

Comparing Cost, Convenience, and Customer Satisfaction of Preferred Railway Ticket Booking Websites in India: An Empirical Study

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Abstract

This empirical research comparatively analyses three aspects viz. cost, convenience, and customer satisfaction of railway ticket booking websites managed by government and private companies in India. The most preferred five railway ticket booking websites—IRCTC, MakeMyTrip, ClearTrip, Yatra, and Ixigo are selected for comparison using data collected from 103 respondents in India. Comparison is also made by visiting these websites and actually making booking attempts while comparing websites side by side. It is found that government run website www.irctc.co.in is most preferred website among the respondents. Also in parameters such as website loading speed, ease of use, website security and reliability, customer care, and in ticket prices MakeMyTrip is the second, IRCTC being first. Customer satisfaction is higher for booking confirmation compared to booking process or receipt of tickets. On the basis of customers' responses and website comparison, these websites are then ranked.

Keywords e-ticketing, convenience, customer satisfaction, websites

Introduction

Everyday more than 30 million passengers travel using Indian Railways. Divided into zones, and further into divisions, the Indian Railways is one of the largest rail networks in the world (Raman and Wig, 2009). By the end of the year 2015-16, road share in passenger movement is estimated to reach 95 percent compared to 5 percent for the rail-based (Singh, 2000). Indian Railways also developed such websites as www.trainenquiry.com and www.indianrail.gov.in, which provide information on planning the trip, getting train schedule, checking train availability, seats availability, details on trains between stations, PNR status, fare enquiry, etc. These websites are more useful for searching for train lists and selecting trains but there is no online booking facility availability here.

While attempting to book tickets online, the website automatically directs the users to www.irctc.co.in in a opened window. separately (Vyas, 2015). Train ticketing has observed two phases in India – 1) introduction of online ticket booking, which gave freedom for passengers to visit railway stations personally to book tickets, and 2) entry of private

(non-government) train booking websites. In India, government run train ticket booking website www.irctc.co.in enjoyed monopoly for a few years till travelers began to use popular private websites like www.makemytrip.com, www.yatra.com, www.cleartrip.com, www.ixigo.com, etc. Though IRCTC is the centralized and government managed body for allotting seats and reserving tickets directly to passengers and also to private booking websites, the choice for customers are not limited to only IRCTC website. Look and feel of websites play an important role in attracting website users. These competitive websites charge service charges in addition to IRCTC charges but customers still prefer the private websites also in exchange of convenient and hassle free booking, which has potential to generate booking loyalty (Peng, 2013). In this situation, IRCTC has taken strategic reactive steps such as increasing website (www.irctc.co.in) efficiency. A new ticketing system with a capacity of booking 7,200 tickets a minute from old system of 2,000 tickets is one such example (Ansari *et al*, 2013).

The features provided by train booking websites save

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customers' time and energy and lead to retain them for a longer time. More or less all the websites provide similar features, if not exactly same in number of features but it is helpful for website managers and decision makers to know what customers think about different booking websites and how do they rate different train booking websites in terms of cost, convenience, security, ease of use, booking process and such other aspects. In competitive service market, all the players try hard to earn their share.

Literature Review

Sat Parkash Bansal, Ramjit Sing, and Amit Gangotia, (2014) noted that in marketing of hospitality and tourism services there has been a change observed due to intervention of internet and e-commerce, particularly. Consumers' demands and expectations have also risen. The study by these authors attempted to examine effects of promotion, service quality, and customer experiences on e-ticket purchases in India. The results revealed that these factors had significant effects on customer satisfaction while buying. Moreover, sales promotion had significant influence on customer satisfaction compared to other determinants. In a study titled *Customer's Attitude towards Technology Acceptance of E-Ticket Booking*, conducted in Gujarat – India taking 532 samples, Panchamia, and Doctor, (2015) measured attitude and intention of customers for using technology while booking railway tickets in India and predicted relationship between TAM (Technology Acceptance Model) factors and attitude of customers on e-ticketing. The relationship was also predicted between this attitude and perceived risk and infrastructure support. The findings were – *perceived usefulness* found to be the most powerful predicting variable for attitude of customers and intention to use e-ticketing services on websites while *infrastructure support* was not found to be useful variable for prediction. A strong relationship between *perceived usefulness* and *perceived ease of use* was established. Sahney *et al.* (2010) attempted to test customers' expectations on convenience and satisfaction about online reservation facilities of Indian railways. The authors looked at influence of users' online buying decision on consumer personality traits and a model was developed. 327 Indian online railway reservation services users' were taken as samples. The authors applied multiple regressions that helped to verify impact of consumer personality traits on online railway ticket reservation, particularly comparing among age and gender. It was found that online railway ticket buying had no significant differences for gender but for age groups some attributes had significant difference. The study concludes that an understanding of how to attract, retain, and satisfy buying needs of online buyers requires to be studied. Further, it should be noted that online customers' hedonic motives and increasing number of customers searching goods or services on internet are different from actual buying. Consumer personality is very important factor for their intention to transact online. The same authors in another research (Sahney *et al.*, 2014) examined Indian buyer's motivations towards buying railway ticket online. Authors note that sellers' attempts are to ensure customer satisfaction and loyalty, in addition to attract and persuade prospects. It is important to understand motivating factors for Indian consumers to buy online railway tickets in India. Factors influencing online buying decision were explored and

their causal impact was ascertained through a model in this research. The study found that all motivation constructs had a significant impact on buyers' intents for ticket booking via internet. It was useful to know consumers' expectations about satisfaction and convenience of online railway ticket reservation services and to help better understand consumer motivations and developing marketing strategies. Sulaiman *et al.* (2008) conducted a research to understand patterns and usage trends; particularly usefulness, reliability, security, convenience, and efficiency of Kuala Lumpur based urban communities towards e-ticketing. The other factors like cost-including cancellation cost, lifestyle, privacy, mental efforts etc. were also considered. The impact of demographic variable on e-ticketing adoption was also checked with 500 respondents. It was found that e-ticketing has been established practiced for past two years among almost 250 respondents though air ticket booking rules online booking practices. Respondents had such motivating factors as convenience and ease of use for online ticket buying. The respondents fell in particular age, education, and income group who preferred to buy tickets online. The study found that there were reasons among respondents for not using e-ticketing. The reasons were lack of confidence or trust, no access to computers, lack of knowledge or awareness, limited access of internet, security concerns etc. Ng-Kruelle *et al.* (2006) explained opportunities and challenges in public transport e-ticketing via a case study on successful implementation of e-ticketing strategy by world's largest logistic network firm Deutsche Bahn Mobility. The authors differentiated airlines and railways with description of e-ticketing in transportation sector. Potential market expansion of this firm was discussed. Authors observe difficulty in implementation of strategies in an open access system. Ching-Fu Chen, (2008) investigated relationship between service quality, perceived value, satisfaction and behavioral intentions for air travelers. The study was conducted using Structural Equation Model. Service expectations were found to have positive effect on perceived performance significantly. It had no significant positive effect on perceived value and satisfaction. Perceived value and satisfaction had positive effects on behavioral intentions significantly. Peng (2013) conducted a literature review on online booking. The author divided the literature summary in three stages – online information search, determinants of online booking, and online booking loyalty. A literature review based new research agenda was proposed for studying tourists' online booking behavior. The research provided an inclusive understanding of tourist behavior and recommends future empirical study.

Methodology

Descriptive research using convenience sampling method is used in this research. Survey method is employed for data collection. Online railway ticket booking users from 10 states of India are selected as samples. Sparingly used five train ticket booking websites are selected for comparison on cost (fare, service charge, tax etc.), convenience, and customer satisfaction. Aspects of users' online ticket booking experiences are recorded in terms of features and customer satisfaction on dimensions like booking process, booking confirmation, receipt of e-ticket in general; and security and reliability, customer care, fare, ease of payment website

specific. It is believed that the more the website features, the more convenient the websites are for customers.

