

How Successfully the Marketing Strategies and Marketing Mix are Effecting the Preferences of Indian Travelers between Airplanes and AC Coaches of Trains

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ABSTRACT

According to the document, titled 'saaf niyat, sahi vikas' (clean intent, right development), published to celebrate 4 years of Narendra Modi government in May 2018, it was recorded that for the first time in history, the passengers travelling in airlines is increasing on a fast pace and already surpassed the passengers commuting through AC coaches of train. Passenger traffic in domestic airlines is growing, and is giving a tough competition to the travel flow in the air-conditioned (AC) classes of railways. Air traffic increased by 23 per cent¹ to touch almost 77 million¹ during April-December 2016, and the passengers traffic travelling in air-conditioned railway coaches increased merely 5per cent¹ to reach 108 million¹.

The reason behind writing this paper is to understand the concepts of marketing strategies, its types, and effects on consumer behavior by taking two industries – Aviation industry and Railway industry as a benchmark. In both the industries, only the passenger traffic is considered for the analysis and its results, and not the freight traffic. The purpose is to gain the in-depth knowledge of the marketing strategies and its impact on boosting the revenues of the industry as well the passenger traffic.

Key words: Marketing strategy, marketing mix
Aviation industry, railway industry, passenger traffic.

INTRODUCTION

India is the seventh-largest country by area and the second-most populous with over 1.35 billion people in the world. It is also among the fastest growing economies of the world and is expected to become the fifth largest by the end of 2019. The Railways sector of India is one of the world's largest rail networks while India civil aviation industry is currently considered the third largest domestic civil aviation market in the world. Both of the modes of transport are used for covering the longer distance travel and conveniently available to the commuters in offline as well as in online modes. For domestic travels, both of the modes are in direct competition and good substitutes. As per the report by IATA (India's Air Transport Sector), the aviation sector of India has demonstrated a very strong growth on the domestic market segment in recent years. Passenger's traffic in Indian airlines has more than doubled² over the past seven years, compared with just a 6per cent³ increase in railway's passenger traffic. In a developing country like India where travel in railways has long been the dominant mode of transport due to its cheap prices, aviation sector of India has increasingly established itself as a safe, reasonable and dependable alternative. Reasons for this growth are numerous, but India's economic growth and rising

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disposable income of the middle class have played a significant role. Marketing strategies adopted by the airlines are more focused on lower fares and higher services these days.

OBJECTIVE OF THE STUDY

The objective of the study is to gain the knowledge of the marketing strategies of the aviation and railway industry as well the various government initiatives taken to enhance the performance as well as to increase the revenues of both the industries. Our intention is to test the statement written in the document that - air travelers is rising fast and already surpassing the number of passengers travelling in AC coaches', by using secondary data available in the public domain.

RESEARCH METHODOLOGY

Regarding the passenger movements, passenger traffic data disclosed in the annual reports of the DGCA (Directorate General of Civil Aviation) is compared with data provided in the annual documents of the Indian Railways. The Indian Railways issues an annual document by name - 'Statistical Statements' that provides the categorization of the passenger's traffic that were carried in the particular year by the numerous classes of compartments in which they have travelled. We have aggregated the passenger traffic of AC First Class, AC Sleeper Class, AC 3 Tier & AC Chair Car in order to arrive the number of passengers travelled in the AC classes. For Indian airlines, aggregate of domestic and international passenger traffic is considered.

We have also used key financial elements - Operating revenues, operating expenses, passengers load factor, travelling cost, and economic factors - GDP per capital and Airlines Turbine Fuel, in order to check the financial status of the industry and its prospects in the near future. Data used for these analysis are available on the websites of Ministry of Railways and Directorate General of Civil Aviation.

CONCEPTS OF MARKET STRATEGIES AND MARKETING MIX

Marketing strategy is a planning exercise which defines the mission and objective of the company regarding building the customer value and attain profitable customer relations by using various marketing strategies and marketing mix. As customer is the main center, the seller needs to decide which customer it wants to serve (by doing an effective segmenting & targeting) and how it is going to satisfy them (by creating differentiation and positive positioning in the minds of customers).

After deciding on its overall marketing strategy, the seller decides an integrated marketing mix made up of factors that are under its control i.e. product, price, place and promotion (4ps) and gradually three more factors are added into the marketing mix, including processes, people and physical evidence. In order to find the best marketing strategy and mix, the company constantly engages in the marketing analysis, planning & implementation & control.

Marketing Strategy

As it is not possible for any company to serve all the customers profitably in any given market due to many kinds of customers with diverse needs, that is why each company has to divide the total market into small segments and design strategies specifically targeted to those chosen segments. This process involves segmentation, targeting, differentiation and positioning in the market.

Marketing Segmentation

It involves division of a market into different groups of buyers who have common needs, individualities, and specifically who requires distinctive products or marketing programs.

Market Targeting

Marketing targeting is the process of evaluating each available market segments in respect of its attractiveness and selecting one or more segments to target.

Market Positioning

Positioning is a product arrangement of the company to occupy a clear, strong and distinctive image in the minds of the customers in comparison to the competitor's products.

Market Differentiation

It involves the process of differentiating the company's products relative to competitors so that it gives customers superior value.

Marketing Mix

Decisions on appropriate marketing mix follows after marketing strategies are established in order to plan all the set of controllable factors - product, price, place, promotion, processes, people and physical evidence. The marketing mix consist of everything a company can do to control as well as increase the demand for its offerings.

Product: it includes goods as well as the services that the company is offering to the target market, including variety, quality, design, features, services, etc.

Price: price is what the consumer is willing to pay for

Table 1 : Marketing Strategies and Marketing Mix of Indian Civil Aviation and Railway Industry

Marketing Strategy	Civil Aviation Industry	Indian Railways
Segmentation	<p>There are two main segments in the Indian Aviation industry</p> <ul style="list-style-type: none"> a) Passenger b) freight <p>Passenger segment is further segmented on the following basis:</p> <ul style="list-style-type: none"> a) Corporate Travelers b) Independent Business Travelers c) Leisure travelers 	<p>Indian railways are also segmenting the Indian market into two main segments:</p> <ul style="list-style-type: none"> a) Passenger b) Freight <p>Their passenger segment offers diverse services which includes: AC, Non-AC, super-fast, slow trains, intercity trains, etc. to cater to the specific needs of the passengers</p>
Targeting	<p>All age groups, who wants to cover the medium and long distance in short time at affordable price (depending on the carrier chosen)</p>	<p>All age groups, for any distance, at economic prices</p>
Positioning	<ul style="list-style-type: none"> a) Premium pricing for superior quality of services b) Safest mode of travel c) Low cost carriers offering low traveling cost d) Passengers feels increase in status when they starts flying 	<ul style="list-style-type: none"> a) Comparatively cheap mode of transport b) Easily accessible c) Various options available in terms of classes of coaches, like AC, Non AC, sleeper, etc. d) Covers long journey in comparatively less time as compared to other roads transport
Differentiation	<p>In Civil Aviation industry, there are many private players in addition to the Air India, a government owned enterprise. Each player has differentiated itself from the other players in the market. If we look at the civil aviation industry as a whole, then we can probably determine that the differentiation lies in the fact that it is an air mode of transport and provides premium quality services at affordable prices</p>	<p>Indian railways is a natural monopoly in India, owned by government and provides the train services at the cheapest rates as compared to other modes of road transport. It is available everywhere across India</p>

its product. It should always provide a good value for money for the consumers.

