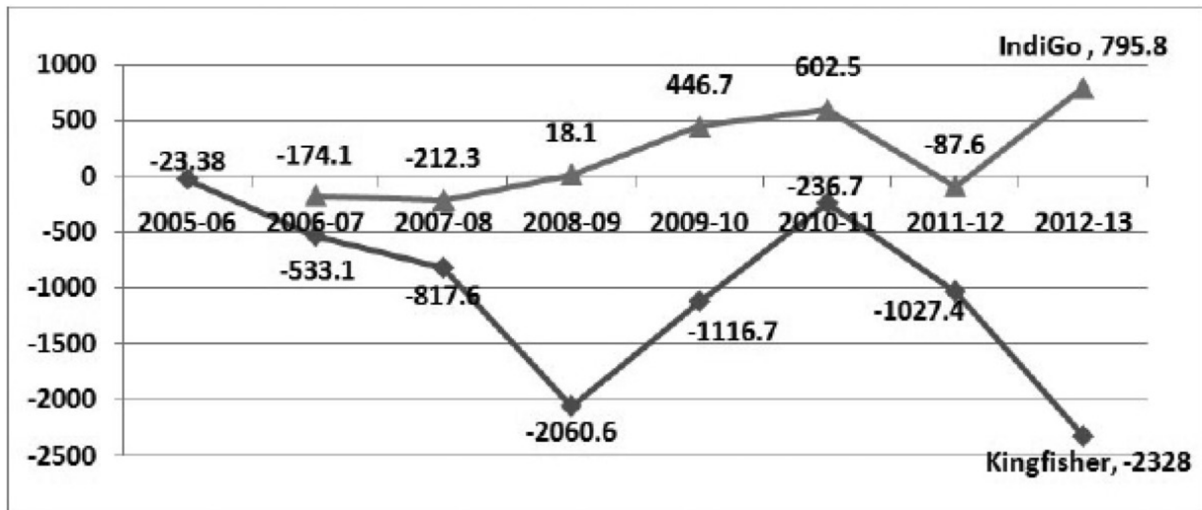
The Fluid Business Model

Kingfisher Airlines started off as an all-economy, single-class configuration aircraft with food and entertainment systems. But just after a year of operation, it changed track and started projecting itself as a full-service upmarket airline. It also changed the cabin configuration while introducing business class and reducing the overall seat count. According to Kapil Kaul, CEO of CAPA, 'Kingfisher made too many changes in their business model and strategies and that led to strategic weakness.'[121]

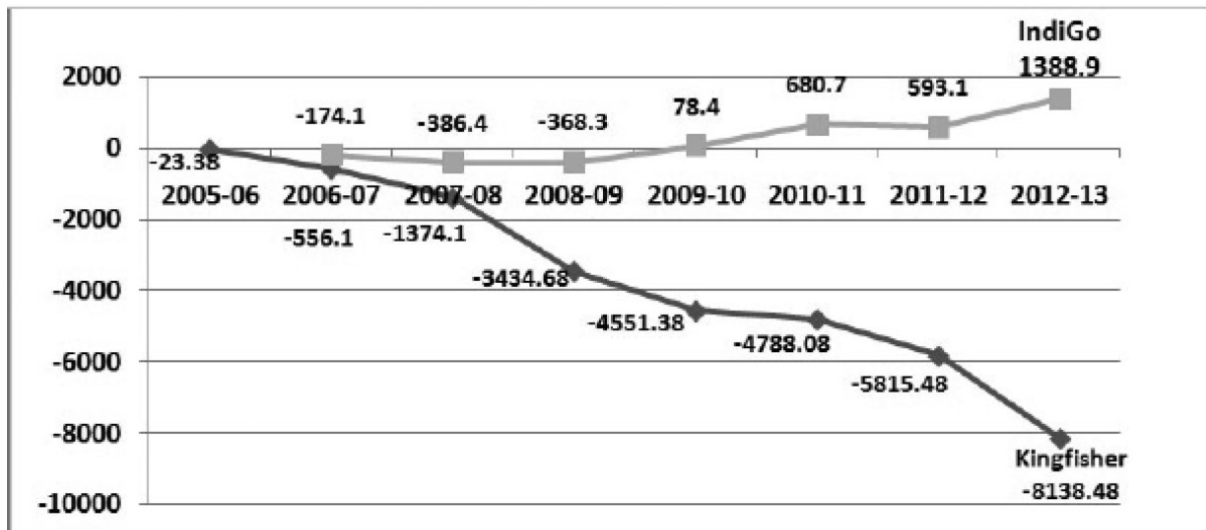
Mallya wanted to have a pie in every segment, and every class. So, he acquired Air Deccan and soon rebranded it as Kingfisher Red—a low-cost sibling of Kingfisher Airlines. But in September 2011, when it was clear that LCCs were the real stars of the Indian sky, Mallya announced the closure of Kingfisher Red, stating he did not believe in LCCs—'We don't believe in low-cost operations anymore!'[122]

Growth Alone Doesn't Ensure Profitability

There was a time when every affluent person wanted to own a television channel. There also came a time when everyone wanted to start an airline. But the Indian sky has been a graveyard that has sunk in more airlines than have survived. The Indian sky post the 90s has been a story of high growth and high mortality—turning the traditional management wisdom upside down. You don't always end up making money simply because the market is exploding. If the commercial matrix is not right, one can lose money faster than one will in a static or downhill market. If an airline is making a profit of one rupee for every kilometre flown per flight, the airline's profit will multiply by as many times as kilometres flown. But if the situation was reversed, it will also end up making as much loss. So, just the fact that a market is expanding fast doesn't guarantee profit—certainly not in airline business. CAPA estimated that in 2011, in the domestic market, India's airlines were losing $25–$30 every time a passenger boarded an aircraft.[123] Kingfisher never had its commercial calculations in place. Perhaps the promoter thought that just like the liquor business, he would squeeze in margins even when one didn't see it on paper. On the other hand, IndiGo knew right from the beginning what it wanted and how it would go about it.



Year-wise profit/loss, IndiGo vs Kingfisher (in crore)



Cumulative profit/loss, IndiGo vs Kingfisher (in crore)

Kingfisher's high-cost, full-service model also did it in. It needed to extract more premiums from flyers to cover the cost but there was a limit to which a flyer would cough up money for the extra frills or thrills. Everyone loves flying king-size but not paying king-size.

There also came a time when Kingfisher was obliged to charge fares lower than budget carriers such as IndiGo to get customers. 'No-frills carrier IndiGo charged the highest fares on several sectors, while so-called "first class" airline Kingfisher was the cheapest, latest official data for July shows, showcasing yet again some of strange

ironies of India's aviation business,' observed a leading financial daily.[124] It further wrote, 'Kingfisher Airlines is the new low-cost carrier in terms of pricing as the analysis by the aviation regulator has pointed out how the Vijay Mallya-owned carrier is offering lower average fare than the industry average.'

The Perils of Unprofessional Management

A big problem with Kingfisher was that it never really had a professional management. Nigel Harwood was its CEO for the first year of its operations, but that was about all. Kingfisher always remained a one-man show unlike the professional and team-managed IndiGo. Mallya always believed that he was sufficient to manage the airline all by himself. By the time creditors forced him to bring in a professional CEO, Sanjay Aggarwal, in September 2010, it was too late. Commenting on the affairs of airline, aviation analyst Mohan Ranganathan pointed out, 'Things went out of control further because Kingfisher never had a professional airline management in place.'[125]

The Cost of Impatience

Vijay Mallya was always in a hurry to make Kingfisher the undisputed leader of the Indian sky. The king of good times and the king of Indian liquor business was just too impatient to see himself as the undisputed emperor of Indian sky too.[126] Mallya appeared to believe that his flamboyance and influence within the government of the day would ensure Kingfisher's rise to the top double quick. Perhaps, he thought he would decimate his aviation rivals the way he had defeated his liquor business rivals a few decades ago. That too never happened.

In his impatience to climb to the top, which also meant starting international operations, Mallya bought Air Deccan in 2003 at a price which defied justification and reflected his desperation.[127] Meanwhile, Jet Airways had acquired Air Sahara, fuelling a ruinous race to the bottom.[128]

The Crash

The years 2010 and 2011 were definitely not the best years for the Indian airline sector, and it was not the time for an airline to be caught up in financial vortex. The fuel price was skyrocketing and operational costs were shooting. But instead of going slow, steady and in a measured way like IndiGo, Mallya kept up with his aggressive expansionist plans which further dented Kingfisher's financial situation. By the time it started nosediving from the beginning of 2012, Kingfisher had accumulated a loss of over ₹9,000 crores. Its net worth had turned negative from 2009 itself and by the time it crashed, its negative net worth had crossed ₹18,000 crores.[129] While banks and creditors still rue over this disaster, thousands of its former employees continue to remain unpaid and languish over a crashed dream. On the other hand, IndiGo demonstrated how prudent fiscal management and professional working can cut through tough times and help an organization sail through strong headwinds!

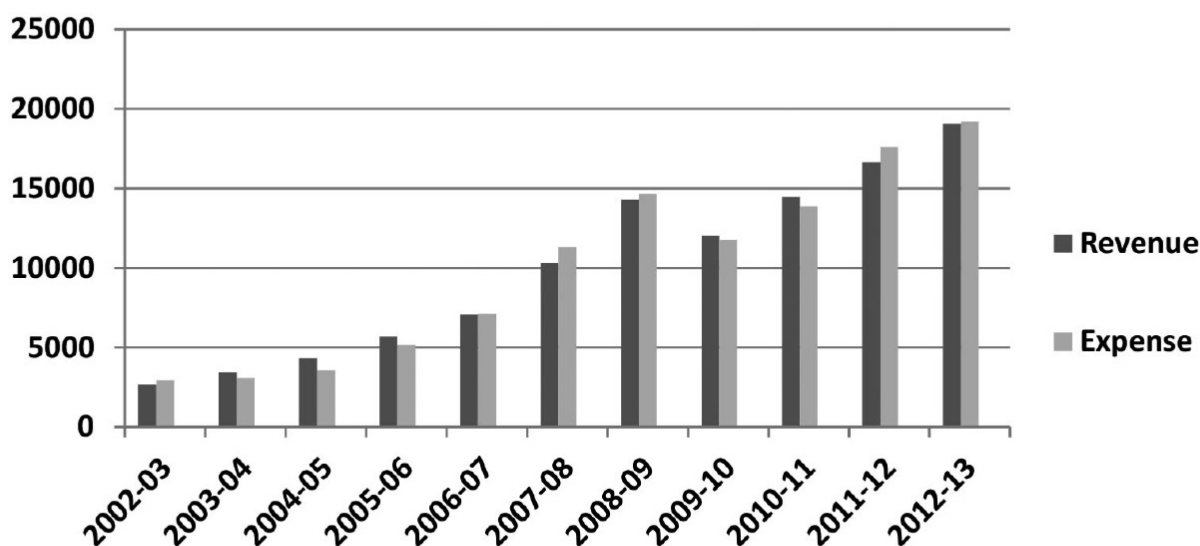
Jet Airways: The One Which Just Quit the Battle for Domestic Turf!

Naresh Goyal-promoted Jet Airways, the oldest surviving private airline in India and once a dream airliner, has turned out to be an enigma. It continues to be the biggest Indian airline company by revenue but is also saddled with the largest debt in the airline industry, barring public carrier Air India—a case of classic paradox. In May 2018, it completed 25 years of its existence but is now in the midst of serious existential crisis due to mounting debts and losses. With unexpected fourth quarter loss of ₹1,040 crore in FY 2017–18[130], its net worth turned negative,[131] i.e., its liabilities have exceeded its assets, while its debt mounted to ₹14,505 crores as on 31 March 2018. A year earlier, it had a debt of ₹11,934 crores, despite having a profitable run for eight consecutive quarters and taking measures to reduce its debt. This is far more than the ₹9,000 crore of debt which Kingfisher was saddled with when it crashed. As

on July 2018, Jet's assets were valued at less than ₹4,500 crore, while its market capitalization had also shrunk. Its market capitalization was also below ₹4,500 crores.

Its alarming debt situation prompted its independent auditor, DTS & Associates, to remark that Jet Airways' future would be at stake if it was unable to raise funds due to its negative net worth. Raising new debt is not going to be easy for Jet as it is currently assigned 'BBB' credit rating by ICRA.[132] Any new debt will also come at a higher cost.

Jet Airways plans to purchase 75 narrow-body Boeing 737 planes for nearly $9.0 billion[133] as the airline seeks to bolster its presence in the fast-growing domestic aviation market.[134] Raising money for new acquisitions now is going to be extremely difficult for Jet.

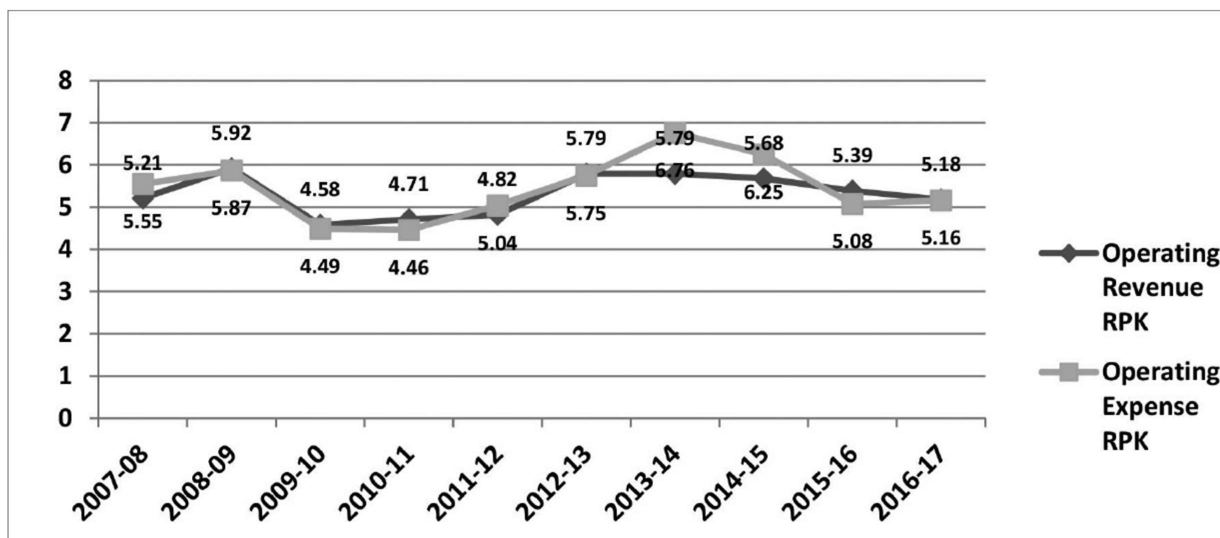


Jet Airways*: Revenue vs expense time series (in crore)
From 2007–08, Jet Airways figures also includes JetLite's financials

The airline is also the largest international operator from India, something that is considered more rewarding than domestic operations, but that hasn't helped the airline wriggle out of its financial mess. For record, over 60 per cent of Jet's revenue comes from international operations. The assumption that Etihad's 24 per cent equity stake in the company, which was acquired in 2013,[135] was supposed to bail it out, hasn't happened despite the fact that it

got half of the lucrative India-Abu Dhabi routes and Jet Airways-Etihad together have virtual monopoly over this sector. Rumours also keep surfacing about Etihad looking to exit Jet at an opportune moment. Even though this is something that has been faithfully denied by Etihad management, that hasn't stopped rumours from surfacing at regular intervals.

Jet also received a major setback recently, when in May 2018, the Ministry of Civil Aviation denied its proposed merger with its subsidiary, JetLite.[136] No reason for denial has been cited either by the ministry or the airline. To recall, Jet Airways had purchased Air Sahara[137] way back in April 2007 in a deal which cost Jet heavily. After acquisition, Air Sahara was rebranded as JetLite and turned into the LCC arm of Jet Airways. But ever since the merger, JetLite never made any profit and continued to be a bleeding vein for Jet. Its new management's DNA has been that of FSC, and they could never align JetLite's operational strategy with the main FSC arm. The decision to buy Air Sahara will continue to haunt its promoter for a long time.



Jet Airways: Operating revenue vs operating expense time series

What Went Wrong?

