Strategic Alliances and Joint Ventures in Civil Aviation – A case study

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Mrs. Smitha Siji**

The New Economic policy Reforms 1991 has paved way for almost all Indian industries to undergo a radical change. The traditional and restrictive Aviation industry is no doubt a part of it. Infact, Indian civil aviation had to immediately nod to liberalization due to its poor and pathetic financial numbers. Airline, being a service industry is facing intense competition after liberalization. As a result, the various airlines are engaged in consolidation, strategic alliance and privatization, with an aim of improving their competitive positions.

Key Players in Indian Industry

Airlines on International Routes

Air India is the national flag carrier airline of India with a network of passenger and cargo services worldwide. It is one of the two state-owned airlines in the country, the other being Indian Airlines. Air India has 44 world-wide destinations. The airline has been profitable in most years since its inception. In the financial year ending March 31, 2006, Air India has made a net profit of Rs.97 million; earned a revenue of Rs.87,480 million - representing a growth of almost 15 per cent over the previous year.

Air Sahara is a privately owned airline operating scheduled services1 connecting all metropolitan centres in India. The airline was established on 20 September 1991 and began operations on 3 December 1993 with two Boeing 737-200 aircraft as Sahara Airlines. The uncertainty over the airline's fare has caused its share of the domestic Indian air transport market, from approximately 11% in January 2006 to a reported 8.5% in April. Sahara Airlines was rebranded as Air Sahara on 2 October 2000.

Indian is India's state owned primarily domestic airline, under the federal Union Ministry of Civil Aviation The Company was formerly known as Indian Airlines. On December 7, 2005 the company was rebranded as Indian as a part of a program to revamp the company image in preparation for an IPO. Indian Civil Aviation Minister, Praful Patel, announced Government of India's plan to merge Air India and Indian into one giant airline consisting of 130-140 aircraft.

Jet Airways a “regular” airline which offers normal economy and business class seats. Jet Airways, along with Air Sahara, is the only airline which survived the dismal period of 1990s when many private airlines in India were forced to close down. Jet Airways operates both in domestic and international routes. The airline operates over 300 flights to 43 destinations across the world. It currently controls about 32% of India's aviation market.

Airlines on Domestic Routes

SpiceJet is a low-cost airline. Their marketing theme is "offering low", “everyday spicy fares” and “great guest services to price conscious travelers". Their aim is to compete with the Indian Railways passengers travelling in AC coaches.

Air Deccan is an airline based in Bangalore, India. It was India's first LCC (low-cost carrier)/no-frill airlines2, and as of May 2006, it connects 55 cities within India. Air Deccan has grown rapidly since it first started air operations in 2003, and despite its almost disastrous maiden
inaugural flight (which caught fire), it continued to grow. The growing Indian economy and the increasing number of middle-class people in India have greatly helped its growth.

GoAir The People’s Airline, a low cost carrier promoted by The Wadia Group is a domestic budget airline based in Mumbai, India established in June 2004. It’s a relatively small player as compared to other low cost airlines.

Kingfisher Airlines is an airline based in Bangalore, India. Services started on 9 May 2005, following the lease of 4 Airbus A320 aircraft. It initially operates only on domestic routes. The airline promises to suit the needs of air travellers and to provide reasonable air fares. Kingfisher are pushing for an amendment of the present Indian government rule which requires an airline to fly a minimum of five years on domestic routes before it can start flying overseas.

IndiGo Airlines is a new and a private domestic airline based in India. IndiGo placed an order for 100 Airbus A320 aircraft during the 2005 Paris Air Show. The total order was worth US $6 billion; one of the highest by any domestic carrier during the show. The new low-fare carrier has started operations from August 4, 2006.

2. No-frill airlines - Low cost airlines which does not provide food, beverages or other amenities to passengers

Growth potential of aviation industry

What drives the aviation dream is the growth potential, estimated to be 25 percent with domestic players like Indian Airlines, Jet Airways, Kingfisher Airlines, SpiceJet, Air Deccan, GoAir and Air Sahara carrying 25 million passengers every year. In spite of the downturn, key players are ramping up to fight the battle.