Place: The place represents the location where the product is available for the consumers to purchase. It should be at a location where the target consumers can access them easily.

Promotion: It includes all those activities which a company can accommodate to attract the customers, like advertising, personal selling, sales, promotion, and social media. All these are like communication tools that can be used to put across the organization's message to the concerned audiences/customers.

People: It is true that without people a company cannot be formed and functions. Every company is highly dependent on the people ranging from workers to the Directors. It is very important to having the right people as they are representing the products/services of the company.

Processes: It includes the entire process starting with the purchasing of raw materials, converting into finished goods and receiving the cash from the customers from its ultimate sales. The company has to pay special attention that whatever process it follows is efficient as well as effective.

Physical Evidence: Like goods, services also include some physical elements even if the consumer is paying for is intangible. For example, a hair stylist would provide their client with a nice hairstyle.

Now let's understand the 7Ps of marketing mix adopted by the Civil Aviation and Railway industry of India in detail.

Aviation Industry:

a) Product: The aviation industry is used to be considered as a service provider that cater to the needs of customer's travelling. But due to increase in the public demand for low priced conveyance, it has been shifted towards a commodity business. Now a days travelers know how to search the web for better options through innumerable sites such as Makemytrip, Goibibo, Yatra.com, etc.

Amid the competition, airlines have recognized the importance of the needs of customers and have started refocusing their attention to satisfy those needs. As a marketing strategy, industry usually aim towards regular flyers, like members can earn extra miles through travelling, discount on car hiring charges and hotels, etc. In Feb 2018, TRAI (Telecom Regulatory Authority of India) recommended to allow in-flight Wi-Fi services that can provide internet access during flights. As

per the study by the consultancy Roland Berger on internet connectivity on airlines globally points out that internet access is amongst the top three criteria people look for when choosing a flight, in fact 2-3 passengers are prepared to pay more to have internet access in the air. Many airlines offer fast online check-in (web check-in) at home so that they don't have to stand in a queue and saves their time. Self-service check-in kiosks are also installed by nearly all airlines where passengers identify themselves with a credit card, download their boarding pass, choose their seat, and much more.

b) Price: The following are some of the pricing strategies adopted by the airlines:

- i. **Premium Pricing:** In this, the airlines may set prices above the market price in order to reflect the service quality or the unique status of the provider. The product features are not easily replicated by its competitors or the company's strong reputation is sufficient to justify its premium price, for example Taj Airways, club one airways.
- ii. **Value for Money Pricing:** The airlines charge the average price for the services and put emphasis on excellent value for money at this price. Doing this airline can attain good levels of profit on the basis of established reputation, for example Indian airlines.
- iii. **Cheap Value Pricing:** This is done to undercut the competition where price is used to trigger the purchase immediately. Unit profits might be low, but the overall profits can be maximized. Airlines usually practice differential pricing, i.e. they differentiate prices on the basis of the classes. Fares for each class vary as per the facilities provided and the comfort level in each class. Fares also keeps on fluctuating on the basis of seasons i.e. fares rises during the peak holiday times.
- iv. **Low-cost Pricing:** This concept came up with the introduction of the low-cost airlines in the Indian aviation industry as these airlines provides exceptionally low prices to its customers as compared to different airlines. For example, Spice Jet, Go Air, Indigo.
- v. **APEX Fares (Advance Purchase Excursion Airfares):** In this pricing scheme, customers are given comparatively cheaper rates if they book their tickets before the stipulated time period. The only draw-back of this scheme

is that if the booking is cancelled due to any reason, a booking amount is not returned.

- c) **Promotion:** In airline industry all the methods for organization promotional mix i.e. Advertising, Public Relations, Sales Promotion, Personal Selling, Direct Mail and Internet/E-commerce, are also used. Many airlines have tied up with various travel agencies like makemytrip.com, yatra.com, goibibo.com, etc. This has helped them to be easily presentable to their customers, and in such ways the customers can easily compare and avail tickets. For example, Air India promotion activities continue in the Indian Railways website, wherein customers are easily able to avail Air India tickets via the IRCTC portal, thus it makes easy for the customers to plan journey rationally and easily.
- d) **Place:** Most of the Airlines are present across all the cities in India. They utilizes many methods of ticket distribution like through their websites, other ticket booking websites and also collaborated with various agencies to promote the selling of their tickets. There are primarily two widely adopted channel structures for the booking system:
- i. Internet booking system
 - ii. Telephone reservation system.
- e) **People:** Providing excellent service quality to its passengers is the biggest concern for any airline as it helped them to increase their goodwill in the market. In order to achieve this excellence, airlines employs highly skilled professionals, from pilots to cabin crew.
- f) **Physical Evidence:** Airlines have its physical evidence through its airplanes, airport kiosks, website etc. They also maintain premium lounges in airports across major cities, for ex, Air India has premium lounges in cities like Mumbai, Kolkata, Delhi and Hyderabad. With a fleet of quality airlines and providing high level of amenities, airlines usually aim to provide the best of travel experience so as to motivate the travelers to make frequent purchases.
- g) **Process:** Airlines have multiple processes in place for its functioning and ease of business. Every process is integrated step by step so that customers can have a smooth transition in every step, i.e. from purchase of tickets to the collection of luggage. Premium lounges at airports makes waiting time for the passengers more relaxed and easy. Online portals of booking

tickets also enables the easy management for both passengers and airline. For any airline to be successful, it should make sure that the passengers don't face any type of problems in case of any flight reschedule or cancellation and have easy alternative to it.

Railway Industry:

- a) **Product:** Indian Railways is a government run organization which runs the rail network in India and connects millions of commuters. The main services offered by Indian Railways is to provide good quality, economic, and safe rail connectivity to passengers. There are various services offered, including the following:
- o Passenger travelling services
 - o Freight transport services
 - o Mobile ticketing services
 - o Parcel courier services
 - o Parking Services
 - o Food services

However, Indian Railways are usually in news for negative, for example, late running of trains, lack of passenger facilities including cleanliness at the railway stations, lack of security arrangement on the railways resulting in theft and dacoits, unhygienic food, dirty blankets, commuters died during accidents, etc.

