

## Challenges and Opportunities in Online Reservation of Bus Tickets

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**Abstract:** Over the past few years tourism industry has witnessed rapid and continuous growth. In developing countries like India tourism has become one of the major sectors of the economy. The major modes of transportation are by airways, railways, seaways, or by roadways. The reason that airline tickets are comparatively expensive and train tickets are reserved in advance, it makes bus travels a feasible option. There are many companies providing facility of booking online bus tickets. Huge population is availing this service either due to the convenience or due to lack of time and many other reasons. There is a gap between the promises made by those companies and quality of services provided by them. The study aims to identify the various issues and challenges faced by the customers. The above identified factors will be analyzed (using ANOVA) whether they are perceived as same by both the genders or not.

**Keywords:** Tourism Industry, transportation, online reservation.

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### I. Introduction

#### 1.1 Tourism industry in India

Tourism can be defined as the activities of people traveling from one place to another for business, leisure, or some other purposes. Over the past few years tourism industry has witnessed rapid and continuous growth. It is becoming one of the fastest growing economic sectors in the world. It has become the fourth largest industry in the global economy<sup>1</sup>. In developing countries like India tourism has become one of the major sectors of the economy. It has contributed to a large proportion of the National Income. It has also created vast employment opportunities. It has great potential for further expansion and diversification. However, there are positive and negative impacts of tourism industry in India.

#### 1.2 Changing trends of travelling in India

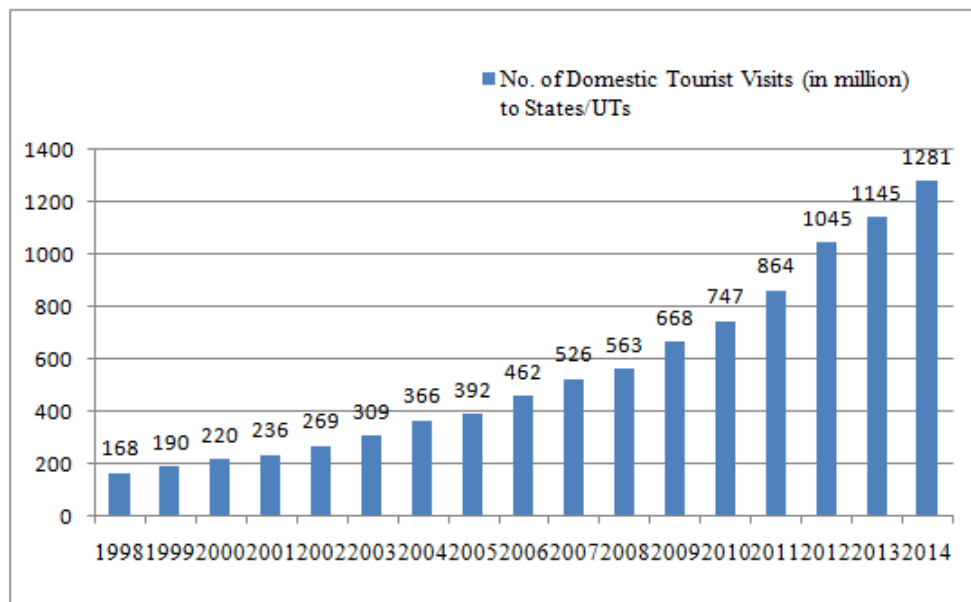
Tourism in India developed mainly through the indirect sources in the early period. Trade was major purpose of travelling in India. Majorly the abundance of agricultural produce, conversion of iron-ore into steel for weaponry, tools and textiles created an important link for transportation in India. Other important purposes for travel were pilgrimage and spreading education. For example, Ashoka travelled a lot to spread the teachings and doctrines of Buddha. But as the time passed there were significant changes in the lifestyle of people. The statistics given by the Government of India (as shown in Figure 1) clearly tells that the number of domestic travelers have increased from 168 in the year 1998 to 1281 in the year 2014<sup>2</sup>. Seeing the technological advancements it can be said that the number of travelers will keep on increasing in the future too.

