



ROLE OF INFORMATION TECHNOLOGY AND BARRIERS IN INDIAN TOURISM

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Introduction

Within the travel and tourism, industry, technological developments have had a significant impact on distribution as the industry attempts to meet the demands of discerning customers who have increasingly diverse profiles. The nature of the tourism product (intangible, perishable, volatile, heterogeneous) suited to the adoption of information technology because of the dependence on the supply and exchange of information throughout the production and distribution chain. Within this distribution chain, computers have come to play an increasingly strategic and dominant role.

The dynamic nature of the tourism product is such that a mechanism is required to transmit information about products between the different in the chain of distribution. Indeed, without such a mechanism, the travel and tourism industry's operational efficiency would be severely restricted. At the same time, competition between suppliers further heightens the need for efficient, reliable and accurate information regarding the product and their availability. As a result, the means of conveying information in and around the chain of production and distribution becomes virtually as important as the information itself. Therefore, it is not, perhaps, surprising that information technology is proving to be all – pervasive within the travel and tourism industry – certainly, travel agents, tour operators, airlines and hotels are all heavy users of information technology, to the extent that Poon (1988) refers to it as a 'total information system'.

Developments in information technology have undoubtedly had significant impacts on distribution, although there are disparities in the introduction of and level of development in different countries. For example, destination marketing systems have met with success in Canada, yet this is not the case in the UK or in Switzerland (see Alford (2000) for further details). Similarly, the development of Computer Reservation Systems (CRS) has been particularly advantageous in the USA where, because of the geographical size of the country, they have become widely used for the booking of both domestic and outbound holidays. With domestic holidays, Americans are more likely to travel via air and so use travel agents to book flights and accommodation. Conversely, in the UK, customers are more likely to book domestic holidays direct as they tend to use their own transport and are sufficiently confident to book their own accommodation. Other technological developments have also become more established in some countries than elsewhere, such as multi-media kiosks which provide destination specific information at the destination and, sometimes, incorporate a book facility. In the USA, these are located in a variety of venues, including state welcome centres, hotel lobbies and tourist attractions.

Sporadic travels by the nomads in earlier days has now turned into world's most flourishing industry, namely tourism. Tourism is unique. It involves industry without



smoke, education without classroom, integration without legislation and diplomacy without formality. Francis Bacon aptly remarked, "Travel in the young sort is a part of education and in the elder, a part of experience". Tourism is a form of education is a part of civilized existence. Tourism allows people to escape from their normal humdrum lives. Mark Twain had aptly said, "even heaven can be boring after a while". The human animal needs change if it is to operate at optimum level; travel provides that change. However, the level of satisfaction achieved from tourism depends from the age, health, energy and background of the individual. The young and better educated travel more than the elderly and less educated. The word travel is derived from the French travail which means hardship. In the past, transportation was far more primitive than today and travelling was difficult far from being a pleasure, travel involved great hardship and risk. Although the development of modern transportation method has made travelling safer, easier and more comfortable. The element of stress has not been entirely eliminated.

Tourism as a System

Tourism is a complex, multi-dimensional phenomenon that is difficult, if not impossible, to define. It is certainly a social phenomenon, in that tourism is manifested in the movement of millions of individuals, both within their own countries and internationally, for a variety of purposes. However, that movement of people would not, for the most part, occur without the services provided by the 'industry', or tourism production system. Together, tourists (the demand side of tourism) and the production system (the supply side of tourism) combine into what has been described as a 'functioning tourism system' (Gunn 1994), an interdependent and dynamic system where, ideally, demands is balanced by supply. India is one of the greatest civilizations of the world, the continuity of which is traceable back to thousands of years. A decisive factor in shaping India's culture and history has been its geography and ecology. Beginning from the snow-clad peaks of Himalaya in the north to the sea encased southern peninsula, India is a veritable mosaic of landscapes and environment. With a variety of climatic conditions and therefore a wealth of flora and fauna it becomes a place of natural choice for tourists from abroad as well as from domestic regions desirous of experiencing other regional cultures. The importance of Information Technology in tourism, especially of the World Wide Web – has increased tremendously over the past years and this trend will certainly continue. Tourism is ranking the top ahead of all other categories of international trade. Tourism is concerned with pleasure – holdings travel and going or arriving somewhere. There are the motivations that make people leave their normal place of work and residence for short-term temporary visits to other places. Though there are many definitions for tourism, it could be simply defined as a 'travel and stay of a non-resident'. In order to travel to a particular area there must be a reason. For example a person may travel for leisure, business, visiting people and relatives, health, education etc. The paper shows the use of information technologies, like, computers and various other sources of information in the context of tourism.