- b) **Price:** Indian Railways follows a differential pricing strategy where the distance travelled is same but at different price for different class of consumers. It's one of main objective is to provide cheap rate tickets to the lower and middle income group of people. The prices as well as the services that are offered varies as per the class you book – Chair class, sleeper class, AC class, etc. Extra charges are levied in case for Tatkal booking system. Concession in fares by Indian Railways are enjoyed by privileged consumers like politicians, railway employees, etc. which is not valid in the civil aviation industry. Overall their price segment is quite affordable and one of the cheapest in the world as their differential pricing strategy is catering to the needs of everyone.

IRCTC has now shifted to dynamic pricing (flexible pricing) of ticket rates, which means that as the number of ticket getting sold out are increasing then the pricing of residual tickets also increases, that is, the prices will be affected by the market demand. This pricing strategy

is usually followed in the aviation industry, where the base fare of tickets will increase with the rising demand. The new fare structure will, however, not be applicable to 1AC and executive class coaches. Let's understand this system using the following data:

As of May 3, 2019, the fares given in the portal of IRCTC (Indian Railway Catering and Tourism Corporation) for travel in 3AC coach of Mumbai Rajdhani Express from Delhi to Mumbai are Rs. 1624 as base price, it can go up to Rs. 2274 from, if the highest surge rate applies (excluding all other charges).

Similarly, in the same train, the fares for 2AC can go up to Rs. 3,551 from Rs. 2,367, excluding all other charges. However the base ticket price for travel in 1AC coach in the same train costs

Rs. 4,093 irrespective of the demand.

On the same date, according to makemytrip, many airlines offered fares in the range of Rs. 2,500-Rs. 3,099 for travel between Delhi and Mumbai.

It is reported that after the introduction of flexi-fares system, the railways has lost around 700,0006 passengers during September 9, 2016 to July 31, 2017 while the additional revenue earned as a result of the scheme was around Rs. 5.52 billion6. The Comptroller and Auditor General (CAG) has suggested that the Parliament should ask the railways to review this system.

- c) **Promotion:** Indian Railways has launched its own website that offers required information and offers to interested parties. IRCTC (Indian Railways Catering and Tourism Corporation) is

Table 2 : Fare Structure for Rajdhani and Duronto category of Trains⁵

Charges % of berths	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
2S	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5X	1.5X
SL	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5X	1.5X
3A	1X	1.1X	1.2X	1.3X	1.4X	1.4X	1.4X	1.4X	1.4X	1.4X
2A	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5X	1.5X
1A	1X	1X	1X	1X	1X	1X	1X	1X	1X	1X
X= Base Fare										

Table 3 : Structure for Shatabdi category of Trains⁵

Charges % of berths	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
CC	1X	1.1X	1.2X	1.3X	1.4X	1.5X	1.5X	1.5X	1.5X	1.5X
EC	1X	1X	1X	1X	1X	1X	1X	1X	1X	1X
X= Base Fare										

a subsidiary of the Indian Railways that handles the catering, tourism and online ticketing operations of the Indian railways. IRCTC has around 66 million⁷ users registered on their website, and out of these 52 million⁷ are active users. On an average 25,000 new users⁷ are registered daily with IRCTC. IRCTC has got a diversified service portfolio which covers not only railway ticket booking but also air ticket booking, hotel booking, tour packages, catering business and many more. In the consecutive year 2014 and 2015, IRCTC won 'Most popular

website of the year India' award, based on an independent online election organized by MetrixLab. IRCTC also runs a Scheme for Frequent Travelers (SOFT) loyalty program called as Subh Yatra which provides frequent travelers discount on railway ticket booking. IRCTC has collaborated with State bank of India to provide SBI rail card to people. This is a credit card which gives reward points on every booking as well as exclusive offers and discount while booking tickets. IRCTC also has a toll free number where people can enquire about

status of train or other services. The IRCTC Rail Connect Android app was launched in the year 2017 to make rail ticket booking easy and convenient. Within two years of its launch, the app has become quite popular and has so far been downloaded by more than 30 million users⁸ and more than 140 million bookings⁸ have been made on this app since its inception. The IRCTC Rail Connect app has been conferred National Award for E-Governance 2018 - 2019 as a Special Jury Award⁸.

IRCTC has entered into a 'strategic partnership' with online travel portal, MakeMyTrip, to sell customized 'rail-holiday packages' in 2013⁹. This partnership has extended numerous choices of holiday packages to its customers by providing best-deal railway packages along with air-tickets, hotel bookings and holidays, on a single platform.

- d) **Place:** Indian Railways has the distinction of being one of the largest rail network in the world. In the year 1951 railway system was nationalized under a single unit India Railways. It has an extensive track of 115,000 km that spreads over 67,312 km route and includes 7,112 stations, covering 7 union territories and 29 states in India. It operates suburban and long-distance systems. They almost cover every corner in the country, from rural areas to metropolitan cities. Indian Railways has international connectivity with its neighbors - Pakistan, Nepal, Bhutan and Bangladesh.
- e) **People:** Indian Railways had not been at a very efficient place when it comes to the employee aspect. The Indian Railways currently employs 1.34 million¹⁰ people and the wage bill constitutes nearly 50 per cent¹⁰ of its working expenses. It faces a serious problem of low level of employee productivity. Transport output in terms of passengers and freight tonne kilometres per employee on Indian Railways is only 400¹¹ as compared to 500¹¹ for Chinese and 570¹¹ for French Railways. Surplus workforce and operation of a number of lines with low traffic and assets not essential for the Railways are contributory factors. The organization has been reducing its workforce since many years which also come in to the results when a RTI(Right To Information) was filed to check the new vacancies arises due to the retirement of the employees. As per the RTI reply¹², the results show that during the period 2008 to 2018, not

even in a single year, did more people get jobs than the number of employees who got retired. As a result the number of vacancies went up to around 0.3 million.

Factors like after sales service play a predominant role in framing the perceptions of the customers about the brand. It has been a centralized organization with hierarchical decision-making and the need for delegations of certain functions has been emphasized by the higher authorities. Indian Railways are slowly becoming more active on the social media, which is also the need of the hour. Customers are encouraged to share their grievance¹³ so that relevant actions can be taken. Indian Railways receive complaints on various platforms and to make it more effective they have planned to integrate the feedbacks received from various channels. A unified helpline number has also been developed to make the feedback process easier for the customers. Now the commuters can also lodge their complaints using 'Rail MADAD' mobile app and enables them to check real-time status of their complaints.