<table>
<thead>
<tr>
<th></th>
<th>Domestic Passengers (In lakhs)</th>
<th>increase</th>
<th>International Passengers (In lakhs)</th>
<th>Passengers % increase</th>
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<tbody>
<tr>
<td>2001-2002</td>
<td>190.60</td>
<td>*8.5%</td>
<td>149.90</td>
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<tr>
<td>2002-2003</td>
<td>206.80</td>
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<td>2003-2004</td>
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<td>168.42</td>
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<tr>
<td>2004-2005</td>
<td>243.45</td>
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<td>178.53</td>
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<td>2005-2006</td>
<td>250.50</td>
<td>*7.0%</td>
<td>188.35</td>
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<td>2006-2007</td>
<td>278.73</td>
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<td>2007-2008</td>
<td>298.24</td>
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<td>2012-2013</td>
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<td>2015-2016</td>
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<td>314.47</td>
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<tr>
<td>2016-2017</td>
<td>523.16</td>
<td></td>
<td>329.88</td>
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</tr>
</tbody>
</table>
- (Forecast upto 2010-11 based on study by "Foundation for Aviation and Sustainable Tourism - April 1996".)
- Forecast from 2012-2017 is taken at the rate of 6% based on a report of AAI.

Growth in aviation industry can also viewed from macro economic perspective. A study by NCAER\(^3\) pointed out that one per cent increase in GDP required one per cent increase in air passenger traffic and 1.3 per cent increase in air cargo traffic. In the first three years of the Tenth plan, the air transport has grown at an average rate of 7 per cent per annum as against the planned estimate of 5 per cent. During the year 2004-05, air transport witnessed a very high growth of 22 per cent in passenger traffic and 20 per cent in air cargo.

### Passenger Traffic Trends

<table>
<thead>
<tr>
<th>YEAR</th>
<th>International</th>
<th>Domestic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in million</td>
<td>% Growth</td>
<td>No. in million</td>
</tr>
<tr>
<td>2003-04</td>
<td>17</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>2004-05</td>
<td>19</td>
<td>17</td>
<td>40</td>
</tr>
<tr>
<td>2005-06</td>
<td>23</td>
<td>18</td>
<td>51</td>
</tr>
</tbody>
</table>

2010 (Projection):
105-115 million (69 mn domestic & 40 mn international)
(Source: Ministry of Civil Aviation)

### Air Cargo Trends

<table>
<thead>
<tr>
<th>YEAR</th>
<th>International</th>
<th>Domestic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qty (Thous. tonnes)</td>
<td>% Growth</td>
<td>Qty (Thous. tonnes)</td>
</tr>
<tr>
<td>2003-04</td>
<td>693</td>
<td>7</td>
<td>375</td>
</tr>
<tr>
<td>2004-05</td>
<td>824</td>
<td>19</td>
<td>457</td>
</tr>
<tr>
<td>2005-06</td>
<td>903</td>
<td>10</td>
<td>479</td>
</tr>
</tbody>
</table>

2010 (Projection):
3,360 thousand tonnes

Growth in India’s civil aviation sector, for many years stunted by bureaucracy and political interference, is now booming at an estimated 25 percent per year. The intense competition ushered in by new entrants — and the strategic response by existing players — will drive further market growth. This expansion is being fuelled by annual economic growth of about 8 percent, rising incomes, cash-rich middle class, a reformist government and an ambitious plan to modernise the country’s aviation infrastructure.

The Indian aviation industry is growing at a rapid pace, thanks to air transport deregulation, emergence of new operators, lower fares and large untapped demand for air travel. The New Delhi office of the Center for Asia Pacific Aviation (CAPA), a Sydney-based aviation consultancy, says airlines in India may be selling about 50 million tickets a year by 2010, compared with around 19 million now. Another study conducted by KPMG suggests that the air passenger traffic is likely to reach 100 million in 2009-10.

3. NCAER – (National Council for Applied Economic Research), India’s premier economic research institution, specialising in policy research, surveys etc.

The main drivers of air traffic are economic upswing, concentration of population, industries and liberalisation leading to higher propensity to travel. The spike in air passenger traffic is largely triggered by the emergence of low-cost carriers in the domestic sector. The penetration of low-cost carriers in small towns, coupled with exceptionally low airfares comparable with railway AC fares has raised the competition to a new level. India is the only country where the number of air travellers a year equals the number of rail passengers in a day. The growth potential in this sector is further leveraged by the first-time flyers queuing up to fly.

