

Role of Information and Communication Technology in Development of Tourism Sector in India

Dr. Divya Purohit*

Achal Hardia**

***Faculty, Institute of Management Studies, DAVV, Indore**

****Faculty, Institute of Management Studies, DAVV, Indore**

Abstract

This research paper throws light on the relationship between Information and Communication Technology (ICT) and tourism business. It shows the impacts as casted by the ICT on the tourism industry through a wide range of literature review and its analysis. There is a deep involvement of ICT in assisting various processes in the tourism industry. Tourism industry of any nation can progress only if the technology that it's based on is compatible with the other developed nations. India is still to grow in terms of such aspects and this research work focuses mainly on this aspect of how ICT is changing the tourism scenario in India.

Introduction:

In the early times travel was more of an objective related activity than anything else. People would rarely focus on the primary concerning issues related to travelling beforehand. Larry Krotz (1996) described travelling as 'an unordered and disorganized activity, contrary to the well-arranged events for a group of tourists that visit a nearby museum by train and coaches'. There is a lot of improvement in terms of handling the client's expectation as witnessed by the travel industry worldwide. The clients are also keen and aware about what they may come across when they reach a particular destination. Thus the travel industry has to be a step ahead in analyzing the expectations before they cater any facility. That in reality they are working upon today. This credit though may just not be given to any one sector say the hospitality or the travel or any other for that matter. ICT sector has constantly worked upon computing speed; decrease equipment size; reduce hardware and software costs; and improve the reliability, compatibility and inter-connectivity of numerous terminals and applications. It is noticeable that the more powerful and complicated ICTs become the more user-friendly and inexpensive they are,

enabling more people and organizations to take advantage. Appealing presentations of business products and travel destinations, sophisticated visualization of tourism products, the consulting role of travel agents, the social interaction and information exchange between travelers, as well as the information richness of the Internet are key features for successful tourism e – business (Berger et al. 2006).

IT also plays an increasing role for strategic operational management and marketing in various activities of the tourism industry. Information and communication technologies are solely responsible for airlines and travel, hospitality, tour operators, travel agencies and destination management and marketing. Every industry has its important arms and support system for its functioning and so is the case with tourism industry. It is well knitted with ICT. This makes it easy for information to reach the destination accurately and timely. Also the most talked about “low cost airlines are also making their mark through the IT industry only. The reason of course is the resources as saved in transaction, booking, hiring employees, delivering the receipts and manuals and other such facilities which were once not thought of without a physical presence of an individual are more promptly dealt with by the technologies themselves. There is a massive time utilization practice being adopted by the industry people through IT facilities.

Role of ICT for the promotion and management of tourist destinations is a key factor for developing the interest towards the destination in the minds of the clients. An important question to be addressed is, how satisfied the users are with this system and whether this can be considered as a replacement for human resource. This paper tries to identify the usage of IT in the tourism industry and it also throws light on the practical aspects and benefits of the usage of Information and Communication Technologies in tourism.

Literature Review:

Bojnec,S. and Kribel,Z.(2004). The ICT revolution has brought considerable changes in the tourism industry management and operation. The usefulness of the ICT as a tool for the tourism industry is widely confirmed. However, it has brought also a considerable change in traditional and new tourism intermediaries, including the rapid changes in ICT with implications of tourism for destinations, the public sector, and the virtualization of the tourism industry. With the heavy dependency on IT in the hospitality and tourism industries, system failure can have catastrophic consequences (Lu & Law, 2007).