- f) **Physical Evidence:** The presence of Indian Railways has been quite evident as its establishment lies way back in 1853. It is the world's 3rd largest rail networks and is present all across India. The reserved tickets and receipts act as physical evidences for all the services offered by the Indian Railways.
- g) **Process:** The process followed by the Indian Railways is quite easy when it comes to delivering the service to customers. There are multiple platforms -online as well as offline where customers can book tickets and avail the benefits offered. They have also introduced the Tatkal system mainly for people who have to travel on a short notice or have been kept on a waitlist. The process is user friendly and customers can access the portal services 24*7. The tracking process and delivery process of freight services are user friendly too

KEY FACTS AND MARKET OUTLOOK OF INDUSTRIES

Aviation Industry

The civil aviation industry (including all non-military aviation's) is among the fastest growing sectors in India during the last three years. India is also among the top 3 largest domestic civil aviation market in the world. As per International Air Transport Association

(IATA) forecasts, India is also expected to out beat the UK to become the third largest air passenger market by 2024¹³. India is expected to become the world’s largest domestic civil aviation market in the coming 10 to 15 years¹⁴, as per Mr Jayant Sinha, Union Minister of State for Civil Aviation, Government of India.

- Growth in domestic passengers: India’s domestic passenger traffic grew at a CAGR of 12.18 per cent between FY2009 to FY2018, to reach 243 million¹³ in FY18. Domestic passenger traffic is expected to reach 293.28 million¹³ in FY2020 at a CAGR of 9.8 per cent.

- Growth in international passengers: India’s international passenger traffic grew at a CAGR of 7.34 per cent between FY2009 to FY2018, to reach 65 million¹³ in FY18. International passenger traffic is expected to reach 76 million¹³ in FY2020 at a CAGR of 8.13 per cent.

million¹³ in FY18. International passenger traffic is expected to reach 76 million¹³ in FY2020 at a CAGR of 8.13 per cent.

The Government of India has planned a Vision 2040 document which has a robust 20 year plan that lays out the targets and the directions to reach there along with timelines and transparent accountability. In order to deal with the surge in demand, the Indian Government has been planning to increase the quantity of airports. In FY2018, India had 10115 operational airports and it is expected that by March 2040, the operational airports would be around 190-200¹⁵. India is also expected to witness a massive upgrade of its aviation education and skilling infrastructure. Its affordable and high-quality aviation

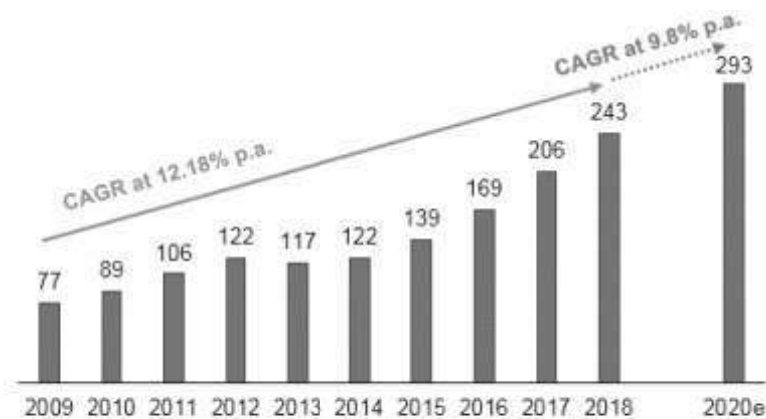


Figure 1 : Growth in Domestic Passengers (in millions)

Source: www.ibef.org, Airport Authority of India, Ministry of Civil Aviation

education system will attract students globally. The Government alongside has committed to enhance the regional connectivity through its UDAN initiative

and also planning to deploy US\$ 1.83 billion¹⁶ for its related infrastructure. There are around 62013 aircraft being operated by scheduled airline in India as of July

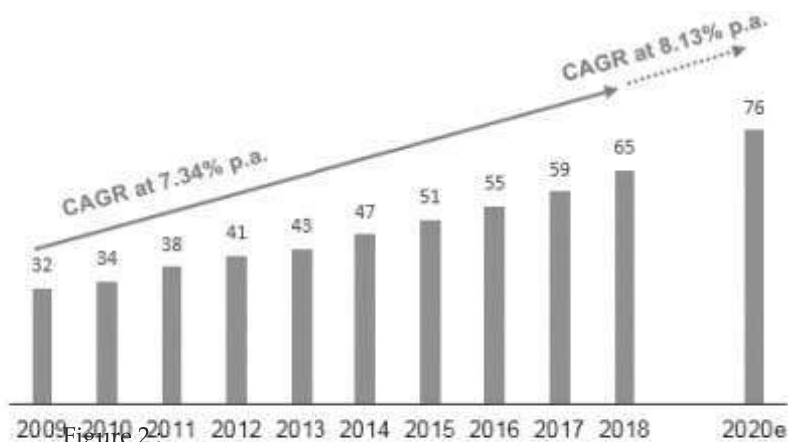


Figure 2 : Growth in International Passengers (in millions)

Source: www.ibef.org, Airport Authority of India, Ministry of Civil Aviation

2018, and it is expected that the number of aircrafts would grow to 1,10013 planes by 2027 and 2,35915 by 2040.

Furthermore, the government has allowed 100 per cent FDI under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline. However, FDI over 49 per cent would still need government approval. According to Department of Industrial Policy and Promotion (DIPP), FDI inflows in India's air transport sector (including air freight) touched US\$ 1,820.62 million¹⁷ between April 2000 and December 2018. The industry is expected to invest Rs 350 billion¹³ (US\$ 4.99 billion) in the coming four years, showing huge growth potential for the aviation industry in near future. Some of the key facts given in the Vision 2040 documents are presented in the below chart and table:

Railway Industry

Indian Railways was nationalized in 1951, and today the Indian Railways ranks world's 3rd largest rail networks and is also recognized as among the largest railway systems under single management (i.e. by government only). The Indian Railways route length network is spread over 115,000 km¹⁸, with 12,617 passenger trains¹⁸ every day from 7,349 stations¹⁸ plying 23 million commuters¹⁸.

Industry revenues has grown at a CAGR of 9.08 per cent during 2009-2018, and has reached to US\$ 27.71 billion¹⁸ in FY18 from US\$ 12.67 billion¹⁸ in 2009. Earnings from the travelers business touched US\$ 7.55 billion¹⁸ in 2018. FDI inflows into Railways related components from April 2000 to December 2018 has reached US\$ 940.92 million¹⁸. However, the major problem facing by the industry is that passenger