Data Collection

A structured non-disguised questionnaire was used to collect data from 150 respondents from twenty three cities and towns of India. The questions were asked about users' frequency of booking tickets online, preferred ticket booking websites, booking process, booking confirmation, receipt of tickets, buying motives, internet access for booking, rating websites on different features of websites. Questionnaire was circulated via online survey forms and also by personally contacting respondents. 103 respondents returned completed questionnaire.

Respondents' Profile

Data were collected from 103 respondents (users of train ticket booking websites) from 23 cities of 10 states of India. Out of total respondents, 41.4% were female and remaining 58.6% were male respondents.

The median age of the respondents was calculated as 21 years, with the age range from 17 to 56. 42% respondents were graduate, 41% passed higher secondary and pursuing undergraduate degree, 15% were postgraduate, and 1% secondary school passed and 1% respondents were PhD. Categorizing respondents education qualification wise, 48% were students, 14% professionals, 12% in service, 11% engaged in their own businesses, 9% homemakers, and 6% doing private jobs. The average number of family members of the respondents was 4.64. Respondents' monthly family income was classified into five slabs – 1) Less than Rs. 10,000; 2) 10,001 to 20,000; 3) 20,001 to 50,000; 4) 50,001 to 1,00,000; and 5) More than Rs. 100,000. The highest percentage of respondents (43%) had more than rupees 100,000 monthly family income.

In last one month, these respondents had purchased railway ticket online average twice and maximum for twelve times and had purchased any ticket (air, rail or bus) online average 2.8 times and maximum for sixteen times.

Data Analysis

Collected responses are divided in three parts – cost, convenience, and customer satisfaction related analysis and interpretations. Cost is calculated by checking actual base fare and service charges of the websites. Responses of the questions related to convenience and customer satisfaction are recorded and converted into scores. For example, if a feature of search trains by Tatkal (urgent) quota without signing in is available on www.yatra.com but not on www.ixigo.com then 1 point is allotted to Yatra and 0 to Ixigo.

Results

Cost

To compare fare charged by five different websites, a booking attempt was made across all five websites at the same time on January 11, 2016 at 3:50 pm for one sleeper class seat for Ahmedabad-Surat trip dated January 11, 2016 in Adi Puri Express (train no.12844) departing at 18:00 hours. Table 1 shows the fare comparison for the same booking for selected five different train ticket booking websites:

Table 1
 Fare (in RS.)

| Sr. No. | Websites | Fare |
|---------|------------|------|
| 1 | IRCTC | 22.9 |
| 2 | MakeMyTrip | 23.9 |
| 3 | ClearTrip | 23.0 |
| 4 | Yatra | 23.0 |
| 5 | Ixigo | 22.9 |

As seen in the table, www.irctc.co.in, and www.ixigo.com charges the least among all five. www.cleartrip.com charges the highest though the difference in fare is not more than 10 INR. This difference will increase when comparing fare for frequent journeys with buying multiple tickets (e.g. with many family members) in higher classes for long distance trips in superfast trains.

Here, it must be taken note that Ixigo redirects booking to IRCTC. IRCTC being a centralized source of ticket booking does not charge as high commission as private websites. Among four private ticket booking websites, www.ixigo.com offers the best fare and www.cleartrip.com charges the highest. The fare involves considerations for services charge, tax, and cost of internet data usage, which will be in invert proportion with website loading speed and efficiency of internet servers.

Convenience

When asked about major reason behind their preferring buying railway tickets online, respondents enlisted reasons such as ease of use, speed of ticket booking, transparency, saving time and efforts, convenience of not visiting railway stations or booking agents, easy money back in case of cancellations, checking and comparing train options, etc.

Majority (83%) respondents said they buy railway tickets from www.irctc.co.in, followed by 9% saying www.makemytrip.com, preferences for www.yatra.com, www.ixigo.com, and for www.cleartrip.com were 3%, 1%, and 2% respectively. Two percent respondents said they used more than two websites to book train tickets online.

Table 2
 Preferred websites

| Websites | % |
|---------------|----|
| IRCTC | 83 |
| MakeMyTrip | 9 |
| Yatra | 3 |
| Ixigo | 1 |
| ClearTrip | 2 |
| More than two | 2 |

More than half of the respondents (52%) believed that www.irctc.co.in is the easiest website for railway ticket booking online, followed by www.makemytrip.com (37%). This percentage is lowest for www.yatra.com and for www.ixigo.com. 7% respondents said that www.cleartrip.com is easiest to book tickets online.

Table 3
Ease of use

| Websites | % |
|--|----|
| www.irctc.co.in | 52 |
| www.yatra.com | 2 |
| www.makemytrip.com | 37 |
| www.cleartrip.com | 7 |
| www.ixigo.com | 2 |

As shown in table 4, 58.7% respondents accessed internet from their residence to book online railway tickets. Followed by 19.57% using internet at their workplace, 18.84% used from their school or college (student respondents), and 2.9% accessed internet from their mobile phones. Asked about devices used to book online train tickets, 16.77% replied they used desktop computer, 41.61% used their laptop, 16.15% accessed mobile version of booking websites (e.g. mrails.makemytip.com), and 25.47% booked tickets using mobile phone applications (table 5).

Table 4
Accessing internet

| Source | % |
|-----------------------|-------|
| From home | 58.70 |
| From work/office | 19.57 |
| From School / College | 18.84 |
| Mobile | 2.90 |

Table 5
Access devices

| Devices | % |
|----------------|-------|
| Desktop | 16.77 |
| Laptop | 41.61 |
| Mobile website | 16.15 |
| Mobile App | 25.47 |

Respondents were asked to select a website which they experiences as having highest loading speed. 54.55% selected www.irctc.co.in, 11.11% selected www.yatra.com, while www.makemytrip.com, www.cleartrip.com, and www.ixigo.com were selected by 28.28%, 3.03%, and the same 3.03% respondents respectively, as seen in table 6.

Table 6
Website loading speed

| Websites | % |
|------------|-------|
| IRCTC | 54.55 |
| Yatra | 11.11 |
| MakeMyTrip | 28.28 |

| | |
|-----------|------|
| ClearTrip | 3.03 |
| Ixigo | 3.03 |

Customer Satisfaction

Respondents were asked to rate their satisfaction level from highly satisfied to highly dissatisfied towards online train ticket booking in general, on such parameters as booking process, booking confirmation, and receipt of electronic tickets (table 7). Respondents were also asked to compare satisfaction level for the five websites on parameters like security and reliability of websites, customer care, booking cost (fare), and ease of payment (table 8).

Table 7

Customer satisfaction for online ticketing booking

| Parameters | Booking process (%) | Booking confirmation (%) | Receipt of e-ticket (%) |
|---------------------|---------------------|--------------------------|-------------------------|
| Highly satisfied | 33.33 | 58.14 | 26.53 |
| Satisfied | 0.00 | 0.00 | 54.08 |
| Neutral | 51.11 | 34.88 | 17.35 |
| Dissatisfied | 11.11 | 4.65 | 1.02 |
| Highly dissatisfied | 4.44 | 2.33 | 1.02 |

Table 8

Website specific customer satisfaction

| Websites | Security and reliability (%) | Customer care (%) | Reasonable fare (%) | Ease of payment (%) |
|------------|------------------------------|-------------------|---------------------|---------------------|
| IRCTC | 72.73 | 34.69 | 58.00 | 57.58 |
| Yatra | 1.01 | 7.14 | 6.00 | 2.02 |
| MakeMyTrip | 19.19 | 44.90 | 24.00 | 31.31 |
| ClearTrip | 3.03 | 6.12 | 10.00 | 8.08 |
| Ixigo | 4.04 | 7.14 | 2.00 | 1.01 |

By allotting 1 or 0 point, whichever is applicable, for the availability or unavailability of the feature on respective website and by giving point from 1 to 5 according to survey responses, table 9 is prepared to calculate final score. Column-wise total of points are made for each website – called *Total Features Score* (a). This TFS is then divided by fare (which includes such cost as service charges etc.) of respective website (b). This division is tagged as *Cost/Features* (a/b) in this scoring method. Finally ranks from 1 to 5 are allotted for websites scoring the highest to the lowest number.

Table 9
 Website ranking

| Sr. No. | Benefits | Websites | | | | |
|---------|--|----------|------------|-----------|----------|----------|
| | | IRCTC | MakeMyTrip | Cleartrip | Yatra | Ixigo |
| 1 | Search trains by <i>Tatkal</i> quota without signing in | 0 | 1 | 0 | 1 | 0 |
| 2 | Search trains by neither specifying journey dates nor signing in | 0 | 0 | 0 | 0 | 0 |
| 3 | Map view of routes | 0 | 0 | 1 | 0 | 1 |
| 4 | Showing total number of trains running | 0 | 0 | 1 | 1 | 1 |
| 5 | Journey duration in search | 1 | 0 | 1 | 1 | 1 |
| 6 | Journey number of stops in search | 1 | 1 | 1 | 0 | 1 |
| 7 | Sort search list by Train names | 0 | 0 | 1 | 1 | 1 |
| 8 | Selection of trains by class | 1 | 1 | 1 | 1 | 1 |
| 9 | Sort search list by arrival time | 1 | 1 | 1 | 1 | 1 |
| 10 | Filter search list by stations | 1 | 1 | 1 | 1 | 1 |
| 11 | Sort search list by Fare | 0 | 0 | 1 | 0 | 1 |
| 12 | Sort search list by dates | 1 | 1 | 1 | 1 | 1 |
| 13 | Sharing trip details on social media | 0 | 0 | 1 | 0 | 0 |
| 14 | Showing days of run | 1 | 1 | 1 | 1 | 1 |
| 15 | Rating in terms of speed | 4 | 3 | 1 | 2 | 1 |
| 16 | Confident on security | 5 | 4 | 2 | 1 | 3 |
| 17 | Price filters | 0 | 0 | 0 | 0 | 0 |
| 18 | Quick booking | 1 | 0 | 0 | 1 | 1 |
| 19 | Promotional schemes | 0 | 1 | 1 | 1 | 0 |
| 20 | Modes of payment | 2 | 3 | 1 | 4 | 2 |
| A | Total Features Score | 19 | 18 | 17 | 18 | 18 |
| B | Fare or Cost (in Rs.) | 222.9 | 232.9 | 233.0 | 232.0 | 222.9 |
| A/B | Cost/Features | 8.524 | 7.729 | 7.296 | 7.759 | 8.075 |
| | Websites Ranks according to Convenience | 1 | 4 | 5 | 3 | 2 |

When private sector is comparatively praised for better services, convenience, and product features in telecom, health, transport etc. sectors, surprising government run www.irctc.co.in stands first besides private players. Among remaining non-government managed train ticket booking website, www.ixigo.com ranks the highest and www.cleartrip.com scores the least.

Although it is imperative to note that all other website run by private firms depends on government run IRCTC for train data and getting reservations done. Moreover, respondents' experience about such features as security and reliability of website, and internet access speed also matter.

Conclusion

Even after reducing government monopoly in railway ticket booking, private ticket booking websites have failed to build security and reliability trust among customers and to attract customer on the base of competitive fare. Providing express speed on internet for ticket booking is also a selling point that non-government ticket booking websites must learn from www.irctc.co.in. Other websites can include convenient feature like showing calendar of seat availability as offered by www.cleartrip.com. On the other side IRCTC need to introduce those features which are still attracting customers from ticket booking. These features, to mention a few, are searching trains by neither specifying journey dates nor signing in, showing map view of trip routes, showing total number of trains running, sorting or arranging search list by fare, etc. Services have always scope of improvement, particularly when competitors are many and the competition is severe. Adding missing features will give consumers wider choices of booking tickets more conveniently and increase customer satisfaction.

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