To make online payment safe, travel agency websites should provide secure transactions to protect consumers' data (Wu & Chang, 2006). Today is the era of customer delight and most of the companies are working upon the delivery of demand which is not stated by their client. The e Airlines is a typical example of a shift from computer reservation systems to global distribution systems (Buhalis 2003). This indeed is another example for bringing about satisfaction through technology. Internet, mobile technology and wireless computing (ICT) provide tourists with the means to gain immediate access to relevant information of greater variety and in-depth than has been available previously, about destinations throughout the world (WTO 2001). Internet is becoming the primary channel for business-to-business (B2B) communication. Carter & Bedard (2001) and Carter & Richer (1999) have focused on the operators in the tourism industry. Developments of the e commerce and DMO (Development Management Organizations) and their changing value chains are analyzed intelligently and clearly so that importance of internet presence for consumers, intermediaries, travel media and other players in the industry is noted and understood through their works. The role of ICT is crucial both in theory, practice and praxis. It must be understood in the context of its application as a part of marketing, customer service, revenue management etc. (Sabado 2005). Studies like (Poon 1993, Sheldon 1997, Werthner & Klein 1999, Alford 2000, Werthner and Klein 1999, Alford 2000, WTO 2001) have revealed that Internet and strategic implementation of IT is now critical for companies to survive in the global economy. However, not many efforts are made to study e-tourism developments in India and other developing countries. Mobile technology can be used for coordination during large festivals, and an enjoyable and useful mobile coordination service motivates staff usage (Lexhagen, Nysveen, & Hem, 2005).

A study conducted by O'Connor (2007) showed that only a few companies display third-party privacy certificates to ensure that guests' data are protected from inappropriate use. O'Connor (2006) also found that hotels can use cookie technology to implicitly collect information about the personal identity of browsers. These are fantastic examples of delivering the most sort after technologies to the client base.

Computer simulation tools and decision support systems could be used to help tourism organizations to better plan and manage visitor flows (Lawson, 2006; Bousset, Skuras, Tesitel, Marsat, Petrou, Fiallo-Pantziou, Kosova, & Bartos, 2007).

Role of IT in Tourism:

Prior to the advent of concept of IT, tourists were getting information either by word of mouth publicity or by print media. This was the period when gathering information about places within the home country and abroad was quite difficult. The tourism industry took the support of the advertisement industry for keeping the people updated. This led to the fact that information conveyed was purely dependant on the intention of the organization and was more influenced by marketing department. IT has added value to the system by directly handling the power of analysis in the hands of the customers. They also have the privilege of comparing the information provided by various sites with each other.

ICT has also led to changes in demand and supply. A higher demand for flexible, individualized options and quality of information has personalized leisure and tourism behaviour, a consequence of increased ICT use. Through new technology and social and economic ratings (e.g., social media platforms like Face book, Twitter and blogs) customers have the ability to share information and research ratings on destination, quality of service in hotels and restaurants and environmental and social conditions? Number of hotels (e.g., Marriot Hotels and Resorts, Ritz Carlton Hotels, Hyatt Hotels and Resorts) have strengthened their brand image and communicate directly with their customers by posting links to a press release or promoting new package through Twitter.

Facilities by ICT in Tourism:

The ICT has immensely affected the tourism industry. ICT has also become a part of the core product, especially for business travelers who now expect certain facilities to be available during their trip on their mobile phones or laptops. The internet and the World Wide Web have revolutionized the promotion and communication functions of tourism. Mobile is also beneficial for tourists because they can access maps, places, videos, advertisement etc on their mobile.

E-Ticketing:

Computerized Reservations Systems (CRS) is a replacement of manual reservations on display boards where passengers were listed and travel agencies had to locate the best routes and fares for their customers in a manual and then telephone for availability, reservation and confirmation before issuing a ticket manually.

E-Hospitality:

ICTs help in hospitality management by providing various software solutions and with centralised database concept. These concepts integrates hotel operations, reshaping the marketing function, improving total efficiency, providing tools for marketing research and partnership building, and enhancing customer services, while also providing strategic opportunities. Tourists also get facilities in their rooms; internet access via the television set and data ports has become standard for higher hotel categories.

Internet facility has improved the hotel reservation processes. Bookings through the web are particularly convenient for tourist. Web helps tourists to watch videos and images of hotels and rooms before bookings.

E-Tour Operators:

ICT facilitates tour operators and help them to keep in touch with the partners including accommodation and transportation principals, ICTs are also critical for the distribution of tour operators' packages. Tour operators developed several systems for interconnectivity for example websites. Through websites they can communicate with each other for further business activity. The co-ordination and exchange of timely information is important because it allows tour operators to co-ordinate activities, to resolve potential problems and to ensure that customer requirements are communicated to all principals delivering the tourism product. Strategically, ICTs play a critical role for tour operators.