The Government has also come up with some initiatives in the right direction which aids the growth of aviation industry such as strong political will and improved policy environment: Electricity Act, Draft Maritime Policy, Draft Civil Aviation policy, ring fencing of funds earmarked for infrastructure, nomination of implementation authorities, urgency to bring about...
commercial viability, momentum of private participation, innovative financing concepts like ‘Public Private Partnerships’ and ‘Viability Gap Funding’ etc.

The aviation industry is almost an under penetrated market with total passenger traffic being only 50 million as on 31st Dec 2005 amounting to only 0.05 trips per annum as compared to developed nations like United States have 2.02 trips per annum. Air Cargo has not yet been fully taped in the Indian markets and is expected that in the coming years large no of players would have dedicated fleets. The key challenge for Indian aviation companies is to convert strong traffic and revenue growth to profits for which yields need to stabilize.

Civil Aviation: Before and After Liberalisation

Before Liberalisation

The cost of travel in India was amongst the highest in the world. The two state-owned domestic and international carriers, Indian Airlines (IA) and Air India (AI) dominated the market until recently. Built on huge cost and as full-service providers they justified these high airfares.

4. Viability Gap Funding’ – A scheme which is meant to reduce capital cost of projects by credit enhancement and to make them viable and attractive for private investments through supplementary grant funding.

With no competition from any front, the state-run airlines enjoyed a monopoly. From their position of strength, they pressurized the state machinery to obstruct foreign airlines from expanding flights to India and also to restrain the growth of private sector players. As a retaliatory measure foreign players hindered the growth of Indian airlines by not accommodating any deals with them. In the early 1990s, steps were taken to liberalise the aviation sector and the rest what we witness today is history.

After Liberalisation

From the consumers perspective; choice of airlines have increased, fares have reduced significantly, and increased routes is another big major advantages. From the airlines perspective; Commercial freedom is the biggest advantage along with increased foreign investment. From the airport perspective; increased number of air passengers and aircraft contributing to increased revenue in form of landing charges and consumer spending at airport is the great advantage. All these factors have directly and indirectly contributed to the economy in form of increased tax revenues, increased employment opportunities and increased inflow of FDI, increased tourism etc

Problems in Indian Civil Aviation

The most restricted industry faces serious setbacks even after liberalization and privatization. Infact such initiatives have caused new problems.

Infrastructure bottlenecks: There is hardly an airport with more than one runway. Also, none of the runways can handle wide bodies like the A380. There is serious shortage of parking bays. Ground facilities are hardly sufficient to process the current passenger volume. While the offer of cheap tickets and the convenience of choosing between different airlines and flight timings are luring domestic flyers, there are other issues that need attention. If one talks to regular flyers today one will come across endless tales of how flights circle above airports, waiting to land, or they are made to wait endlessly in aircraft because of the long queues of planes either waiting to take off or land.

Traffic Jam: Airport privatization is facing rough weather. The ground infrastructure of metro-airports is very poor. Delhi and Mumbai together handle around 60 percent of India’s passenger
traffic. It typically takes 10 to 15 minutes for any flight to land in Delhi or Mumbai airports. Under foggy conditions, it may go up to 40 to 45 minutes. It may be noted that each minute of flying over the airport burns around fuel worth Rs.1000.

Taxation policy: The taxation policies of the Indian government are also adversely affecting airlines operations. The aviation turbine fuel (ATF) price in India, which is reportedly subject to 8 per cent excise duty, and a high sales tax averaging well above 25 per cent, is on the high side. Airlines in India have to spend 30 per cent of their operating costs on ATF while the international average is 10 to 15 per cent.

Productivity: The legacy carriers\(^5\) are replacing their high-cost labour with new blood which would result in lower wages as less senior people means lower wages. At the same time, low-cost carriers will be maturing and with older work force comes higher salaries. The most difficult problem facing the legacy carriers will be the transition to higher productivity. Senior workers will be hesitant and it will be difficult to change the culture. The low-cost carriers will face aircraft that are older. Older aircraft requires more maintenance and more time out of service as the longer maintenance cycles are more intense.

Reasons for Alliances & Joint Venture in Civil Aviation

The salient features that favoured the alliances and joint ventures in airlines are as follows: Capital intensity, service orientation, Limited manufacturers, High level of regulation, low margins and tendency to consolidate and outsource.

