EXPLORING THE SOCIO-ECONOMIC AND TECHNOLOGICAL SITUATION OF INDIAN AVIATION INDUSTRY

Ashutosh Kolte, Savitribai Phule Pune University
Balkrishan V. Sangvikar, Savitribai Phule Pune University
Komal Tilak Shettigar, Savitribai Phule Pune University
Kevin Francis Joy, Savitribai Phule Pune University

ABSTRACT

India, a country where train travel has been the most common mode of transport, the airline sector has settled itself as a safe, economical and convenient alternative, whose demand has increased rapidly over time. India has one of the fastest growing aviation markets in the world. With a growing population of approximately 1 billion people in the 1990s, India's prospective for further growth and industrial expansion was very clear. Before the 1990s, the aviation industry was untouched by many private companies as the major players were public sector companies. After the incorporation of liberalization, privatization and globalization (LPG) in India, many realized the possible exponential growth in the aviation industry. There was a rise in the entry of private sector companies in the aviation industry in India. It was a very competitive and booming sector which helped in the growth of these companies and created huge profits. However, their story did not last long. The last decade has seen a downfall in the profits of these private companies, due to high operating costs such as the maintenance of Indian aircrafts in the USA, unstable exchange rates influencing these costs, continuous rise in the Aviation Turbine Fuel (ATF) prices, rapid increase in competition in a market full of private companies, and other factors that have resulted in the poor financial stability of the Indian aviation sector, have helped in our attempt of predicting the financial stability of Indian airline operators, which are studied in this paper.

Keywords: Indian Airline Operators, Aviation Industry, Air Transport Services, Financial Stability, Turbulence.

INTRODUCTION

The Indian aviation industry has witnessed a downfall in its growth in the recent years. Several journals, business reports and related material published online were studied to gain an in-depth qualitative and quantitative understanding about the civil aviation industry in India.

There are several factors that can positively affect the aviation industry and boost its growth such as the rise in purchasing power with the middle class and rapidly growing youth population, favorable demographics, economy flights/ Low Cost Carriers (LCC), growing tourism industry of India and a rise in passengers traveling by air within and outside the country can attract foreign investments. These opportunities in the aviation industry can only be tapped after the challenges are dealt with. Due to the unfavorable circulation of money in this industry, the airline operators in India have faced a declining financial performance (Kanthe, 2012). Air India, IndiGo, Spice Jet, Jet Airways, Go Air, Air Asia and Vistara are some reputed airline companies in India. Air India is one of the highly reputed government operated airline in India which has been in operation for 72 years now. After IndiGo and Jet Airways, Air India ranks as the third largest domestic airline in India, in terms of number of passengers carried. Spice Jet has successfully marked a passenger market share of 13.1 per cent and now is the fourth largest airline in India (Reports, Rediff Business, 2016). The second largest airline company after IndiGo is Jet Airways which has a passenger market share of 21.2 per cent (Trust Research Advisory TRA, 2016). On the contrary, IndiGo has successfully captured the largest share of the market which stands at 43 per cent and in the coming three years it is predicted to touch 45 per cent. A fall in the Brent crude oil prices from $85 to $55.6 per barrel can improve Indigo's EPS (Naidu, 2018). Subsequent to the closure of Kingfisher Airlines in 2012 from the Indian aviation industry, Go Air holds the fifth rank with 8.4 per cent of passenger market share. The Malaysian airline, Air Asia started its operations in India in 2013, after its joint venture with Air Asia (49 per cent share), Tata Sons (30 per cent share) and Arun Bhatia (21 per cent share) (Reports, Rediff Business, 2016). Vistara, another introduction of Tata SIA Airlines Limited is a joint venture with Tata Sons (51 per cent share) and Singapore Airlines (49 per cent share), successfully carried over two million passengers by June 2016, exactly one and a half years from commencement. Vistara also holds 2.3 per cent of the passenger market share (Reports, Rediff Business, 2016). Furthermore, with a recent approval from the government of India, Vistara has been permitted to fly internationally (Economic Times, ANI, 2019). As a result of increase in domestic travel via Spice Jet, IndiGo, Go Air, Vistara, Air India and Air Asia, the year 2017-18 has witnessed an 18.86 per cent growth in passengers carried domestically. IndiGo holds the highest market share in terms of Revenue Passenger Miles, followed by Jet Airways, Spice Jet and Air India (DGCA, 2017-18).

