UDC: 338.487:004.738.5

# DEMAND FOR MODERN INFORMATION AND COMMUNICATION SYSTEMS IN TOURISM

### Maia Meladze, PhD

Associate Professor at Grigol Robakidze University, Tbilisi, Georgia

#### Nino Jerenashvili, PhD candidate

Grigol Robakidze University, Tbilisi, Georgia

#### **Abstract:**

Information and Communication Technology (ICT) is one of the key factors of competitiveness. Internet is especially relevant to tourism product since it enables knowledge about a consumer or a tourist to be gathered and vice versa. Tourism product is dominated by the need to provide fast and accurate information to a consumer.

Tourist products cannot be examined before traveling. Traveling and tourism industry products do not exist until they are sold. Therefore, the decision on buying trip at the destination is based on the specific information accessible for a tourist. If Georgia does not provide information about tourism sites via Internet, it will be ignored by millions of people who expect that all tourism sites can be accessed via Internet.

I.

Information and Communication Technology (ICT) is one of the key factors of competitiveness as far as tourist markets and strategic tourism management are concerned. In fact it reduces transaction and operational costs. The implications of the ICT revolution for tourism competitiveness and management are identified in different sectors of tourism and its closely associated industries. The international ICT is widely used in industries such as airlines and travel, hospitality, tour operators, travel agencies, computer reservation and management systems for tourism and destinations. <sup>1</sup>

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.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Gursoy, D., and K. W. McCleary. An integrative model of tourists' information search behaviour, Annals of Tourism Research, 2004

<sup>&</sup>lt;sup>2</sup>Buhalis, D., Tourism: Information technologies for strategic tourism management., 2003

Internet is especially relevant to tourism product since it enables knowledge about a consumer or a tourist to be gathered and vice versa. This gives "rise both to global visibility of destinations and global merging of market segments". The use of web-based tourist information systems has grown significantly.

Tourism is an important sector in the economy contributing around 10% to worldwide GDP, projected to rise to nearly 11% by 2014 (World Tourism Council 2004). Tourism has been and will be one of the most impacted industries by IT innovations. Tourism product was one of the first sectors to embrace Information Technology (IT). IT is crucial to the tourism industry and its success. IT has bought with it a number of changes and challenges that affect business and tourism. IT developments that have taken place with respect to the tourism industry are overviewed in this paper. Challenges they pose for the sector and tourism operators generally are also identified.

Tourism markets are being dynamically developed. It can be seen as one of the first business sectors where business functions are almost exclusively using information and communication technologies (ICT). Information systems have an important role in the development of tourism product. Computerized Reservation Systems (CRS) were among the first applications of IT worldwide. ICT facilitates this integration and enables customisation of tourism products to suit the needs of individuals. Due to changes in consumer behaviour of a tourist, the market is becoming more segmented with each potential consumer belonging to a number of market segments simultaneously. Tourist operators need to be aware of these changes and equipped to respond, or better still, take a proactive approach.

Tourism product is dominated by the need to provide fast and accurate information to a consumer. The first step to achieve this goal of a one-stop service is via global distribution systems (GDS), a form of IOS. GDS evolved from computer reservation systems and enable the aggregation of information from airlines which enables travel agents (as information brokers) and tourists to "make reservations and order other services in a single marketplace"<sup>4</sup>. Examples of GDS are Sabre, Galileo, Amadeus and World span.

Distressed web sites have a role to play in distribution, however, should not be the only web distribution channel. If a hotel has not developed a direct web distribution plan, it will only appear on internet via distressed web sites which, as discussed, erodes its quality. A

<sup>&</sup>lt;sup>3</sup> Werthner H., Klein S., Information, Technology and Tourism: A challenging relationship, Springer Computer Science, Vienna, Austria, 1999.

<sup>&</sup>lt;sup>4</sup> JOO J., A business model and its development strategies for electronic tourism market, Information Systems Management, 2002.

total online distribution strategy therefore is needed with a direct-to-consumer distribution model at the centre of the strategy, such as adopted by the airline industry.

Cultural tourism is a good example of the way in which online technologies have been influential as its emergence has been fostered by Internet. Cultural tourism focuses on the presentation of areas cultural heritage, ranging from environmental attractions through historical, artistic, archaeological and folkloric components. A specific example of this form of tourism is the MEDINA (Mediterranean by Internet access) project started in 2002, due to completion in 2005 which established a cultural web portal for fourteen Mediterranean countries. Access to the portal by a tourist is achieved through mobile devices (e.g. personal digital assistants or smart phones) and allows a tourist to make informed decisions concerning cultural sites. The emergence of artificial intelligence and mobile computing empowered a consumer of tourism services. Mobile devices are increasingly being used by tourists as electronic personal tour guides.

In order to provide information needed for successful operation of the tourism market in Georgia, tourism information system is essential which represents the part of any well-organized tourism business. It can also be used to control the tourism development programme. Perfect information is essential for the Georgian tourism organizations to improve their competitiveness, so that tourist product can permanently change in response to the changing market requirements.

Communication does not mean only contacts of people. It also means supply of information, including tourism information. A lot of Internet users live in the countries which spend more on tourism purposes. The following countries spend the largest amount on tourism: China, the United States of America, the United Kingdom and Germany. Penetration level is very high in these countries. 36, 3 % of the China population uses Internet, 78.2%, - of the USA, 82.0% - of the UK and 79.9% of Germany. (Table 1)

<sup>&</sup>lt;sup>5</sup> Garzotto, F, Paolini, P, Speroni, M, Pröll, B, Retschitzegger, W & Schwinger, W 2004.

<sup>&</sup>lt;sup>6</sup> www.internetworldstats.com - Internet World Stats. Usage and Population Statistics.

Table 1

Top 10 countries with the highest number of Internet users, 2011

	Country	Internet users Latest Data 485,000,000	Penetrati on (% population) 36.3 %	% of world users
	the United States	245,000,000	78.2 %	11.6 %
	India	100,000,	8.4 %	4.7 %
	Japan	99,182,0	78.4 %	4.7 %
	Brazil	75,982,0 00	37.4 %	3.6 %
	Germany	65,125,0	79.9 %	3.1 %
	Russia	59,700,0	43.0 %	2.8 %
	the United Kingdom	51,442,1	82.0 %	2.4 %
	France	45,262,0	69.5 %	2.1 %
0	Nigeria	43,982,2 00	28.3 %	2.1 %

The modern information systems and catalogues are very important for internet space and have special demand within internet consumers. International market leaders - Google and Yahoo every day satisfy million consumer search demands, but internet content is a renewed concept. Thus, by expert evaluation, search mechanisms are the main indicators of internet development and need constant improvement.

The tourism industry has also moved towards diversification and differentiation of products and development of packages for tourist destinations using ICT in catering, leisure, hotels and other supported activities. Most of tourists get first information by Internet. This holds for both transit tourists as well as tourists with the overnight stays in a certain tourist destination.

Tourist products cannot be examined before traveling. Therefore, the decision on buying trip at the destination is based on the specific information accessible for a tourist: recommendations of friends, brochures or announcements published by national tourism officials. This type of information is increasingly accessible by Internet. Tourists learn from WWW about various tourism sites and make appropriate use of the information about tourism countries. If Georgia does not provide information about tourism sites via Internet, it will be ignored by millions of people who expect that all tourism sites can be accessed via Internet. Internet is a new arena of fighting and those who overlook it have little chance to achieve success in the competition. In addition to it, provision of information by Internet needs a good presentation, rather than millions of investments and that can be done at extremely low costs.

Study of the Georgian Internet reality is not an easy task. One of the first Search System Catalogues www.Qartuli.com was made in 1999. Its search system is a partner programme of Google which give a chance consumer to search information in internet-giant data by this site. In the Georgian search system www.geres.ge was one of the most important web-sites which contains general information about Georgia, tourism, travel, tourism agencies and hotels. Another search system and catalogue of Georgian internet space is www.Interes.ge which is functioning from 2006 and gives a consumer the opportunity to search any information in Georgian as well as in global internet space.

"TOP.GE" 7 offers statistics of Georgian users according to which there are 6 main providers:

- 1. Silknet.com 44.13 %
- 2. Co.ge 33.27 %
- 3. Egrisi.ge 11.14 %
- 4. Cgc.ge 3.49 %

<sup>&</sup>lt;sup>7</sup> www. Top. ge

- 5. Magtigsm.ge 2.74 %
- 6. Maximali.ge 1.31 %■

The further we enter the information age, the more consumer expectations are changed. They expect information to be provided quickly and with high quality. In Georgia, government investment growth in media is very important aiming at attracting tourists, advertising in magazines, publishing about tourism, disseminating information via Internet. Besides, formation of an efficient image of a destination requires that the advertisement be relevant to the reality.

In spite of the fact that information service is provided free of charge, tourism firms mainly realize their tourism products by means of it.

To provide information for consumers, catalogues, prospectus, brochures, information booklets are usually used which contain full contents and quality of service package, prices, etc.

These materials are presented to each customer who expresses willingness to purchases certain tours. In addition, a consumer must be provided with further information and consultations about booking, paying, change and cancellation of tours and all the details related to traveling (passports and visa, customs and exchange regulations, natural and climatic conditions, medical service, insurance, etc).

Communication means supply of information, including tourism information. Traveling and tourism industry products do not exist, until they are sold. When selling a tourism product it only represents a piece of information in computer reservation system. Unlike the majority of consumer products, such as TV sets, photo cameras and automobiles, tourism product cannot be examined until we make the decision to buy it.

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 virtualisation of the tourism industry.

## **References:**

Gursoy D., McCleary K. W. An integrative model of tourists' information search behaviour, Annals of Tourism Research, 2004.

Buhalis D. Tourism: Information technologies for strategic tourism management. 2003.

Werthner H., Klein S., Information, Technology and Tourism: A challenging relationship. Springer Computer Science. Vienna, Austria, 1999.

JOO J., A business model and its development strategies for electronic tourism market, Information Systems Management. 2002.

Garzotto, F, Paolini, P, Speroni, M, Pröll, B, Retschitzegger, W & Schwinger, W 2004. www.internetworldstats.com - Internet World Stats. Usage and Population Statistics. www.Top.ge