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<sup>1</sup><http://www.trcollege.net/articles/74-development-and-impact-of-tourism-industry-in-india>

<sup>2</sup><http://www.tourism.nic.in/writereaddata/CMSPagePicture/file/marketresearch/statisticalsurveys/India%20Tourism%20Statistics%20at%20a%20Glance%202014New.pdf>

**Figure 1:** No. of domestic tourist visits to states/U.T.



Source:<http://www.tourism.nic.in/writereaddata/CMSPagePicture/file/marketresearch/statisticalsurveys/India%20Tourism%20Statistics%20at%20a%20Glance%202014New.pdf>

With the advent of modern technologies there came a change in the purpose of travelling in India. The needs above mentioned changed to recreation and purpose of leisure. According to U.N.W.T.O., 53%<sup>3</sup> of people travel for the purpose of leisure. The wide network of rail, airways, sea-routes and road transportation handed over the needs for leisure over huge number of population. U.N.W.T.O. report states that 54% of the travelers prefer airways followed by roadways with 39%<sup>4</sup>.

### 1.3 Bus Travelling In India

Although it is being used by huge number of people, the bus travel industry in India is highly fragmented as well as unorganized and it took little time to adopt some innovations in the bus ticketing industry in India. Redbus is the largest bus ticketing company operating in India. The bus travel industry in India is disorganized and highly fragmented. It is a one hundred twenty billion annual turnover industry with a 25% growth rate per year<sup>5</sup>. This industry is growing rapidly in India, being one of the most preformed modes of transport for huge population of India. There are around two thousand private bus operating agencies which function with around twenty thousand buses on various routes. In the Indian bus travel industry, earlier, most of the private players were regional players and did not have a presence all over India. The market for online bus reservations business was estimated to arrive at one hundred fifty million dollars in the year 2011<sup>6</sup>. The two carriage categories in the Indian bus travel industry operations are firstly, the contract carriages and other is stage carriages. The contract carriages are mainly long distances from intercity with lesser number of stoppages whereas stage carriers on the other hand are short distances with several stoppages. The contract carriage industry in India is disintegrated, with more than 65% of the bus travel agencies possessing around less than twenty buses each. Despite the high growth of online ticket bookings in the country through renowned agencies like yatra.com (airline) and IRCTC.com (train), there was a very slow growth when it came to online bus reservations. The role of Information Technology in revenue management is popular topic for discussion by many researchers. The reasons for the slow growth could be because of several reasons like the reluctant majority of the Indian population to book their bus tickets online, low internet connectivity and more than that, the non-availability of a proper online platform to book their bus tickets. The Indian bus travel industry could be also divided on the basis of regular and luxury bus travel rendering to the entire population. Volvo buses have played a major role in increasing the level of comfort of the bus passengers. The credit for the growth of this

<sup>3</sup><http://www.e-unwto.org/doi/pdf/10.18111/9789284416899>

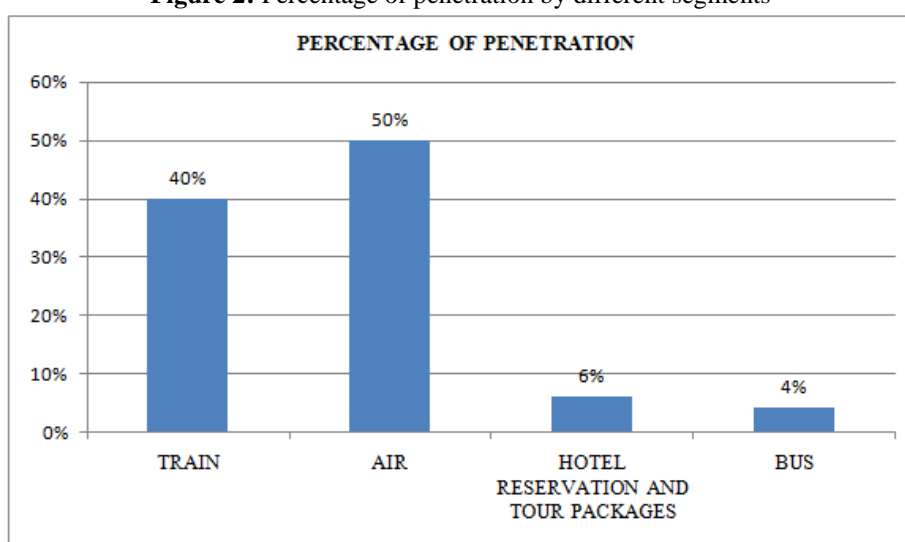
<sup>4</sup><http://www.e-unwto.org/doi/pdf/10.18111/9789284416899>

<sup>5</sup> International Journal of Business and Management; Vol. 9, No. 11; 2014 ISSN 1833-3850 E-ISSN 1833-8119 Published by Canadian Center of Science and Education

