

Information technology has influenced all walks of our lives over the last few decades in a tremendous manner with the Tourism and Travel sector being one of the main beneficiaries. The introduction of computers can be traced back to early 60s, when the vacuum tube was the primary component of computer systems. This was largely inefficient and error prone and soon gave way to transistors which were replaced by Integrated Circuits. Now the technological advances have allowed advanced graphics integrated with moving images and sound to be incorporated into the modern computers.

The tourism product being largely intangible stands to gain a lot from technology. Travel was considered a

risk in the early days mainly due to the fact that the knowledge about the terrain, climate, culture etc. of the destination was limited or unknown. Only the adventurous and men in quest for newer pastures ventured into such journeys. With the advent of IT into the travel sector, things have changed. Travel has become much more enjoyable and comfortable. The modern day traveller has a plethora of options to choose from, with internet being the favourite haunt for the potential traveller. Places of tourist interest and scenic beauty often do not catch the attention of the customer largely due to the fact that they are not marketed well. Internet in the early days did not support graphics, video, sound etc. Hence the tourism products

could not be marketed over the net effectively. Now things have drastically changed with the introduction of various protocols.

In Kerala scenario the advent of IT has been restricted to travel agencies using reservation systems and development of websites by Governmental and non-Governmental agencies. Also office automation is in place with the accounting process also being computerised. Kerala Tourism website www.keralatourism.org has won many national and international accolades as being one of the best sites in tourism worldwide. In the education sector, institutes such as the Kerala Institute of Tourism and Travel Studies (KITTS) has imparted IT education in Tourism sector by

Gateway for Tech Tourism

giving hands on training to students in GDSs (Global Distribution Systems) and computerized applications. Kerala Tourism Development Corporation (KTDC) has also fully computerised their reservations and a tourist can easily book a room through the net.

Global Distribution Systems

Global Distribution Systems (GDS) have evolved over the years and has played a major role in making online travel possible. A Computer Reservation System (CRS) is used to store and retrieve information and conduct transactions related to travel. These were originally developed by airlines, but it was later extended to travel agents as a sales channel. A functionality of CRS has been extended and what is known as the Global Distribution Systems came into existence. The major CRS operations that book and sell tickets to multiple airlines are known as GDS. Many airlines have opted to divest most of their holdings to Global Distribution Systems due to which many systems are now accessible to consumers through Internet gateways for hotels, car rental agencies and other services as well as airline tickets. A traveller or a

travel agent can chalk out an itinerary using a GDS which is a global system interconnecting airlines, hotels, travel agents, car rental companies, cruise liners etc.

E-Ticketing

An electronic ticket or e-ticket is a means by which a passenger or a group of passengers can ensure their seat in a commercial airline by booking over the internet. This greatly reduces the procedures associated with issuing a paper ticket, which consists of a number of copies. Both the airlines and the passengers are benefited by this form of ticketing. The main advantage of e-ticketing is the fact that it reduces booking expense by eliminating the need for printing and mailing paper documents. Another advantage is that it eliminates the possibility of critical documents getting lost in the mail or being sent to the wrong address.

Property Management Systems

As the term indicates, Property Management Systems (PMS) refers to systems which have been used world wide to manage and effectively control the various day to day and other procedures related to managing large properties. Even in Kerala,

these systems are used in large scale.

The core functions which a PMS can handle are reservations, front office operations, some back office operations and some managerial functions. A PMS is commonly used for handling the accounting functions of various departments in a Hotel. This is in addition to being the hub for all interconnectivity with other systems in the hotel. Just as a person, who is cut off from the rest of his colleagues during work, a standalone computer is not of much use. Hence a networked environment is provided whereby a server can cater to the needs of the end-user who may be a manager or receptionist or a waiter. This is achieved by networking the systems and sharing of resources. Software may be developed to suit the needs of the hotel which may have a front end and a back end.

A front end is user interface, through which data may be entered or information retrieved. The back end may consist of a RDBMS which acts as the storage hub. Queries and reports may be used to retrieve information. For example, if a guest wants to know details regarding tariffs during off season, a click of the mouse may be sufficient to retrieve information.



Virtual Reality Systems

Virtual reality is related to artificial intelligence and neural networks. Artificial intelligence is an area where technology has made rapid strides in recent years. Human beings have been blessed with intelligence which ranges from their ability to remember things to inventing gadgets and making life more meaningful. It goes without saying that human brain is an amazing and intricate organ which has till date not been surpassed by even the fastest super computer. It is doubtful if such thing will happen in future too. But artificial intelligence has paved pathways to new gadgets and robots which help man in potentially dangerous and intricate tasks.

Virtual Travel

With the ever increasing need to use the net, tourism has entered a new era. Virtual travel has gained popularity and a tourist can use various tools and internet and sit at the comfort of his office or home and do a virtual travel. Earlier there used to armchair travelogue creators who used to design the show from articles and hearsays. But now travel writing has been simplified just because there is a plethora of information in CD's, brochures and on the net.

There are even virtual travel agencies on the net which offers a tour through its gallery and offers a great deal of information. Virtual travellers are more informed and many of them do not even need an introduction to a destination which they plan to visit.

In addition to the virtual tour of the real world, artificially created virtual worlds are there, waiting to be explored. These sites offer a free package for a week which can be downloaded.

Travel Recommender Systems

Travel has become a part and parcel in the lives of human beings. The modern day traveller has a plethora of options to choose from when planning his trip. Travel Recommender Systems though in its infancy has established its utility value in travel planning. In the coming years, its importance as tool in aiding travel planning will be indispensable. A few recommender systems are available in the market that gives the tour operator or the customer options to remove the intangibility associated with the product. Austria is one of the few countries which have introduced Recommender Systems to the travelling public and have found favourable response from the users. Recommending a travel plan consists of many aspects such as the destination type, location specific information, seasonal specific recommendations etc. All this has to

be presented to the user in a customer friendly manner so that one can input the options to the system which in turn will suggest the most recommended travel plan.

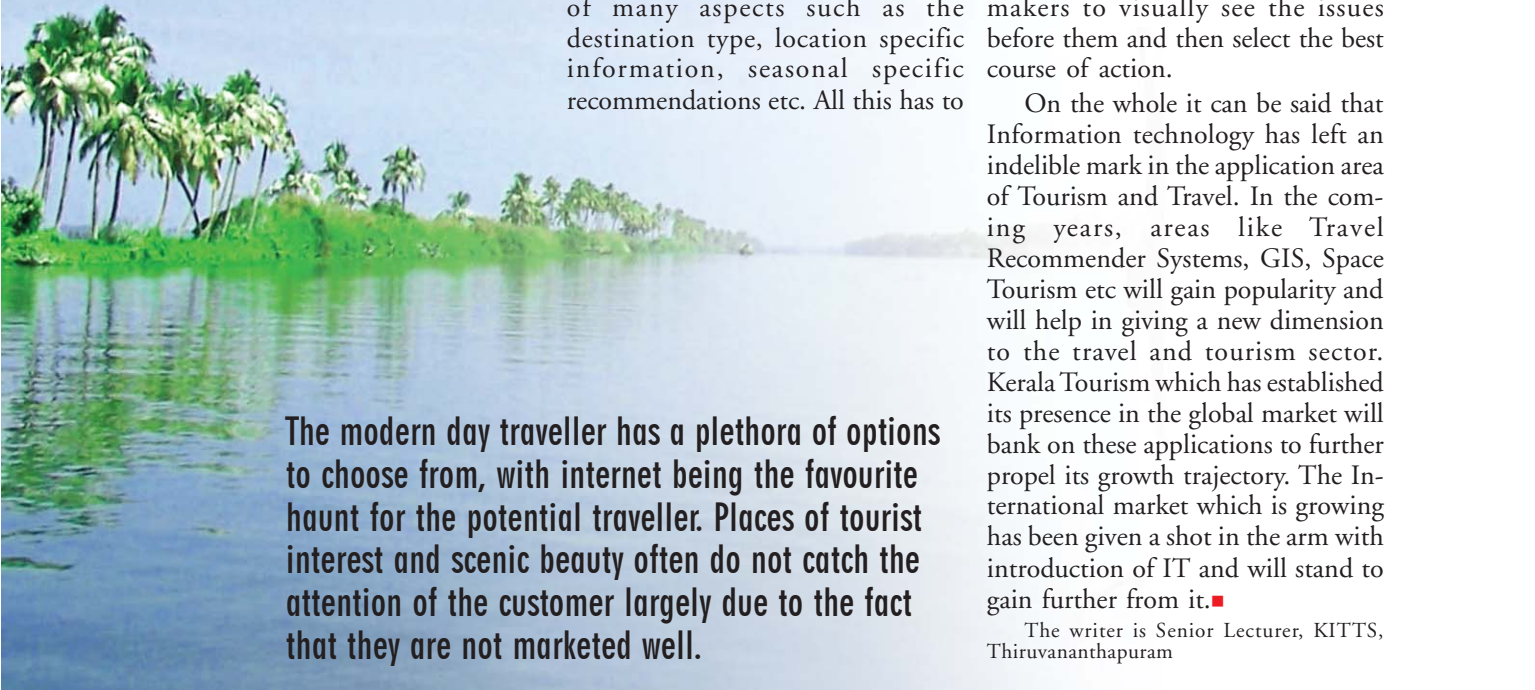
Geographic Information Systems

The usage of maps dates back to centuries. Man has been using maps for guidance and for locating places. With the advancement of computer technology and graphics, maps have been digitised and used for providing accurate and timely information to users. Databases have been combined with computer graphics in the area of GIS.

This connection between spatial data and databases is the driving force behind the working of a GIS. Maps can be drawn from the database and data can be referenced from the maps. When the database is updated, the associated map also gets updated. GIS database include a wide variety of information including geographic, social, political, environmental and demographic data. GIS technology is a computer based data collection, storage and analysis tool that combines previously unrelated information into easily understood maps. A GIS can perform complicated analytical functions and present the results visually as maps, tables or graphs, allowing decision-makers to visually see the issues before them and then select the best course of action.

On the whole it can be said that Information technology has left an indelible mark in the application area of Tourism and Travel. In the coming years, areas like Travel Recommender Systems, GIS, Space Tourism etc will gain popularity and will help in giving a new dimension to the travel and tourism sector. Kerala Tourism which has established its presence in the global market will bank on these applications to further propel its growth trajectory. The International market which is growing has been given a shot in the arm with introduction of IT and will stand to gain further from it. ■

The writer is Senior Lecturer, KITTS, Thiruvananthapuram



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