Apart from regular explanations like high fuel costs and adverse aviation environment, how Jet managed to get so deep into a

financial pit continues to puzzle analysts and people like me alike. Its Chairman Naresh Goyal has been a smart man, had a fair degree of understanding of airline business, and really knew how to get things done or for that matter how to even put a full stop to future competition. Remember all the talks that had surrounded the government's denial of permission to the first proposal of Tata-Singapore Airlines to start an airline in India during NDA I? Sanjay Nirupam, who was a Shiv Sena Rajya Sabha MP at the time, had gone on record stating that it was Pramod Mahajan, Vajpayee's man Friday and possibly the most powerful man in NDA I, who had stalled the Tata-Singapore proposal at the behest of his friend Naresh Goyal. Shiv Sena was also an ally in NDA I.[138]

And despite the conundrum[139] behind its initial source of finances,[140] Jet Airways with its fine service and professionalism had brought respectability to the private airlines and had helped transform Indian aviation in a big way. Its growth, after its first flight in 1993 from Mumbai to Ahmedabad, was impressive and it had soon begun to challenge the government carriers Air India and Indian Airlines (Air India Express later on) for market share. There came a time when it commanded huge respect, had the biggest market share and was the preferred airline for corporate travellers while having the biggest share in metro routes. It had a fantastic lead in the premium Delhi–Mumbai route. Jet Airways was also the first private airline to begin international operations.

By the end of 2009, both Kingfisher and Jet Airways had almost the same market share of 28 per cent each. IndiGo was a distant fourth with 12.5 per cent market share after Air India which had 15.1 per cent market share. From here on, Kingfisher's slide had begun but it was not Jet Airways that capitalized on its decline, but LCCs, and the lion's share was grabbed by IndiGo. Surprisingly, Jet's domestic market share also started declining. Perhaps, it got into the belief that it will not be able to compete with LCCs. At the same time, it had started diverting more and more of its fleet to international operations. As IndiGo had the best fleet planning, it was able to quickly take over the spots vacated by Kingfisher.

By mid-2010, IndiGo had overtaken Air India to become the third largest domestic airline. A year later, it had overtaken Kingfisher to

emerge as the second largest and by early 2013, it had overtaken Jet Airways to become the biggest domestic airline by passenger share. Meanwhile, Jet's domestic share had declined from 28.1 per cent in 2009 to less than 26 per cent by 2013. By the beginning of 2018, Jet's domestic market share had declined to 17.6 per cent and has not shown any signs of climbing. By early 2018, the new pecking order had IndiGo at the very top, by a very big margin, at over 40 per cent market share,[141] followed by SpiceJet with 13 per cent, Air India with 12 per cent and GoAir with 8.4 per cent. Vistara and AirAsia had less than 5 per cent market share each.

The One-man Show

Much like Kingfisher, Jet Airways has always been a one-man show—led by its promoter Naresh Goyal. Jet was nothing without Goyal. But then, as the market and competition grew, and there was increased transparency in decision-making within the corridors of aviation ministry, one couldn't have survived with a legacy era mindset. To get work done smoothly and fast was one aspect but to sail an airline into profit zone was another thing—something that required a professional approach and a competent team.

The last professional CEO who had a long tenure at Jet was Wolfgang Prock-Schauer,[142] who was its CEO from mid-2003 till October 2009. Prock was replaced by Nikos Kardassis,[143] who remained at the helm till May 2013. Then came Garry Kenneth Toomey who resigned within seven months. He apparently had serious differences with Goyal over the way affairs of the airline were managed. After Toomey came Cramer Ball; apparently, Etihad had pushed for his case. But despite good performance during his time, he also didn't last long. On 17 December 2015, Cramer took industry watchers by surprise when his resignation became public. Cramer's resignation had been preceded by some top-level resignations. Cramer became the third CEO to have resigned after Etihad had picked up stake.

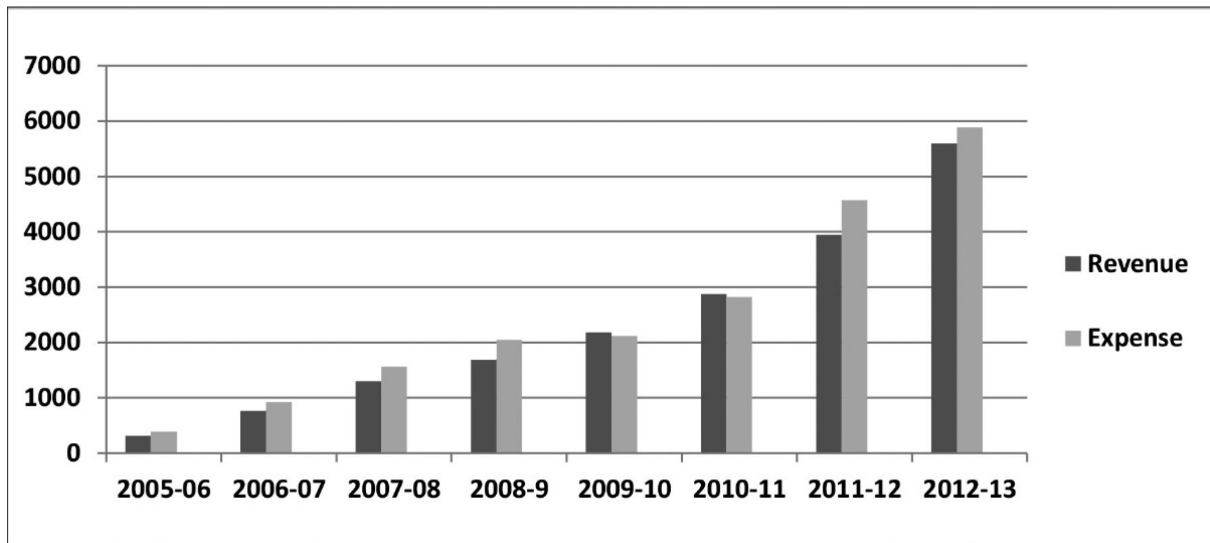
Jet remained without a full-time CEO for the next 15 months till the appointment of Vinod Dubey, an Indian-American with fine

experience at top positions in some global majors like Delta and American Airlines.[144] Now Nikos Kardassis is back again as an adviser![145] Let's see how long Dubey and Nikos last, given the mounting financial troubles of the airline. Goyal has been grooming his son Nivaan Goyal[146] to run the airline and if the airline survives to see brighter days, the son will ultimately take over the father's role. It may not be the endgame yet for Jet, but things are certainly very fluid. It appears to be in the same trap in which Kingfisher was before it crashed.

IndiGo's aggressive international plans together with SpiceJet and Vistara will test Jet Airways further in the coming days. It will be interesting to see if and how soon IndiGo is able to overtake Jet in the international sky too. And if Jet crashes under the weight of its own troubles, it will be IndiGo and Vistara which will gain the most.

SpiceJet: Too Many Ownership Changes Destabilized It

SpiceJet is the LCC avatar of erstwhile ModiLuft. The chief promoters of its second innings were London-based Indian businessmen brothers Bhupendra and Suresh Kansagra. Kansagras had received the shares of ModiLuft from its promoter S.K. Modi in 2000 after an acrimonious legal battle. After becoming its new owners, they pumped money in the airline, hoping to gain from the opportunities presented by the rising Indian aviation sector. In what capacity, Ajay Singh,[147] its current promoter, was part of SpiceJet's new team is not very clear but Singh is presented as the co-founder of SpiceJet in the company's communications. At the time, the show on behalf of Kansagra was run by Siddhanta Sharma,[148] as SpiceJet's executive chairman.



SpiceJet: Revenue vs expense time series (in crore)

The Kansagras decided to exit from SpiceJet in May 2008 apprehending little future in the Indian airline business given the tough commercial environment and probably realizing the maze that the Indian aviation sector was, despite all its outer attractiveness. The airline never made profit during their time. The Kansagra family shares in SpiceJet were bought by Kalanidhi Maran,[149] the owner of Sun Group. Ajay Singh was out once Maran became the new promoter with 53 per cent equity while Siddhanta Sharma soon joined Rahul Bhatia's IGE as its director, corporate affairs, and later became president of InterGlobe Air Transport.

The airline got aggressive with fleet expansion and route additions under Maran, but again, it never made money. Things had become really bad for SpiceJet towards the end of 2014 which made it cut its fleet size from 58 in 2014 to 34 in 2015. It also laid off 43 pilots and in January 2015, the airline was grounded for one full day. By the end of FY 2014–15, the airline had accumulated losses to the tune of ₹3,233 crores, while liabilities stood at ₹1,635 crores. In between, Maran also got embroiled in a few serious controversies and once there was a change of government at the centre, he started contemplating exit from the airline. DMK, the party headed by Maran's uncle M. Karunanidhi, was part of UPA II.

Ajay Singh, the man who had been officer on special duty (OSD) to NDA I's most powerful minister—Pramod Mahajan—and the one who is credited with coining the popular slogan, 'Abki Baar, Modi Sarkar',[150] and who had been part of SpiceJet's founding team, was back in the pilot's seat once Maran was obliged to transfer ownership and management control of the airline along with all its liabilities to him in January 2015.[151] It was the swiftest transfer of ownership in Indian corporate history with every agency, regulatory authorities and the ministry clearing the transfer in a record of 15 days.[152] At what price, terms and conditions Maran had decided to transfer ownership to Singh remains a puzzle and a source of contention between the two parties. Last heard, Marans had approached an arbitral tribunal comprising retired Supreme Court judges Arijit Pasayat, Hemant Laxman Gokhale and K.S.P. Radhakrishnan to claim compensation of ₹2,000 crores, from Singh for the transfer of management control. Singh had denied any obligation on this count. The tribunal was created in the end of the year 2016 under orders of the Delhi High Court and is adjudicating on a share transfer dispute between Maran and Singh.

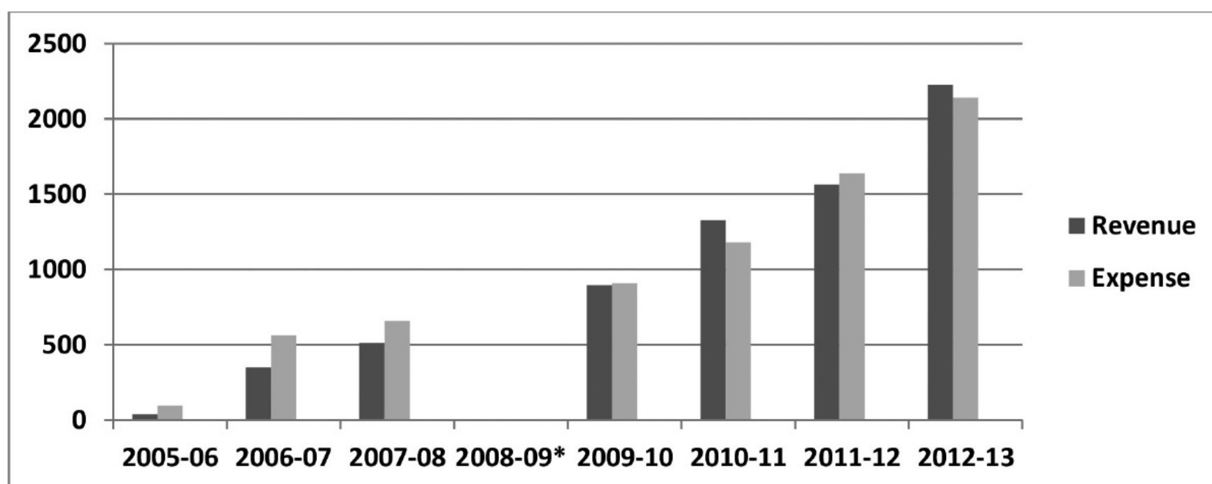
After Singh took over, SpiceJet has been showing some vigour. But with substantial accumulated losses, rising fuel prices, growing competition and continued feud with past promoters, the situation is not as hunky-dory as its current management would like to portray. Its walk-in to profit zone in the last two years is largely a result of deferred taxes and liabilities. *Business Today* was bang on when it remarked in an article by Manu Kaushik that SpiceJet's order of 205 Boeing in January 2017 was more about optics and less about business sense.[153] SpiceJet's woes are far from over. By the end of June 2018, it still had a negative net worth of ₹609 crores, though its market valuation has been shooting up since Singh took over.

Currently, SpiceJet has the support of the government at the centre and has been allowed to postpone many of its dues. But during its 14 years of flight, SpiceJet never came in the cruise mode, and if there is a change in government at the centre after the next general election, the sailing will become really tough for it. The era of patronage Raj may not be over, but today, nothing can survive if its

fundamentals are weak. For now, SpiceJet doesn't really have what it takes to pose a realistic challenge to IndiGo.

GoAir: Slow and Steady or Plain Content!

Founded in 2005 by Jeh (Jehangir) Wadia, the younger son of industrialist Nusli Wadia,[154] GoAir appears to be quite content with its slow and steady growth. The author remembers meeting promoter Jeh Wadia at one of his first press conferences in Delhi post GoAir's launch. When asked if too he planned to go for an aggressive fleet expansion, Jeh had categorically dismissed taking such a route. Pointing out to the fate of many airlines in the past, he had said that it would be rather prudent to go in for a slow and steady approach.



GoAir: Revenue vs expense time series* (in crore)
**Financials for 2008–09 is not available with DGCA*

Well, its approach has served the airline and the promoter well during tough times. After all, remaining afloat is an achievement in itself in the Indian sky. It has also been careful not to get into a debt trap and has kept its ambitions in check. GoAir has been a clean airline company with little or no controversy. Its patient footsteps and good service have also made it a stable and respectable brand.

Currently, GoAir has a fleet size of 35 Airbus A320 and connects to 23 destinations via 140 daily flights. The airline is the fourth

largest private carrier in India. It has often stated its intention to go public but a firm date is yet to be announced. Since 2012, the airline has reported profit without a break.

From all we know about GoAir and its promoter and despite Jeh Wadia's sportive posers[155] for aggressive expansion,[156] it will very much remain content with steady growth and stable profit. It will be the last airline to think of taking on IndiGo in the foreseeable future.

7

Going International

No airline truly believes that it has arrived until it goes international. The lure of flying in the international sky has led to many dogfights and imprudent decisions by airliners. Remember how Kingfisher was in a hurry to go international and bought Air Deccan for a beefy price which contributed to its crash? Conquering the international sky is a different ball game and requires a very different strategy from domestic operations. But there is also no doubt that international markets offer a huge opportunity to Indian carriers.

Growth of International Traffic

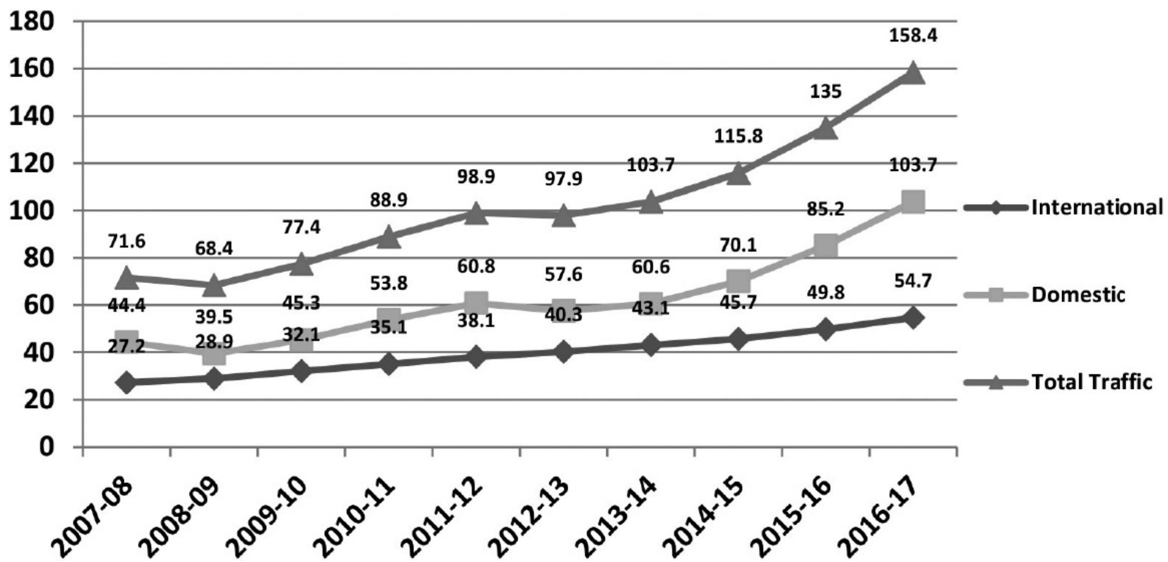
In 1993–1994, the international air traffic to and from India stood at 7.72 million while the number of domestic passenger was 11.5 million. By 2006–2007, the international traffic had jumped over three times to reach 23.40 million while domestic traffic also grew three times to touch 35.79 million. Of this number, Indian carriers carried 7.2 million passengers (30.76 per cent of total international traffic) while foreign airlines served 16.20 million (69.24 per cent). By the next five years—in 2011–2012—the total international traffic to and from India had shot up to 38.83 million, out of which 13.95 million

(35.92 per cent) passengers were carried by Indian operators while the rest 24.87 million were carried by foreign airliners. The international traffic grew at over 10 per cent annually during this phase.

By the end of 2016–17, the international traffic had crossed the 50-million milestone and stood at approximately 54.70 million passengers. Indian carriers with 20.61 million passengers had grown their share to 37.68 per cent, while foreign carriers' number stood at approximately 34.10 million.[157]

More and more Indians today are now travelling abroad, thanks to the rising income and growing aspirations. There was a time when the number of foreign tourists' arrival (FTA) was higher than outbound tourists' number. Now outbound flyers' number is over three times the FTA number and the gap is widening. In 2016–2017, 8.8 million foreign tourists arrived on Indian shores while more than 21.87 million Indians left for foreign destinations either for vacation, leisure, work or MICE related engagements.[158] This figure does not include the large number of people who take flights for employment abroad. According to a projection by the World Tourism Organization(UNWTO), the number of outbound tourists from India will cross 50 million by 2020.

Hence, unlike the scenario in the pre-liberalization days when average Indians would generally head to Gulf for work, and only a miniscule number of Indians could afford to explore the world as tourists, more and more Indians are now travelling for leisure and business. India's international market has both expanded and diversified dramatically in the last 20 years. So, if earlier, the feeder volume market was primarily Gulf, a significant proportion of international traffic now is contributed by leisure destinations such as Thailand, Sri Lanka, Singapore and Malaysia.



Domestic and international traffic growth (in million)
Source: DGCA

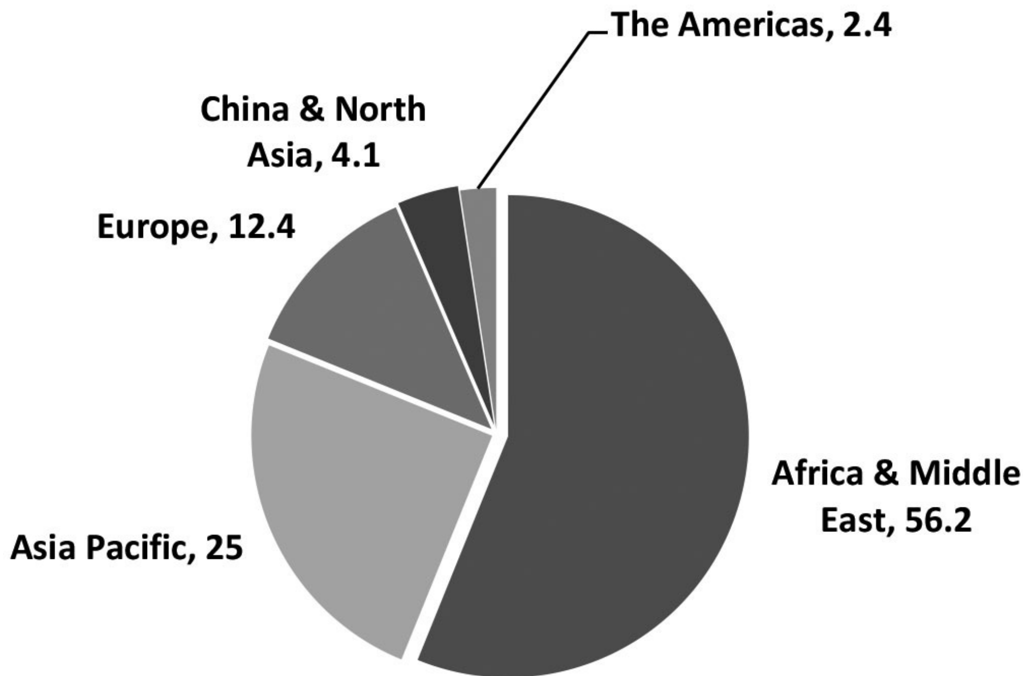
India today offers direct air service to nearly 55 countries, which means one can avail flights to these countries from an Indian airport. Direct air service should not be confused with direct air flight which means flying from one airport to another without a break or halt.

Top International Destinations

UAE happens to be the largest outbound market. Nearly 18.50 million—over 33.83 per cent of total international traffic—was to this country, with Dubai topping the chart. The number two to number ten destinations account for over 40 per cent of the traffic while countries in 11–20 rank provide 17.06 per cent of the traffic. The remaining 35 countries have less than 9 per cent share in India's international traffic. This also means that more than 91 per cent of international traffic flies to just 20 countries while top 10 countries account for more than nearly 74 per cent market share in volume terms.[159]

Top Countries by Traffic: 2016–2017 (Total International Traffic To and Fro from India: 54.68 Million)

Sr. No	*Country*	*Total Traffic (in million)*	*Percentage of Total Traffic*
1	UAE	18.50	33.83
2	Singapore	3.60	6.58
3	Saudi Arabia	3.30	6.03
4	Thailand	3.0	5.49
5	Oman	2.95	5.40
6	Qatar	2.90	5.30
7	UK	2.50	4.57
8	Malaysia	2.3	4.21
9	Sri Lanka	2.10	3.84
10	Hong Kong	1.40	2.56
11	Germany	1.35	2.49
12	Kuwait	1.1	2.01
13	Bahrain	1.1	2.01
14	USA	1.1	2.01
15	Nepal	0.86	1.57
16	France	0.73	1.33
17	China	0.66	1.20
18	The Netherlands	0.52	0.95
19	Russia	0.37	0.67
20	Japan	0.35	0.64
	REST (35 Countries)	4.90	8.96



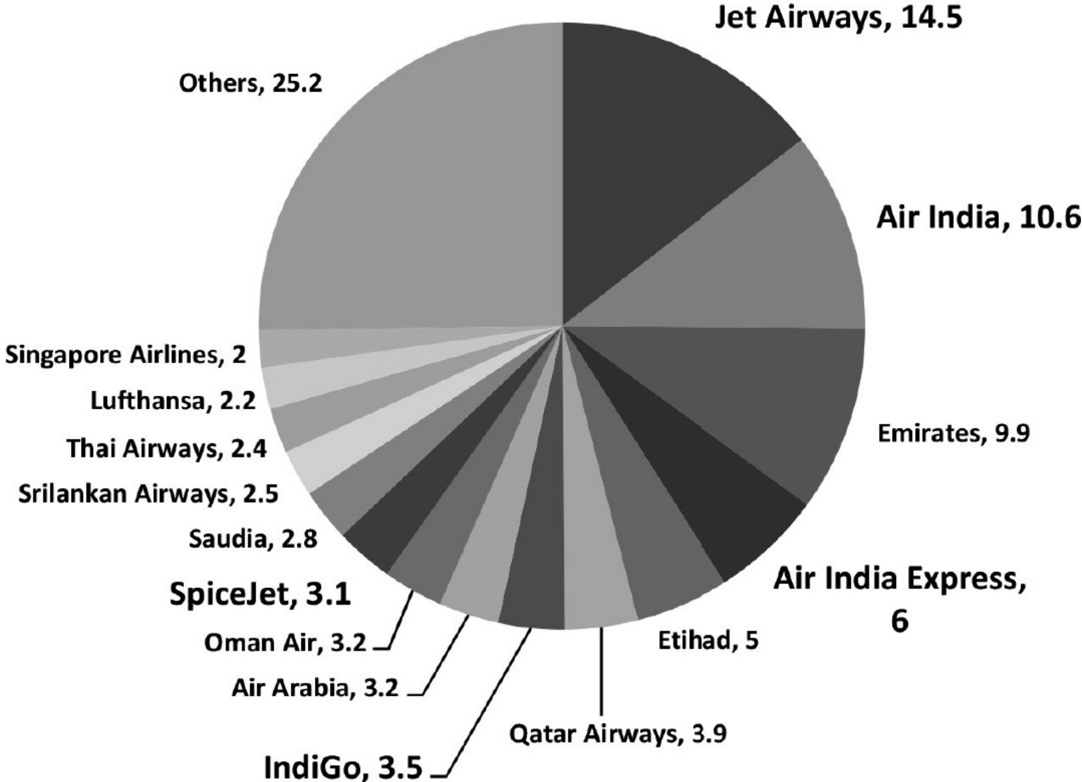
Outbound international traffic destinations from India, 2016–17 (in percentage)

Market Share

The real opportunity for Indian carriers stems from the fact that there are only five Indian carriers offering international services, while India is served by more than 85 international carriers. The share of passengers carried by Indian carriers has been increasing with time, but foreign carriers still account for nearly 65 per cent of total volume. The international operation is dominated by full service airlines. In terms of passenger carried, out of the top 20 air operators, only four are budget carriers (please see the chart).

Jet Airways with 8 million annual international passengers is the largest international carrier serving India, followed by Air India with 5.8 million and Emirates with 5.3 million. Air India Express (3.3 million), Etihad (2.70 million), Qatar Airways (2.1 million), IndiGo (1.9 million), Air Arabia (1.7 million), SpiceJet (1.7 million) and Oman Airways (1.7 million) are the top ten international airlines serving India. In terms of passengers carried, European, American and East Asian Airlines are among the top 11–20 airlines.[160]

The top six LCCs serving the Indian market are IndiGo, SpiceJet, Scoot (after a merger with Tiger), Fly Dubai, Thai Asia and AirAsia Berhad. Amongst them, only IndiGo and SpiceJet carry over a million international passengers.



Market share of international traffic by carriers in India, 2016–17 (in percentage)

Top International LCCs Servicing India International Market (2016–2017)

1. IndiGo
2. SpiceJet
3. Scoot
4. Fly Dubai
5. Thai Asia
6. AirAsia Berhad

In terms of revenue share in international routes, the share of foreign carriers is much higher as American and European long-haul

carriers dominate the American and European routes. The competition provided by Indian carriers is basically on short-haul and medium-haul international destinations.

Dollar earnings is also a major attraction to start international operations as most of the fleet lease payments are made in dollars. With rupee continuously depreciating against dollar, it does becomes attractive to earn in dollars. Also, international operations are often advantageous in terms of fuel cost, particularly if one is flying from India to Gulf destinations. Small benefits can add up to big savings and make international operations a more profitable venture. And of course, the glamour factor cannot be discounted!

So, one would assume that international operations are more profitable than domestic business! Well, by simple rule of thumb—yes. Long-haul international operations generally offer better margins since flyers are willing to pay higher premiums for comfort. Also, due to bilateral agreements, the competition is limited. Many routes are often a duopoly which allows for unspoken understanding between two airlines on the airfares to be charged. But if it is a short-haul international operation, the dynamics change completely. In Europe, international flights have become an extension of domestic operations as size of countries is small. The distance between two busy routes, London and Paris, is less than 400 kilometres. In India, two popular international destinations, Bangkok and Dubai, also qualify for short-haul operations (Delhi–Thiruvananthapuram is longer than Delhi–Dubai or Mumbai–Dubai), while offering thin margins amid stiff competition. Not all international destinations qualify as high margin routes. On the other hand, transatlantic routes, typically over 5,000 kilometres, are considered quite profitable, especially the ones connecting Europe and the USA. Long-haul operations also come with more class options which provide additional opportunity to charge higher margins for extra comfort.

In the USA, before the Continental-United merger, both airlines often incurred losses in domestic market but covered up on international operations due to higher margins. Even the British Airways' mainstay has been long-haul international operations. On the other hand, Air India, which operates to around 120 international

destinations out of its total 370 touchpoints, doesn't make profit on the majority of international routes. According to a 2014 statement by Mahesh Sharma, the then minister of state for civil aviation, only three of Air India's international routes—Cochin–Kozhikode–Jeddah, Kozhikode–Sharjah and Kolkata–Yangon—had made profit that year.[161] So, profit also depends a lot on how an airline is able to strategize and leverage an opportunity against its cost structure.

Regulatory Environment

For long, international operations were restricted by the 5/20 Rule, whereby an airline must have completed five years of service and should have a minimum fleet size of 20 aircrafts devoted to domestic operations to qualify for grant of permission to undertake international operations. The battle often began from this rule as a new entrant would have to fight to take slots out of the bilateral rights quota between India and other countries. If the route was already saturated, it would have to wait till the number of seats or flights were increased by two countries. In the meanwhile, the airline had to start off with lesser lucrative routes. Indian carriers have historically availed lesser percentage of their bilateral quota on majority of the routes, though on most busy routes, such as Mumbai–Dubai or Delhi–Singapore, it is another story.

The 5/20 Rule was introduced around 2004–2005. The government's main objective was to provide a protective cover to its own baby, Air India, from private sector competition in the profitable international routes. However, by default, it also became a shield for those private players which had qualified for international operations under this rule. Thus, both Jet Airways and Air Sahara were the first private airlines to get the licence under this rule, and new entrants like Kingfisher or IndiGo had to wait for five years to commence international operations. Five years is a long time in aviation. We have seen how most of the early airliners post-liberalization went belly up in less than five years. Kingfisher went on to buy Air Deccan or SimplyFly Deccan as it had qualified for international operations by 2008, to take a slice of this presumed 'lucrative pie'. But it ended up paying a heavy price for this injudicious financial extravagance.

Jet Airways took to international operations in a big way and even when Kingfisher was going down, it kept diverting more and more of its fleet to international routes rather than grabbing the routes abandoned by Kingfisher. One key reason for this action was that Jet had perhaps believed that its FSC model could not have posed an effective challenge to the new bunch of aggressive LCCs such as IndiGo, SpiceJet and GoAir, which had arrived on the scene. Thus, it opted to concentrate on international routes where it had no competition from private Indian carriers. To a point, it turned out to be a good strategy as Jet eventually overtook Air India as the largest Indian operator on international routes. Jet's international operations proved to be its saviour for a long time. But gobbling up Air Sahara at a heavy premium to delay challenges on the international front from Kingfisher caused it much suffering later on.

State-owned Air India and the Federation of Indian Airlines (FIA), which comprised IndiGo, SpiceJet, Jet Airways and GoAir at the time, wanted the 5/20 Rule to stay, while new start-up airlines, Vistara and AirAsia India, wanted the rule to go.

Soon after the Tata-SIA joint venture airline Vistara began its operations in January 2015, it unleashed the campaign to get this inhibiting rule abolished.[162] On the other hand, older airlines such as Jet, IndiGo, SpiceJet, GoAir and public carrier Air India were completely against its abolishment as they felt that tweaking this rule would be a great injustice to older airlines who had been made to nurture unprofitable routes (under Route Dispersal Guidelines [RDG]) for five years before they were allowed to fly international. They had argued that retaining this rule would create a level playing field and would be the fair thing to do. They wanted the legacy to continue.

On behalf of established airlines, the resistance was offered by FIA whose chairman at the time was Rahul Bhatia.[163] Bhatia, in a letter to Prime Minister Modi dated 25 August 2015, had contended that the removal of the 5/20 Rule would negate the level-playing field in Indian civil aviation.[164]

Bhatia wrote that it was 'disheartening to see that the Indian government might be planning to take steps that favour new entrants', established and controlled by foreign airlines.

> At a time when incumbent airlines are committed to high-cost domestic networks due to the 5/20 Rule and route dispersal guidelines (RDG), the removal of these rules will vitiate the level playing field that exists in Indian civil aviation, and tectonically shift it in favour of foreign airline controlled new entrants, who have shown, at best, peripheral interest in serving the Indian domestic market.[165]

Taking an indirect dig at newer entrants, especially AirAsia, FIA also alleged that, 'at least one of the one of the two new entrants has stopped its expansion in the domestic market beyond the mandatory requirement of five aircraft.'

The FIA was also of the opinion that the 5/20 Rule combined with RDG had been the main catalyst for boosting domestic connectivity and abolishing it would impinge the growth of air connectivity in the country.

On 15 June 2016, taking a middle path, the Cabinet decided in favour of modifying the rule. The much contested 5/20 Rule was changed to 0/20 rule. Under the new scheme, an airline with permission to fly national scheduled services could fly international routes if it allocated a minimum of twenty aircrafts or 20 per cent of its total fleet, whichever was higher, for domestic operations. The waiting period of five years was done away with.

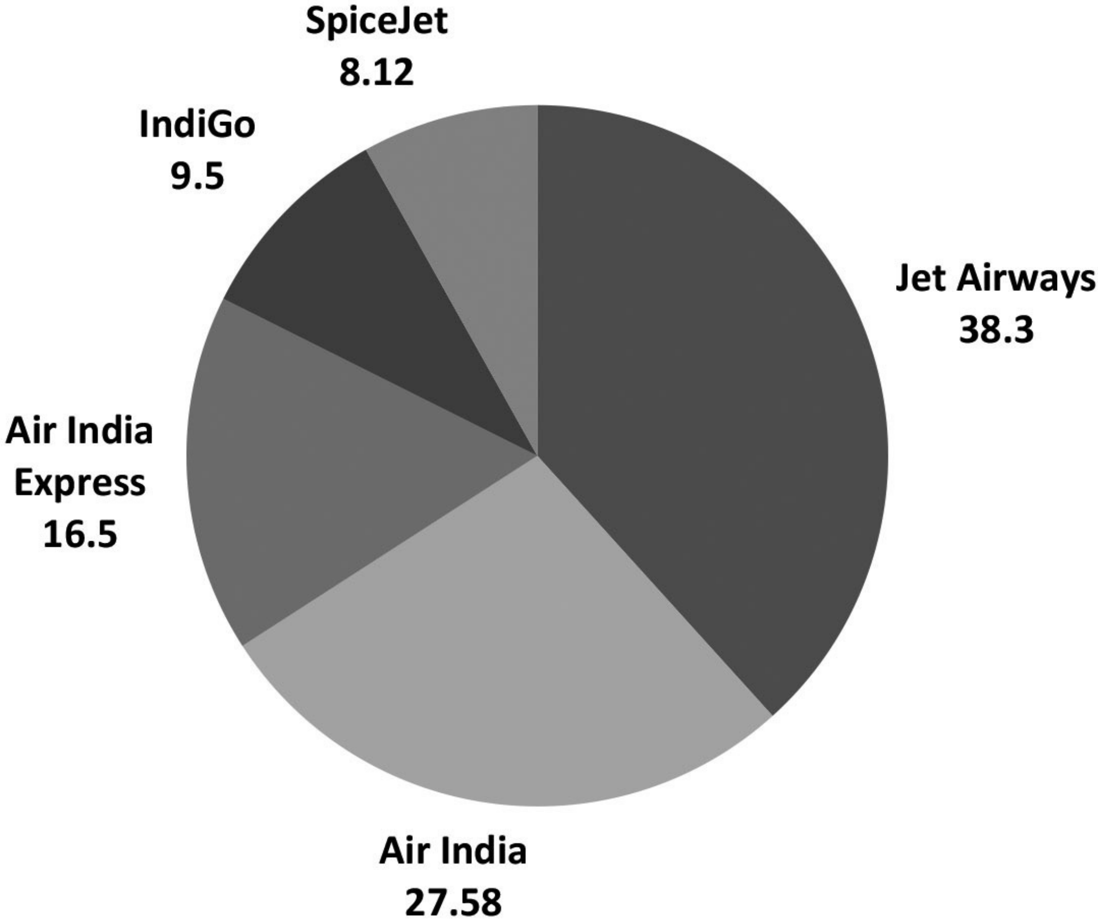
IndiGo's International Operations

IndiGo qualified to undertake international operations in August 2011 as by then it had completed the mandatory five years of operation. Months before it qualified, it had already been granted international traffic rights by the Ministry of Civil Aviation to commence operations to four key destinations—Singapore, Bangkok, Dubai and Muscat. So, it had a good lead to prepare for its much-anticipated international launch.

On 1 September 2011, IndiGo launched its international services by commencing a direct flight from New Delhi to Dubai by offering the lowest return airfare at ₹9,999. This was soon followed by the commencement of flights to Singapore and Bangkok. At that time, the management had announced that it would allocate 15 per cent of its total capacity to international routes by March 2012 and would be serving ten international destinations by that time.

IndiGo's strategy has always been to grow the overall market by stimulating fresh demand with low fares and also to wrest passengers from international competition. As pointed out earlier, international carriers have always had the lion's share of international traffic to and from India, though their share has been declining with time. Indian LCCs have been wresting more ground in the in the short-haul and medium long-haul operations from international airliners.

By the end of 2016–2017, IndiGo had carried nearly two million passengers and had cornered 9.5 per cent of traffic share among Indian carriers. It had also become the number-one LCC serving international market to and from India. But its share remains much lower than the leader, Jet Airways. However, with Jet[166] in serious financial[167] trouble,[168] it has a good opportunity to bridge the gap faster.



Shares of international traffic carried by Indian carriers, 2016–17 (in percentage)
Source: DGCA

By mid-2018, IndiGo is flying to nine international destinations while it plans to add at least 24 foreign destinations on its map by the end of 2020, which will also include some long-haul flights.[169] IndiGo has announced plans to commence flights to some major destinations in Europe, including London, Paris and Madrid.[170] It is also planning to start flights to Germany, Belgium and Switzerland. On the eastern side, Hong Kong will be a major addition while on the Gulf side, it plans to add more flights and routes.

To ensure success of its aggressive international plans and to undertake long-haul operations, the airline has firmed up plans to order up to fifty Airbus A330, which are wide-bodied aircrafts suitable for long-haul operations.

The recent management upheavals at IndiGo also have a lot to do with its international plans. It is believed in aviation circles that a key reason for Aditya Ghosh's exit was his lack of experience in running international operations. IndiGo's promoters did not wish to take any chance with the success of its phase-two strategy.

However, things may not be as easy as it appears on paper as IndiGo will be facing new challenges now. The emerging challenger Vistara has also firmed up aggressive plans to go international by the end of 2018. And given the fact that Singapore Airlines is one of its co-promoters, one can expect it to come out with a great strategy and it is expected to make an impressive international foray. Vistara is going to be a particularly tough competition on eastern routes. It will leverage SIA's experience and easier access to airports combined with advantages that come with being a full-service airline, such as more class configurations. The first round of the international battle between IndiGo and Vistara, which was fought via shadow boxing over the 5/20 Rule has already been won by Vistara. In the following months, it will be interesting to see how the next battle round plays out between various airlines.

8

The Highs and Lows

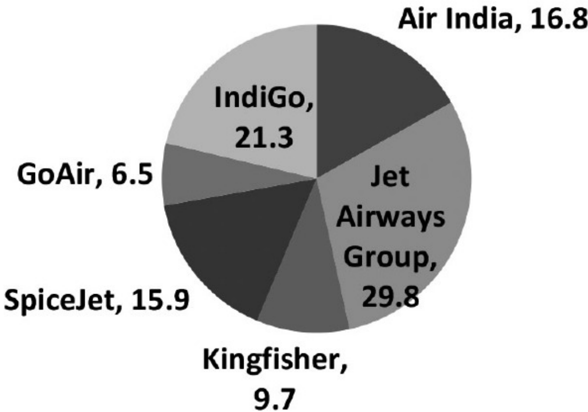
In July 2012, while Kingfisher crashed, IndiGo emerged as the new king of Indian sky. Hereafter, it went on to rapidly extend its lead over the competition. IndiGo by now had done well and had truly arrived. The world acknowledged it as an incredible LCC phenomenon.

IndiGo had closed its year of operation, i.e., 2006–2007 with 4 per cent market share. By the end of 2007–2008, it had gained 10 per cent market,[171] which increased to 14 per cent in 2008–2009. By 2008, it declared itself to be operationally profitable, something which was indigestible to competition and aviation watchers alike. By the end of 2009–2010, with 15 per cent market share, IndiGo managed to gain market share just marginally. It was its lowest year-on-year climb till 2018.

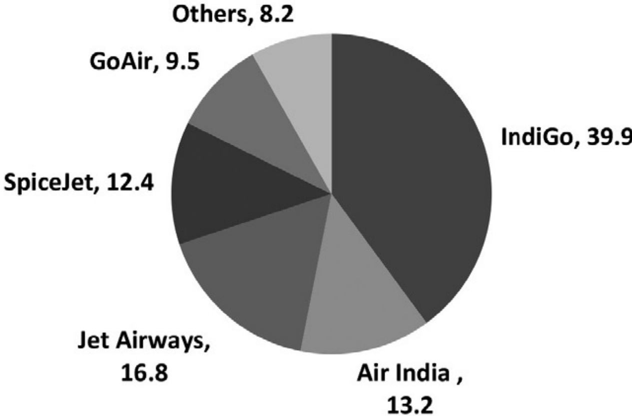
While IndiGo gained altitude and became operationally profitable, other airlines were unable to squeeze out any profit. SpiceJet's chief promoter Bhupendra Kansagra, had decided to exit the Indian aviation sector, seeing no hope for its resurrection. At the same time, Kingfisher became very aggressive, adding fleets and acquiring Air Deccan by mid-2007. Even the king was not making any money, though the bleeding stage was still a few years away. On a stand-alone basis, by early 2010, Kingfisher had taken over Jet Airways to

become the number-one airline in India. However, if one combined the market share of JetLite, then Jet Airways remained ahead of Kingfisher.

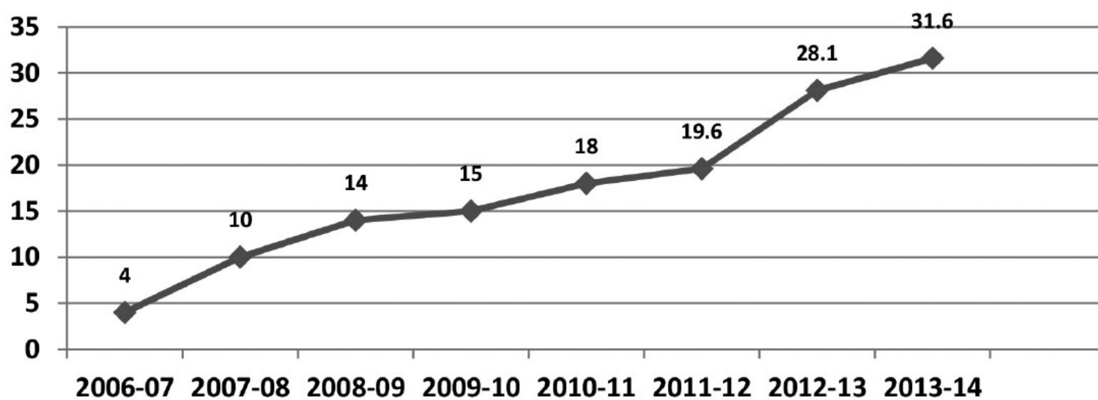
In 2010, IndiGo's market share climbed to 18 per cent. By mid-2011, with 19.6 per cent market share, IndiGo had almost caught up with Kingfisher which was still the leader with 19.8 per cent. Jet Airways had 17.8 per cent, but together with JetLite's 7.7 per cent, it still had 25.5 per cent overall market share. But Kingfisher was in serious financial muddle by now, and it had begun to lose altitude, rather alarmingly.



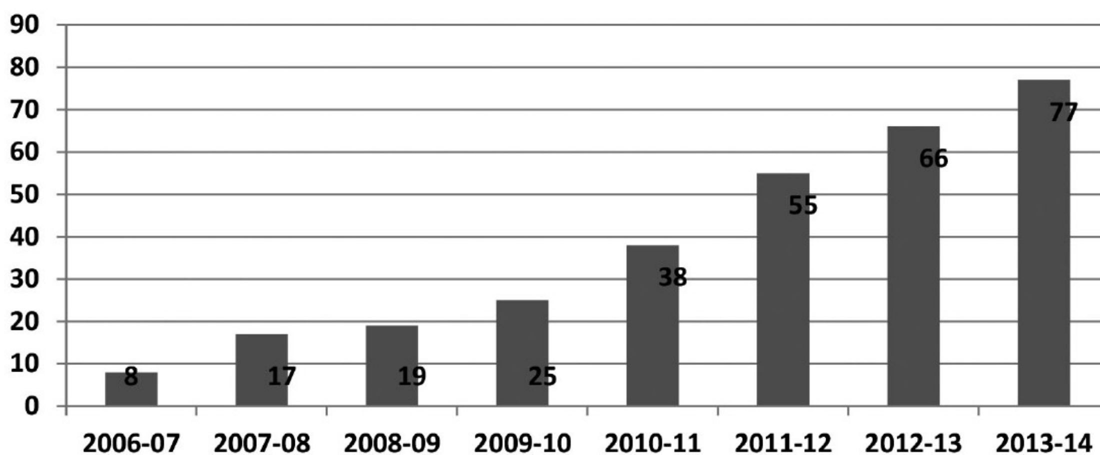
Domestic market share, February 2012 (in percentage)



Domestic market share, March 2013 (in percentage)



IndiGo market share growth (in percentage)



IndiGo's fleet growth, number of aircrafts year-wise
Source: DGCA

The Crowning Moment

July 2012 was a defining month for IndiGo. Kingfisher, at this time, was counting its last breath. It had all but collapsed. By mid-July, IndiGo, with 27.2 per cent market share,[172] flew past Jet Airways (19.4 per cent) and JetLite (7.2 per cent), combined to emerge as the new king of Indian sky. Aditya Ghosh, the then president of IndiGo, had a somewhat muted but mature reaction on this milestone. 'We have never chased market share. But being the largest airline in the world's largest democracy is truly humbling.'

Nonetheless, every newspaper and television channels acknowledged this 'IndiGo moment' by prominently featuring this feat and the new pecking order in the Indian sky. A new LCC phenomenon had truly arrived.

In the same month, Air India (together with Air India Express) had 18.2 per cent market share, while SpiceJet with 17.8 per cent was at number-three spot among private carriers.[173] GoAir had around 7 per cent share. Together, LCCs by now had cornered 59 per cent of the domestic market share.

The crowning moment also had some other distinctions. IndiGo was the only airline making profit which led to this observation by CAPA—'IndiGo is an anomaly in the Indian market; it is the only profitable domestic airline this financial year (ending 31 March 2012).'[174] According to a statement given on 22 March 2012, by Ajit Singh, the then Cabinet Minister for Civil Aviation, all scheduled airlines except IndiGo were incurring losses. The industry's combined operational loss was pegged at ₹260 billion ($5.1 billion) for 2007–2010 period while the industry was staring at another loss of ₹100 billion ($2.0 billion) in 2011–2012.

The culprit was the spiralling cost of jet fuel and global economic slowdown leading to a growing gap between rising expenses and lowering revenue yields. But IndiGo's business acumen, forward planning and the steadfast implementation of its well-crafted low-cost strategy had won the day for it even when others were caught deep in a financial whirlpool.

The Making of Aviation Billionaires

Richard Branson, the founder of Virgin Atlantic and Virgin America, had once famously remarked, 'If you want to be a millionaire, start with a billion dollars and launch a new airline!'[175] Well, the airline didn't really make the millionaire out of the Billionaire Branson, but he realized after more than three taxing decades of wandering into this maze called aviation that it was beyond him to run an airline.

The complexity of the airline business can confound and stump anyone, be it a shrewd showman or a seasoned corporate honcho.

Branson began his exit journey by first selling Virgin America to Alaska Air Group for $2.6 billion[176] in December 2016 and followed it up by giving up his management stake in Virgin Atlantic to Air France-KLM in July 2017. Virgin Atlantic, the dearest of all his numerous ventures, was the airline he had founded in 1984 with a high decibel blast to challenge the monopoly of British Airways. Virgin was his second identity. But as early as 2000, Branson had to sell Virgin Atlantic's 49 per cent stake for £600 million (approximately $984 million at 2000 rate) to remain airborne. In 2012, disappointed with the placid performance of Virgin, Singapore decided to sell off its entire stake to Delta for just £224 million ($360 million). In July 2017, Branson sold 31 per cent of his 51 per cent equity to Air France-KLM for £220 million and was left with only 20 per cent equity—he no longer had the management control. One doesn't really know what the new owners will do to Virgin Atlantic, but well, Alaska Air did kill the brand Virgin America in April 2018,[177] leaving Branson with a big heartburn.

Branson was lucky to exit with a fistful of dollars in his pocket. Not everyone has been so fortunate. Vijay Mallya must still be ruing the day when he dreamt of starting an airline. The 'King of Good Times' had to pawn almost everything to keep his airline and himself flying! Jet Airways' founder Naresh Goyal had made it to the 'billionaire's club' post Jet's IPO in 2005, but today, he is nowhere on this coveted list.

Even the most astute and successful investor in the world, Warren Buffett, has burnt his fingers in airline stocks. To begin with, airline stocks were on his strict 'Touch Them Not' list. As late as 2013, Buffett had maintained that the US airline industry was a 'death-trap for investors'. But the impressive performance of the top US airlines in the last four years made him change his strong revulsion for airline stocks. The charm of airline industry finally cast its spell on Buffett in 2016. Buffett perhaps went into the rethink mode, impressed with the strong performance of the top US airlines and decided to have their stocks as part of his portfolio. By January 2017, Buffett's total investment in four airline stocks (American, Delta, United and Southwest) had gone past $10 billion.[178] But even a man like Buffett may have overlooked the impact of some of the

strong external factors—the invisible air pockets—which cause periodic turbulence in the airline industry but over which no one has control! He may never have thought that President Trump would be a spoilsport by turning the strained relations with Iran into a crisis which, along with other factors, would shoot up the prices. He was not alone. No oil expert or institution had predicted the kind of particularly sharp crude price rise that began from mid-2017. The airline industry is amongst the most impacted by fuel cost. By January 2018, a year later, even Buffet had managed to lose more than $700 million in airline stocks.[179] They had managed to deceive Wise Warren's judgement too.