<sup>6</sup> International Journal of Business and Management; Vol. 9, No. 11; 2014 ISSN 1833-3850 E-ISSN 1833-8119 Published by Canadian Center of Science and Education

industry goes to the reason that airline tickets are comparatively expensive and train tickets are reserved in advance. It makes bus travel a feasible option. Most of the firms work in small regions that operate on a lesser scale and depend mainly on manual systems for ticket bookings and reservations. The industry was dispersed heavily with the travel agents acting as manager for ticket bookings. One of the major threats to the bus ticketing industry in India is that despite being used by huge number of people it took enormous period of time to observe some modernization in this sector. Moreover, it is also recorded that the train and flight reservations had integrated booking and reservation process. This process was implemented much earlier than the bus travel industry. The bus operators are dispersed across whole of India largely supported by traditional travel agents. There was an urgent need for transparency within the industry so that travelers can easily avail the services of an integrated system where they could be advised with the information related to the total number of bus routes, rates, seats availability, preferences, cancellations, refund process, and feedback options. E-ticketing in India is modifying the scenario. There are research studies which have discussed these issues. The service providers could increase their readiness related to monetary transactions and increase their various services by adopting modern Information Technology.

**Figure 2:** Percentage of penetration by different segments



Source:[http://www.ey.com/Publication/vwlUAssets/rebirth\\_of\\_e-commerce\\_in\\_india/\\$file/ey\\_re-birth\\_of\\_ecommerce.pdf](http://www.ey.com/Publication/vwlUAssets/rebirth_of_e-commerce_in_india/$file/ey_re-birth_of_ecommerce.pdf)

The travel and leisure embodies 76% of the overall share in the ecommerce market in the country. The online ticketing market had observed a tremendous rise in the Indian market with 30% of tickets from railways and 40% of airline tickets booked through internet. Over the last few years, a phenomenal rise in the number of bus ticketing websites was observed in India. The online bus ticketing market is forecasted to be five to six billion that is about three to four percent of the overall market. This modification in the travel space cannot go unnoticed. The private bus travel industry is expanding at a rapid rate of thirty percent and forecasted to cater around 350-400 billion by 2016. In the year 2002, Air India started with concept of the e-ticketing. The IRCTC website ([www.irctc.co.in](http://www.irctc.co.in)) is one of the largest and most visited online websites in India. Expansion in India's tourism industry is the second fastest in the world. Online travel agencies are shifting their focus to hotel reservations and package tourism. These agencies need to adopt innovations to succeed in hotel reservations, as they previously limited their scope to ticketing. An increasing number of issues and challenges are reducing the growth of currently existing players. Commission rates in the bus travel segment are around 10%.<sup>7</sup>

#### 1.4 Low Technology Adoption Limiting the Growth Of Bus Services In Online Travel

There is low diffusion of the services catering to online reservation of bus tickets in India. The online existence of bus travel agencies would increase their presence in the market, since it would be easy for the travelers' access to information. Despite the high scope for expansion, the low adoption of innovation and technology by the online bus travel agencies and the scattered nature of the industry hinder the growth. Operators need to, therefore, quickly spend in technology to avoid risk of losing out on an important part of potential travelers. The growth of the Indian online travel agencies has appealed to leading global players to

<sup>7</sup>[http://www.ey.com/Publication/vwLUAssets/Rebirth\\_of\\_e-Commerce\\_in\\_India/\\$FILE/EY\\_RE-BIRTH\\_OF\\_ECOMMERCE.pdf](http://www.ey.com/Publication/vwLUAssets/Rebirth_of_e-Commerce_in_India/$FILE/EY_RE-BIRTH_OF_ECOMMERCE.pdf)

India. Popular Indian travel agencies have been successful in grabbing the market share as they understand the behavior and attitude of local customers and customize their travel accordingly.

## **II. Literature Review**

**Sulaiman, A., Ng, J., & Mohezar, S. (2008)** in their research paper entitled “**E-ticketing as a new way of buying tickets**” try to focus on the motivational factors that influence online buying. According to I.A.M.A.I., India has a big pool of techno savvy population (30% of total population i.e. 375,000,000<sup>8</sup>) that is not only browsing the internet but also purchasing products that are available online. Using internet as a medium to attract the customers and sell products or services is the basic concept of online marketing. This paper theoretically attempts to connect critical motivational factors that influence online buying. It was found in the study that the motivational factors do not have significant difference between men and women.