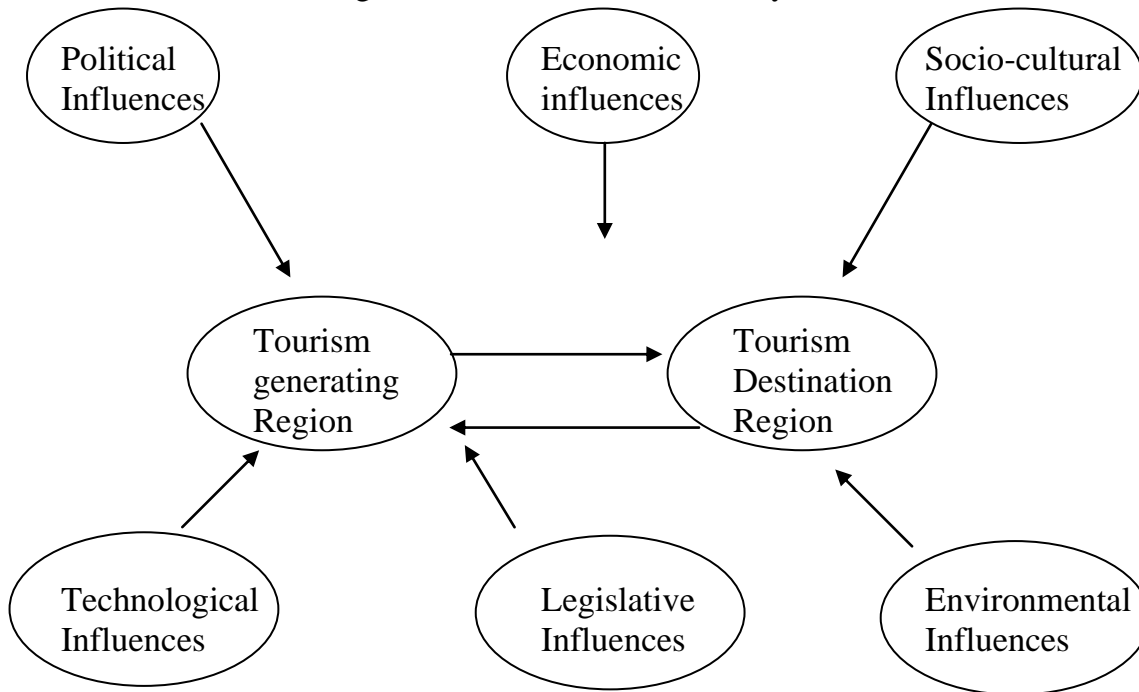
This functioning tourism system has, according to Leiper (1979) three geographical elements:



Tourism generating regions: the regions which stimulates tourism, and where much of the tourism production system (especially tour operators and travel retailers) is located.

- i. Tourism destination regions: the regions which attract tourists, which experience the consequences of tourism, and where primary elements of the production system (hotels, attractions, facilities) are located.
- ii. Transit route region: This is both a temporal region (the short time spent travelling between home and the destination) and places visited *en route*.
- iii. There are clear inter-dependencies throughout this functioning system. For example, tourism businesses in the destination are dependent upon generating region-based companies (tour operators, travel agencies, airlines) for a supply of customers; equally, tour operators require an adequate supply of hotels in the destination, tourists require appropriate attractions of facilities, generally, destinations must be able to satisfy the needs of tourists, needs which are created or influenced by their own, home environment.

The below diagram shows the tourism as a system:



Components of IT

There are many components of Information Technology which are used in tourism Industry such as: Phone, computer with internet and without internet facilities, T.V. with cable and without cable connection, Radio, Satellite, GIS software programme, satellite phone, fax machine, camera, wireless, electronic payment, DVD, CDs etc which can be extensively used for providing and receiving information.



Types of Tourism

- **Recreational Tourism:** This is where mass and popular package tours seek mainly sun-sea, sand and fresh air or sporting activities of various kinds. These groups are mainly seeking a change and rest.
- **Cultural Tourism:** Here the aim is to experience new cultural activities i.e. Folklore, art and music etc.
- **Historical Tourism:** This involves visit to heritage location (Taj Mahal, Macca), museums, churches, temples etc.
- **Ethnic Tourism:** This involves contact with unusual or quaint customs in remote areas, visiting the family's country of origin and relative and friends.
- **Environmental Tourism:** When the higher income groups in particular are interested in visiting remote environmental i.e. Hawaii.
- **Adventure Tourism:** This is agreed to promote mountaineering, trekking and adventure activities.
- **Religious Tourism:** People go for worship like Golden Temple, Macca, Jama Masjid.