Indian consumers are highly price sensitive and Low Cost Carries have turned this challenge to their advantage thus creating a highly competitive aviation industry in India. This created a new challenge, amendment of prices, which eventually turned into difficulties in cost management resulting in a decline in the profitability of these airline companies. In addition, the Aviation Turbine Fuel (ATF) is a taxed at a comparatively higher rate in India, which consumes a large portion of airline operating costs, which includes the cost of aircraft maintenance which is done in the USA. Some major challenges faced by airline operators in India are scarce number of workers and professionals, lack of infrastructure and connectivity in interior locations, safety concerns, insufficient capacity, and high airport charges which hinder the operations of airline operators in the Indian aviation industry (Kolte et al., 2018).

LITERATURE REVIEW

Kanthe (2012) indicated in his study that high fuel prices, lack of trained and skilled employees, increase in costs due to shortage of technical manpower, lack of regional connectivity, inadequate infrastructure for airports and air traffic control (ATC), have resulted in a chaos in the Indian aviation industry. He further pointed out a limitation in innovation in the industry due to restriction on ownership by foreign investors and strict labor laws. He also emphasized on the need for an improvement in the cost structures aimed towards cost efficiency. Singh (2016) has discussed in his paper the factors apart from rising ATF prices, resulting in the losses in the aviation industry in India. He emphasized on the congestion or overcrowding in airports due to limited capacity, which in turn leads to a huge wastage of fuel whenever there are no available landing slots which delays the landing and aircrafts are forced to hover in the sky for at least 30 minutes. Such situations increase the fuel consumption by approximately 25 to 30 per cent resulting in an increased operational cost. In addition, high aeronautical charges at international airports in India are the highest compared to the rates in the Gulf and Asian countries which turn out to be an additional cost to domestic airline operators with no additional facilities or benefits. He further emphasized on how the arrivals of low cost carriers have taken over the market share of premium airlines, which are now forced to reduce their prices, leading to a cutthroat competition and price war in this sector. Williams & O'Connell (2012), put forth concerns that have had a negative impact on the airlines, airports, and economic reforms in India. Concerns directly impacting this were the lack of investments, high taxes, hesitation in ownership of government owned carriers, and a highly restrictive Indian regulatory system.

Director general of civil aviation (DGCA) in 2017-18, indicates that a high Passenger Load Factor (PLF) which measures the use of flight capacity as an outcome of successful sales of available flight seats. Though, a higher PLF does not always indicate higher operating profits. When the PLF is lower than the Break-even Load Factor (BELF), it indicates significant losses in the books of the airline operator. In terms of domestic flight schedules in 2017, Spice Jet registered a PLF of 94.7 per cent, followed by Go Air at 88.6 per cent and IndiGo at 88.2 per cent. Spice Jet also grabbed the first position in terms of international flight schedules with a PLF of 89.4 per cent, followed by Jet Airways at 83 per cent and IndiGo at 82.8 per cent. Hinthorne (1996) has assessed that airlines being a commodity service have very little control over their pricing. Every player strives to be a low cost carrier to attract demand except at airports where they have ousted competition and have a significant share in the market. High investments in aircrafts and facilities can help achieve economies of scale, which also means higher fixed costs, hence capacity utilization becomes crucial. Reduction in prices in one way to fill the surplus capacity, however competition does not only revolve around reduced pricing strategies. He pointed out that few competitors utilize legal actions and forced relations to prey on in the competitive arena.

Sarker et al. (2012) in their study of LCCs conducted a research where respondents were asked for reasons for choosing a low cost carrier over a full service carrier, wherein 80 per cent of the respondents considered the low price as the main reason for opting a LCC followed by 49 per cent stating value for money. 51-56 per cent of the respondents mentioned convenience in flight schedules and airport accessibility, including convenience in booking ticket. Respondents were asked to state a flight departure timing preference, and on an average, all the respondents preferred flight timings +/-1-2 hours compared to the actual timings of departure, which indicates that a higher frequency on certain routes could aid LCCs to maximize yields and flight capacity utilization. Further, 33-40 per cent of the respondents considered brand name and reputation prior to booking a ticket with an LCC which indicates a need for brand management to ensure repeated business and hence elevating profitability.