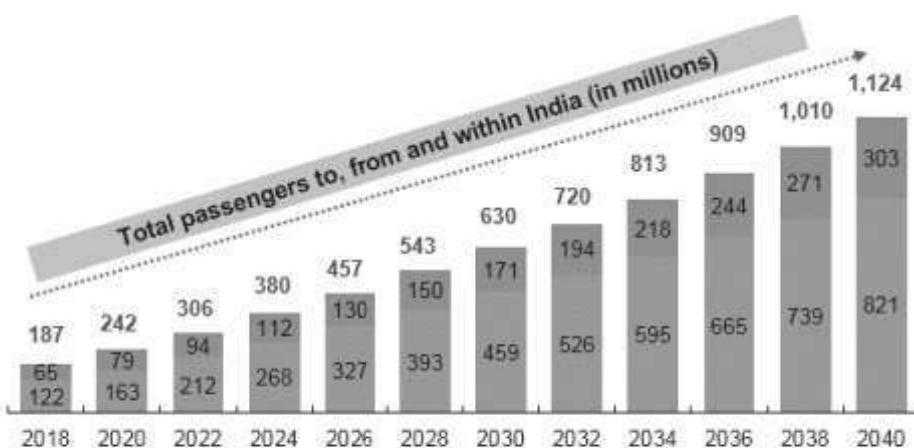


Figure 3 : ■ Domestic Traffic ■ International Traffic

Source: FICCI, KPMG

Table 4 : Passengers Growth

Parameters	March-2018	March-2040	CAGR (per cent)
Total passengers (in millions)	187	1,124	8.5 per cent
Global ranking	7	3	-
Industry Revenue (US\$ in billions)	11.4	28.6	4.3 per cent
Number of operational airports	99	160-180	3 per cent

traffic is on a continuous declining trend since 2013, indicating falling demand for the travel in railways. Traffic has been moving to other transport modes such as roadways and airways.

As per IRCTC, passengers travel more in the sleeper class, 63 per cent¹⁹, while only 1 per cent¹⁹ of the passengers travel in the AC 1st class.

As per the data from the Comptroller and Auditor General (CAG)²⁰, it showed that only the AC 3-tier

out of AC 1-tier, AC 2-tier and chair car segment is making operational profits, means within the AC segment, more people prefer to travel in the 3-tier segment than in the AC 1-tier, AC 2-tier and chair car put together.

During financial year 2017, 84 million²¹ passengers travelled by AC 3-tier against 54 million²¹ in the other AC segments. Out of these 54 million, AC 1-tier carried 3 million²¹ passengers, AC 2-tier and AC chair booked 25 million²¹ and 26 million²¹ people, respectively.

In April 2018, Indian Railways announced that it all set to replace AC 2-tier coaches on some Rajdhani and Duronto Express trains with AC 3-tier coaches in the coming months to minimize the losses. Soft superior quality blankets introduced as per the revised specifications issued by the Railway Board. Luxury travel is restricted for the senior railway officials, now asked to travel in general coaches to get passengers feedback and to check the quality standards that are being maintained across various classes of coaches on trains. Indian Railways is one of the country's biggest

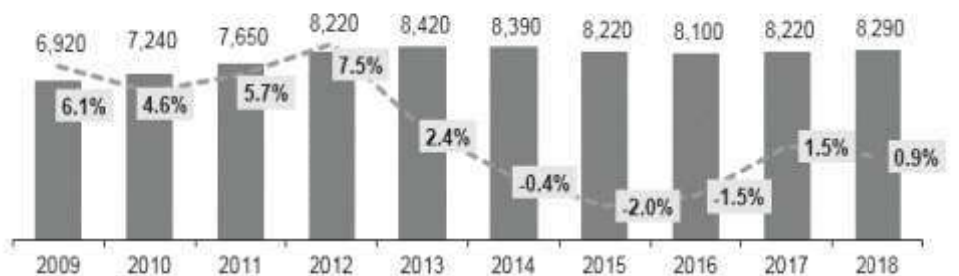



Figure 4 :

— Growth in Total Passengers (in millions) - - - Annual Growth rate (in %)

Source: www.ibef.org, Ministry of Commerce & Industry, Government of India

employers, and is expected to generate one million jobs¹⁹ in the near future, according to Mr Piyush

Goyal, Union Minister for Railways and Coal. In the next five years, it is projected that the Indian railway

	% of Passengers travelled by:			
	AC 1 st Class	AC 2 nd Class	Ac 3 rd Class	Sleeper Class
	1%	7%	29%	63%

market will be among the top 3 largest market in the world, accounting for 10per cent¹⁸ of the global market.

OUTCOMES OF THE STUDY

As per the passenger data published in the DGCA - Handbook of the Civil Aviation Industry and Statistical statements of the Indian Railways, the number of people traveled in the airlines has increased during 2016-17 from the passenger carried in AC classes of train for the first time. It is important to note that for calculations, we have taken the domestic and international passengers in the aviation industry while in Railways, passenger traffic is the aggregate of

passengers carried in the AC First Class, AC Sleeper Class, AC 3 Tier & AC Chair Car of the broad gauge.

It is clearly reflected in the above chart that passenger traffic in airlines have increased during 2016-17 to reach 158.4 million²¹ from the passenger traffic in the AC coaches of Indian Railways, 145.4 million²². One of the striking aspects of the stagnating ridership of Indian railways is that although total number of passenger carried in the AC Sleeper class has been decreased in absolute number but the annual growth rate of all the AC coaches accept AC 1st class has decreased substantially. In the charts below, In the AC sleeper class, number of passengers carried in the broad gauge of railways has decreased from 26.5

million in 2015-16 to 25.7 million in 2016-17. The annual growth rate of all the AC classes has decreased from the previous years except AC 1st class, this indicates that due to dynamic fare pricing, except AC 1st class (which also has no impact in dynamic fare pricing) all other AC coaches passengers preferred to opt other mode of transports, or say airplanes rather than similarly priced railway tickets.

As per the data given in Railways Statistical Statements, there is no doubt that the average rate (in paisa) per passenger per kilometre has increased in the past years for all the AC coaches. The most striking aspect to note here is that Average rate of increase in the rates is highest in AC Sleeper class (27per cent) while 26per cent increase is observed in AC 3 tier class and 22per cent in AC Chair class since 2011-12. Ironically, 1st AC, the highest class of train