Capital intensity: The modern jet aircraft are products of intensive research and commercial application and are hence very costly. This implies that airlines companies should have the ability to mobilise enormous resources for acquisition and maintenance of their fleets.

Service Orientation: As the basic aircraft gives little scope for product differentiation, airlines are harping on high level of on-time performance, wide network that offers better connectivity, better in-flight services, attractive frequent flyer’s programme, superior lounge facilities etc. to attract passengers. Airlines are, thus, dependent on the skills of the flying crew and pleasant behaviour of the cabin crew for attracting and retaining passengers.

5. Legacy carrier - An airline revolving around a hub & spoke network and a corporate structure. Legacy Carriers mainly include:: First Class/Business Class, Lounges, Frequent Flyer Programs, Alliances Frills/Perks throughout the cabin (food, beverage, better service)

Limited manufacturers: Most of the aircraft are manufactured by two manufacturers: Airbus Industrie and The Boeing Company. As a result, basic features like carrying capacity, speed, range and facilities offered are likely to be similar for same type of aircraft operated by different airlines.

High level of regulation: Operations of the air transport industry are governed by the agreements entered into between countries in which the aircraft are registered. These agreements prescribe the names of the carriers that can operate between the countries, the frequency, seating capacity and rights to pick up and discharge passengers. Countries have to enter into bilateral agreements for these rights. Government support is, therefore, essential for the survival of the airline industry.

High level of concentration: Although there were more than 700 airlines in the world, the top seven (in terms of revenue) accounted for 33% of the total tonne kilometre performed in 1996. Again, approximately 35% of the total volume of scheduled passenger, freight and mail traffic was accounted for by the airlines of the United States. On international services, about 18% of all traffic was carried by the airlines of United States.

Low Margins: Almost all the airlines are running under losses. If at all any airlines showed profits, it is only marginal. Generally any capital intensive industry would book low or negligible profits.
Tendency to consolidate: Faced with intense competition and falling yields, the major players in the industry are moving towards consolidation through block space arrangements\textsuperscript{6}, code sharing\textsuperscript{7} alliances and joint ventures. In 1996, six major alliances controlled 59% of the revenue, 56% of the fleet, 55% of employees and 60% of total tonne kilometre for the top 100 airlines in the world. Through alliances, the partners attempt to edge out marginal players on different routes.

Adding to the salient features, the following reasons contributed for consolidation in Indian airline industry: Weak financials, high cost of operation, poor brand image, lower fleet capacity and inability for differentiation.

6. Block space arrangement - reservation of certain number of seats in one airlines’ flight is reserved for sale of another airline

7. Code sharing - seats can be sold by two airlines bearing codes allotted to more than one airlines

\textit{Weak Financials:} The Laws of supply and demand in economics were not working for civil aviation business. “In the law of economics, lower prices lead to increase in demand and in turn lead to higher revenues. In the airline business, there has been a reduction in fares resulting in an increase in demand for seats. But the industry does not experience a corresponding increase in revenues; in fact, the reverse is happening.” Cumulatively, the losses reported by various airlines exceeded Rs.2000 crores in 2006.

\textit{Declining Yield:} Intense competition is leading to falling yields. This issue got compounded by the very high prices of aviation turbine fuel (ATF). Airlines are not able make up for the frequent and steep increase in prices of ATF through price adjustments. It is noteworthy to mention that ATF prices account for around 30 - 45% of an airline’s operating cost. Hefty taxes imposed by Central and State government is another reason for low margins. The additional service tax imposed on business class and first class passengers also affected custom from a sector that has been paying handsome prices.

\textit{High cost of Operation:} The steep decline in fleet strength and the ageing fleet make cost of operations still costlier for Indian Airlines. Today, the average age of the Indian Airlines fleets over 17 years; these include fuel guzzlers like A 300 and B 737. With the new order by IA for 43 aircraft, the average age would fall to less than 8 years.

\textit{Poor Infrastructure:} Air transport follows road transport case in India. Development of road infrastructure was not matching the production of cars. Similarly Airport infrastructure is far behind the acquisition of aircraft. Presently, there is increase in demand for air travel and this has stimulated the investments in airport infrastructure. Upgradations with huge investment are carried out at Delhi, Mumbai, Bangalore, Hyderabad, Cochin airport. Due consideration is given to smaller airports.