Analyzing financial and operational turbulence and predicting bankruptcy of aviation companies can not only help the company's management to come up with innovative strategies to strengthen their financials but also save banks from providing loss-making loans to aviation companies, as seen in the case of Kingfisher Airlines which focused more on providing a luxurious air travel experience than analyzing its rapidly rising costs and implementing cost-effective strategies (Kolte et al., 2017).

A Jawabreh et al. (2012), discussed in their research about tactics that airline operators should use to capture and retain customers through healthy Customer Relationship Management (CRM) tools to manage customers in order to achieve financial stability in the aviation industry. Information Technology (IT) investments will not only enable cost cutting and effective working but also improve brand image, company reputation, customer loyalty and earnings thus, achieving good returns from IT investments. Laudon & Laudon (1998) pointed out in the early years that technology is the way to an improved communication between the internal and external environment of an organization, helping it to interpret how the organization is perceived outside. If implemented in the aviation industry, it can improve linkages in the value chain, reduce coordination costs and other risks involved in transactions. Heijden (1996) in his study mentioned that accessing details related to flight schedules and rates, with a platform to obtain relevant advices and share experiences turns out very convenient for frequent travelers through information technology.

Dussauge et al. (1994) studied and discussed how technology is one of the factors that affect various aspects of a firm’s strategy. The study identifies that technology aids innovative ways to compete through cost reduction and product differentiation. Through such data collection and analysis of customer insights, several solutions can be implemented to improve the operations in Indian airlines to focus on the improvement of activities in line to the organization’s strategies.

Prakash et al. (2015) have studied the need for total quality management in all the functional and operational are as to arrive at an improved performance of Indian airline operators, creating a more stable, secure, economic, systematic and efficient air transport service to passengers, which must be prioritized and implemented with top management commitment. They further discussed the importance of employee training as an important factor. Likewise, factors like employee participation and teamwork as well as customer involvement in ensuring an *‘improvement culture’* will lead to higher customer satisfaction, competitiveness and effectiveness and hence achieve the TQM goal of the organization.

Agarwal & Dey (2010), studied in their paper, a measure of expected level of service quality using the Likert type scale where six attributes were considered i.e. booking convenience online/offline, hassle free check-in, baggage handling, in-flight experience, flight performance based on schedules and an overall value for the money paid. Through this strategic management tool of perceptual mapping, given a number of attributes, they concluded it by stating that customers perceive a low cost carrier and a full service carrier based on attributes that can be improved or innovative, or those which could provide a better service quality in delivering the ongoing service.

RESEARCH PROBLEM AND RESEARCH METHODOLOGY

After the literature review, we have arrived at a few research questions as below:

1. What were the factors apart from fluctuating rupee and high fuel prices that affected the financial stability of airline operators in India?
2. Can the implementation of TQM improve the financial position of these companies?
3. Can the implementation of CRM tools and high investments help the financial stability of the airline operators?

Methodology involves the review of literature, examining past annual reports. In addition, we have also considered secondary data from sources like Money Control and Annual/Business Reports of Indian aviation companies that are used in this study.

The methodology involves a deep study and understanding of various factors that affect an organization financially, which do not reflect on their financial statements. The aviation sector companies in India are in a great need of improvement in its financial stability in order to survive and sustain itself in the market. However, this study focuses on the factors which indirectly affects these companies but do not appear on their financial statements.

ANALYSIS OF DATA AND DISCUSSION

One of the most important basis for a consumer to select an airline operator for an air transport service is the value for money perceived. According to our research, IndiGo showed the highest value for money perceived in its service. In terms of reputation, respondents were asked to rank 6 popular airline operators. Jet Airways was ranked first, followed by IndiGo and Air India, while Air Asia ranked last.

We have done of SWOT analysis of Indian Aviation sector before analyzing company wise performance in Table 1.