**Vyas, P. (2014)** in his research paper entitled “**The growth of online bus ticketing industry: redBus route to success in the Indian market**” attempts to give the readers an overview about Indian travel industry in context of redbus. Although the bus travel industry is used by millions of people in India, it is highly fragmented. After the buses being introduced to transport system it took a little time to witness some innovations. The paper attempts to traverse through the journey of ‘redbus’ which is the largest online bus ticketing agency in India. The paper discusses the challenges faced the Indian travel Industry and the challenges encountered by redbus.

**R. Ramya (2015)** undertook the project entitled “**customer satisfaction on online bus ticket booking**” with an objective to analyze and evaluate the level of customer satisfaction. The main aim of this study was to find out the level of customer satisfaction towards online reservation of bus tickets. The sample size is of 110 respondents. The study revealed that socio-economic factors like age, educational qualification, occupation, monthly income earnings of the family have direct impact on the level of customer satisfaction of the customers in relation to online reservation of bus tickets.

### **Objectives Of The Study**

1. To understand the profile of customers availing the service of online reservation of bus tickets.
2. To specify the benefits for opting online booking services.
3. To identify the issues and challenges in online reservation of bus tickets.
4. To provide suggestions for resolving the identified problems.

## **III. Research Methodology**

This research was conducted in Bangalore, India to find out the major benefits and challenges in the online reservation of bus tickets. A questionnaire was used to get the responses from population in the city of Bangalore. Judgmental sampling was used as the people who had booked online tickets for more than five times were taken into consideration. Sample size was taken to be 100. Hypotheses were formed to find out if there was any significant difference in the benefits and challenges of online reservation of bus tickets between the genders of the respondents.

### **1.1 Hypotheses**

Null Hypothesis: There is no significant difference in the benefits of online reservation of tickets between the genders of the respondents.

Alternate hypothesis: There is a significant difference in the benefits of online reservation of tickets between the genders of the respondents.

Null Hypothesis: There is no significant difference in the challenges of online reservation of tickets between the genders of the respondents.

Alternate hypothesis: There is a significant difference in the challenges of online reservation of tickets between the genders of the respondents.

## **IV. Analysis And Interpretation**

### **4.1 ANOVA for checking the differences in the benefits of online ticketing between genders of the respondents**

One way analysis of variance (ANOVA) was used to determine whether there is significant difference in the benefits of online ticketing between genders of the respondents.

The following Null and Alternate hypothesis were framed for checking the differences in the benefits of online ticketing between gender of the respondents.

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<sup>8</sup><http://www.internetworldstats.com/asia/in.htm>

**Null Hypothesis:** There is no significant difference in the benefits of online reservation of tickets between the genders of the respondents.

**Alternate hypothesis:** There is a significant difference in the benefits of online reservation of tickets between the genders of the respondents.

There were 23 benefits related to the online reservation of bus tickets mentioned as follows:

- i. Saves time.
- ii. Easy to book tickets online.
- iii. Comparison between different travel agencies is possible.
- iv. Saves paper.
- v. Saves money through discounts and offers.
- vi. Easy cancellation.
- vii. Able to book tickets in a few clicks.
- viii. User interface helps with the next steps.
- ix. It is reliable and trustworthy.
- x. Service is delivered as promised.
- xi. Buying online is enjoyable and a joyful activity.
- xii. It enhances my status symbol.
- xiii. Fits into my lifestyle.
- xiv. People who are my influencers that I should book bus tickets through internet.
- xv. People who are my important to me think that I should avail information about buses through internet.
- xvi. I have a P.C./Laptop/Mobile.
- xvii. I have speedy internet connection.
- xviii. I am always on the internet.
- xix. I like the idea to get information through internet.
- xx. Using various online services is wise.
- xxi. It is easier to book online rather than going to reservation centers.
- xxii. I strongly recommend others to use it too.
- xxiii. I will use internet to book tickets in future too.

The responses for the above 23 benefits were taken and one way analysis of variance was conducted to see if there is any significant difference in the benefits perceived by men and women.

The above 23 benefit factors were measured on a Likert scale from 1 to 5.

1 being strongly disagree and 5 being strongly agree.

The total positivity score can range from a minimum of 5 to a maximum of 115.

**Table 1: Descriptive (Benefits score)**

Gender	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Male	60	90.7333	11.45347	1.47864	87.7746	93.6921	77.00	116.00
Female	40	86.5000	16.12929	2.55026	81.3416	91.6584	52.00	104.00
Total	100	89.0400	13.60178	1.36018	86.3411	91.7389	52.00	116.00

The table shows that males have scored an average of 90.73 with a standard deviation of 11.45, whereas females have scored an average of 86.50 with a standard deviation of 16.12.