Features of Tourism

- Tourism arises from the movement of people to, and their stay in various destinations.
- There are two elements in all Tourism – the journey to the destination and the stay.
- The journey and the stay should take place outside the normal place of resident and work.
- The movement to destinations is of a temporary character with the intention of return within a few days. A tourist is expected to spend a minimum of 24 hours and a maximum of 6 months in the destination.
- Destinations are visited for purposes other than taking up permanent residence or employment.



The below table shows the development of international tourism:

Transport	<p>Technological improvement</p> <p>Diversification</p>	<ul style="list-style-type: none"> - wide bodied jets - more efficient aircraft - alternative (e.g. : high speed trains) - charter operations - 'no-frills' flights
Accommodation	Innovation in accommodation services	<ul style="list-style-type: none"> - time share club share - self-catering - all-inclusives
Emergence of travel operators	<p>Tour operating & travel retailing</p> <p>Scale of operations</p>	<ul style="list-style-type: none"> - large operators providing the 'complete' experience - image of safety, reliability - widespread network of retailers - economies of scale/ the package providing competitive prices.
Integration	Vertical and horizontal integration	<ul style="list-style-type: none"> - improved quality - economies of scale
Development of support services	<p>Banks/ currency</p> <p>Insurance</p> <p>Information</p> <p>Health</p>	<ul style="list-style-type: none"> - Increasing ease of obtaining currency - variety of insurance and insurance providers - Travel safety information (the internet) - Improved health services
Public sector investment	<p>Government Policies</p> <p>National/ local organisations</p>	<ul style="list-style-type: none"> - positive policies to develop tourism - regulation (e.g. EU Package Travel Directive)
Changing demand	<p>Holidays</p> <p>International Business</p> <p>VFR markets</p>	<ul style="list-style-type: none"> - demands for new destinations, experiences etc. - growth in global business related travel. - new VFR markets related to global migration patterns



Ascher (1984) has observed that factors deterring tourism to particular destinations include 'poor transportation and communications, work stoppages, inferior health and sanitary conditions, unpleasant food, overcrowding, and inadequate hotel and travel facilities.

More specifically, there are a variety of other barriers to which may restrict international tourism this table given below shows the Barriers to international tourism:

Barriers to International Tourism

i. Government intervention:	<ul style="list-style-type: none"> • visa restrictions • entry/ exit quotas • currency restrictions • travel/ departure tax • direct tourism policy • bi-lateral agreements • travel advice • local equity requirements.
ii. Political instability:	<ul style="list-style-type: none"> • military regimes • coups d'etat • terrorism • fundamentalism
iii. Conflict:	<ul style="list-style-type: none"> • wars/ war zones
iv. Crime:	<ul style="list-style-type: none"> • mugging/ theft • violent crime
v. Natural Disasters:	<ul style="list-style-type: none"> • earthquakes/ hurricanes • famine • illness

Factors Affecting the Tourism

- Political environment.
- Education and Age (Younger and Better Educated).
- Economic conditions.
- Social and security.
- Infrastructure.
- Skilled guide.
- Crime (e.g. Australian lady killed by pre-paid taxi driver in Delhi), rape.
- Variety of foods, drink.
- Publicity and advertisement.
- Control on price and quality.
- Healthy Environment (SARC, Plague, AIDS)
- Conferences (National and International level on tourism)
- Trained travel agents.
- Complete identification of Driver, Guide etc.
- Special security for the tourist.



Barriers in use of Information Technology in Indian Tourism:

- Lack of computer knowledge.
- Lack of electricity power.
- Low income level.
- Lack of infrastructure.
- Lack of proper maintenance.
- Very high cost of learning and purchasing.
- Lack of upgrading.
- Communication skills problems.
- High costs of equipment.
- Computer and Tourism Education is not compulsory at school and college level.

The future of Information Technology in Indian Tourism: ITT will focus on the following areas

- Information and reservation system.
- Computer Reservation system/ Global Distribution systems.
- Management information systems.
- Internet services and World Wide Web.
- Graphical.
- Expert systems, knowledge based systems and intelligent agents.
- Enterprise Modeling.
- Reverse marketing.
- Management Science.
- Quality Control.
- Legal and social aspects of IT applications in travel and tourism.

Conclusion: The paper discusses the fields related to tourism and the various technologies available to enhance the existing infrastructure. The technologies mentioned are mostly applicable in advertising and attraction sectors. Using the modern technologies, the present situation of tourism in whole India can be improved tremendously. Tourism is now one of the fastest growing sectors of economy of many countries particularly in India as it assumes a dominant role in the service. India is a country of villages where about 70% population is living and rest of living in urban area with literary rate about 65% therefore in Indian Tourism it would be barriers to use information technology. The government should make a strong policy regarding tourism & Information Technology education at school and college level.



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