

INTEGRATING ICT- BASED APPLICATIONS FOR SUSTAINABLE TOURISM DEVELOPMENT IN ALGERIA

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ABSTRACT

Information and Communication Technology (ICT) has inevitable impacts on different industries and their performances. The tourism industry, as the largest and fastest growing industry in the world, cannot be excluded from this technology and its huge impacts. ICT provides information about tourist attractions in different destinations before travelling and improves tourists' satisfaction. Although Algeria has great tourism potentials, it still needs to be performed well in promoting its attractions to international tourists via ICT tools yet. This research explores the impact of ICT on foreign tourists' satisfaction of the tourism industry and uses Algerian tourist agencies as a case study and proposes a model for the impact of ICT on sustainable tourism. It proposes a model; namely, Al Djazaer Siyaha, for improving information quality and tourist services' quality in the eTourism industry. Also, it is recommended that the tourism authorities should develop e-tourism infrastructures in order to keep up with the competitiveness of this field to enable the country to benefit from the global benefits of the tourism industry.

Keywords: Al Djazaer Siyaha, Information and Communications Technology (ICT), Tourism, Tourists' satisfaction, Sustainable tourism, Information quality.

INTRODUCTION

Tourism is now one of the most important industries in the world. It is also known as the fastest growing sector-the first world industry, and an important tool in promoting sustainable development. Besides, it promotes economic development through bringing important revenues of foreign currency, reducing unemployment, and upgrading areas. So, accordingly, most countries in the world rely on tourism as a pillar for their economy.

The world has already undergone too many changes, and ICT has occupied the highest position of interests of various business sectors and services. Since tourism industry is the first industry that has been associated closely with progress

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in information and communication technologies, tourist electronic transactions have become global outcry and an important condition for providing competitive tourist services of good quality in the new global marketing environment. So, tourism organizations should adopt an e- tourism strategy, in order to be able to compete within the era of digital economy, technology, e- commerce, electronic information sources, e-negotiation, commercial, and business services of international aspect (Deepthi, 2008).

ICT plays an important role in the application of e-tourism services in terms of activating systems and web- based applications. Providing customers with electronic services has become one of the successful elements of any economic sector, especially tourism industry, as it promotes electronic services and modern applications.

It is one of the promotional features in a highly competitive market interested in updating the tourism industry and e-marketing and all tourist services provided. As e-tourism has been the bulk of e-commerce, developing and activating the best solutions and the latest electronic systems for tourism services has been done in terms of e-marketing strategies to achieve comprehensive performance of tourism to support the competitive global tourism to attract tourists and tourism investments (Tahayori & Moharrer, 2006).

It is worth to mention that many countries have succeeded in using ICTs to develop their tourism industries. For example, Malaysia has been very successful in attracting many tourists through these means (Mohsin, 2005). Islamic tourism in Malaysia is one of the important tourism segments considering its official religion. The country possesses numerous natural, religious, historical, and cultural tourist attractions. Hence, the integration of well- crafted ICT solutions, the tourism industry in Malaysia rely on ICTs and especially the internet as tool of international communication. As an important segment, Islamic tourism is also utilizing the advancement of technology by using websites as a tool in performing tourism related activities such as marketing, promoting and introducing tourism products and services to the potential tourists. As a very important reference point for potential tourists, Islamic tourism websites have become of a good quality standard, since it is the main indicator for the e-business success (Buhalis & O 'Connor, 2005).

In 2007, Malaysia's tourism website has been declared as a role model of e-tourism by the United Nations Conference Trade and Development (UNCTAD). Based on its superb display of marketing graphics and design, it was the beauty of this website that lead to an average of 12.3 billionhits every month (Lee & Kozar, 2006).

It is worth to mention that eTourism market in France had reached €6.57 billion in 2008, which represents 23% of development, compared to 2007. In this context, eBusiness in the field reached 47%, including all operating activities. Internet users for tourism reached 17 million; they spent 18% of their tourist budget online (Malaysia's Websites the Model of E-tourism, 2007).