Table 1
SWOT ANALYSIS OF INDIAN AVIATION INDUSTRY

STRENGTHS	OPPORTUNITIES
Rise in working class population.	India has very large population and number of people who can afford to air travel is rising rapidly.
Rising national income, rising per capita income of people making air travel affordable.	Maximum FDI allowed in Aviation sector is 100% which will bring necessary capital.
Substantial rise in number of passengers travelling by airways.	Growing infrastructure for aviation business leads to possibilities of growth of companies.
Substantial efforts being taking place to expand and improve basic infrastructure required by Airlines Industry, by increasing number of airports and capacities.	With domestic training of pilots and staff, there is possibility of reduction of employee cost.
Growing confidence on Air ways as a fast, affordable and safe way to transportation.	India is a large country and with ambition of government making India a 5 trillion dollar economy, airline companies have opportunities, as passengers travelling with other modes of transport will shift to air travel.
	Indian airline operators can work on reduction of operating costs, which eats up its revenues.
	If Aircrafts can be made in Asia with global standards, this may substantially bring cost of aircraft bringing down Aircraft lease.
Weaknesses	**Threats**
India witnessed very slow growth in infrastructure required by aviation industry.	High taxes on ATF and other taxes imposed.
Though enough efforts are taken in past few years, on ground growth of infrastructure is slow.	Possible higher ATF prices in case of economic and political instability in OPEC countries.
Lower occupancy rates on certain routes make it difficult for airlines operators to break even on certain routes.	Rupee depreciation and possible devaluation as a result of unforeseen economic situations.
Price war between companies to increase passenger load factor.	Cut throat competition seen in the past, due to new ambitious entrants, eating up businesses of established companies.
Aircraft lease rentals and ATF costs are major contributors in eating up profits of Airline companies.	Price war between companies to increase passenger load factor may eat up all possible profits.

Airlines business is capital intensive and many companies have taken debt to fulfil ambitions. In few cases, lower profit margins resulted in companies unable to service debt properly.	Operational Inefficiency of Air India has put it under a huge financial crisis making it difficult to attract investors.

Information has been extracted through annual reports and other financial data of Airline Operators in India which have been assessed to derive conclusions for our research purpose.

During the year 2018, Jet Airways incurred losses of INR767.62 crores (where 1 crore is equal to 10 million) which is comparatively lower than the losses incurred in the years 2015 and 2014 which were INR 1,813.71 and INR 3,667.85 crores respectively, however the years 2016 and 2017 have seen profits of INR 1,173.56 and INR 1,482.52 respectively. Prior to its closure, Jet Airways had debts amounting to more than $1 billion which forced it to discontinue the operations of majority of its flights. Jet Airways still struggles to pay off its aircraft leasers and employees including pilots (Times of India, TOI, 2019). The Indian Oil Corporation (IOC) had discontinued the supply of aviation turbine fuel to Jet Airways due to its inability to clear its dues; though the IOC resumed the fuel supply later as the airline company assured the clearance of its dues within a reasonable time. (Times of India, TOI, 2019).

Jet Airways reduced the number of operating flights by 80 per cent during the year before its closure, according to the DGCA. More than one thousand customers faced a cancellation in their flights with little or no notice at all, bringing about an aggression among its loyal customers. Despite Jet Airways holding the second largest market share in India, it had defaulted on several loan payments. A few months before its closure, Jet Airways operated only 26 flights out of its aircraft fleet of 119. Jet Airways has been moving through a rough financial phase due to fluctuating global crude prices, weak and unstable rupee, and the aggressive competition from its rivals (Times of India, TOI, 2019).

IndiGo has gone through a rise and fall in its profits during the last five years. It had a profit of INR 474.44 crores in the year 2014, which shot up to INR 2,242.37 crores in the year 2018. IndiGo is one of the few airlines in India which has been able to sustain its presence in the competitive aviation market today.

IndiGo is one of the fastest growing air transport service providers in the Indian aviation sector which has a fleet of over 200 aircrafts, offering more than 1300 scheduled flights daily, connecting 52 domestic destinations and 16 international destinations.

In the month of February 2019, the airline had cancelled several flights, due to shortage of pilots and bad weather conditions which led to a weak passenger growth or PLF. According to a source, passengers were allegedly forced to purchase last minute flight tickets at higher rates (NDTV, 2019). IndiGo has recently made efforts to attract senior pilots, especially to those from Jet Airways, by offering them a compensation for the overdue salaries. The recent event held by IndiGo in New Delhi was attended by many and had a positive response. The airline company assured on-time salaries payments and on-the-spot jobs to selected candidates. (Tripadvisor, 2019). IndiGo still seems to have an upper hand over the other low cost carriers in India due to its convenient flight schedules, cheap flight tickets giving value for money to customers through its quality of service and other factors affecting its market share in the aviation sector. Though, losses are expected, due to inefficient cost management, weak rupee and rising aviation fuel prices.