**Table 2: ANOVA table for benefits score**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	430.107	1	430.107	2.357	0.128
Within Groups	17885.733	98	182.507		
Total	18315.840	99			

From the above table it has been found that men and women perceive the benefits of online reservation as same. The sum of squares between groups is 430.1 and within the groups are 17885.73. The F value is calculated to be 2.357 with a sig value of 0.128. Therefore, there is no significant difference in the benefits of online ticketing between the genders of the respondents.

#### **4.2 ANOVA for checking the differences in the challenges of online ticketing between genders of the respondents**

One way analysis of variance (ANOVA) was used to determine whether there is significant difference between the challenges of online ticketing and gender of the respondents.

Null Hypothesis: There is no significant difference in the challenges of online reservation tickets between the genders of the respondents.

**Alternate hypothesis:** There is a significant difference in the challenges of online reservation tickets between the genders of the respondents.

There are nine challenging factors which restrict the respondents to book online tickets.

They are as follows:

- i. Lack of internet connectivity.
- ii. Personal information is not safe.
- iii. There is risk in monetary transactions.
- iv. There is risk of hackers.
- v. Sometimes money is deducted without the booking.
- vi. There are some extra website charges.
- vii. Time consuming.
- viii. Difficult to cancel the tickets.
- ix. Difficult to get the refund.

The responses for above 9 challenges were taken and one way analysis of variance was done to check if there is any significant difference in the challenges perceived by men and women.

The above 9 challenges were measured on a Likert scale from 1 to 5, 1 being strongly disagree and 5 being strongly agree. The total challenges score could range from a minimum of 5 to a maximum of 45.

**Table 3: Descriptive-challenges score**

GENDER	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Male	60	28.5333	6.09381	.78671	26.9591	30.1075	14.00	38.00
Female	40	27.8000	7.80270	1.23371	25.3046	30.2954	16.00	41.00
Total	100	28.2400	6.80036	.68004	26.8907	29.5893	14.00	41.00

The table shows that males have scored an average of 28.53 with a standard deviation of 6.09, whereas females have scored an average of 27.80 with a standard deviation of 7.80.

**Table 4: ANOVA-challenges score**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.907	1	12.907	.277	.600
Within Groups	4565.333	98	46.585		
Total	4578.240	99			

It has been found that men and women perceive the challenges related to online reservation of bus tickets as the same. The sum of squares between the groups is 12.90 and within the groups are 4565.33. The F value is calculated to be 0.277 with a sig value of 0.600. Therefore, there is no significant difference between the challenges of online ticketing and gender of the respondents.

### V. Findings

- Majority of the respondents (56%) are in the age bracket of 21 years to 30 years.
- Majority of the respondents (60%) are males.
- 66% of the respondents are unmarried.
- 80% of the respondents are Post-graduate.
- 43% of the respondents access internet from home.
- 36% of the respondents travel monthly.
- 84% of the respondents are private employees.
- 72% of the respondents have annual income in the range of 2.5 lakhs to 5 lakhs.
- There is no significant difference in the benefits of online ticketing between the genders of the respondents as found by the ANOVA. Therefore, men and women perceive the benefits of online reservation as same.
- There is no significant difference in the challenges of online ticketing between the genders of the respondents as found by the ANOVA. Therefore, men and women perceive the challenges of online reservation as same.

## **VI. Suggestions**

- The services should be provided as per the promises made by the online travel agencies.
- Extra website charges should be reduced.
- Personal information should be safe.
- Few more facilities for online payment should be added to the websites.
- Refund should be done as soon as possible.
- Details related to the monetary transactions should be secured.
- Online travel agencies should adopt new technologies to curtail the entry of global players in the domestic market.

## **VII. Conclusion**

Tourism industry has a great future in developing countries like India. Technological advancements are being witnessed by this sector which forms major part of economy. In the modern era the travelers are educated, well informed and are very conscious about the trending technology. They want to adopt better and smarter ways to buy products or avail services. Modern passengers do not have time to go the traditional reservation centers and book their tickets. They just book their tickets through internet which helps them in saving time and at the same time avail various other benefits. Online ticketing has got great market opportunity in the future with increasing number of techno savvy youngsters and working women in India. There are some factors such as privacy, hacking etc. due to which people refrain from booking online tickets. The online travel agencies should adopt various measures to cope up with these challenges and sustain in this competitive market.

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