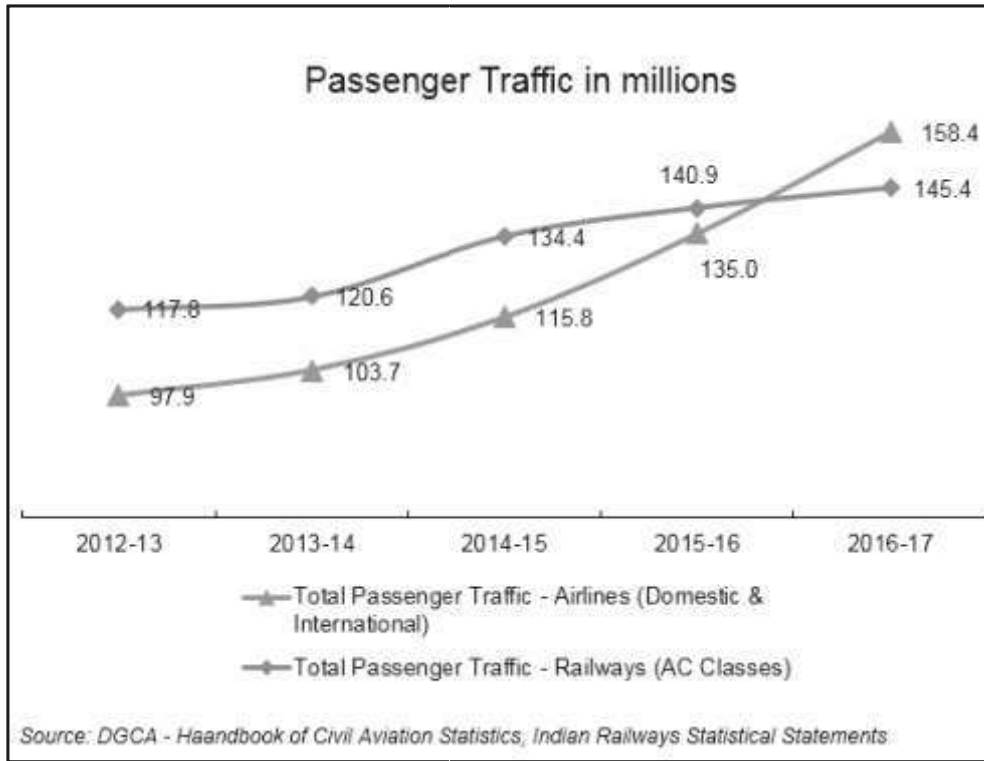


Figure 5 : Passenger Traffic in millions

travel, which is also the most expensive, has recorded the lowest increase in fares during the same period, i.e. 11per cent.

From the above charts, it has been cleared that railway tickets became more expensive for the AC

coaches as compared to the previous years, our next step is to understand the reasons behind the gravitation of higher class of railway passengers towards airlines. The following figure reveals that the operational revenue per passenger per kilometre

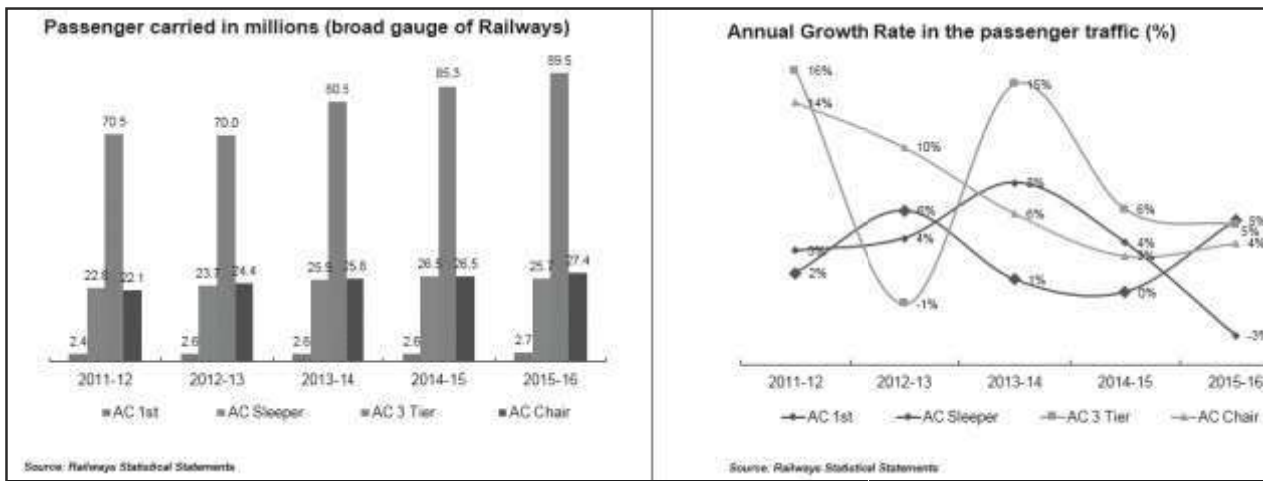


Figure 6 : Growth Rate in the passenger traffic

of all airlines started falling since 2013-14. The fall in operational revenue per passenger is a fair indicator of the declining cost of air tickets. Also the decline in operational expenses of all airlines per passenger per kilometre, largely due to declining aviation turbine fuel (ATF) costs (explained in the coming para).

In the below chart - Railway ticket price versus Airplanes ticket price, although there is a significant gap between the railway travel cost and air travel cost, but the trend in railway ticket pricing saw a steady rise every year. However, the reversed trend is observed in the airline pricing suggests declining