Although Algeria has many attractive tourist potentials which can make her

rise to the ranks of the important tourist destinations in the Mediterranean Sea and the world, there are major challenges in front of Algeria to exploit these potentials to meet the requirements of global markets and keep up with the trends. To achieve this goal, the Algerian government adopted in 2008 a strategy to promote tourism to the very prospects of 2030 based on the support reception structures and work on improving services to international standards. Despite the natural potentials owned by Algeria, it is still far to attract tourists from different countries of the world. Many experts asserted the need to redraw the plan of developing tourism in Algeria, creating a competitive advantage, and the need for the embodiment and foundation of a strong tourism and promoted as a tourist productive and durable destination.

The material resources alone are not enough to attract tourists, but several conditions must be provided by creating excellent tourist poles that respond to international. So, in order to improve tourism and tourist destination, Algeria should give a great importance to ICTs and exploit them effectively for the sake of improving tourism industry and promote sustainable development of tourism in the country to be an excellent tourist pole in the region. This paper analyzes how ICT can be a veritable tool for tourism sustainable development in Algeria. Also, it proposes Al Djazaer Siyaha, as a web program model for improving information and tourist services' quality in the eTourism industry.

This is a non- experimental and explorative study, which focuses on Information and Communication Technology (ICT) with particular concern on its effects on tourism development in Algeria. The main aim of this work is for appreciation of how ICT and tourism influence one another. On the other hand, it also hopes to highlight the need for stakeholders in tourism to take this rampaging technology into cognizance and see the need to harness it for sustainable tourism in the country. Specific attention is being focused on internet-based Information and Communication Technologies (ICTs).

LITERATURE REVIEW

Nowadays, with the technological revolution, ICTs have had tremendous impacts in all industries and sectors, as well as, specific businesses. The impact of ICTs on businesses relate to the facilitation of communication with organizational stakeholders, serving as an effective sales channel, providing an effective platform for engaging in marketing and others. It is not withstanding that the tourism industry has also been influenced by the integration of ICTs. This; in fact, has been largely acknowledged in the literature.

Alisha & Frew (2010) carried an investigative study into the use of information and communication technology for sustainable tourism development. They examined how ICT can be used in the management of sustainable tourism. They presented an array of ICT-based tools/applications for use by destination managers and discussed the opportunities in destination management for applying ICT to Sustainable Tourism Development.

Ogbu, Idris & Ijagbemi (2011) analyzed how ICT can better improve the tourism sector in Nigeria. They demonstrated various ways by which ICTs have been adapted for the course in tourism. In their work, it was revealed that almost every tourism product can be sold online without the consumer necessarily visiting the place before making any choice since tourism products are not already manufactured goods. Booking of flights and hotel reservations can be done online through e-mail,

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telephone calls and other internet services thereby helping to reduce if not remove entirely the time-wasting processes of the old system.

Toumi & Kherif (2011) believed that e-marketing for tourism has been of paramount importance, especially with the explosive growth in new technologies and the increasing use of the Internet. Since it has become the most competitive area in the tourism marketing environment, they illustrated the importance of the fact that organizations of tourist services should to competitiveness in the field of using new sources and new channels of tourist information to provide the best quality of services in order to achieve the satisfaction of the customers.

Nabil Aid (2013) investigated on eTourism in Arab countries and discussed the role of ICTs in promoting and developing tourism sector. According to him, Arab governments should highly exploit ICTs to improve e-applications for tourism industry relying on e-marketing strategies to have sustainable tourism and support world tourism competitiveness to attract tourists and tourist investments.

Karimidizboni (2013) examined the role of information technology in the tourism industry in Iran by presenting some solutions about it. Due to popularity of internet demand, many tourist organizations, such as hotels, airplanes, and travel agencies, have changed by applying the Internet as an important part of communication and marketing strategies. Searching Information that is important part of buying decision-making process, evolved as an internet achievement. ICT not only reduces the risks of receiving and uncertainty, but also increases the quality of travel.

REASONS FOR ADOPTING ICTs IN THE TOURISM INDUSTRY IN ALGERIA

Setting up a well-recognized framework for eTourism will support harmonized development of the industry. Accordingly, e-TF is also playing a fundamental role in the distribution of tourism information and sales. Increasing proportion of users are buying services on-line, in this sense, online booking and reservation services have been widely accepted among both leisure and business travelers to a degree where it is true to say that “e-tourism” has taken off and the touristic sector will gain a larger and larger share of the online commerce market. Recently, Mr. Ghouti, Adviser at the Ministry of Tourism, has revealed that an agreement was signed between his ministry and that of Post and ICT to develop an e-TF to support future economic operators, hoteliers, travel agencies to integrate tools for virtual tourism marketing (Castells, 2001).