E-Travel Agencies:

ICTs have introduced major improvements in the internal organization of travel agencies. By integrating their back-office (e.g., accounting, commission monitoring, and personnel) and front Office (customers' history, itinerary development, ticketing and communication with suppliers)

functions, travel agencies have achieved significant synergies, efficiencies and cost savings. As transactions made in branch offices can automatically be reported back to the head office, tighter financial control can be achieved.

Information and Communication Technology, usually abbreviated as ICT, is often used as an extended synonym for information technology (IT), but is usually a more general term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers, middleware as well as necessary software, storage- and audio-visual systems, which enable users to create, access, store, transmit, and manipulate information. The expression was first used in 1997 in a report by Dennis Stevenson to the UK government and promoted by the new National Curriculum documents for the UK in 2000.

Following are some examples where uses of ICT in Tourism. Information technologies influence the strategic management and marketing of contemporary organizations, as a paradigm-shift is experienced, transforming the "best" business practices globally. This is the major reason for its usage in the tourism business as well. The below mentioned points further illustrate the relevance of the same in the tourism business.

- Managing destination Resources
- Inventory of tourism resources
- Maintaining a well connected and informed system
- Managing customer requests
- Accommodation bookings
- Travel related information management
- Managing sites and attraction
- Identifying suitable locations for tourist
- Manage tourist statistics
- Generating report area wise for the development of tourism in the sector

Road Ahead:

Usage of ICT in tourism is increasing day by day. It is widely used now for ticket booking. Carrying of printed ticket while travelling is not necessary now, instead of it any personal digital assistant (PDA) can be used. A few months back customers were unable to book ticket, site was not developed for huge traffic and it crashed frequently. Because of the customers were not able

to book tickets. To solve their problem IRCTC moved their site from client server architecture to cloud computing which enhance the response time of IRCTC site and now customer can book their ticket easily. To resolve this problem proper training programs should be conducted.

Problems in using ICT:

Lack of Qualified Professionals:

ICT based system required highly qualified professional to handle it. Current generations are aware with the computer technology but issues are with the old employees. Who are not comfortable with technology?

Lack of Awareness: Computers are still very expensive and out of reach of normal people. Even today common men are books tickets or hotels in traditional way. It is necessary to make computer affordable to everyone and also train common man to use it for tourism purpose.

Lack of Internet or Slow Connectivity: India still facing internet bandwidth problem and internet has still not reached villages. Connectivity of internet in urban area is good enough but in rural area still lot more need to do. Improper connectivity or discontinuance in connectivity of internet is major problem at the time of bookings.

Lack of Trust: In India people have myth. If they book tickets using internet then they thinks that ticket will not be booked or it may create problem. So they only prefer window ticket booking system or the always prefer to book by themselves, they don't rely on technology or on automated systems.

Suggested Strategies:

Tourism websites should be upgraded and updated with the latest technologies to increase the business potentiality. Websites must be attractive and must contain pictures and videos of places to attract tourists. Social media is also important player to increase tourism but staff must be train and skilled so that they can access social media account. Availability of high speed internet is also important because whole concept is now a day is dependent on internet. The awareness for the stakeholders towards Google search should be provided. Enterprises should integrate all departments through ICT. High-speed internet facilities should be provided by the government and power failures should be avoided. The government should encourage the development of

mobile commerce (e.g., promotion, payments etc.) and should be integrated within tourism industry.

Conclusion:

This paper discusses field related to tourism and the use of information technologies available to enhance the existing infrastructure of tourism industry. ICT in tourism is widely used in Reservations, Transport, Accommodation and Publicity. It can clearly be understood and stated through this paper that there is an immense potential in the field of tourism, and this potential could never have been applied to its actual form without the aid and help of ICT. ICT enabled system is not just prompt but is also more users friendly. This ability of being user friendly is the need of the hour in every sector. The consumer who is the ultimate king should be able to sort out the information accurately and on time. Such minor yet complicated issues can also be addressed to in the best form through the appropriate use of ICT.

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