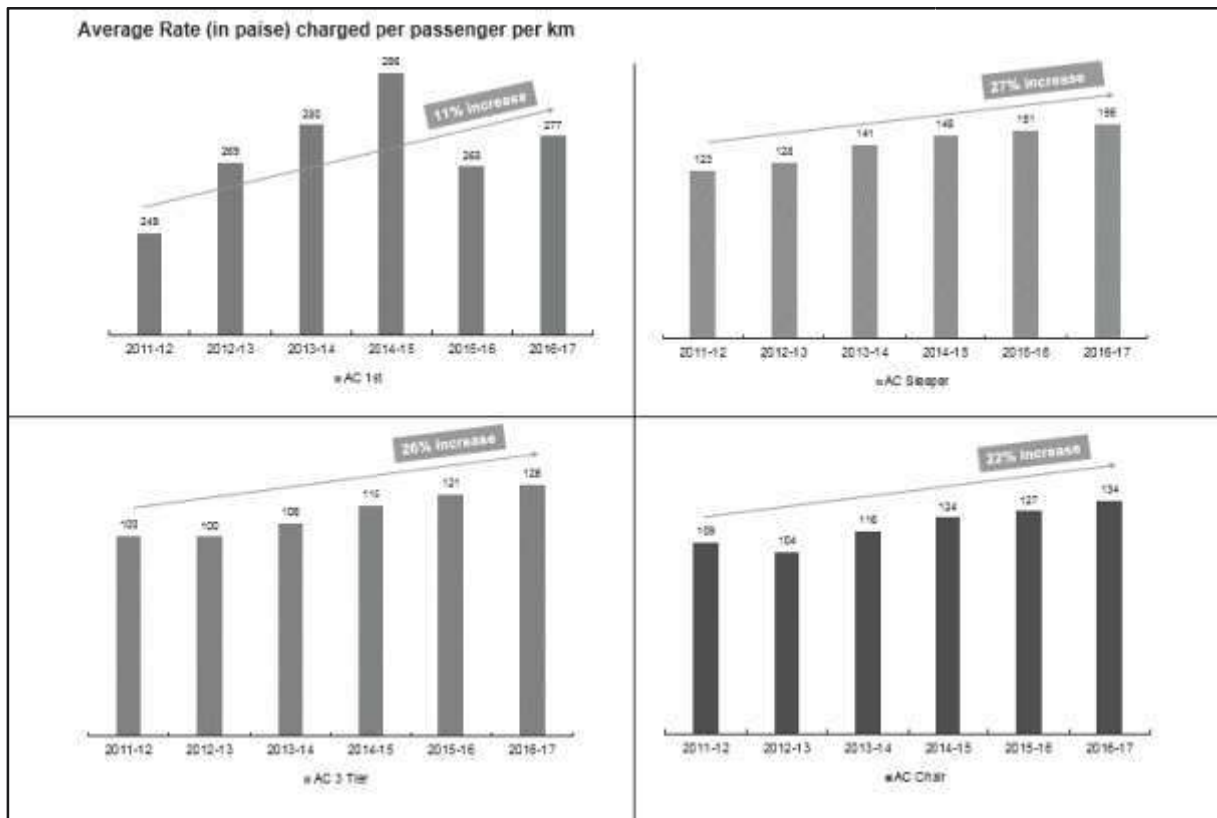


Figure 7 : Average Rate charge per passenger

ticket costs over time.

The buoyancy in airline travel is vindicated by the significant rise in the revenues of Indian civil aviation industry in India. The story becomes clearer if we

compare this growth to the growth in the revenues of Indian railways. One of the crucial aspect of the boom in airline travellers is the ever increasing passenger load factor of airlines. During the period 2016-17, the

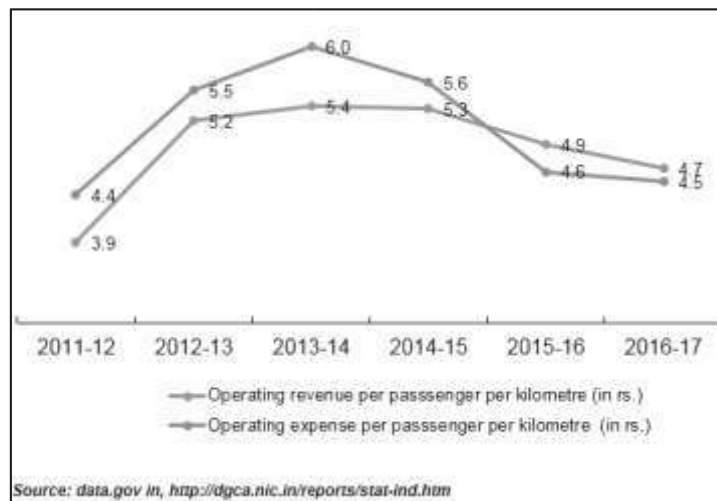
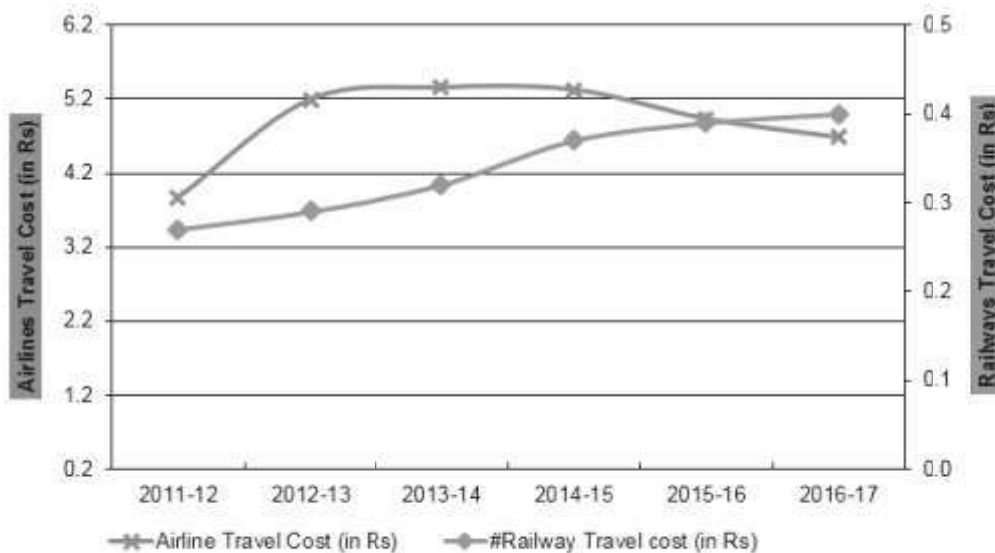


Figure 8 : Operating Revenue Vs Operating Expenses per passenger

Source: data.gov in, <http://dgca.nic.in/reports/stat-ind.htm>

chart below shows that airlines' passenger revenues have increased at CAGR of 12.2 per cent to reach Rs. 669 billion in 2016-17, while the revenue increase for railways during the year period is CAGR of 10.6 per

cent to reach Rs. 461 billion. It is important to mention here that the revenues of Indian Railways shown in the chart below are aggregate of all the coaches.



Source: Directorate General of Civil Aviation, Railways Statistical Statements
#Railway travel cost is the average of all the coaches - reserved as well as unreserved

Figure 9: Railway Vs Airline Travel Cost per Passenger

As we have noticed till now, railway ticket pricing is playing a significant role in pushing more people to the skies and so do the continuous falling cost of air travel. So, we cannot just give the credit to higher railway ticket pricing for this shift. We have to understand the factors which has caused this fall in cost of air travel in India. There are basically two

factors: the declining cost of ATF (Aviation Turbine Fuel) and rising per capita incomes. India's economic growth and rising disposable income of the middle class is creating significant demand for quality travel. Aviation turbine fuel is also fallen to a great extent, which in turn is reducing the operational cost of Indian airlines and hence let them to sell their air

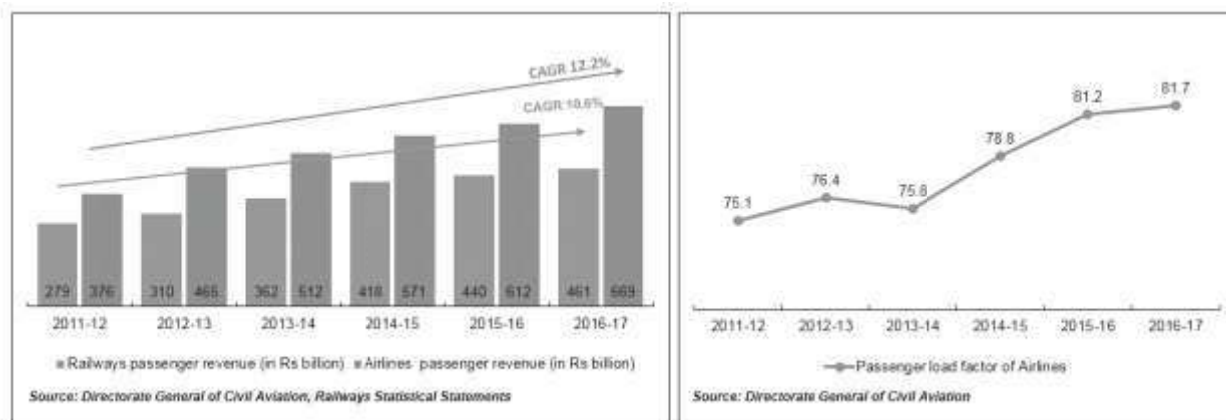


Figure 10: Railway Vs Airline Revenue

tickets at cheaper rates.