This decision falls well with the expectations of the promotion of tourism sector that were proposed by JF Schmidt, university and French marketing expert, who recommended that in Algeria, e-tourism can be set in accommodation with tourist capabilities. He believed that “the effectiveness of the internet is the simplest tool and rich opportunities for global tourism action plan”. In reviewing the data on the virtual marketing and tourism demand in France, the expert found that “60% of the French prepare their travel via the Internet”. This means that the new promotional marketing virtual media has its place to “provide pallets of new tourist products” (Castells, 2001). As far as Algeria is concerned, he asserted that “the destination can be enhanced but only to regions that convey imaginary sites for tourists who want to get there. “Best examples can be taken from Morocco, Cuba, and Australia that illustrate new data for e-tourism and contribute to the influx of tourists in these regions. In order to implement e-TF, the three following basic necessary steps are

required:

- Tourism data collection (Offers, prices, maps, reports, etc)
- Digitization of data collected using various technological means
- Dissemination of information electronically via WAP, across multiple electronic media, and in several languages (Castells, 2001).

The quality of tourist services will only be made available through the use of ICT in various fields of tourism and hospitality; such as, planning, promotion, marketing, booking, contracts, and financial settlements. Also, the World Trade Organization (WTO) and other governments have emphasized on the importance of using ICT in the tourism sector and hospitality. It is no longer an option, but it has become a basic building block in tourism development. So, eTourism is not seen as competitor to the traditional tourism, but it is considered as a complementary to it, and necessary for the development of the tourism sector (E-Marketing for Tourism Promotion in Algeria, 2010).

This integration can be as follows:

- Tourist services, of various kinds, rely heavily on circulation of tourist information, characterized by difference and contrast, and therefore difficult to measure its quality. So, there is the Internet which is appropriate center to them. It reduces this discrepancy by virtual visit to the tourist service so that the user can identify landmarks and areas easily through interactive images of the site and search the data and detailed information on tourist areas to be visited.
- The use of ICTs enables to reduce the cost of producing tourist services. It contributes in promoting tourism. On the other hand, ICT operates to reduce costs, especially those related to contacts, and those related to the distribution.
- Expand in the use of ICTs may lead to the emergence of potential needs that did not exist before, and this obliges workers in the tourism sector to develop a variety of new products in order to meet the needs of potential (Buhalia, 2003).

Also, among the factors which push and incite policymakers to use ICT, we can cite the followings:

- ✚ The desire of business managers in the sector to define their work, products and services presented to tourists and how to contact them more quickly and at lower cost.
- ✚ Electronic publishing of the information concerning both tourism and hospitality institutions which the tourists want to know about without going to the tourist organization.
- ✚ Providing special services for tourists in terms of speed and ease, via the Web and e-mail.
- ✚ Attract new tourists who are connected to the internet.
- ✚ Dissemination of tourist information to the tourists in a timely manner; any delay in the publication deadlines will affect the value of information. Advertise tourist products and services online so as to attract a large number of tourists.

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- ✚ Allow tourists to book via the Internet. Being present everywhere and display compatibility with the requirements of tourists.
- ✚ Being a pillar of innovation and development and creating new products, services, and markets.
- ✚ Provide a variety of services for tourists fastly (E-business watch, 2005).

HOW CAN ICT BE A VERITABLE TOOL FOR TOURISM SUSTAINABLE DEVELOPMENT IN ALGERIA?

Information and communication technologies are driving forces in the current information driven society. It facilitates trading partnership with other industries, provide facilities, distribution of product and services, provide information online to consumers in order to plan their trip, create a new business environment and also help tourism professionals to define the boundaries of the proposed tour site and its surroundings. It gives information on weather, altitude and other information to pilot on board. It helps tourist on air to communicate during emergency and also to other pilot on airplanes with traffic control station. Information is very important at every stage in the sales cycle of the tourism product (Pollock, 2005). Information must be able to flow quickly and accurately between the client, intermediaries and each of the tourism suppliers involved in servicing the client's need.

The amalgamation of computer and telecommunications has become an almost universal feature of the tourism industry (Bennett, 2003). Its power allows information to be managed more effectively and transported worldwide almost instantly (Frew & