

## THE IMPACT OF TECHNOLOGY ON DISTRIBUTION SYSTEMS IN TOURISM

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### **Abstract**

*The tourism industry is ideally suited for computer technology. It requires a system to determine availability of transport and accommodation at short notice, to make immediate reservations, amendments and cancellations, to quote complex fares and conditions of travel, to process documents such as tickets, invoices, vouchers and itineraries rapidly.*

**Key words:** tourism, information technology, distribution systems, computerized reservation systems

### **INTRODUCTION**

In tourism, technology is a powerful dynamic factor that is responsible for many changes in the past, present and future. The technological advance occurred mainly in the last two decades, facilitated the distribution of travel services and in the future will have a major impact on the structure of distribution systems.

### **MATERIAL AND METHOD**

#### 1. The link between technology and tourism

In the last two decades tourism industry recorded a spectacular increase. This development has convinced those involved in this sector that not only carry out an activity of organizing the trips but also a communication and information. The changes recorded at the characteristics of the consumers, their preferences and decision-making procedures, plus continuous process of change in a global environment with very high competition, have contributed to the growing closeness between tourism and information technology. To create memorable travel experiences, the tourism providers offer consumers a range of potential options of choice, and from this aspect, clarity and consistency of the information provided is essential variables of consumption satisfaction. The complexity of this activity increase as the competitive global tourism environment continuously generates new information. The combination of these strengths and professionalism growing need for directing this information to tourists, determines the need to use technology in order to collect, process, distribute and communicate information. The technology allow for all of these

functions in a view to creating products and services for individual and personal addressing potential consumers. In addition, the need to help ensure that value is a key factor in consumer satisfaction.

## 2. Computerized reservation systems

The technology used in the tourism industry with the highest frequency and most widespread is the computerized reservation systems (CRS s). They were introduced on experimental level in the 60s and were used by airlines as internal systems selling filing places. In the following years, many different systems were developed by the airlines individually. To illustrate, the airline TWA introduced the system PARS, United Airlines introduced APOLLO system, Delta introduced DATAS II and American Airlines has introduced the SABRE

Later, airlines have realized that they can use the CRS to communicate towards intermediate rates, thus contributing to an increase in the effectiveness of expenditure. As a result, in the first half of the 1970 s the airlines have tried to gain an advantage over your competitors, by creating your own versions of the system. This action was based on the assumption that a company that has adopted a broad scale CRS, would be able to provide clients with timely information, which would contribute greatly to the increase in sales. Due to legal aspects regarding the property and control, these systems have worked individually until 1976 when companies TWA, American Airlines and United Airlines have agreed to offer a reciprocal access to their own systems, it was considered to be reservations first try interconnection systems of reservation. The moment marked the beginning of widespread prevalence of CRS. Because, afterwards, from example of airlines and other suppliers such as hotels and car rental companies have adopted, in their turn, CRS.

### Characteristics of computerized reservation systems

- There are various connection systems with most of them using other communication systems in place of the telephone service, as well as AT&T/1stel. They improve the speed of connections to databases and increase the volume of traffic information to the Terminal. These systems are necessary, considering the fact that, for example, SABRE solve daily bookings that exceed 1 million. Expansion in the 1990s digital telephony systems (ISDN) will increase the processing capacity of information networks.
- Allow adding and connecting to other software programs from inventory management to CRS. These include the automated ticketing and automatic bill release, and management and accounting systems, providing the ability to connect to databases of consumers.

- Produce a change from a traditional business travel, a complex activity that involves offering a varied range of travel products. Tour operators (To) and major travel agencies have their own booking systems linked sites to leaders CRS.
- They are able to provide the highest visual quality can not replace, but can help reduce material losses editing brochures and other materials.

In recent years, we are witnessing a trend of formation of alliances at different levels of the tourism industry. These alliances have resulted in response to intensified competition, the need for capitalization, but also to obtain different economies. One such example is the cooperation between airlines Delta, Northwest TWA that introduced a new CRS, WORLDSPAN. But that is only a network of booking. Other tourist offer, providing services in various fields of tourism, were connected to the existing reservation systems, such as Sheraton hotel chain and car rental company Avis, which offers the possibility of making reservations through the Sabre system. After numerous series of alliances, mergers and acquisitions, CRS's have assessed what we GDS's (Global Distribution Systems).

GDS differ from simple information systems that are more comprehensive, while ensuring, providing information, reservation taking orders and actual sales. All these three factors are interrelated ensure responsiveness. A single GDS terminal allows the immediate access to all services offered by all the companies that have chosen to distribute their products through this network.

Major airlines have developed their own GDS and in order to ensure accessibility of information to the public system facilitates the availability of third parties, such as travel agencies.

The main services that is offering a GDS booking and ticketing for air transportation, hotel reservations for units of big international chains, car rental bookings. To these is added and the new services such as booking hotels in smaller, rural tourism products, cultural and sporting activities, local transportation, travel insurance, financial services, etc.

The main distribution networks are highly concentrated and the tourism in largely dominated by American and European airlines.

Use of these systems allows the the bidders, intermediaries and customers whole world sharing information about a large variety of tourism products, including rates for air and ground transportation, room rates and information related to tourist destinations.

Such computerized reservation systems are installed by the major TO worldwide (with over 100,000 customers annually). The development of these technologies, while decreasing costs of these systems, made smaller the TO, with a potential of 5,000 customers annually, to allow this.

Currently, the selling agencies are directly connected to the computer TO, your travel agent can check if there are seats for the requested product, and if not, automatically are highlighted information on departure dates and destinations closest to the initial request. As soon as the agent determines that the request may be accepted shall be carried out, with some reservation systems the possibility that one to formulate firm option within 24 hours; nowadays, TO tend to only accept firm bookings. Each reservation is assigned a numerical identification code, during which travel agent get paid out from the customer for the product requested advance and booking sheet completed by the client. All of these recently stood in computer memory, and the chips completed booking tourists are kept at the headquarters of the travel agency. On receipt of the advance, TO emits an interim invoice which basically confirms the reservation, then about 10 weeks before departure of the client to the destination chosen, emits a final bill, thus requiring total payment, approximately eight weeks before departure. As soon as the final bill has been issued, no longer possible making changes in travel schedule. After full payment, TO emits all tickets, vouchers, itineraries necessary, that they sends to the travel agency, which hands out to clients.

In order to increase the employment of tourism capacity contracted TO accept bookings at the last minute. The ability to react quickly in such situations, plays a key role in achieving this objective. Coupled with the fact that all offers discounts at the last minute, many TO have introduced procedures are meant to attract these reservations and booking system operated so travel tickets are issued quickly, they can be taken from tourists, for example, at the airport, departure.

At the level of travel agencies, computerized reservation systems are designed to provide three distinct features, namely:

- to alleviate the specific activity of front-office, allowing to travel agent to check availability and to make quick reservations;
- in the back-office allows the preparation of invoices, tickets, itineraries. as well, the working tools necessary for achievement of the best accounting
- to provide updated information on the company's performance, helping the Manager in driving and control

The systems that have been developed to date, provide all three facilities, even for small agencies, independent, at prices that continue to fall. The system can be purchased also in leasing, this reducing the initial capital requirements.

Using the computer represents a step forward in the work of travel agencies, but at the same time a threat, explained by placing terminal systems in public areas so that tourists have the opportunity to conduct their bookings directly. In the US Sabre system is available to the public, but to

protect travel agents, certain reservations can not be performed only through them.

In cast tourism we meet also computerized reservation systems created by groups or hotel chains, with exclusive character and that have more reservations offices.

## CONCLUSIONS

### 3. Automation of the travel ticket issuance

Other technologies have facilitated the distribution of tourism along with reducing costs and increasing accountability. STP (Satellite ticket printers) currently allows intermediaries to emit tickets directly.

EDTN (Electronic Ticket Delivery Network) is another form of STP. The difference is that in order to use ETDN network is paid a commission, while STP is charged only to charge print.

Electronic kiosks, that are fixed terminals of computers that are located in hotel lobbies or offices, or tourist information offices, currently allow tourists to carry out various operations, such as buying a plane ticket, obtain information relating to a specific destination, hotel bookings.

Another development that facilitates the distribution of tourism is represented by the electronic travel documents, ticketless- travel, where passengers' personal information are entered into an electronic file airline and traveler must present personal identification, thus entering into possession boarding card.

### 4. The Internet

The internet can be used equally by tourism bidders, intermediaries and individual travelers. Currently, it is considered both a replacement but also a complement to traditional distribution channels. When he works as a replacement, the Internet allows individual travelers to make their reservations and to purchase products on-line, eliminating potential existence of an intermediary. In this sense, the GDS have been included on the internet allowing getting information about tourist products, looking for cheap deals, automatic calculation of tariffs, automatic access to air transport availability, obtain booking facilities. For many, the Internet provides an opportunity for finding and communicating with clients and to attract additional market segments. The biggest advantage of the Internet is its ability to make tourism products accessible anytime and anywhere in the world at a much lower cost compared with traditional systems of distribution. Despite all these benefits that the internet brings, there are still some elements that limit its immediate adaptation as an alternative method of distribution method. From the point of view of the customer, we mean the

level with computers, common in software use, confusion to access a huge databases, etc.

Experience has demonstrated that the tourist industry perfectly adapts to new technologies, creating new ways of tourism, or distribution that complement and facilitate the distribution of existing methods. These computer systems are coming to ease the work of all those involved in the marketing of tourism products, makes the public access to the tourist offer, and last but not least, helping to reduce the costs of distribution.

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