Spice Jet incurred a loss of INR. 687.05 crores in the year 2015. However in the next four years, Spice Jet has been able to recover the loss and maintain a profitable stand in its books, in spite of its forced discontinuance of its 12 Boeing Co 737 MAX 8 planes, similar to Jet Airways that faced the same problem due to safety concerns brought into notice by the Indian aviation watchdog. The passenger yield moved upward in comparison to the shrink in flight capacity, leading to an increase in ticket prices. The aircraft leasers of cash-strapped Jet Airways offered Spice Jet to lease some of the aircrafts which could benefit Spice Jet as it could fill the gap caused due to the grounding of its 12 Boeing Co 737 MAX 8 planes (Money Control, 2019). Due to several promotional offers offered by airline operators, there has been a hike in the passenger load factor resulting in an increased demand (Money Control, 2019).

Air India ranks first in terms of most reputed government owned aviation brands but has still not been able to overcome or reduce the losses it has been incurring over the years and has been facing a worse scenario in comparison to other private companies and low cost carriers. Rather, the loss after tax deductions incurred in the financial year 2016-17 went up to INR 62,815.40 crores which is about double the loss incurred in the previous year i.e. INR 38,367 crores. Though, 2017-18 has seen a drop in the loss after tax deductions at INR 53,377 crores which still seems shaky to overcome in the coming decade.

Despite its good reputation, it has not been able to maintain its customer loyalty and brand image which seems to be deteriorating over the years. According to our research conducted, and interviews of frequent flyers in India, we have noticed that Air India is respected as it has served as an air transport service provider for the longest time, but one major reason for its reduced growth is lack of innovation, employee training for providing improved services and its inability to sustain market share and customer loyalty.

CONCLUSION

With such rapidly growing middle class population with rising levels of disposable income and favorable demographics, India has one of the fastest growing aviation markets in the world. Despite high demand and growing passenger load factor, the aviation industry in India has not been able to utilize it in the right manner. The supply of flight capacity is much lower than the demand at present, due to factors mentioned in this paper which include the indebtedness of airline operators and inability to operate enough aircrafts to cover the demand, being few among the top reasons. The fight between low cost carriers to capture market share through extremely attractive promotional offers has kept up a very aggressive competition among them. Though, flyers now want and expect a better service for the money paid.

Airlines, especially in India, should emphasize more on the implementation of CRM tools and collect feedback from customers after every journey and manage these responses effectively. This will not only help improve weaknesses in the operations of these aviation companies, but also help improve customer loyalty and brand image through effective and innovative solutions.

The respondents mentioned delay in baggage collection, delay in flight departure and uncomfortable seats and leg spacing being the top three issues faced with an airline operator; this gives another headstrong reason to invest and implement CRM and TQM tools in the organization with the participation of employees and customers, and commitment from the top management.

According to our research conducted, it is evident that Jet Airways is one of the most reputed brands in the Indian Aviation market, though the company has not been able to maintain a healthy relationship with its stakeholders due to its inability to pay off its debts, and lack of supply of flight capacity in relation to demand. This reputation Jet Airways has earned through its quality service offered to its passengers. It was also found that respondents favored IndiGo and Jet Airways when asked to suggest or recommend an airline to a friend. This shows that implementing TQM can improve the reputation of the airline operator despite its weak financial position. Customers will choose an airline based on its reputation even if the company is running in losses.

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Ashutosh Kolte[1*], Balkrishan V. Sangvikar[2], Komal Tilak Shettigar[3] and Kevin Francis Joy[4]

[1]*Assistant Professor, Department of Management Sciences, Savitribai Phule Pune University, India.*
[2]*Professor, Department of Management Sciences, Savitribai Phule Pune University, India*
[3]*Students at Department of Management Sciences, Savitribai Phule Pune University, India*
[4]*Students at Department of Management Sciences, Savitribai Phule Pune University, India*

***Corresponding Author**: Ashutosh Kolte, Assistant Professor, Department of Management Sciences, Savitribai Phule Pune University, India. E-mail: ashutoshkolte@gmail.com