\textit{Poor brand image:} Customer service and network are the main aspects of the product offered by airlines. Since it is a service industry, only the quality of service will ensure success in business. AI’s product has suffered on these counts in the recent past due to which it has lost its business to other airlines.

\textit{Lower fleet capacity:} AI’s fleet size is only 26, which is significantly less when compared with other international airlines. British Airways has 256 aircraft while Singapore Airlines is having 80 aircraft. Even after the merger between Air India and Indian, there will be only 112 flights in total. All other private carriers also don’t have commendable fleet size to meet the growing demand. But
almost all the airlines have ordered for aircrafts in big numbers. Fleet acquisition will be a successful only if there is access to adequate capital.

**Inability for differentiation:** Being a capital intensive industry, it is difficult for the airlines to differentiate in the aircrafts they run. Hence the differentiation has to be in service – with frills or no-frill service.

**Strategic Alliance – The modern airline trend**

Strategic alliances have been one of the most visible responses of airlines to the intense competition of recent years. The main objective of these alliances is to create competitive advantage for the partners by enabling them to complement each other’s services and achieve substantial economies of scale, particularly in marketing and maintenance costs and largely retailing and corporate independence. Inter-airline alliances lead to many competitive advantages:

- Merging of commercial activities in terms of sale and passenger service
- Pooling of intercontinental routes and linking domestic routes
- Providing high quality services
- Giving preferential access to a long haul hub for feeder airline partners
- Joint ground handling and maintenance at airports
- Capturing market share
- Joint investments and operating expenditure agreements
- Merging of reservation systems
- Joint fare policy
- Code sharing
- Advantage of global status and transcontinental distribution on partners
- Generate economies and new opportunities
- Risk sharing

8. **Hub** – An airport or city in which an airline has a major presence and many flights to other destinations. Many carriers use the hub and spoke system to maximize profits by keeping the aircraft in the air as much as possible. Flights to the hub are many, and from there flights to many other destinations are scheduled.

Such alliances enable the airlines to break regional barriers and explore vast and hitherto untapped business opportunities. In the international front, the first major alliance was established in 1989 between KLM and North West Airlines. The ‘Star’ alliance was initiated in 1993 between Lufthansa and United Airlines. In 1996, British airlines and American airlines formed the ‘One World’ alliance. Airline merger permits airline that may be constrained by bilateral regulations to offer a global coverage (Agusdinata and de klein 2002).

In the domestic front, such alliances are going to shape the outlook of entire aviation industry. Jet airways and Air Sahara has set the prelude for alliance and mergers. In years to come there would be one or two alliances formed by merging or amalgamating small airlines like Air Deccan, Go Air, Indigo etc and one national airline (merged entity between Air India and Indian). Kingfisher airlines is looking forward eagerly for such opportunities.

**Strategic Initiatives in Civil Aviation**

The Ministry of Civil Aviation has taken some serious steps after privatisation which was actually pending for a long duration.

**Revenue from Real Estate:** All most all the airports, be it be Bangalore International Airport (BIAL), Cochin international airport (CIAL) or Hyderabad International airport(HIAL) – all of them have unanimous decision to earn diversified revenue from their huge re
al estate land with them. The promoters of BIAL are planning to lease out a 300-acre corridor along the access road. CIAL expects to attract Rs.3,500 crore of investment in real estate. It will lease some of its land, enter into joint ventures, and may even pick up equity in some projects. It is the same story for HIAL. All this flows from civil aviation ministry policies on airport infrastructure of 1997 and 2002.

### The New Business Model

<table>
<thead>
<tr>
<th>Airport</th>
<th>Area for Commercial Development (Acres)</th>
<th>Real Estate Plans</th>
<th>% of Revenues Expected from Real Estate</th>
<th>Expected Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIAL</td>
<td>300</td>
<td>Hotels, Office Space, Malls</td>
<td>Not available</td>
<td>Rs. 2,000</td>
</tr>
<tr>
<td>HIAL</td>
<td>600-800*</td>
<td>Not available</td>
<td>Not available</td>
<td>Rs. 5,000 crore*</td>
</tr>
<tr>
<td>CIAL</td>
<td>300</td>
<td>Golf course, 4 hotels, convention centre</td>
<td>70-80</td>
<td>Rs.3,500 crore</td>
</tr>
</tbody>
</table>

* estimate

Source: Business World, Bushman & Wakefield

**Joint venture for support services:** IA’s joint venture on maintenance, repairs and overhaul is also being extended to take of the maintenance of air frame and other engineering services. IA has been offering a lot of ground handling operations for other airlines. In all 23 foreign airlines, including British Airways and Lufthansa, are provided ground handling services by IA in 16 stations. Some 25,000 third party flights are covered by these stations.

