

# SELF SERVICE TECHNOLOGIES FOR SERVICE DELIVERY: CONSUMER RESPONSE TO INTERNET RAIL TICKETING

Dr. Reena M. Tak

*Assistant Professor, MCA, JIT Borawan, M.P. India.*

**Abstract** - Technology-enabled self-services are becoming increasingly popular and widespread because of the convenience of any time anywhere and the confidentiality of interacting with machines rather than human beings, as well as cost effectiveness. One such service of national importance is the Internet Rail Reservation facility. Online Rail Reservation system has proved to be a major relief to the travelers who were earlier spending hours in queues at Railway Reservation counters. The present paper analyses consumer response to this facility in and around Jabalpur District(M.P.), India . The methodology of collection of data would be by questionnaires to three groups of people. Firstly a sample set of consumers with Internet connections at home will be surveyed for their propensity to use it for Railway Reservation. Secondly those not using it would be surveyed for the blocks that prevent them from doing so. Thirdly a set of consumers without Internet connection at home will be surveyed to see whether their need for Internet Rail Reservation is strong enough for them to seek this facility outside. The objective of this analysis is to help understand consumer reaction as well as resistance to such services in general and Rail Reservation in particular. It is hoped that the outcome will help identify effective means of making such services popular and successful.

**Key words:** Internet, Rail Reservation, Technology, Telephone

## I.INTRODUCTION

Commerce has evolved over the centuries. Prior to the evolution of money it was a simple “barter process” where things could be exchanged, say milk for grains. The evolution of money brought with it, the concept of a “marketplace”. In a marketplace, Commerce is function of 4 P’s – Product, Price, Place and Promotions. All these four components play a vital role in a transaction to take place. Different combinations of 4Ps determine different forms of Commerce. Once the marketplace came into existence, a few pioneers realized that people would be ready to pay extra if they could deliver products at customer’s doorsteps. A slight modification on Price and Place led to the convenience of getting products at their homes. This concept delighted the customers and thus, the concept of “Street Vendors” was born.

When the Postal System came into being the sellers decided to cash in on the new opportunity and started using mailers giving description of their products. It led to the concept of “Mail Order Cataloguing”. From here, the evolution of the “Tele shopping” networks was inevitable with the development of media vehicles.

The latest generation of commerce is one that can be done over the Internet. Internet provides a virtual platform where sellers and buyers can come in contact for sale and purchase of goods and services. They can be thousands of miles apart, may belong to different parts of the world, might speak different languages, “E-Commerce” emerged as the boundary-less trade medium in the era of globalization.

Since, Internet has the ability to reach the customer’s home; the Distribution Channel has started to assume new meaning to the B2C and C2C eMarketer. The Physical delivery got converted to electronic delivery; physical products were now electronic products, displayed on a website. With options of paying online through debit and credit cards, even the transaction was purely electronic. Another important P for the e marketer, the Promotion, assumed importance, especially because there is no face to face interaction between the buyer and seller.



*Fig: Evolution of Commerce*

Since the introduction of E-Commerce, there have been debates on future of its prospects in India. Would it be as successful as it is in US or is it a mirage that attracts many but offers nothing worthwhile? The adoption and usage of E-Commerce in the country is a function of the overall environment for Internet usage in a country. To correctly understand the likely growth path for E-Commerce in India it is imperative to understand the Internet ecosystem in the country. Some of the key variables that need to be understood are the proportion of computer literates, Internet penetration, frequency of access to the Internet, purpose of Internet access etc. A correct mapping of these would help in understanding the overall framework of E-Commerce in the country. Though in India overall penetration is still low, the important factor is that a critical mass of users is shaping up which will fuel rapid growth over the next

few years. As these Internet Users mature with respect to exposure and awareness of Internet, they tend to spend more time online; access Internet more frequently and surf non-communication based applications and advanced online applications like gaming, E-Commerce, etc. However, E-Commerce is still not the key driver of the Internet. Internet usage in the country is still driven by email and information search.

## II. E-COMMERCE & RAIL RESERVATION

It has been observed that most of the Online Shoppers start their e-Shopping journey with buying Air/ Railway Tickets. This might be because the service provided in case of Travel, especially ticketing is undifferentiated with the place of buying the tickets. The buyer is ensured that he would get the same service as his co-passenger who has bought his tickets from the physical counters. The online ticketing website of the Indian Railways has emerged as one of the largest single-product E-Commerce sites in the country. Online rail reservation system proved to be a major relief to the travelers spending hours in queues at railway reservation counters. The Railway's initiative to sell tickets to passengers through the Web has caught on well, with the service registering about 100 per cent growth rates. The growth story is not limited to the metros — the country cousins are turning techie as well. "Share of smaller cities has been going up very fast, even though Mumbai, Delhi, Bangalore and Chennai continue to account for the highest shares," an authority from Indian Railways said.

## III. PRESENT PAPER

This paper presents consumer survey of a random sample of Internet user in a mid size town (Jabalpur). To assert in their propensity to use Internet for Railway reservation. It also analyses the triggers and barriers for such a usage.

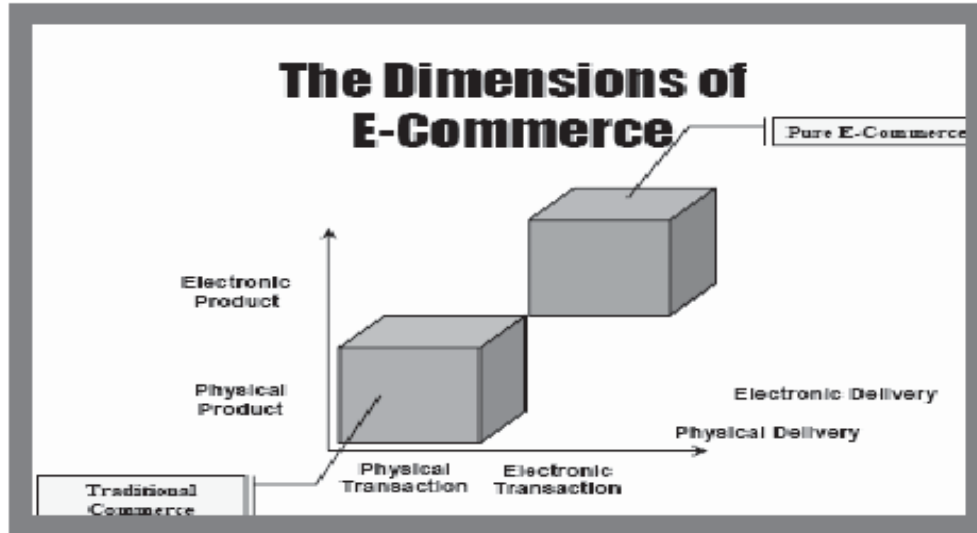


Fig: E-COMMERCE IN INDIA

IV. RESEARCH METHODOLOGY

Data of Internet users in Jabalpur was collected from Bharat Sanchar Nigam Limited Jabalpur who provide a most popular and prevalent Broadband Internet access. It will be interesting to mention here that the authority were initially reluctant to supply that data due to apprehension of corporate espionage by competitors and the usual bureaucratic aversion through provision of information. It required intervention by no less a personage than the General Manager BSNL who had the vision to see the noble purpose of research behind the requirement.

This data of phone numbers with broad band connection and an excel table of telephone directory with names and addresses were exported to tables in a Microsoft Access Database. These were joined by primary key of phone number and an SQL query generated giving telephone numbers, names and addresses of customers with Broadband connection. Final selection of customers to be surveyed out of this virtual table was made by the process of random number generation giving a fresh seed number. The list so compiled was used for a person to person survey on the following points:

Whether Internet connection being used for Railway Reservation

If yes, what – in the individual opinion of the customer – are the positives of using this facility?

If no, what are the reasons that the customers are not using this facility?

The positives (TRIGGERS) and negatives (BARRIERS) were coded and the complete data was compiled in excel worksheets. In the survey different positives mentioned by the user customer fell into ten categories. Similarly the reasons for non-users fell into eight categories. The occurrences of these triggers and barriers were counted in MS-EXCEL and their percentages calculated. The results were also represented in pie chart.

V. ANALYSIS

The table of triggers using Internet for Rail Reservation is shown below:

TRIGGER	COUNT	PER.
CONVENIENT	15	26.31579
FUEL/CONVEYANCE SAVING	13	22.80702
FAST	11	19.29825

NO QUEUE	5	8.77193
BETTER SERVICE	3	5.263158
MORE INFORMATION	3	5.263158
EASY	2	3.508772
UP-TO-DATE INFORMATION	2	3.508772
SAFE	2	3.508772
TIME SAVING	1	1.754386

The table of Barriers enumerated by non-users is shown in the table below:

BARRIERS	COUNT	PER.
NO REASON	24	41.37931
DO NOT NEED MUCH RESERVATION	16	27.586207
FINANCIAL PROBLEM IN TRANSACTION	5	8.6206897
PAYMENT OPTION NOT AVAILABLE	4	6.8965517
LACK OF COMP.AWARENESS	4	6.8965517
FEAR OF GIVING FIN.INFORMATION	3	5.1724138
POOR INTERNET CONNECTIVITY	1	1.7241379
PROBLEMS IN CANCELLATION	1	1.7241379
	58	

## VI. RECOMMENDATIONS

A little thought reveals to us that online Railway Reservation has even more positives for Indian Railways than for the customers. The advantages to Indian Railways are many:

- Less man power and infra structure needed at Railway counters.
- Elimination of cash transactions
- No chances of embezzlement and corruption
- Elimination of all processes leading cash from counters to Railway bank accounts.
- Elimination of errors as consumer himself is doing the entries.

Two facts emerging from our analysis make it mandatory for the Railway authorities for being more proactive in promoting online reservation:

- Those who are using it are very enthusiastic, happy and satisfied. They, almost invariably cite, more than one positive of the process
- All the major barriers are not inherent in the customer behavior but in the system so, they can be easily removed. If Indian Railways could
  - Publicize this facility better
  - Lays with internet service provider to increase quantity and quality of internet penetration
  - Give more options to online payment

- Improve their software for quick cancellation and refund.

## VII. FUTURE SCENARIO

Online Railway Reservation is bound to increase in future because of increasing penetration of Internet in society, both horizontally and vertically. The Railway reservation facility is becoming more popular by means of word of mouth. People are increasingly becoming aware of this facility by human to human networking. On seeing the advantages namely, security, less fraud, increasing number of users, more banks are joining the on line payment band wagon. As mentioned above Railways can play a proactive role in this expansion.

Another facet of future scenario may be the expansion of m-commerce. Currently E-Commerce is synonymous with PC and browser-based interaction. However, in the near future GPRS-enabled mobile phones will rule the online transactions. Today, online downloads to mobile phones is limited to low value services like music downloads, picture message downloads and ringtone downloads. However, as the mobile users get more familiar with buying online, the purchase of high-involvement products is expected to rise. Certain verticals like Banking and Finance, Travel, Entertainment, and Retail are likely to drive the growth of m-Commerce in the country. In the recent past, E-Commerce and its variants like the m-Commerce have yearned for the position of being the most important drivers of the Internet. They are continuously evolving and upgrading to make a consumer's e-Spending experience hassle free and memorable. However, to attain that position, it needs to awaken its inner beauty – simplicity and security of transaction.

## VIII. CONCLUSION

The Internet and Communication technologies are becoming very popular day by day. And with the increase in usage of ICT tools especially Internet, commerce has been transformed drastically. The non experimental survey based study done by the author clearly identifies the triggers and barriers in the expansion of services like Internet based Rail Reservation system. As is evident from the table given in the paper, convenience, time saving and fuel/conveyance saving are the major reasons that drive Internet users to use Railway Reservation on line. Together, they account for nearly 70% of the positives mentioned. This leads us to the thought that Internet reservation convenience pre requires connectivity at home. Better connectivity plans will lead to more Railway Reservation being done online.

On the negative side the first two “reasons” are actually not very relevant. In non-metro people travel less and their preferences are not very professional. Taking these two reasons out of reckoning, four main reasons – Lack of awareness, Payment options not available, Poor Internet connectivity, Problems in cancellation can be dealt easily with technological advancements and awareness programmes.

To conclude it can be said that with the increase in Internet Penetration and awareness programmes, facilities like Internet Rail reservation systems can be easily made popular. And we can very soon be able to see a new face of commerce in India, totally driven by technology.

## IX. ACKNOWLEDGEMENT

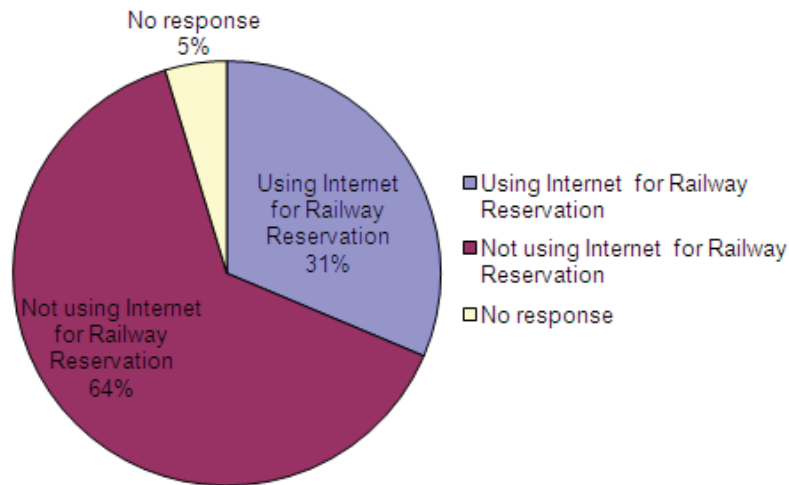
The author wishes to record her deep appreciation of the vision of Er. S.C.Jain General Manager Bhart Sanchar Nigam Limited, Jabalpur who intervened to provide the data without which this research would not have been possible.

## REFERENCES

- [1] e-Technology group @ IMRB, IMRB International Mumbai.
- [2] [www.indianrail.gov.in](http://www.indianrail.gov.in)

ANNEXURE 1

**RESPONSE OF SURVEYED CUSTOMERS**



**REASONS FOR NOT USING INTERNET FOR RAIL RESERVATION**

