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# Technology's Impacts on Tourism Management: A Study

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**ABSTRACT** - Strategic operations that take place within them and use information technology have a big impact on the tourist and hospitality sectors today. It is driven both by the fierce competition present in the industry and by the emergence of novel, innovative ideas. Tourism refers to travel that is done for business, pleasure, or both. The tourism business greatly benefits from information technology. Information technology is employed in the travel, lodging, and tourist industries. These technologies are used to recognise and meet the constantly changing needs of the travel and tourist sector. Technology has come to be regarded as a template for India's future tourist economic growth and E-tourism development based on the liberalisation and globalisation policies.

**Key-Words :** Tourism, Information Technology, Accommodation, E-Tourism, Innovation

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## Introduction

The use of information technology has been one of the most explored topic in tourist technology since the 1980s. The disruption of digital technologies has accelerated the evolution of the tourism and hospitality sectors. A number of changes in the tourism business have been brought about by the advancement of modern technologies. These changes may be seen in both the tourism demand and supply sides.

Since the turn of the century, every product that used to have a years-long life cycle has changed to one with a much shorter life cycle of months. Tourism and hospitality are two closely related industries that make extensive use of information technology. It is typically employed to enhance communication between travellers, tour operators, and service providers in the tourism industry. Therefore, its adoption in various tourist destinations, hotels, modes of transportation, as well as by other related service providers, is a clear indication that it is a component of the tourism and hospitality business. E-tourism is currently high, as are digitalized tourism and hospitality activities like online booking, flash packets, travel blogs, e-tour guides, and online service platforms, among other things.

Both the tourist industry and other industries connected to it are significantly impacted by technology. These include, among other things, the transportation, communication, and tourism industries. The usage of technology in tourism has evolved over time to offer incredibly upscale services all over the world. When technology was less prevalent in the tourism industry in the recent past, the majority of services were of extremely low quality and equally unreliable. The quality of service has, however, significantly improved with the passage of time thanks to technology.

## Objective

1. To discover how technology can make contribution to the growth of the tourism industry.
2. To Study the present scenario of technology in Tourism Management.
3. To evaluate the components of technology and tourism management industry.

## **Research Methodology**

Descriptive methods of study were used for this research paper. The Technology impact on Tourism Management were covered for the present study. This paper fully based on secondary source of data. All the data used for the purpose of this research has been data sourced from various sources like research papers, books, news let, Paper articles, websites. Collected data were presented in the theoretical form.

This research paper scope of the study is limited to Technology impacts on Tourism Management.

## **Need of Technology In Tourism Management**

All of us have connections in travel. The recent technological revolutions and the alterations to social structures that they have caused have increased in the twenty-first century. As a result, tourism management is currently becoming more intense. They need in-depth information on each place they intend to visit. The exact elements of these information demands are as follows:

- Geographical details, including place, topography, and climate.
- Information Needs in Tourism Management
- Accommodations, restaurants, and entertainment options
- The region's unique social traditions, culture, and other elements
- Leisure and recreation amenities Seasons of visitation and other distinctive characteristics
- The average expenses of the facilities, taking exchange rates and their quality into account

Though travellers are the information's intended end users, the tourism sector, which consists of destination service providers and managers actually profits financially from it. To better serve their customers and grow their businesses, travel intermediaries like travel agencies, tour operators, and reservation systems keep such information on each destination on hand. To meet the information needs of the clients as rapidly as possible, they require the information in a format that is the simplest to get.

Three sectors contribute up the tourism industry:

1. The Transportation Sector,
2. The Accommodation Sector, and
3. Attraction sector,

## **Technology And Tourism Management Industry Components**

### **1. The Transportation Sector**

The travel industry is entirely computerised both globally and in several regions of India. Since all travel-related services, including train, car, bus, coach, and airline tickets, are computerized, effective information management is made possible. The data produced by numerous tourism organizations makes information on the visitors or passengers of the past, present, and future easily accessible.

There are many types of travel services that use software applications.

#### **i) A Rental Car**

Worldwide and in major cities, car rentals are a significant industry. Corporate or business travellers, as well as tourists looking for superior service and conveniences while travelling, make up many automobile rental customers.

Amadeus, Sabre, and other information and reservation systems are utilised for car rentals and information in other countries, particularly in America and Europe where the car rental industry is entirely computerized.

**ii) Railways**

A few years ago, the train services began to be computerized. The software system utilised for ticketing and other customer services was created especially for Railways. The PNR (Passenger Name Report) number listed on each customer's ticket is the main focus of the computerised system. Each of these PNR numbers is distinct and uniquely identifies the passenger on the ticket, together with the passenger's personal information, as well as the train and the intended destination. A person can now make reservations immediately and book tickets well in advance of the journey date. Computerized customer service facilities have replaced the computerized ticketing system.

**iii) Airlines**

In the travel industry, computerization has been most pronounced in the airlines. All airlines utilise the Computer Reservation System (CRS) to book reservations. The CRS helps to increase occupancy rates while also giving airlines better marketing and distribution options. A more effective and reliable distribution system was required due to the rising global popularity of air travel. The first Information and Reservation System (IRS) was created in the US in 1970. This system offered CRS for direct booking on the preferred airline as well as information about the travel business, including that of the airline industry.