A Different Story

In India too, we have seen how airlines' stocks came a cropper. Thankfully, due to its strong and well-rooted fundamentals, IndiGo has had a different story.

In October 2015, InterGlobe Aviation went public with a target to raise ₹3,018 crore via the initial public offer (IPO) by divesting around 10 per cent of the promoters' share. Of the total proceedings, InterGlobe wanted to utilize ₹1,165.66 crore for retiring some of its existing aircraft's lease obligations.[180] This was to be the biggest IPO in India since 2011, and if successful, it was also expected to reinvigorate the placid capital market. Indian capital markets had been subdued in the previous three years due to the American banking crisis and India's own financial environment.

The stock price band was fixed in the range of ₹700–765 per share by valuing the company at a whopping ₹27,500 crore ($4 billion),[181] which was nearly 75 times the ₹350 crore Bhatia and Gangwal had injected as equity capital in this venture in 2005.[182] At the time of its IPO, the stocks of other listed airlines, Jet and SpiceJet, were at rock bottom. Jet (it had gone public in 2005) was valued at just ₹3,210 crores while SpiceJet had a market capitalization of little over ₹1,200 crores.

However, in a controversial move, just a few days before the IPO, IndiGo's promoters rewarded themselves with a hefty ₹1,500 crore

dividend, which pushed the net worth of InterGlobe Aviation into the negative zone by ₹139 crores. This was not the first such case of lavish dividend. Since 2010, InterGlobe Aviation had doled out over ₹3,500 crores as dividend to its promoters and equity holders.[183] Some analysts doubted if the company would be able to fetch the high valuation it had fixed as its net worth had turned negative.[184]

A Remarkable Success

On Tuesday, 27 October 2015, IndiGo's IPO opened up. A day earlier, on Monday, IndiGo had already raised ₹832 crore by allotting shares to institutional investors[185] such as Monetary Authority of Singapore, Goldman Sachs India Fund, Abu Dhabi Investment Council, Indus India Fund (Mauritius), Kuwait Investment Authority Fund 224 and Credit Suisse Singapore, at the upper price band of ₹765 per share.

IndiGo's IPO came to a close on the following Thursday evening, on 29 October. The exercise turned out to be a remarkable success. The IPO was oversubscribed 6.15 times while qualified institutional investors had bid for 15.17 crore shares, about 17.80 times the number of shares on offer for them. Non-institutional investors had bid for 2.07 crore shares, over 3.57 times the quota of 58.19 lakh shares for them. However, the response from retail investors was lukewarm as they bid for only 1.25 crore shares which was less than the 1.35 crore shares set aside for this category. Perhaps, retail investors were still too wary of taking a plunge after having repeatedly burnt their pockets in stock markets in the last couple of years.

That day was also considered to be the day of Lakshmi, the Goddess of wealth, by Hindus. Not surprisingly, IndiGo's twin promoters Rahul Bhatia and Rakesh Gangwal had become 'True Blue Billionaires' on that same day. They were now part of the exclusive, envious 'Global Billionaires Club' with a combined net worth of more than $3.5 billion—just on the strength of IndiGo's equity![186]

Nonetheless, a grand welcome awaited IndiGo's stocks when it began trading on 2 December 2015. Unlike many stocks which are artificially pumped up during the IPO phase and crash as soon as their trading begins (the real test of a stock's worth), IndiGo's share got a 21-gun salute from the stock market. Investors lined up to buy IndiGo's shares on the first day of its trading, pushing its stock by 17.5 per cent to breach the ₹900 benchmark.[187] In contrast, the stocks of Jet and Spice crashed further by 4.27 per cent and 5.09 per cent, respectively, on that day.[188]

By last count (March 2018) and together with his other businesses, Forbes estimated Rahul Bhatia's net worth at $3.9 billion. As IndiGo's stocks soared in value year after year,[189] Gangwal, with a net worth of $2.7 billion in March 2018, went on to become the richest Indian American in the USA.[190]

The Headwinds

However, it hasn't always been smooth sailing for IndiGo. Crisis and failures are part of every organization's life, more so in the airline industry. How the organization deals with it reflects their maturity level and character. IndiGo also has had its fair share of troubles—some were due to its own shortcomings and deficiencies, while some like neo engine failures were just a case of bad luck and not something of its making. But in a service business, the buck ultimately stops at the service provider and IndiGo had to pay a high price for all the failings involving its brand, image and staff.

IndiGo has been the leader in the Indian sky for over six years now. Till it was just another airline, its failings and shortcomings would have been either overlooked or judged on softer parameters. But now that it is the leader, the biggest and most successful face of Indian aviation, anything that happens with this airline or any undesirable incident that takes place involving its operations or flyers will hit headlines and will come under intense scrutiny. The yardstick is different now. As a leader, IndiGo has to focus on not only maintaining a healthy balance sheet, but also set a benchmark on

other key fronts too, especially its handling of customers and its internal shortcomings.

Here is a look at where it failed or took a beating:

I. Pilots' Exodus

Pilots' power is immense and disproportional to their number, and their ire can often cost an airline dearly. Keeping pilots in good humour is one of the biggest challenges for operators—whether in good or bad times. Bringing trained pilots on-board during the high growth phase can be an expensive affair while getting rid of them during a tough phase can be quite troublesome as well. If not handled sensibly and sensitively, pilots can often ground an airline, and cripple it. Air India, Air India Express (erstwhile Indian Airlines) and Jet Airways have all experienced, to their chagrin, this power of pilots. In 2012, Air India's pilots resorted to the longest pilots' strike in global aviation history when they went off duty for over 60 days over an issue which continues to baffle aviation pundits. The trigger was the government's decision to allow their co-brothers from the recently merged Indian Airlines to undertake advanced pilots training for the soon-to-be-inducted Dreamliner.[191] Their strike had a crippling impact on the national carrier and contributed to its slide. That was not the first or the last time Indian pilots had kept away from work.

Towards the ends of 1992, the pilots of Indian Airlines went on a prolonged strike.[192] The government's decision to hire pilots and aircraft from Uzbekistan Airways to counter their strike and maintain services ended in a tragedy when in January 1993, a leased Tupolev Tu-154 aircraft crashed at Delhi airport while landing in foggy conditions. The mishap forced the IA management to get into dialogue mode with the striking pilots. Pilots won the day.

Jet Airways also tested the bitter power of pilots when on 8 September 2009, a majority of its pilots reported sick and went off-duty leading to cancellations of at least 130 flights.[193] Jet termed the pilots' mass action as 'simulated strike by reporting sick'.

IndiGo has also often been at the receiving end of the pilots' power. Prior to its IPO in 2015, the airline had seen a spate of exits forcing it to revise its pilots' remunerations above the industry's standard.[194] More than 60 pilots were reported to have quit IndiGo around this time to either join Indian competitors or foreign airlines having services in India. In 2013, more than 145 pilots quit IndiGo.[195] But then, IndiGo has also been accused of poaching pilots from rivals to steer its fast growing fleet.

In mid-2016, 25 more pilots were reported to have quit IndiGo. At the time, Indigo had some 1200 odd pilots on its payroll. Thus, the number of exits cannot be termed particularly alarming. In a high growth phase, this is an expected and accepted attrition rate. However, the mutual poaching game had an adverse impact on the business environment. To bring in a semblance of sanity, DGCA had to come out with a circular in 2017 increasing the mandatory notice period from six months to one year for senior pilots and from three months to six months for co-pilots. The new rules, however, have been rejected by pilots associations in India. Trouble at IndiGo once again began brewing when its Indian pilots were peeved at a recent advertisement offering higher salaries and perks to foreign pilots.

II. Service Deficiencies

Airline is a high-stress business, particularly for the staff who are in the front line of duty and have to face flak from all kinds of passengers. In a country like India where air travel culture is new and evolving, even a discount traveller believes in being treated like a VIP and takes certain privileges like clicking photographs of women crew members as part of their package. The number of unruly flyers[196] has been rising along with the boom in aviation business, but then, once one is in this business, one has to find ways to deal with these situations. Airlines have to train their staff to respond suitably to various difficult situations that can arise. A proper training module, procedure and escalating response mechanism has to be laid down. It is for the airline's own good because a bad incident can often snowball into a major controversy, sullying their

image and doing long-term harm which can be difficult to erase even with the best of PR exercise. Airliners also need to remember that they are in a business where image is paramount, and in bad situations, it is often them who will be held responsible, whether they are at fault or not. Life isn't always fair!

But one good thing in a country like ours is that the public also reacts as angrily at a Member of Parliament who tries to misbehave and boss around airline staffers as it does when airline staffers break all norms and become physical with a middle-aged traveller or lacks courtesy with a national icon like PV Sindhu.[197] Sindhu, the first Indian woman Olympic silver medallist, an Arjuna and Padma Shri awardee, had tweeted on 4 November 2017, about her bad experience with IndiGo airlines.

Before the uproar could die down, a video surfaced showing a middle-aged IndiGo flyer being thrashed and pinned down to the ground by its ground handlers. The incident had apparently happened fifteen days back in October 2017, but became viral on social media after Sindhu hurled her ire.[198] This was soon followed by a woman passenger from Guwahati accusing IndiGo staff of misbehaviour. IndiGo staffers' manhandling a passenger damaged the airlines image and reputation. The issue really escalated when the media and public realized that IndiGo had not only tried to conceal the incident but was going soft over it even when social media was on fire.[199] It went into the damage control mode only when the issue had snowballed into a serious image crisis and attracted sharp reactions from all quarters. One might wonder what took IndiGo so long to douse the fire and what was the reason behind their reluctance in issuing an apology. Were they trying to show camaraderie with their staff? This incident also led the Indian Parliament to get into action. It set up a committee to investigate the matter and its report lambasted IndiGo for 'discourteous and rude behaviour' and advised it to ensure some basic training to its staff in customer courtesies. The report also castigated IndiGo for its institutional failings.[200]

> The Committee observes that the problems affecting the airlines are not personal, it is institutional. An institution like IndiGo has to develop a consumer-friendly approach in dealing with their passengers. The Committee believes that being a

> leader in market share, IndiGo needs to look inward and find out the reasons for the discourteous attitude and rude and indifferent behaviour of their employees, whether it is their cabin crew or the ground staff.

Above is a passage from the report by the Parliamentary Standing Committee on Transport, Tourism and Culture which was tabled in Rajya Sabha on 4 July 2018.

The committee was particularly peeved at the poor defence presented by its then CEO Aditya Ghosh, who tried to pass the buck on staff hired from backward hinterlands for the discourteous handling.[201] 'We have a challenge of getting talented people in this industry. For a country of 130 crore people, one shortage we have is talent,' Ghosh told the committee while assuring that it was investing more and more on training.

The committee, in its report, lambasted Ghosh and advised, 'If a particular airline has grown exponentially, (it) should deploy a proportionate amount to the training of (its) staff instead of misbehaving and manhandling the passengers or blaming the youngsters from tier-II and III cities and government schools.'

IndiGo again hit the headlines for the wrong reasons on 11 April 2018, when it deplaned a surgeon for complaining about mosquitoes in the cabin! The incident led the new Civil Aviation Minister Suresh Prabhu to order a probe.

III. Going Overboard with Cost Cutting

The Parliamentary Committee, headed by Trinamool Congress Rajya Sabha member Derek O'Brien, which looked into the customer-related issues with airlines, also indicted IndiGo for its other failings.

The committee, in its report, stated that IndiGo had resorted to undesirable means to inflate its on-time performance record. 'It was brought to the notice of the committee that the flying time of IndiGo from Indore to Delhi is two hours whereas in other airlines, it is only one hour and 35 minutes. IndiGo is adopting a longer flying time in various sectors of their flights just to bolster their on-time performance.'[202]

Interestingly, IndiGo's on-time performance record fell considerably after the DGCA changed its methodology to measure this metric while SpiceJet emerged as the leader on this count.

IV. Engine Failures

The months of February and March in 2018 were particularly bad for IndiGo when its recently inducted Airbus A320neo planes reported many instances of mid-air engine shutdown. For flyers, this was extremely scary. DGCA subsequently ordered grounding of as many as 11 of IndiGo's A320neo aircrafts and also initiated an inquiry.[203] This was not the first instance of engine failures while more troubles were to follow soon.[204]

IndiGo had received the delivery of its first A320neo aircraft on 10 March 2016, which made it the first operator in Asia to get possession of this new class of aircraft.[205] It comes fitted with a radically new engine that uses 'high-bypass turbo fan propulsion technology', as against the conventional low or medium bypass turbo fan.[206] While delivering the much-awaited aircraft, Dr Kiran Rao, Airbus EVP Strategy and Marketing, stated, 'It fills us with pride that IndiGo, India's largest airline and the biggest customer for our A320neo, has taken delivery of its first aircraft. On top of best in class operational efficiencies and environmental benefits, the A320neo will offer IndiGo's passengers unmatched comfort.' But it was not to be as frequent and scary engine snags would rob this 'breakthrough aircraft' of all the shine.

So what went wrong? The frame-maker Airbus offers two engine options for neo. One can either opt for Pratt & Whitney (P&W) (United Technologies) PW1000G or go in for the LEAP Engines developed by CFM International (CFM is a joint venture between GE Aviation, a division of General Electric and Safran Aircraft Engines, a division of Safran of France). Both engine manufacturers use the newly developed high-bypass turbo fan technology but each of the engines have a slightly different working. P&W engines come cheaper which had made IndiGo opt for them. But then, for all practical purposes, the technology remains a work in progress and in

testing stage in real-flight situation and nearly all the snags have been reported in P&W engines. For United, it has not been easy to develop this new disruptive technology while the development was delayed much beyond its projected timeline due to one snag after another.

Nonetheless, the new engine is supposed to be more energy efficient and claims to lower fuel consumption by as much as 15 per cent for the same load factor. Now this is a huge temptation for any airline as fuel costs are the biggest component of operational cost. Little wonder, IndiGo's then CEO Aditya Ghosh, in a press statement, had expressed optimism that its soon-to-be-inducted neo aircrafts would be its springboard to the next level of growth. 'Indeed, taking delivery of Airbus A320neos would be a game-changing moment for IndiGo. The next big thing after placing large aircraft orders would be taking delivery of A320neos … we add more and more A320neos, the cost structure of IndiGo will come down.'[207]

IndiGo received the delivery of 29 A320neos by mid-2017 and its induction was supposed to be an added boost for the airline's low-cost leadership strategy. However, the new springboard of growth would soon bog down IndiGo in a manner it had never dreamed of—a nightmare was to follow as mid-air engine snags started being reported at an alarming frequency.

One report said that the airline had to replace P&W engines on its 32 A320neo aircraft at least 69 times between May 2016 and November 2017. In February 2017, DGCA ordered IndiGo and GoAir to compulsorily inspect the engines after completing 1,000 hours of flying.[208] The airlines were also made to carry out checks every 500 hours. To overcome frequent engine troubles, IndiGo had to fly these planes at lower altitudes which increased its fuel expense. And to make up for the grounded planes, IndiGo had to wet-lease planes from Lithuanian airline, Small Planet Airlines.

Between 15 March and 31 March 2018, IndiGo had to cancel more than 600 flights due to neo engine failures.[209] GoAir also had to cancel nearly 140 flights during this time, again involving the same P&W neo engines. The cancellations followed the DGCA grounding of eight of IndiGo's neo planes and three of GoAir's. A panicky P&W, is believed to have sent a huge technical team from the USA to New

Delhi to assess the situation and provide emergency replacements for faulty engines. The problem, according to P&W, was due to 'knife edge seal issue'.[210]

By mid-2017, financial analysts had begun projecting lower revenue for IndiGo. Leading financial firm, Motilal Oswal, had cut IndiGo's earning forecast for 2017–2018 by as much as 18 per cent, factoring in the cost of delays due to neo troubles.[211] Together, with the rising fuel cost, neo had eaten a good deal of IndiGo's profit which reflected starkly in its FY2017–18 results.

Snags involving neo engines were also reported from different parts of the world much before the issue flared up in India. Even in mid-2017, airliners around the world were getting worried over the durability issue of the neo engines. The P&W engines were particularly found troublesome when flying in tough conditions beyond a certain number of hours. The alarming number of snags led to carriers such as Royal Brunei Airlines and Qatar Airways switching to CFM engines, while some airlines also cancelled their orders.[212]

According to a report by CAPA, nearly all airlines around the world which had started operating A321neo aircrafts fitted with P&W engines had grounded them due to safety concerns.[213]

> The first aircraft for Volaris has not yet entered service since it was delivered at the end of 2017. Aircraft at Air Astana, Hawaiian Airlines and VietJet entered service in late 2017 but were removed from service earlier this month, due to engine-related issues. The only Pratt & Whitney-powered A321neos currently operating are two aircraft for All Nippon Airways and one for Hawaiian Airlines, according to the CAPA Fleet Database.

