CHAPTER 1: INTRODUCTION

1.1 Background

The internet is one of the more recent developments in communications and information transfer. According to violin (1996) it is considered a technology asset because of its ability to disseminate large volume of information quickly and efficiently to all types of stakeholders, including employees, customers, shareholders and suppliers. To date, the internet is more accessible and less expensive than it was, and the number of internet users is growing rapidly. According to the statistics of internet world stats, it shows that the number of internet users around the world was approximately 1463 million by the end of June 2008. There were 60 million Internet users in India (representing 5.2% of the population). Schonland and Williams stated that (1996) as today’s consumers are more focused on time saving and are more likely to access a greater proliferation of product information, the internet appears to have several advantages over other media as an information gathering tool. Apart from information search, Internet users can also make bookings or purchase products and services through this new channel. As more internet users choose to use the web for buying goods and services, the potential for business to conduct electronic commerce likewise increases. Nowadays, many business corporations use the internet not only as a valuable marketing tool in providing a low-cost medium for advertising and promotion, but also as a channel of communication to generate additional sales.

During the past decade, the popularity of the internet has been growing explosively besides the number of companies that create web presence to communicate with customers as well as other firms. Also, the internet has been accepted by broad consumer segments for various purposes, such as information search and online purchasing. As reported in Cyberatlas.com (2002), 36 percent of Americans used the internet to search for products and service information. According to the Internet and Online Association India railway, airline and bus ticketing comprises almost 63 percent of the market; the remaining 37 percent comprises categories such as books, music, VDs and festival shopping.
1.2 Online marketing

ONLINE MARKETING is a new way of performing the task of marketing; made feasible by the advent of new technology namely the Internet. On-line marketing is a form of direct marketing and entails the use of Internet technologies to reach out to customers. At a higher level, on-line marketing can be defined as a system for marketing products and services to target audiences who use the internet and/or commercial online services by utilizing on-line tools and services in a strategic manner, consistent with the organisation’s overall marketing programme (Janal, 1995). The concept of online refers to the interactivity between two parties (the prospect/buyer and the seller in the case of on-line marketing) through the use of modern technology without the two being present or interacting physically. Online marketing also referred to as web marketing, Internet marketing, or eMarketing, is the marketing of products or services over the Internet. On-line marketing has facilitated the practical application of various concepts, including relationship marketing, interactive marketing, micro-marketing or targeted marketing and mass customization, all of which have important implication for marketers.

1.3 Adoption

1.3.1 Definition

When new product or service is offered by a company, it is necessary to convince customer to buy new product or service. Motivating customers by manufactures or service providers is complicated process which part of it is based on customer characteristics and behaviors. This mental process through which an individual passes from first hearing about an innovation to, final adoption is called Adoption Process. (Kotler 1999) (Adoption is an individual’s decision to become a regular user of a product. (Kotler 2003))

1.3.2 Stages of adoption process

An Innovation is any good, service or idea that is perceived by someone as new (Kotler 2003) If an Idea didn’t spread through customers, it won’t be accepted Rogers (M.Rogers 1995) defined innovation diffusion process as the spread of a new idea from its source of invention or creation to its ultimate users or adopters. In order to adopt new product or service, customers go through five steps of Adoption process which listed as bellow:
Awareness: The consumer becomes aware of the new product, but lacks information about it.

Interest: The consumer seeks information about the new product.

Evaluation: The consumer considers whether trying the new product makes sense.

Trial: The consumer tries the new product on a small scale to improve his or her estimate of its value.

Adoption: The consumer decides to make full and regular use of the new product.

(Kotler 1999) If companies want customers to consent their new services or products, they have to work on strategies helping customers to go through these steps. Figure shows adoption steps:

![Figure 1.1 Stages of Adoption process (M.Rogers 1995)](image)

1.3.3 Adoption categories

The time element of the diffusion process allows us to generate diffusion curves and to classify adopters into categories. Because individuals in a social system do not adopt an innovation at the same time, innovativeness is the degree to which an individual is relatively earlier or later in adopting new ideas than other members of a social system (M.Rogers 1995).

People differ in their attitude to use new product or service; some people are always consumption pioneer and customers that we call them early adopters. Some people are not interested to use services before majority of people accept using the product. Figure 1.2 shows the adopter categorization on the basis of Relative Time of Adoption of Innovation.
Figure 1.2 shows that diffusion of innovation follows a normal-bell shaped curve when we draw the adoption over time. After slow start which has been began with innovators and people who are always enjoy using new products and services , an increasing number adopt new idea and number reach the peak and at the end small part of society who are not interested in adopting to new idea remain. Bases on this curve we can categorize adopters:

- **Innovators** are technology enthusiast and enjoy tinkering with new product. They are always member of Alpha and beta test group and report early weakness. In fact they are the gate way of new idea to the other part of society if we look at this network of interpersonal; innovators are starting point of information exchange. Prerequisites for being an innovators are having knowledge in order to use new technology , substantial financial resources in order to deal with possible loss from an unprofitable innovation.

- **Early adopters** are visionaries who search for new technologies that might give them dramatic competitive advantages. These groups of people are powerful enough to buy a product or use a service with high price. They adopt new idea before average number of people. This group decrease uncertainty about new idea by adopting it.

- **Early majority** pragmatist who adopt the new technology when it’s benefit are proven and a lot of adoption has already taken place.

- **Late majority** are conservatives who are risk averse, technology shy and price
e sensitive. This group accepts new ideas after the average number of system and they need to be sure that uncertainties have been removed and there is no risk in adopting new idea.

- **Laggards** are skeptics who resist the innovation until they find that the status quo is no longer defensible. They are the last group of society that adopt to the innovation.

Rogers sees the five adopter groups as differing in their value orientations. Innovators (M. Rogers 1995) suggests that the adoption of a new idea results from information exchange through interpersonal networks. The first adopter of an innovation discusses it with other members of the system, and each of these adopters pass the new idea along to other peers. The diffusion curve begins to level off after half of the individuals in a social system have adopted, because each new adopter finds it increasingly difficult to tell the new idea to a peer who has not yet adopted, for such non-knowers become increasingly scarce. The segment of the diffusion curve between 10 to 20 percent adoption is “critical mass” or the “heart of the diffusion process” (M. Rogers 1995) and represents the transition from the “early adopter” level of innovativeness to the “early majority” (Jacobsen 1998).

### 1.4 Online marketing and travel and tourism industry

The rapid growth of the travel industry requires sophisticated information technologies (ITs) for managing the increasing volume and quality of tourism traffic. Prior studies have indicated that modern travelers demand more high quality travel services, products, information, and value for their money (Christian 2001; Lubetkin 1999; Samenfink 1999). The emergence of new tourism services and products, coupled with a rapid increase in tourism demand, has driven the wide-scale adoption of ITs in general, and in particular, the Internet as an electronic intermediary. In other words, the Internet serves as a new communication and distribution channel for e-travelers and suppliers of travel services and products. This new channel also enables tourism businesses to improve their competitiveness and performance.

Researchers have emphasized the importance of the Online marketing on travel and tourism. For tourism suppliers, it provides a way for them to sell their products globally to potential travelers at any time. These suppliers can remotely control their servers to display information on services/products at an electronic speed (Law 2000). The successful factors for a travel Web site, from a supplier’s
perspective, are lower distribution costs, higher revenues, and a larger market share. For travelers, online marketing allows them to communicate directly with tourism suppliers to request information, and to purchase products/services at any time and any place (Olmeda and Sheldon 2001)

1.5 Online marketing in Indian Railways

The emergence of the internet in the mid-1990s as well as the development of Intranets and Extranets forced Indian Railways to refocus their strategy on technological innovations in order to enhance their competitiveness. IR identified the online marketing as a major opportunity to tackle distribution costs and to reengineer the structure of the industry.

INDIAN RAILWAYS (IR) is a premier transport organisation of the country. It has the largest rail network in Asia and the world’s second largest organization under one management. It is owned by the central government of India. IR has traverse through the length and breadth of the country covering 63,140 route kms. It owns a fleet of 2, 16,717 wagon (units), 39,236 coaches and 7,739 numbers of locomotives. IR manages to run 14,444 trains daily, including about 8,702 passenger trains. It carries more than a million tonne of freight traffic and 18 million passengers covering 6,856 numbers of stations daily. The Railways are the largest employer in India with 1.4 million workers.

IR was going high tech, so in February 2000, Indian Railways' web site was deployed. This web site is so popular all over the world that it is visited at least a million times a day either to find out the Train fare, ticket reservation or the availability status of a wait listed ticket. People who have access to a computer and the Internet can now reserve their tickets online. In fact, Indian Railway online reservation has made things easier for many people who want to travel through trains. Online marketing is information sharing, which allows railways to provide a wide range of information they expect consumers to need in decision-making over final purchases. It is convenient to both railways and consumers because of a marketing channel that defies time or distance constraints. It provides overall efficiency to Indian Railways especially in monitoring their operations and performance because of easy organization, sharing and analysis of information from its e-marketing operations.
The IR and Online Marketing have evolved rapidly, going through several distinct stages since its beginnings in 1980s. Before we delve into an analysis of the Online Marketing as offered by IR that are shaping today, a quick look on online services of IR is given below.

1.5.1 Centre for Railway Information Systems (CRIS):

In 1986, Ministry of Railways established the Centre for Railway Information Systems (CRIS) to be an umbrella organisation for all computer activities on Indian Railways (IR). It works with Indian Railways to build new products or services and to implement prudent business and technology strategies in today's dynamic digital environment. CRIS facilitates implementation of computerization projects on the Railways.

1.5.2 Online Ticketing System:

IR begins online ticket reservation of I-ticket on Aug. 3, 2002. RCTC has launched E-ticket facility in August 2005 for IR, which can be booked on www.irtc.co.in. It was launched all over the country at the same time. And it is picking up fast; some 300 per cent per month growth has been noted for it.

1.5.3 Passenger Reservation System (PRS):

CONCERT - country-wide network for computerized enhanced reservation and ticketing - developed by CRIS, is a total networking solution to Indian Railways Passenger Reservation System. In June, 1987 an early system for computerized reservations begins operating at Mumbai VT for a few trains (pre- CONCERT). The complete network become operational on 18th April 1999, and has been working satisfactorily since then. PRS network of the Indian Railways has enabled reservations in any train, date, or class, between any pair of stations to the travelling public on about 2000 terminals across the country. CONCERT has been installed at more than 1,721 locations with 6,731 terminals handling more than 3,000 trains and more than 3.3 crore passengers are being booked with average passenger earnings of Rs. 1300 crore per month .On 14th Feb. 2008 all time high 1.9 million transactions were done in PRS.

1.5.4 PRS enquiry through ‘Internet’:
Passenger Reservation System is a major computer application with the help of which anywhere to anywhere reserve ticketing is possible. This involves a distributed database spread over five host computers located in five metropolitan cities in India and
terminals located in various cities. The tickets provide information on the train timings like departure time at origin, arrival time at destination, route of the train denoted by major junctions en route and distance. The basic source of this information is the passenger train time table. IR’s website www.indianrail.gov.in provides booking through ‘Internet’ for which Indian Railway Catering & Tourism Corporation (IRCTC) has been given connectivity to PRS system for issue of e-tickets. The website also answers queries regarding accommodation availability, current status of wait listed tickets, trains available between important stations, train schedules, fares, etc. On 28th February 2000, all the common enquiries like Trains between a given pair of stations, reservation availability, PNR status, Fare, Train schedule and station codes were made available to the common public through the Internet. It has in a very short span of time become one of the most popular web sites in India, with peak daily hits of the order of 1.7 million hits per day.

The information on the web sites has also been available through SMS service on mobile phones, all over India.

1.5.5 National Train Enquiry System (NTES)

National Train Enquiry System is a nationwide integrated online information system for monitoring the running of passenger trains and providing reliable updated information regarding arrival and departure of trains to passengers and platform berthing to external devices i.e. IVRS, Touch screens etc. It also provides updated information on Railway rules and facilities available through enquiry counters. The NTES stores the train schedule and provides information on the actual running of trains in comparison the planned schedule.

1.5.6 Unreserved Ticketing Systems (UTS):

To take care of the unreserved segment of the passengers, UTS has been computerized by CRIS and expanded to cover 828 stations to enable passengers to purchase tickets from other than the train originating station, up to 3 days in advance of the date of journey, except for suburban passengers. 25 lakh tickets are being issued daily for 70 lakh passengers with daily earnings of Rs.1.6 crores.

1.5.7 Freight Operations Information System (FOIS):

FOIS is an on-line system for management and control of freight movement which enables freight customers to have instant access to information regarding the current status of their consignments in transit. More than 2,000 reporting devices have
been installed at more than 700 locations, which are interlinked through Railway-owned digital microwave communication facilities complemented by hired channels from BSNL.

1.5.8 Railtel

The Corporation was formed in Sept 2000 with the objectives to create nationwide Broadband Telecom and Multimedia Network in all parts of the country, to modernize Train Control Operation and Safety System of Indian Railways and to significantly contribute to realization of goals and objective of national telecom policy 1999.

1.5.9 Railnet

Railways have established their own intra-net ‘Railnet’ in September 2000. It provides networking between Railway Board, Zonal Headquarters, Divisional headquarters, Production Units, Training Centre etc.

1.5.10 Tourism services

IRCTC’s tourism portal www.railtourismindia.com is fast growing into a one stop travel shop which meets all the travel & tourism needs of a customer. It is providing online booking of various services like Luxury Tourist Trains, car rentals, hotel, Rail Tour Packages, holiday packages etc.

1.5.11 E Working System (Electronic file Movement and Tracking)

It is a web based application that provides for automation of the functions of all the departments / offices. It provides an effective electronic office management system that encompasses diverse business requirements like File Management, Document Management and Knowledge Management. It provides a user-friendly intuitive interface for the users to accomplish the various tasks.

1.5.12 Other Projects:

CRIS has undertaken some important projects, viz., Parcel Management System for computerization of parcel services; crew Management System to provide information regarding train crew on a real time base, Comprehensive Payroll Processing System, Workshop Information System, E-Procurement System to improve purchase efficiency and transparency, web based electronic office management system.


1.6 Importance of the study

The present study is a thoughtfully attempt to understand the adoption of online marketing in Indian Railways by examining several constructs of technology acceptance model. The study seeks to measure the perception, belief and attitude of consumers, travel agents and employees of Indian Railways towards online marketing of Indian Railways. An effort has also been made to contribute to the existing literature on technology acceptance model by adding different constructs like image, subjective norm, perceived enjoyment, trust and perceived risk. It also studies the trends of online marketing of Indian railways. Furthermore, it attempts to identify the various challenges and opportunities offered by online marketing of Indian Railways form consumers point of view, travel agents and employees’ point of view. It ends with suggesting an appropriate model for online marketing in Indian Railways.

1.7 Organization of the Study

The present study is composed of eight chapters. A concise sketch of each chapter is given below:

Chapter 1: This chapter provides a brief background of online marketing and adoption, then described online marketing in Indian Railways. It also highlights the importance of the study.

Chapter 2: This chapter consists of review of literature related with influence of online marketing on consumers and also deals with business perspective. Then it reviews the current issues in online marketing and factors affecting adoption of online marketing. Further it provides a critique review of miscellaneous studies related with online marketing. This is followed by highlighting the research gaps and contribution of the present study.

Chapter 3: This chapter presents an idea about the methodology followed in conducting this research. It determines the objectives to be achieved in this study followed by the framework to conceptualize and operationalise those research objectives. It also highlights the sampling technique, data collection methods, questionnaire development and brief idea about data analysis tools. Finally, it discusses the validity and reliability issues to follow the quality standards of the research.
Chapter 4: This chapter provides a holistic view of the trends of online marketing of Indian Railways.

Chapter 5: This chapter put forward the findings of the consumers’ attitude towards online marketing of Indian Railways. This chapter deals with six aspects, namely measuring consumers’ perception, belief and attitude towards online marketing of Indian Railways, identify opportunities offered by online marketing and challenges posed by it, measure the consumers’ attitude towards the various online tourism and information gathering services, identifies the factors affecting consumers’ perception of online marketing service quality of Indian Railways, measure consumers attitude towards Indian Railways website and factors resisting the non-users to adopt online marketing of Indian Railways.

Chapter 6: This chapter presents the findings of research objective dealing with the employees’ attitude towards online marketing of Indian Railways.

Chapter 7: This chapter discusses the findings related with the travel agents perception and attitude towards the online marketing of Indian Railways.

Chapter 8: This last chapter highlights the managerial implications for practice followed by the research limitations and directions for future research.

1.8 References

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