**Alliance with low-cost carrier:** Jet airways have acquired Air Sahara for $500 million. It is also trying for an alliance with Air Deccan - the largest low-cost carrier in the country. The alliance would be on various fronts – sharing of engineering infrastructure, exchange of passengers when flights are cancelled, and combination offers and so on.

**Merger by authoritative bodies:** The Airports Authority of India (AAI) was formed after the merger of the International Airports Authority of India and the National Airports Authority by way of the Airports Authority Act (No.55 of 1994). It came into existence on April 1, 1995. The AAI is keen on establishing world-class airports in the country.

**Consolidation approach:** Despite competition, there seems to be camaraderie between the private airlines. Air Deccan has given one of its Airbuses to Kingfisher so that its pilots can train. Also there are strategic alliances especially in sharing infrastructure at airports and inventory. There are also reports about joint bidding for aircraft manufacturers so as to get a good deal. Indian Airlines and Air India have decided to jointly tender for ground handling at the GMR Hyderabad International Airport (GHIAL). Singapore air terminal service (SATS) was selected by GMR as the JV partner with 49% share holding, while Air India and Indian Airlines both jointly hold the remaining 51%.

Perhaps one of the most published deals is stopping poaching of pilots from one other’s airlines. As airlines in India find their niches (at home and abroad) the advantages of code-sharing and other joint market approaches will become clearer.

**Opportunities in 2007**

Indian aviation industry is optimistic to take up pleasant journey in 2007. Though almost airlines have exhibited losses in the past few years, still the industry seems lucrative both for the players and for the changing Indian consumers.
Reduction in Fuel bill: ATF accounts for 35-40% of the cost of an aviation company. Any drop in prices will spare losses. Oil prices have declined from the peak of US$ 78 per barrel. Now it is around US$ 76 per barrel.

<table>
<thead>
<tr>
<th>Month</th>
<th>Period 2006</th>
<th>Period 2005</th>
<th>(Var 95)</th>
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<td>Jan</td>
<td>34099.80</td>
<td>25859.04</td>
<td>32</td>
</tr>
<tr>
<td>Feb</td>
<td>35228.99</td>
<td>25923.94</td>
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<td>Mar</td>
<td>34995.36</td>
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<td>Apr</td>
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<td>40408.02</td>
<td>29920.5</td>
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<td>Jul</td>
<td>41303.58</td>
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<td>Aug</td>
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<tr>
<td>Dec</td>
<td>36150.47</td>
<td>31750.56</td>
<td>14</td>
</tr>
</tbody>
</table>

Price in Rs per kilolitre in Delhi inclusive of sales tax.

More disposable income with the Indian population: IT revolution and earning youth in India are left with high disposable income. Also the LCC have targeted at the first class train travelers who don’t mind paying a little extra thereby reducing journey time.

Funds pouring into the sector: Aviation is a capital-intensive business with long gestation. Both domestic and international carriers are in the full swing of expansion to meet the growing demand. Unlike earlier days, investors are willing to pour in their funds in to this loss making but still but optimistic sector. The players are adopting different funding strategies. For instance, SpiceJet announced it would raise about US$118.5 million by offering stake to potential investors which include Tata group companies, Texas pacific group ventures, Istithmar PJSC and Goldman Sachs. In August 2006, Spicejet and Babcock & Brown Aircraft management (BBAM), along with a long term strategic partner Nomura Babcock & Brown Co (NBB), signed a sale-and-lease back agreement covering 16 brand-new boeing 737-800/-900 ER aircraft valued at over US$ 1.1 bn based on the manufacturer’s list prices.

Similarly Air Deccan had announced that it had entered into financial structure with a consortium of European banks for US$ 100 mn to be received in four tranches against the assignment of aircraft purchase contract through a special purpose company funded by consortium of European banks. Air Deccan has also issued equity shares to Investec bank (UK) on a preferential basis. Jet airways has successfully launched its IPO and several other airlines are to follow this route.