CONCLUSION

As per the findings, it is shown that the revenues of the railway industry as a whole has increased due to Dynamic Fare pricing, but the passenger traffic

has slowly moved to the aviation industry. For the first time in history, the number of rail passengers travelling in the AC compartments in 2016-17 saw a steep decline from a previous year. The exponential growth has been recorded in the number of passengers

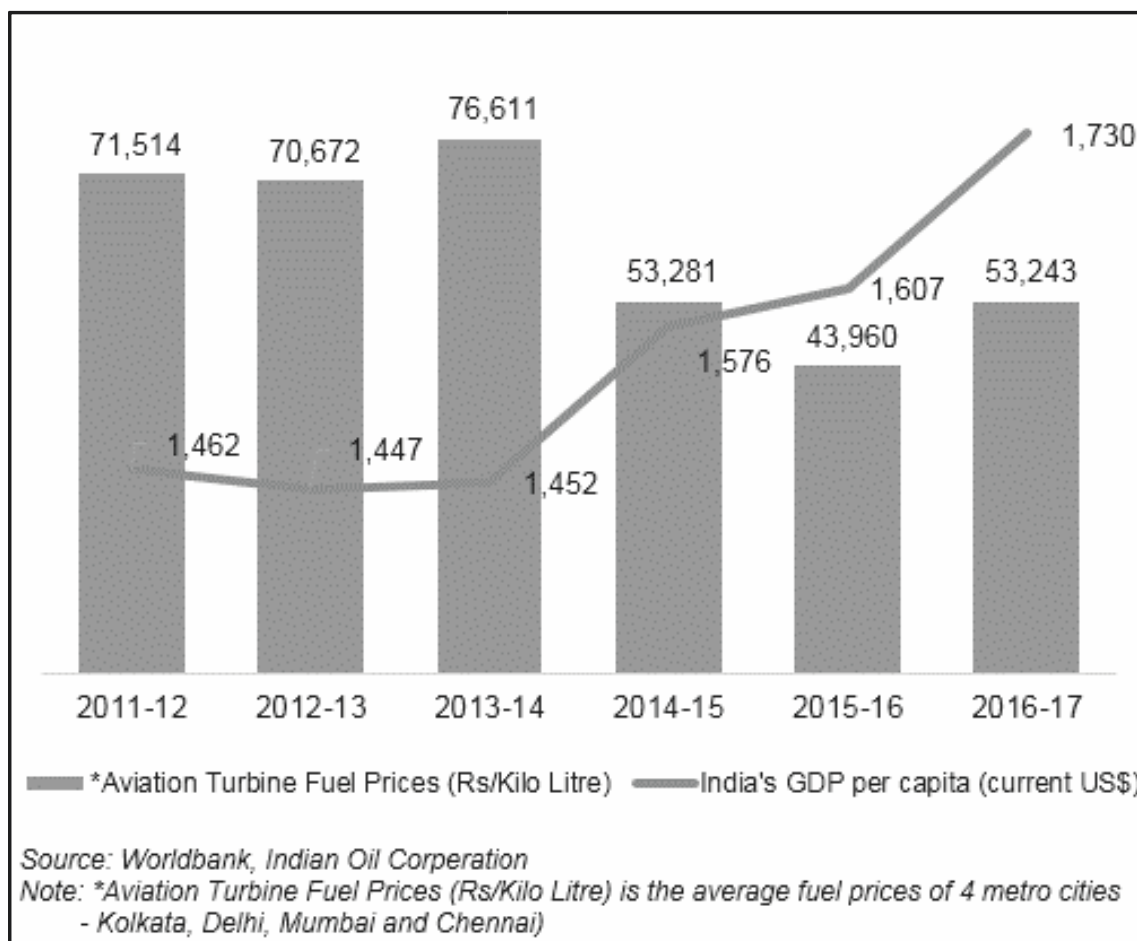


Figure 11 : ATF Prices

travelling in the Indian Civil Aviation, as the dynamic pricing of railway tickets, rising disposable incomes and falling jet fuel prices making the air tickets more affordably priced.

It has been heavily criticized that Indian railways services are far below than Airline Industry services, Indians are now ready to pay little extra and choose to fly instead of taking the costly tickets for the air conditioned class of trains.

Railways controls large market share in suburban travel and long distance non-AC travel, but it has substantially failed to rationalize fares in AC segments even the short distance passengers are shifting to the AC buses, private vehicles and largely to airlines.

Recent shortcomings in the services of railways also affected the decisions of passengers while choosing for the mode of travel. Examples includes bad quality food, dirty blankets offered, etc.

Analysis by the NITI Aayog showed that a couple of years ago, the railways was spending Rs 1.671 for every rupee earned from its passenger business on its social obligation. However, a decrease in air fares due

to fall in global oil prices, along with the railways' experiment with dynamic pricing made AC travel more expensive for those booking late and ultimately making more attractive for them to fly.

As per our understanding, in addition to the increasing per capita income and falling average fuel prices, the following can also be the possible reasons for the rapid growth of Aviation industry:

- **Amalgamation in Aviation Sector :** The Indian aviation industry is growing because of the mergers and acquisitions, it has got to promote its substantial growth, which is not in the case of railways since railways is natural monopoly. The Indian Airlines-Air India merger and the Kingfisher-Deccan merger are few of the M&A example in this sector.
- **When Safety Is Concerned :** Many studies have proved that airlines are the safest modes of transport in comparison to others and also one of the quickest. As per the study conducted by the Northwestern University using the US data between 2000 to 2009, commercial aviation had

a fatality rate of just 0.07 per billion passenger miles²³. By contrast, the corresponding rate for motorcycles was 213²³, for cars it was 7.3²³ and for railways it was 0.43 per billion passenger miles²³.

- **Professional Staff** : The growth of the aviation industry in India is highly reliant on the availability of qualified personnel across all disciplines, including pilots, crew members, engineers, controllers, ground staff etc. Each one of these roles requires education and extensive training that ultimately improves the performance of the airlines and hence makes it more attractive to the travelers.
- **Coping with latest technology** : From fuel-efficient conveyance to the advanced and automated ground process, technological advancement has made Aviation sector as one of the fastest growing sectors in the world.

So, in the end we can conclude that marketing strategies and marketing mix adopted by the Indian aviation industry to some extent are successful in attracting the passenger traffic from the railway industry.

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