In March 2018, the European Aviation Safety Agency (EASA) issued an Emergency Airworthiness Directive with an operational limitation on certain Airbus A320neo and A321neo aircrafts fitted with PW1000G engines,[214] which stated: 'Several occurrences of engine in-flight shut-down (IFSD) and Rejected Take-Off (RTO) have been reported on certain Airbus A320neo family aeroplanes. While investigation is ongoing to determine the root cause, preliminary findings indicate that the affected engines, which have high pressure

compressor aft hub modification embodied from ESN P770450, are more susceptible to IFSD.'

The P&W engine troubles led Airbus to lower its forecast for neo sales and also put on hold all future deliveries due to a safety warning raised by the EASA.

Technology is not always a saviour; it can play truant too, and IndiGo learnt this the hard way.

The Captains Who Steered IndiGo

Amidst all its highs and lows, the one thing that has remained constant are the people that contributed ably to the making of IndiGo. Unlike most other airlines, IndiGo's promoters had done well to provide a stable and competent management team who had a fair degree of autonomy to perform their task. In its entire run till date, IndiGo has had only two CEOs, if we discount the current role of promoter Rahul Bhatia as the interim CEO.

Bruce Ashby

Bruce Ashby, the first CEO and a former colleague of Rakesh Gangwal at the US Airways, had arrived in India in August 2005, a year before IndiGo launched its first flight. This reflected his commitment to make a success of the new airline and also to familiarize himself first hand with the business and commercial environment of Indian aviation. He was part of IndiGo's think tank, which believed that low cost was the future and if packaged well, an airline will have customers flocking to it. 'People love discount travel when it's a quality travel'—he maintained in an interview to *The Telegraph*.[215] This had to be combined with operational reliability to build credibility. 'If IndiGo can stick to its timetable, the airline will be constantly gaining altitude for the foreseeable future.'

Ashby knew the challenges of the airline industry well, having served in key verticals of the top airlines and having been the executive vice president of marketing and planning at US Airways, before taking up the offer of CEO with IndiGo. At US Airways, he had

also handled other crucial departments such as finance, operations and corporate development. He had also been in the thick of things when US Airways was in the midst of existential crisis and had filed for Chapter 11 Bankruptcy.

Prospects of Indian aviation definitely appeared more promising to him when he came here as the industry was on an upswing, and an exciting new growth phase was about to begin. Ashby also rightly sensed that India was still an underserved market despite four LCCs already on the scene and was sure of making the most of the opportunity by positioning IndiGo as the best flying option for the rising middle class. Ashby played a key role in identifying the initial routes which had the potential to yield handsome revenues for IndiGo.

He steered the company during its formative and most challenging phase and he was going strong. However, exactly three years since he had joined, Ashby decided to quit the company in August 2008.[216] No specific reason was given by InterGlobe at that time about his decision to move on. It was believed that he was going to head another start-up LCC in Saudi Arabia, by the name of Sama.[217] Ashby remained at the helm of Sama from December 2008 to December 2010 when he was appointed as the CEO of Oneworld,[218] the leading Airline Alliance headquartered at New York. He served as its CEO from December 2010 to January 2016.

By the time Ashby left IndiGo, he had already put the airline in cruise mode and turned it into a very promising airline with a great future. Since 2008, IndiGo has always made a profit and turned itself from a dark horse to a thoroughbred—one which can win the race.

Aditya Ghosh

The appointment of Aditya Ghosh as IndiGo's president and whole-time director was most unexpected. Rumour was rife that Sidhhanta Sharma, the former executive chairman of SpiceJet who had joined InterGlobe Enterprises at a senior level in July 2008, was likely to take over the reins once Asbhy's decision to move on became public. Dots were connecting. Sharma had come from a rival airline and within a month of his joining, Ashby's exit was announced in

August. Nobody knows for certain what really happened, but a real dark horse, Aditya Ghosh, was named as the one who would take over from where Ashby had left. Just like Herb Kelleher,[219] the lawyer-turned CEO of Southwest, Ghosh would go on to steer IndiGo to incredible heights.[220] Ghosh proved to be a fabulous implementer of well-laid-out strategies which were authored by founders Bhatia and Gangwal along with Ashby.

A law graduate from Delhi University, Ghosh was working on the travel and hospitality mandate with the top legal firm J. Sagar Associates (JSA) when he had come in contact with Bhatia.[221] He was brought on board of InterGlobe Aviation as general counsel, legal when Bhatia and Gangwal firmed up plans for IndiGo. He learned that the airline industry was swift and he is credited with taking care of many of the complex legal issues involving the new airline. In the process, Ghosh also learned a great deal about other verticals of airline business. He earned the confidence of both the partners who wanted a dynamic man to implement relentlessly what they had visualized and was a key reason for his elevation. Ghosh didn't disappoint. He went on to deliver on each count and grew in stature within the company and outside too. For many years, till he resigned, he was the face of IndiGo for media interactions, policy opinion, business outlook—almost everything—while the promoters preferred to shun the limelight and guide the venture from the rear.

Ghosh remained modest too. In recognition of his contribution, IndiGo handed him a never-before-heard incentive in Indian corporate history—₹20.9 crores for the fiscal year 2016.[222] That year, Ghosh's total remuneration turned out to be ₹27 crores. IndiGo also handed a generous average raise of 42 per cent to all its employees that year.

So what triggered his exit? Well, by 2017, it was clear that IndiGo's domestic growth was not going to be a sharp trajectory or as dramatic as it had been in the last five years. It had been decided that its next phase of substantive growth would come from international operations. This was one area where Ghosh had little experience. Once IndiGo's bosses had decided that international was the way to go, Ghosh became a non-fit in the next scheme of things.

Probably he was also being kept away from future planning by the promoters and was not being consulted on the next set of high-level appointments. The message that his time was up became clear when in January 2018, Wolfgang Prock-Shauer,[223] the former CEO of GoAir, was brought on board as the new IndiGo COO to oversee its revenue management and network planning. Prock-Shauer has been an industry veteran with over 36 years of airline experience. Prior to GoAir, he had also worked as CEO of Jet Airways from June 2003 to October 2009. After this stint, he became the CEO of Air Berlin for many years before taking up the assignment with GoAir. Besides Air Berlin, Prock-Shauer also had stints with many top-line international airlines such as Austrian Airlines. When a man with a much bigger profile and experience was appointed as his junior, Ghosh was intelligent enough to get the message.

On Friday, 27 April 2018, IndiGo announced the exit of Aditya Ghosh stating that 31 July would be his last day with the airline. The airline also announced the appointment of Rahul Bhatia as the interim CEO till the time a full-time CEO was appointed. Another surprise announcement the same day was the appointment of Gregory Taylor as a senior adviser.[224] Taylor had earlier served as the executive vice president of revenue management and network planning at IndiGo between 2016 and 2017.

On his resignation, Ghosh in a press statement said, 'For the last ten years, it has been a relentless, exhilarating and a most satisfying task building IndiGo. It is now time for me to step off the treadmill and sometime in the near future embark on my next adventure.'[225]

Bhatia's press statement and email on the development had different tones. The email communication from Bhatia to IndiGo was more in the form of salutation over Talyor's coming on board rather than any shade of grieve over Ghosh's exit.* 'Firstly, and with mixed emotions, I wish to inform you that Aditya Ghosh is resigning and will leave the company on 31 July. Aditya wishes to start a new business venture and we respect his decision to do so…. At the same time, we thank Aditya for all his hard work and contributions and for the successes that the company has enjoyed.'[226]

On Taylor's coming on board, Bhatia wrote, 'I am very excited to announce the return of Greg Taylor as the senior adviser to the

company, reporting directly to me. As many of you know, Greg is no stranger to IndiGo having been our executive vice president of revenue management and network planning during 2016–17.'

Well, such are the ways of the corporate world! But is IndiGo going to miss Ghosh?[227] Not really. Everyone has a role and time span in an organization. Ghosh was doing a good job but as IndiGo prepared for its next growth flight, he didn't really fit into the new scheme of things. It was indeed time for Ghosh to move on and explore new territories.

*Full text of Rahul Bhatia's letter to IndiGo employees spelling out key leadership changes at the airline.[228]

> Dear fellow colleagues,
>
> I would like to bring you up to speed on a few key leadership changes that are underway at IndiGo. A press release on these issues is also being issued shortly.
>
> Firstly, and with mixed emotions, I wish to inform you that Aditya Ghosh is resigning and will leave the Company on 31 July. Aditya wishes to explore starting a new business venture and we respect his decision to do so.
>
> For the last ten years, Aditya has led his team relentlessly in building IndiGo to be India's largest airline. Your Board of Directors and I want to thank him for all his hard work and contributions for the successes that our company has enjoyed over the years.
>
> This said, I am very excited to announce the return of Greg Taylor as senior adviser to the Company, reporting directly to me. As many of you know, Greg is no stranger to IndiGo having been our executive vice president of revenue management and network planning during 2016–17.
>
> Greg has more than 40 years of enormous and varied experience in large World Class Airlines. This experience and his ability to understand the complexities of the airline industry will be invaluable to our future plans.
>
> In addition to his previous stint at IndiGo, Greg has held various senior management roles at United Airlines and US Airways in the areas of corporate strategy, network planning, fleet planning, finance, cost management and airline express operations.
>
> Greg holds an MBA from the University of Chicago. In the coming months, your Board of Directors will consider the appointment of Greg as president and CEO of the company, subject to receiving necessary regulatory approvals and paperwork.
>
> Please join me in welcoming Greg and wishing Aditya and Greg all the very best in their new roles. I look forward to your continued and outstanding dedication to IndiGo and to the superb service that you provide to our customers every day.
>
> Rahul, Interim CEO, IndiGo

9

Expert's Views on IndiGo

Mark Martin is the founder and CEO of Martin Consulting, a Dubai-headquartered aviation consultancy firm. Based out of both Dubai and Delhi, Martin is acknowledged as one of the most insightful and neutral commentators on aviation developments and is widely quoted by media across Asia. He is also a much sought-after speaker at international aviation forums. Martin shares his views on Indian aviation and the future prospects of IndiGo with the author.

Q. At the time IndiGo entered the Indian sky, it had acquired a reputation for being the 'graveyard for private airlines' with nearly 14 private airlines hitting the ground between 1991 and 2006 within less than five years of average existential span! Against this backdrop, what were some of the key things that IndiGo did and the competition did not, which led to its meteoric rise, making it the leader of Indian sky?

A. India's airline business has seen a lot in terms of changing market dynamics and granted, some of it is due to the Indian government's policies and the environment that we've been in. Back in mid-1996, the ICAO globally at the behest of the FAA (Federal Aviation Administration, USA) and JAR Ops (Joint Aviation Requirement for the operation of commercial air transport in European Union),

wanted several standards to be globalized. Some of these were Stage III hush kits and the installation of DFDR (Digital Flight Data Recorder) onboard aircraft. And around that time, India was operating aircraft that were at least 15 years old, aircraft made in the early 80s. Sure enough, the cost of compliance was impossible to deal with and we saw the demise of several regional/short-haul operators. Come pre-Air Corporation Act of 2002, private airlines such as East-West Airlines, Damania, NEPC Airlines, Sahara, Jet Airways and Continental, were faced by the onslaught of the then Civil Aviation Minister Pramod Mahajan with taking a stance to protect the national airline and allow reasonable leverage to Jet Airways and Sahara to continue. Yet, airlines were not legally 'airlines', but 'air taxi operators'. When that changed around the time the Air Corporation Act came into being, the world was witness to the biggest industry attack from banks, insurance companies and lessors as a consequence of the 9/11 terror attack. So, clearly, those were tough times. IndiGo commenced operations in 2006 when market conditions weren't the most conducive with competition and the rise in jet fuel prices. And closer to 2009, the global financial meltdown practically destabilized every economy including India's.

The key to IndiGo's sustainability centres on three basic airline business fundamentals: (i) Air transport will and would continue to be defined by itself as the most efficient mode of transport; (ii) Break-even in the airline business and especially for low-cost airlines takes between three to five years, so you need to stay focused with the business, and most importantly (iii) Always listen to what the traveller wants from a service and give that to them. That's what IndiGo did, and this pretty much is exactly what some of today's most successful airlines continue to do, such as WizzAir, AirAsia, FlyScoot, Tiger Air, Lion Air, Batik Air, Southwest Airlines, JetBlue and Alaska Airlines. IndiGo's positivity and passion to thrive were clearly infectious and that energy spread to other LCCs at the time—GoAir was one of them. We must recognize that around 2009 and 2010, about three years since IndiGo began operations, airlines at that time approached the government for a bailout package, something that India or Asia had never seen and although 'cold feet' did seem to set

in, IndiGo's focus remained something of a well-planned strategy. So clearly, IndiGo has done everything right to get to where it is today.

Q. Do you think IndiGo has what it takes to retain its leadership position in the coming ten years or so?

A. IndiGo has had its fair share of hits and misses. Its worst was when it commenced flights to South East Asia, a region that is clearly dominated by some of Asia's 'heavy-hitter' low-cost airlines that'll do anything to fiercely safeguard their region. IndiGo did suffer a bloody nose in the bargain with reducing flights and eventually had to pull out of destinations. But the good side of failure is that it teaches one a lot with learnings from what it did wrong and what should one do to get it right. And that is what has made IndiGo what it is today. Survivability in the airline business is key and as the years go by, the business centres having the rapid ability to adapt and change, transform to being what time demands you to be. And with that comes the cost of technology.

The IndiGo of today isn't the 'local-fun-Indian-sleepy-turn-in-for-the-night' airline of 2007, with a daily utilization of 9.5 hours per aircraft. IndiGo 2018, with an average daily utilization of over 13 hours, is a harsh, ultra-lean, mean, zero asset, fighting machine with aspirations of taking on the global long-haul low-cost market. Clearly, it is a 'revenue machine' that is on a turbocharger and revved up to take on the best of the best. As IndiGo shall soon migrate to long-range aircrafts for its long-haul low-cost business, I expect that the immediate aim of the airline would be to centre its energy on where the global Indian diaspora is; and along with that, continue to stay invested and focused while ensuring that routes turn profitable.

Q. What would be some of the bigger challenges in the coming years that IndiGo needs to focus upon?

A. The biggest challenges for IndiGo as with any airline are three; the first being the cost of jet fuel and oil prices, the second being competition, and the third being credibility and reputation. The aviation business can be both very good to you and extremely ruthless if you are not careful. All it takes is one air crash to wipe out

five years of reputation built to one's credit. Having said that, I won't be too worried about IndiGo; the airline today has a product and consumer appeal that is second to none and a commitment for reliability and efficiency that has withstood the test of time, so this should work fairly in the airline's favour. What I would be concerned about is the external risks, and in the pecking order comes fuel, currency, foreign policies on India and stability within India's economic and political fabric.

Q. Do you think issues like A320neo engine nags and rising fuel price could impact its operational, profit and reputational dynamics?

A. Whenever a radical, new technological platform is introduced with aviation, it has come at the cost of stabilization and transitional issues. We must be glad and relieved that unlike the 1980s and the 1970s, we haven't seen an air crash or a major catastrophe as a result of it. When the Airbus A320 was launched, the aircraft was complex to the level that pilots took time to understand that aircraft and as a result of that learning, the industry saw close to six crashes. IndiGo has it good at the moment because as we know, 'liability cover and compensation for technical glitches' is something that is covered in the engine purchase contract. The problems with the PW NEO engine come from the high utilization of at least 13 to 14 hours a day, and operating in extremely hot and humid conditions. That clearly has taken a toll on the power plant, and this is something that IndiGo can't be made accountable for. This is a phase and this too shall pass as soon as P&W comes up with a better modification and upgrade for the PW1000 engine possibly by September 2018. Fuel prices are a concern, but there are offsets here as well. For starters, we must understand the logic of how fuel is factored in, and that is everytime you have a plane full of passengers, you fill fuel and its implied that the fuel's been paid for; so in short, it's the travellers who pay up, and cover the airline at whatever rate it is at on the option market. That leaves the actual pressure on profitability, which for IndiGo would have to be well-articulated and structured, from a long-term perspective.

Q. Mr Rakesh Bhatia also has several other business interests, though many of them like the hospitality business compliment the airline business. But do you think diversion or spread of time and interest could impact the management of the airline in the coming years?

A. Bhatia has clearly developed a very viable and workable strategy that has made his core companies, InterGlobe Air Transport (IGAT) and InterGlobe Technologies, what they are today. That is identifying the right person for the right job, and not placing in executives that are 'available'. We've seen this happen several times in the company's history. The IndiGo of 2018 isn't the IndiGo of 2007. The quality and level of skill set needed to take the airline global as well as right into India's grassroots hinterland will clearly need leaders that have stood the test of time, seen failures and have won from them as well. I'll be blunt with that—those skill sets don't exist in India. In times to come, we would see newer and more astute global managers take the reins of IndiGo's key strategic roles and in turn, work towards bringing it all together in perfect synchrony and harmony.

Q. InterGlobe Aviation's stocks till recently were rated as the second-most expensive aviation stock globally. Do you think its high valuation is justified?

A. I know I've got a lot of flak for going on record with stating that IndiGo's stock is overvalued. The reason I say that is because there should be limits to leveraging a stock in the market because leverage works in industries that aren't that dependent on external stocks and risks. Aviation is one business that can be extremely ruthless; and all it takes is one emergency landing, crash or hull to wipe off 50 per cent of your stock. That is because the common investor, except knowing best how to interpret an airline's P&L, has no earthly clue of how the airline business runs. I firmly believe an airline's stock needs to be as fundamental as possible, with an annual return of what the growth levels are. This is around 20 per cent return, which is not bad.

Q. Is it a good idea for IndiGo to venture into regional space/regional aviation? Should it be done with the IndiGo brand name or does it need to opt for a different brand identity for its regional ambitions?

A. If IndiGo wants to be the true blue 'air transport enabler', it has to embed itself in nearly every tier of air transport. Let's also be clear—at the end of the day, there's no glamour or glitz about the airline. One provides a service of connectivity and if there's a need to travel and visit those destinations, you're in business, and to that, airlines are mere 'air transport' with the consumer having every right to know what he's paying for and pay for what he chooses.

IndiGo entering into regional grassroots connectivity was something it should have contemplated many moons ago after the demise of Vayudoot in the 1990s and the gradual withdrawal of Jet Airways from its ATR service. Going regional today, especially when smaller towns demand greater connection to regional business and leisure centres, makes practical and revenue sense. Besides, today we are also living in an environment where most travellers are millennials and those that fall in the bracket of 20 to 35 years; so clearly this is the way to go. The other tier-I sees IndiGo venturing into what's known as micro-grassroots where they utilize even smaller aircraft to connect villages, small towns up in the mountains and cities that even today remain extremely isolated and it takes nothing less than 12 hours to reach there by road. Aircraft like the Twin Otter, Grand Caravan and Mahindra's recently certified AirVan and the newly announced Cessna SkyCourier could, in times to come, become the mainstay of IndiGo's multi-tier transport platform alongside their long-haul low-cost product that should be up and running soon.

Q. Which would be one Indian airline group that could challenge Indigo's leadership in the future?

A. The company that practically invented commercial aviation in India and continues to have aspirations in the market—TATA. We need to be mindful that aviation as a capability was something that India pretty much set the regional standard for as way back as the 1950s and many even today benefit from the aviation learnings.

Singapore Airlines is a clear testament to that. The Tatas today, who have their toes wet with two joint ventures, are clearly gaining from the learning of where aviation is today and how it has changed from the aviation of the 1970s, at a time when it itself ran an airline it owned, Air India, on behalf of the government. I would like to believe that there will be a return of the Tatas in full-blown aviation and there will be a time when Air India will get the right leadership, government decisions and strategic focus. So till then, I don’t see anyone except IndiGo being the most formidable transportation disrupter in the region. For the moment, India is IndiGo’s territory and they command the transport mind share.

Epilogue

The Future of Success

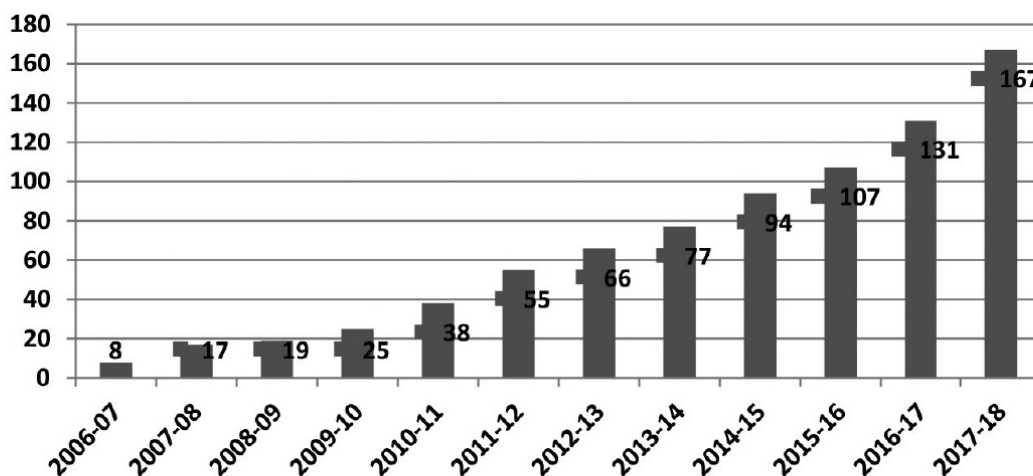
The airline is an awfully tough business and an excruciating one at that. Behind the façade, beneath the glamour, there is tons of grime and grind. An airline has to consistently deal with more than 'five forces'[229] to remain airborne. A slight policy tweak can make one's future growth plans go absolutely haywire, a seemingly innocuous customer handling incident can blow up into a high decibel public relations and social media crisis sullying a reputation painstakingly built over years, a little surge in the oil price can upset all costing estimates, while a tension in some remote part of the globe can have a ripple effect back home leading to large-scale cancellations. No wonder, the industry treads from one existential crisis to another. This industry is not for the faint-hearted. It is also not for people who want to make a quick buck or for those who mistake it as an annex to the glamour world.

One also has to proclaim that there is nothing as exciting as aviation. It appeals and caters to human's innermost cravings—to have wings, and to take to the sky. Aviation has bolstered the civilizational march like none other. Flight is the future in more sense than one. And those who have figured out the intricacies of the aviation conundrum know how to navigate through its numerous air pockets and recurrent headwinds and how to make money too. The

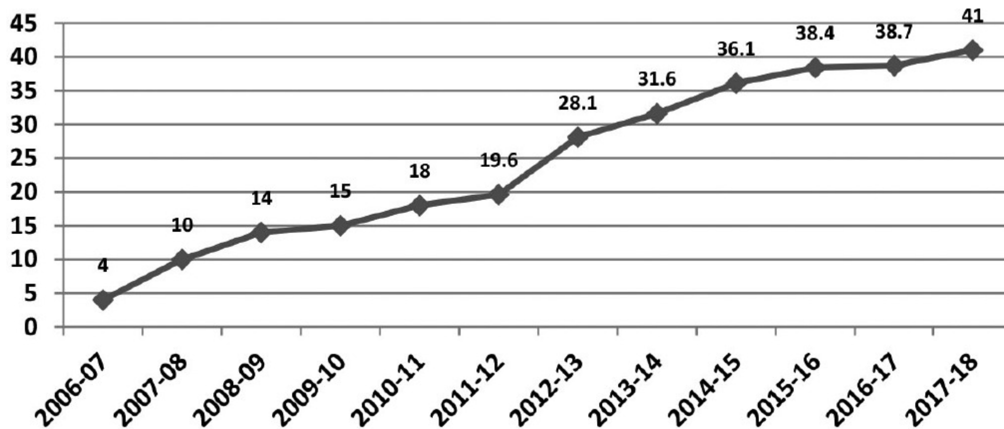
world's successful LCCs such as Southwest, RyanAir, easyJet and AirAsia figured it out. Back home, IndiGo figured this out wonderfully and got handsomely rewarded.

Noted management thinkers, C.K. Prahalad and Gary Hamel, talked about why an organization needs to identify its core competency and build upon it to emerge a winner.[230] IndiGo's founders were clear about what core attributes they wanted in their airline venture and went about building and nurturing it in a meticulous copybook manner. Bhatia and Gangwal also had their growth strategy well in place. It made them winners.

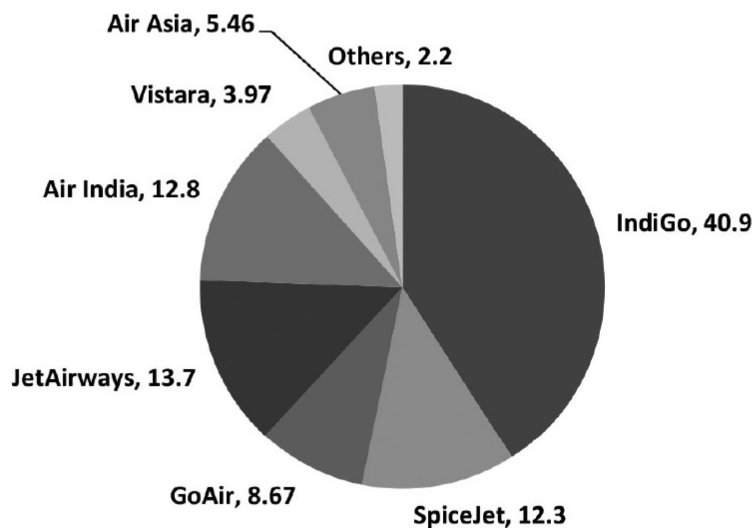
From 2013 to 2017, the IndiGo story has basically been about its rising dominance over the Indian sky. It did face much turbulence in 2017 and early 2018 on account of neo engine troubles and social media chastisement over customer handling issues, but it has never really faced anything like an existential crisis. It has overcome its recent crises and moved on. Till date, IndiGo has made nearly all the right moves much like a seasoned grandmaster while sticking strictly to its business model. Its promoters have also remained grounded and have shown commitment to doing business the right way. Indigo today is a leader of the Indian sky by many miles and remains very well-positioned to defend its home crown in the foreseeable future. It has definitely carved out a 'Blue Ocean'[231] for itself and has built itself to last!



IndiGo's fleet development
Source: DGCA



IndiGo market share growth (in percentage)



Domestic market share, May 2018

What is Next?

Chris Zook, the acclaimed management consultant, posed the question to organizations—what happens when your core business provides insufficient new growth or even hits the wall?[232] Having conquered the Indian sky, this question is in line—what's next for IndiGo? Is it sitting content with its success and taking it easy now? Well, not at all! IndiGo is again in a state of flux, preparing moves to wrest more territories and win more crowns. It is, today, on the springboard of the next phase of growth which will be fundamentally different from the one it set out to achieve in 2005. Today, IndiGo is

going regional and also wants to go international in a big way where it will be a three-front war in which it will have to battle out forces on the east and the west while defending its core domestic territory.

Prahalad and Hamel have also pointed out that the strategy is never static; it's a dynamic process. Every organization needs to be flexible with their strategy to respond to new challenges—the fluidity of strategy.[233] So, has IndiGo figured out its next strategy, its future plans? Zook, in his celebrated book *Beyond the Core: Expand Your Market without Abandoning Your Roots*, talks about 'adjacency moves' which is about creating new growth tangents without disturbing the core. He cautions against drastic diversifications and stresses upon broadening of existing competencies to increase the 'odds of success'. 'The best companies fuel sustained growth through carefully planned 'adjacency moves'—expansion into areas away from, but related to core business.'[234] Will IndiGo move away drastically from its core or will it fly along its adjacencies? To me, IndiGo has figured out its adjacencies. Expanding regional and international operations at the same time is a logical and natural course for it.

IndiGo also knows well that its dramatic domestic growth phase is over. Yes, it is sitting pretty in the pole position and has taken an enviable lead over the competition, but wresting more ground from competitors is not going to be easy now. Domestically, it will grow with the market but others too have figured out by now how to grow and from where to generate margins. It is more or less the end of competitive advantage for players domestically, which would prompt Rita Gunther McGrath and Alex Gourlayto ask, 'So, how will you keep your strategy moving as fast as your business?'[235]

IndiGo will definitely try very hard to retain and sharpen its edge. It also knows well that in the home turf, the next round of high growth is going to come from tier-II and tier-III cities and it wants a bigger presence over there. It will be going for aggressive new route additions, something it had been conservative with. To cater to smaller cities, it will again rely on its key propositions—low-cost and convenient flying experience. One key element of its regional strategy has been to induct, for the first time, a different class of aircraft in its fleet. It has inducted ATR 72, a twin-engine turboprop,

short-haul regional airliner. It already has eight of them, while 42 more will arrive in due course.[236]

However, it is the international market where its real, intense battle lies. Here too, it is now looking at fleet diversification. It will be acquiring 50 wide-bodied Airbus A330 to offer more comfortable flying experience on long-haul international routes. But the international sky is going to be an 'expeditionary market'* for IndiGo, despite it having been there for nearly seven years now. What got IndiGo till here is not going to take them out there![237] On the eastern front, it will have to face the might of well-entrenched players like Singapore Airlines Group, AirAsia and soon Vistara too. On the western front, Gulf carriers are deeply rooted while Jet Airways will do everything in its power to retain its grip on this corridor. Getting hold of Air India's international operations could have given IndiGo a much-needed arsenal to launch the international assault but the government is unlikely to bifurcate Air India's operations into lucrative and non-lucrative pies.

Other changes are also visible. IndiGo is talking of abandoning its much celebrated 'lease and sell' model in favour of the outright purchase.[238] Of late, it has begun to find merit in owning fleet, which it feels will bring down its ownership cost.[239] The recent management changes—the induction of expat aviation professionals at top posts simultaneously with the exit of old Indian hands that we have witnessed—are primarily to shape up its international operations. However, the one lament will be that IndiGo-I was conceived and nurtured primarily by Indian professionals, but IndiGo-II will be piloted almost exclusively by expats. In a global environment, such talks may appear conservative but it does reflect that the Indian aviation has not been investing sufficiently in producing professionals who can take on the challenges of international aviation. The top leadership of AirAsia, Southwest and Ryan largely consist of homegrown aviation professionals. Back home, we have a way to go on this front. As the leader of the Indian sky, it surely lies much upon IndiGo to invest in creating global aviation managers.

Not a Blue Ocean

The international sky will surely not be the 'Blue Ocean' for IndiGo but a bloody red one. Unlike the domestic market, where capacity (ASPK) is just slightly higher than the demand, there is a significant overcapacity on international routes. So it is going to be a very different ball game. IndiGo would be relying on its proven low-cost model to make an impact but what happens once full-service carriers also start offering seats at the price of LCC? In case a price war breaks out on international routes, IndiGo's response will be keenly watched. Also, till date, IndiGo has been rejecting the advances made by Qatar Airways.[240] Will the demands of international operations force it to change its mind?[241] This too will be interesting to see in the coming times. But be assured, an exciting phase for dominance of international sky has begun!

The Perfect Co-pilots

Rahul Bhatia and Rakesh Gangwal represent India's finest aviation and entrepreneurial spirit, much on the lines of J.R.D. Tata, Seth Walchand Hirachand, Biju Patnaik, Narayan Murthy, Sunil Mittal and many others of this celebrated breed. They dared to dream and turned a wild idea into reality. They had the courage and wisdom to shape up their vision. In the course, they thought like leaders and acted like leaders. Along the way, they also upturned much old wisdom.

The general refrain has been that business partnership of individuals is not a very good idea[242] as different personalities with different ways of running and implementing a business plan ultimately clash, which sooner than later brings down the venture, preceded by bitterness in personal equations.[243] But there have also been a few glorious exceptions to this general refrain. Some of the most iconic brands that we know of today have been created by the coming together of two individuals, who, despite radically different personalities, harmonized their respective strengths to shape up a common dream and turned their dreams into mega business

empires. Just think of Bill Gates and Paul Allen[244] or Bill Hewlett and Dave Packard.[245] Could they have done it on their own? Seems quite unlikely!

Rahul Bhatia and Rakesh Gangwal, the men who scripted the most stunning success in Indian aviation, could also not have been more different from each other, somewhat akin to Steve Jobs and Steve Wozniak—the co-founders of Apple. Personality-wise, Jobs and Wozniak were as different as chalk and cheese.[246] And if Wozniak knew how to build a computer (he was the main guy who designed and developed Apple I and Apple II), Jobs knew how to market it. Rest is legend.

On the surface, Bhatia has been the outgoing kind with a vision, while Gangwal, the reticent kind of guy who likes to go about a task quietly, has been the mission man—the implementer. So, while Bhatia had the vision of starting a true LCC and an excellent sense of commercial dynamics and regulatory challenges of the Indian aviation sector, Gangwal was the man who knew how to run an airline. Having been a number cruncher at the helm of affairs of one of the biggest airlines in the USA, he knew how to extract margins where none existed. He also had the right academic and professional credentials and the negotiation skills to convince a company like Airbus to commit to an audacious contract for the supply of 100 aircrafts to an airline which had not even taken wings!

Yes, it did require a good amount of convincing by Bhatia to bring Gangwal on board. Going by a report in a newspaper,[247] Gangwal, while finally agreeing to be a partner, told Bhatia that once they lost all the money, they would shake hands and remain friends. Gangwal knew well the perils of the Indian sky. Once they decided to join hands and brought their respective strengths to the table, IndiGo became a fabulous proposition, as never before had an airline in India been started by two hard-core, well-meaning aviation professionals. More significantly, both went about doing things in an ethical, straight and professional way. One has not heard of IndiGo indulging in shady deals or dubious means to gain an advantage over the competition. Bhatia and Gangwal scripted a success story which has been based on integrity, intelligence and sound business principles.

IndiGo would not have been IndiGo and would not have emerged as the market leader in double quick time but for the coming together of these two gentlemen. They have been the competent commanders of IndiGo's fabulous success while their venture also contributed significantly to taking Indian aviation to greater heights. Their vision and cool implementation of business strategy have indeed changed the script of Indian aviation forever. Bhatia and Gangwal have also provided IndiGo a huge lead over the competition in the domestic market which today looks nearly impossible for anyone to beat and from where IndiGo can launch itself comfortably for the next exciting phase of its journey. They have been perfect partners and perfect co-pilots.

From an upstart in 2005, Rahul Bhatia and Rakesh Gangwal today are the Indian aviation's true blue rock stars, much like Simon and Garfunkel—understated and unassuming, but most impactful and lasting.

This book is as much a salute to the entrepreneurial spirit of Rahul Bhatia and Rakesh Gangwal as it is a story of their fabulous venture, IndiGo, and the Indian Aviation.

Eleven Life and Business Lessons from IndiGo

1. Dare to dream—and dream big.
2. One can succeed and succeed big the ethical way.
3. A partnership can work if it is a partnership of shared vision and shared values—not if it is just a partnership of convenience and connivance.
4. Ultimately, a business has to be run on sound business principles to succeed.
5. PR and gimmickry is no substitute for real performance.
6. A start-up, despite a great idea and market potential, has to do its homework meticulously.
7. Think ahead to remain ahead of the competition! Think like a chess grandmaster—a grandmaster visualizes at least ten forward moves. The current world champion Magnus Carlsen can think up to twenty forward moves.
8. Be the game changer if you can be.

9. Strike like a panther when opportunity strikes.
10. Empowerment of people is key—one can't be everyone and everything.
11. Providence plays its own role, but don't centre your business strategy around it.

IndiGo Timeline

Pre-leadership Phase (2005–2011)

2005

- Placed a landmark order of 100 Airbus A320s.

2006

- Received the delivery of its first A320 aircraft.
- Commenced domestic operations with the first flight from New Delhi to Imphal via Guwahati.
- Added 13 destinations to its network by the end of FY 2006.

2007

- Crossed one million passenger mark.
- Raised capacity to eight operational aircraft, with 96 daily departures.
- Best 'Low Fare Carrier Award' by Air Passenger Association of India.

2008

- Ahmedabad added as a new destination.
- Galileo Express Travel Award for 'Best Low-Cost Carrier'.
- 18 operational aircraft.

2009

- CNBC Awaaz Travel Award for 'Best Low Cost Airline'.
- NDTV Profit Business Leadership Award.
- Added six more destinations (Lucknow, Patna, Dibrugarh, Jammu, Srinagar, Coimbatore).
- Served more than 14 million passengers.
- Cornered passenger market share of 15.4 per cent in December.
- Received delivery of its 25th A320 aircraft.

2010

- Won the 'Best Low Cost Airline—Central Asia/India, 2010' by SkyTrax World Airline Award, for the first time.

2011

- Launched international operations with flights to Bangkok, Dubai, Kathmandu, Muscat and Singapore.
- Placed another order of 180 Airbus A320Neo aircraft.
- Received delivery of its 50th aircraft.
- Added Visakhapatnam, Chandigarh, Dehradun to its domestic route map.
- Served more than 35 million passengers.
- Launched a customer mobile app.

Leadership Phase

2012

- Became the largest and the most profitable airline in India.
- Crossed the 50-million passenger mark in December.

2013

- Received delivery of its 75th aircraft.
- Added Ranchi and Bagdogra as destinations.

2014

- Became the eighth largest low-cost carrier in the world.
- Received delivery of its 100th A320 Airbus.
- Crossed the 75-million passenger mark.
- Ordered 250 A320Neo aircraft.
- Market share increased to 36.2 per cent in December.
- Added Kozhikode and Varanasi as destinations.
- Got top spot to win the Airbus Operational Excellence Award.
- In celebration of the delivery of its 100th plane, announced the launch of the '6E Scholar programme'—sponsored education for 100 underprivileged students.

2015

- Went for mega IPO—became a listed company.
- Crossed the 100-million passenger milestone.
- Confirmed order for 250 A320neo aircraft—Airbus' largest order ever by number.
- Ended the year with a market share of 33.8 per cent.

2016

- Received delivery of its first Airbus A320neo.
- Received delivery of its 125th Airbus A320 aircraft.
- Became the first airline in India to set up a day-care at an airport.
- Added Port Blair as its 41st destination; launched additional flights in domestic sectors.
- Received the AON 'Best Employer Award'.
- Won the 'Best Low Cost Airline in India/Central Asia' for the seventh successive year at the 2016 Skytrax World Airline

Awards.

- Ended the year with a market share of 42.1 per cent.

2017

- Became the first Indian carrier to touch 1000 flights in a day.
- Added 25 new generation A320neos in 2017.
- Ordered 50 ATR 72-600 aircrafts to strengthen its regional operation; inducted first ATR first aircraft in November 2017.
- Added nine new destinations on its route network—Port Blair, Dehradun, Sharjah, Amritsar, Madurai, Doha, Mangalore, Tirupati and Rajahmundry.
- Pronounced 'Best Low-Cost Airline' at the SKYTRAX World Airline Award 2017 for the 8th consecutive year.
- Awarded the best 'Regional and Low-cost Airlines—Asia Pacific' at TripAdvisor's 2017 Travellers' Choice Awards.
- Ended the year with 39.4 per cent market share.

2018

- Appointed Wolfgang Prock-Schauer as the COO.
- Gregory Taylor appointed as the senior adviser to the company.
- Aditya Ghosh, its CEO for ten years, quits.
- Rahul Bhatia took over as interim CEO.
- Had a market share of 39.7 per cent as of March 2018.

Glossary

Aircraft: Any machine that can derive support in the atmosphere from the reactions of the air other than those against the earth's surface.

Aircraft Departures: The number of take-offs of an aircraft. For statistical uses, departures are equal to the number of landings made or flight stages flown.

Aircraft Kilometres Performed: Aircraft kilometres equal to the sum of the products obtained by multiplying the number of flights performed on each flight stage by the stage distance.

Aircraft Movement: An aircraft take-off or landing at an airport. For airport traffic purposes one arrival and one departure is counted as two movements.

Aircraft—Type Of: All aircraft of the same basic design including all modifications thereto except those modifications, which result in a change in handling or flight characteristics.

Commercial Air Carrier: A carrier performing scheduled or nonscheduled air transport services or both, available to the public for the carriage of passengers, mail or cargo for remuneration.

Directorate General of Civil Aviation: DGCA is the Indian regulatory body for civil aviation under the Ministry of Civil Aviation, Government of India. It has a very wide range of functions and authority including (a) Registration of aircrafts (b) Formulation of standards of airworthiness for civil aircraft registered in India (c) Licensing of licensing of pilots, aircraft maintenance engineers and flight engineers and conducting examinations and checks (d) Grant of Air Operator's Certificates to Indian carriers and regulation of air transport services operating to/from/within/over India by Indian and foreign operators, including clearance of scheduled and non-scheduled flights of such operators (e) Conducting investigation into incidents and serious incidents (f) Formulation of implementation of Safety Aviation Management Programmes (g) Aviation requirements for complying with the amendments to ICAO Annexes and many more. For details on DGCA, please visit: http://dgca.nic.in/dgca/dgca-ind.htm

Distance Flown Per Passenger: The average distance flown per passenger is computed by dividing the passenger-kilometres by the related number of passengers carried.

Disembarkation: The leaving of an aircraft after a landing, except by crew or passengers counting on the next stage of the same through-flight.

Domestic Flight: A flight having exclusively domestic stages. See domestic flight stage.

Domestic Flight Stage: Domestic flight stages include all flight stages flown between points within the domestic boundaries of a state (country) by an airline registered in that state (country).

Domestic Scheduled Airline: An airline which operates any scheduled service within the boundaries of the state where the airline is registered but which does not operate, scheduled international services.

Embarkation: The boarding of an aircraft for the purpose of commencing a flight, except by such crew or passengers as having embarked on a previous stage of the same through-flight.

Flight Commercial Air Transport: The operation of aircraft on one or more stages on a scheduled or non-scheduled basis, which is available to the public for remuneration and for hire.

Flight Stage: The operation of an aircraft from take-off to its next landing.

Freight (or mail) Tonne-Kilometres (performed): A metric tonne of freight or mail carried one kilometre. Freight tonne-kilometres equal the sum of the products obtained by multiplying the number of tonnes of freight, express, diplomatic bags carried on each flight stage by the stage distance. Cargo and freight include express and diplomatic bags but not passenger's baggage. Mail tonne-kilometres are computed in the same way as freight tonne-kilometres.

Freight (or mail) Tonnes Carried (performed): The number of tonnes of freight carried is obtained by counting each tonne of freight on a particular flight (with one flight number) once only and not repeatedly on each individual stage of that flight. The only exception to this is for freight flown on both the international and domestic stages of the same flight, which is considered in computation both as a domestic and an international shipment or dispatch. The same principle should be used in calculating mail tonnes carried.

The International Air Transport Association: IATA is the trade association for the world's airlines, representing some 290 airlines or 82 per cent of total air traffic. IATA supports many areas of aviation activity and helps formulate industry policy on critical aviation issues.

The International Civil Aviation Organization: ICAO is a UN specialized agency, established by states in 1944 to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention). ICAO works with the Convention's 192 Member states and industry groups to reach

consensus on international civil aviation Standards and Recommended Practices (SARPs) and policies in support of a safe, efficient, secure, economically sustainable and environmentally responsible civil aviation sector. These SARPs and policies are used by ICAO Member states to ensure that their local civil aviation operations and regulations conform to global norms, which in turn permits more than 100,000 daily flights in aviation's global network to operate safely and reliably in every region of the world. For more, please visit: https://www.icao.int/about-icao/Pages/default.aspx

International Airport: Any airport designated by the Government of India as an airport of entry and departure for a foreign airline for embarkation and disembarkation of scheduled international air traffic, where the formalities incident to customs, immigration, public health, agricultural quarantine and similar procedures are carried out.

International Flight: A flight that contains one or more international flight stages.

International Flight Stage: A flight stage with one or both terminals in that territory of a state, other than the state in which the airline is registered. Technical stops are not considered in classifying flight stage.

International Non-Scheduled Operator: An operator offering international service to the public on a non-scheduled basis only. Such an operator may also offer domestic services on a nonscheduled basis only.

International Scheduled Airline: An airline, which operates any scheduled international air transport service regardless of the proportion of international service offered as compared with all other kinds of services offered.

International Traffic (of airports): For airport traffic purposes, international traffic means:

Passengers, freight and mail disembarked at an airport located in a country other than of the airport of embarkation, or vice versa; and

Movements on a flight of national or foreign aircraft whose origin or destination is located in the territory of a state other than that in which the airport under consideration is located.

Non-Scheduled Air Transport Operator: An operator is classified as a non-scheduled air transport operator if it offers an air transport service to the public on a non-scheduled basis only.

Operating Expenses Per Traffic-Unit: This is a type of financial measurement, which relates the traffic or capacity applicable to the operating expenses. It is computed by dividing the operating expenses by the tonne-kilometres performed or by the tonne-kilometres available.

Operating Revenue Per Traffic-Unit: This is a type of financial measurement, which relates the traffic or capacity applicable to the operating revenues. It is computed by dividing the operating revenues by the tonne-kilometres performed or by the tonne-kilometres available.

Operator: A person, organization or enterprise engaged in or offering to engage in aircraft operations.

Passengers Kilometres Performed: A passenger kilometre is performed when a passenger is carried one kilometre. Calculation of passenger-kilometres equals the sum of the products obtained by multiplying the number of revenue passengers carried on each flight stage by the stage distance. The resultant figure is equal to the number of kilometres travelled by all passengers.

Passenger Load Factor (PLF): Passenger-kilometres performed expressed as a percentage of seat-kilometres available.

Passengers Carried: The number of passengers carried is obtained by counting each passenger on particular flight (with one flight number) once only and not repeatedly on each individual stage of

that flight, with a single exception that a passenger flying on both the international and domestic stages of the same flight should be counted as both a domestic and international passenger.

Passengers Carried Per Aircraft: The average number of passengers carried per aircraft is computed by dividing passenger-kilometres by the related aircraft kilometres flown.

Passenger Revenue Per Traffic-Unit: This is a type of financial measurement, which relates the passenger traffic applicable to the passenger revenues. It is computed by dividing the passenger revenues by the passenger-kilometres performed/available.

Passenger Weight: For converting aircraft passenger load into weight load, the number of passengers is multiplied usually by 90 kilogrammes, which allows for the weight of the passenger plus both free and excess baggage. However, in reporting, the conversion is left to the discretion of the operator and conversion factors other than 90 kilogrammes may be used.

Revenue Passenger: Refers to passengers paying 25 per cent or more of the normal applicable fare.

Route Dispersal Guidelines: The Civil Aviation Ministry came out with the 'Route Dispersal Guidelines' on 1 March 1994. The objective was to quickly and adequately extend air services to lesser-served regions and cities while enhancing access to air travel to a greater number of Indians. RDG divided all air routes into four categories: Category I, II and IIA and III.

Category I comprised of major metro routes. Category II and IIA comprised of stations in Jammu and Kashmir, North-East Region, Andaman and Nicobar and Lakshadweep Islands connected with stations outside these regions. Category III were routes other than those included in Category I and II. RDG mandated all scheduled operators to deploy a certain minimum number of flights proportional to the strength of their fleet to Category II and III routes to achieve the objectives of these guidelines. The scheduled operators were given the option of providing the service either by aircrafts in their

fleet or with aircrafts in any other operator's fleet on mutually agreed terms. Category I Routes: Mumbai–Bangalore, Mumbai–Chennai, Mumbai–Delhi, Mumbai–Kolkata, Mumbai–Hyderabad, Mumbai–Trivandrum, Delhi–Bangalore, Delhi–Chennai, Delhi–Hyderabad, Kolkata–Bangalore, Kolkata–Chennai and Kolkata–Delhi.

Scheduled Airline/Air Carrier: An air transport enterprise offering any scheduled air service.

Scheduled Services: Services provided by flights scheduled and performed for remuneration according to a published timetable, or so regular or frequent as to constitute a recognizably systematic series, which are open to use by members of the public; extra revenue flights occasioned by overflow traffic from scheduled flight; and preliminary revenue flights on planned new air services.

Seat Kilometres Available: Seat kilometre is available when a seat is flown one kilometre. Seat kilometres available are equal to the sum of the products obtained by multiplying the number of passenger seats available for sale on each flight stage by the stage distance. Seats not actually available for the carriage of passengers because of the weight of fuel or other loads should be excluded in the calculations.

Speed Flown Per Aircraft: This is an average per aircraft measure computed by dividing the aircraft kilometres flown by the related aircraft hours.

Stage Distance Flown Per Aircraft: The average distance flown per aircraft is computed by dividing the aircraft kilometres flown by the related number of aircraft departures.

Tonne: The mass equal to 1000 kilograms.

Tonne-Klometres Available: A metric tonne of available payload space flown one kilometre. Tonne-kilometres available equals the sum of the products obtained by multiplying the number of tonnes

available for the carriage of revenue load (passengers, freight and mail) on each flight stage by the stage distance.

Tonne-Kilometres Performed: A metric tonne of revenue load carried one kilometre. Tonne-kilometres performed equals the sum of the product obtained by multiplying the number of tonnes of revenue load carried on each flight stage by the stage distance.

Traffic: For air transport purposes, traffic means the carriage of passengers, freight and mail.

Weight Load Factor: Tonne-kilometres performed expressed as a percentage of tonne-kilometres available.

Source: DGCA/ICAO/IATA

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