Own MRO units: Global players like Boeing and Airbus are collaborating to set up MRO units and aeronautical flight training centre in Nagpur with estimated investment of $ 185 mn. Not only airline carriers are pitching in this space. Even infrastructure developers like GMR group have business plans to set up MRO units. There is strong trend of outsourcing in this space. For instance two decades ago, about 85 percent of global engine maintenance was done in-house. Now, this is reduced to 30 per cent. Locating MRO units in India saves time and resources. Globally 25 percent of flight delays are maintenance related. A research by Hamco reveals that in India these are as high as 60 per cent.

9. MRO units – MRO covers five key segments – engine overhaul, heavy checks, line maintenance, component maintenance and major airframe modifications.
Case of Air-India Limited

Air-India (AI) was set up on October 15, 1932, as Tata Airlines, the first scheduled airmail service in India. In July 1946, the company was converted into a public limited company and renamed as Air-India. By the end of 1947, Air-India International was launched for international services, with the participation of the Government of India. In 1952, the Planning Commission recommended nationalisation of the air transport industry. Nationalisation was effected on August 1, 1953 with the creation of two corporations, viz. Air-India for international services (as the nation’s flag carrier) and Indian Airlines for domestic services.

The paid up share capital of AI as on 31st March, 1997 was Rs. 153.8crores and is wholly owned by Government of India.

Air India and Lufthansa Sign Strategic Alliance

Lufthansa and Air India have significantly improved their market leadership positions on India-Europe-USA routes with the Strategic Alliance agreement signed between Lufthansa & Air India. From 1st October 2004, Air India has been a partner of Lufthansa. Within the scope of an extensive agreement covering a far-reaching bilateral cooperation, Wolfgang Mayrhuber, Chairman of the Executive Board of Deutsche Lufthansa AG, and V. Thulasidas, Chairman & Managing Director of Air India, signed a Strategic Alliance agreement in Mumbai. The objective of the partnership is expansion of the offer of flights between Germany and India. All flights between the two countries are operated by the two airlines in code-sharing. New routes are added. Through the cooperation in the area of frequent flyer programs, customers on flights of both airlines can collect and redeem miles for the respective programmes - Miles & More and Flying Returns.

Air India has been accorded the IOSA\textsuperscript{10} Audit Certificate by IATA\textsuperscript{11} which puts it in the league of a dozen Airlines conforming to quality standards required for joining Global Alliances. India - Germany/ Europe and India-USA are very important markets for Air India which it plans to serve over Frankfurt in 10. IOSA (International Civil Aviation Organisation) – A specialized agency of the United Nations whose objective is to develop the principles and techniques of international air navigation.

11. IATA (International Air Transport Association) – A trade association serving airlines, passengers, shippers, travel agents alliance with Lufthansa. In addition to the code-sharing between Germany and India, the code of Air India will also be bookable on Lufthansa connecting flights from Frankfurt to Berlin, Munich, Stuttgart and Düsseldorf to Amsterdam, Geneva, Zurich and Lyon as well as to Washington, Denver, Detroit, Chicago and Los Angeles.

This cooperation agreement results from a memorandum of understanding which the two carriers signed on 26th August 2003. In it, cooperation in the area of sales and marketing is also foreseen as well as cooperation in the medium term in other areas, for example, in the area of IT.

Lufthansa which was flying from Frankfurt to Delhi (once daily), Mumbai (once daily), Chennai (once daily) and Bangalore (five times a week) as well as from Munich to Delhi (three times a week.) would fly further six weekly flights between Frankfurt and Mumbai as well as three weekly flights between Frankfurt and Delhi which are operated by Air India and can be booked with a Lufthansa code.

Air India served up to 33 destinations from Mumbai and Delhi, including, among others, Frankfurt, Chicago and New York. The fleet of Air India consists of 33 wide bodied aircraft and it had planned to add more to make its Los Angeles & Chicago flights daily. It has also planned to operate daily services between London and Mumbai & London and Delhi and link Bangalore with Frankfurt four times a week from March 2005.

The Lufthansa - Air India pact paves the way for joint development of air services on India-Europe-USA route.
Air India – Indian Airlines Merger

The Indian government has cleared the merger of two state-run carriers Air-India and Indian (Indian Airlines Ltd). Government will continue to be the sole owner of the merger entity and has made it clear that the public sector character of the merged airline would be maintained. But the Government may look for IPO after getting approval of a committee consisting of Finance Ministry.

The merger of the two airlines would enable them to leverage their combined assets and capital better and build a strong and sustainable business. The potential synergies are expected to enhance the new combined airline’s profitability by over US$133 million per annum, or about four per cent, of their current combined assets. By 2010-11, when all the new aircraft ordered by the two carriers are inducted into the fleet, the merged entity’s employee-aircraft ratio would come be about 200:1, comparable with any major global airline. While Air-India has ordered 68 Boeing planes, Indian has finalised the acquisition of 43 Airbus aircraft.

According to the report submitted by Accenture, there will be no manpower rationalisation as the consultancy has suggested ‘careful integration’ of manpower at various levels. It has also suggested a top-to-bottom integration of the employees. It is proposed that the pay-scales be revised to bring parity in promotion procedures.

The merged entity of state-owned international and domestic carriers Air India and Indian - National Aviation Company Ltd - is now in the process of drafting the Scheme of Amalgamation under Section 391-94 of the Companies Act. This would pave the way for the integration of the two national airlines and their subsidiaries — Air India Express (Air India) and Alliance Air (Indian).

Recommendations

The new trends of globalization of the economy, liberalisation and technological developments have opened up a new landscape in the aviation sector. The following recommendations have been put forth after thorough study of the civil aviation in general and Air India in particular.

Market oriented approach: The Indian civil aviation has to follow the footprints of international aviation environment which adopted the market oriented approach after reporting a cumulative industry loss on international scheduled services of US $ 15.6 billion during 1990 – 1993. Liberalisation and privatization came to their rescue. Deregulation, new entrants, low fares, takeovers and mergers became the solution. Similar is the scenario faced by Indian airline companies. Hence is the need for more customer focused initiatives.

Alliance alliances and Mergers: Airline companies are predominantly capital intensive segments. For instance, a new 747-400 that is mainly used for high volume and long distance travel can cost about 200 million dollars and a new 737-800 used for regional flights costs about 600 million dollars. Hence, though initially many players may be seen in this industry, later they enter into joint ventures and mergers. For instance, merger of Air India and Indian and that of Jet Airways and Air Sahara. Such mergers are not an end by itself. What might be required in the long run is two or more airlines forming alliances both in the international and domestic front. Ex. Star Alliance. This would result in two or three major alliances in place of 8 or 9 airlines.

Primary to Secondary airport: A growing number of new-entrant “No-Frill” airlines are attempting to compete on major trunk routes and dominate in underserved markets. In order to provide adequate service, however airlines need slots, aircraft stands, terminals, handling capacity, punctuality, flexibility, low charges, and short connecting times. Because the primary airports can no longer be able to provide such services, there is an urgent need to shift airport model from primary to secondary. No-frills carriers will be able to better compete with major
carriers in competitive markets if they operate at secondary airports. The government should support and offer temporary subsidies to secondary airports for this purpose.

**Outsource strengths:** Airlines which have major strength in providing support services like maintenance, engineering and ground support services could hive these activities as separate companies. In line with the global trend, this would enable the airlines companies to benefit from outsourcing these services and thereby reduce its overheads. For instance, As Air India’s inherent strengths lies in support services, such services can provided to all other airlines at large.

**Conducive climate for Strategic Investment:** India is currently in the unusual situation of having potentially billions of dollars of investment preparing to enter the sector – but lacks a clear policy framework. The domestic airline industry is expected to raise in excess of USD1 billion in private equity and debt in 2007/08, with IPOs likely by Kingfisher and Air India/Indian in 2008/09. Hence the Ministry of Civil Aviation had to immediately respond to clearing up policies and procedures in this regard.

Another key policy issues is the level of investment by foreign airlines in Indian carriers, currently prohibited. Opening this up could bring in much-needed strategic investment and expertise. Similarly, increasing the overall foreign investment cap from 49% to 74% could ease the availability of capital generally.

**References**

23. Annual Report 2002 -03, Ministry of civil Aviation
26. Civil Aviation Policy, Ministry of Civil Aviation, 2000

Websites:
1. http://www.airindia.com
5. http://knowledge.wharton.upenn.edu/india
11. http://www.iimcal.ac.in/community/consclub/reports/airlines.doc
13. http://www.supplychains.in

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