Airlines pay attention to the following factors:

- Enhancing accessibility, client relationships, and business partners
- Electronic Reservations
- Online ticket reservations
- Yield Management
- Electronic auctions for last-minute seats
- Agency charge restructuring and disintermediation
- Increasing the new electronic distribution channel's productivity

**2. The Accommodation Sector**

Due to the way that tourism is managed, enterprises in the accommodation industry lack direct contact with tourists and customers. The way businesses operate in this industry has altered as a result of technology. In fact, organisations in the hotel industry are creating communication networks to compete with Global Destination Systems, a database of information about availability, costs, and related services for airlines, car rental agencies, hotels, rail agencies, etc. that also allows for the issuance of tickets. Additionally, A Global Destination Systems makes any or all of these features available to airlines, booking engines, and travel agencies that subscribe. Amadeus, Apollo, Galileo, Worldspan, and Sabre are the Global Destination Systems leaders. The main users of these Global Destination Systems, which are significant information management technology solutions, are airlines and travel firms. The Global Destination Systems have evolved into vendors of technology solutions for lodging in order to compete with this new threat. Expedia and E-Travel cater to both leisure and business travellers.

### 3. Attraction Sector

Owners of attractions, whether they are man-made or natural, must inform their current and prospective customers about their products. It is crucial to have knowledge about the type of attraction, its location, and directions to get there. The information is used by the attraction owners, in particular the national tourist officers, to carry out their job of promoting the country's tourist attractions.

#### Internet And Tourism

The TCP/IP protocol connects computers all over the world via the Internet, an interconnected system of networks. The internet serves as a global "people's network" for communication and information sharing today. It is made up of the World Wide Web and E-mail, two strong tools. A sizable worldwide knowledge resource, or library, has recently evolved on the WWW, a section of the internet. Because the tourism industry is one of many that can be checked, enquired about, and ordering online easily, and conveniently communicated and delivered electronically via the Internet, the use of the Internet for communication and transacting with customers has been growing quickly. Examples include e-booking of hotel rooms, airline tickets, travel packages, etc.

The tourism sector uses the internet in a variety of ways, including the following:

- a) Marketing technology is used in almost every aspect of marketing, including editorial and newsletters, search engine marketing, email promotion, word-of-mouth via social networks like blogs with customer reviews, communities like the free flickr photo sharing website and YouTube video sharing site, discussion groups, and Facebook.
- b) Real-time reservation and marketing solutions are necessary since, according to current data, more than half of travellers prefer to book their bookings online.
- c) The last item is providing tourist experiences. Offer a first hand experience online, for instance through experience-driven web content or tasters delivered prior to trip via online audio podcast or video clips offering audio tours for on-site consumption on MP3 devices. Connect tourists to more experiences in your area by, for example, emphasising extra sites or activities on your website or as part of a tour or experience. Provide interpretation utilising handheld or mobile devices. With this strategy, you may help your customers understand how they can improve the visitor experience.

#### Technology Used In Tourism Management

Information and communication technology (ICT) is frequently used as a longer synonym for information technology (IT). However, it is usually a more general term that emphasises the significance of unified communications and the integration of telephone lines and wireless signals, computers, middleware as well as necessary software, storage, and audio-visual systems, which allow users to create, access, store, transmit, and modify information. ICT includes all forms of audio and video processing, transmission, and network-based control and monitoring functions. There are also IT, broadcast media, and telecoms involved. Dennis Stevenson, who was endorsing the new National Curriculum guidelines for the UK in 2000, used the aphorism for the first time in a 1997 report to the UK government.

Here are a few scenarios in which technology could be used in the travel industry.

- Managing Resources at the Destination
- Tourism Resource Inventory
- Managing Attractions and Sites
- Finding a Tourist-Friendly Location
- Control visitor statistics



## NEW TECHNOLOGIES SOLUTIONS FOR THE TOURISM INDUSTRY

There are many technology options that the tourism industry can operate and use. There, in the table below, we can see some of the tourism technology options that are now available.

**Table 1 : New Technologies in Tourism Industry.**

<b>Technology</b>	<b>use</b>
Online Booking Systems	The availability of online booking systems has made it easier for travellers to plan and book their trips. Travellers can make reservations for flights, accommodation, tours, and activities online from anywhere in the world.
Mobile Applications	Mobile apps are useful for travellers on to go. They can use apps to search for local attractions, restaurants, and accommodations. Mobile apps also provide features such as GPS based navigation, real time information, and in app payments.
Social Media	Social media platforms are used to market tourism destinations and attractions. Tourism boards and travel companies use social media to engage with customers, provide customer support, and create brand awareness.
Virtual Reality	Virtual reality technology is used to provide immersive experiences to travellers. Virtual reality technology can be used to showcase tourism destinations, museums, and historical sites.
Big Data	Big data analytics is used to collect and analyse data from various sources such as social media, booking systems, and customer feedback. This data is used to gain insights into customer behaviour and preferences, which can be used to improve tourism products and services.
Internet of Things (IoT)	IoT technology can be used to enhance the customer experience by providing personalized services. For example, hotels can use IoT devices to adjust the temperature and lighting in guest rooms based on guest preferences.
Artificial Intelligence (AI)	AI technology can be used to automate tasks such as customer service and reservation management. AI chatbots can provide instant customer support and answer frequently asked question.

### Conclusion

In order to improve the current infrastructure of the tourism sector, this article explores numerous information technology impacts on the area of tourism management. This Article has shown that both the influence and the willingness of technologies on tourism are enormous. The transportation, accommodation, and tourism industries stand to benefit most from the technology listed.

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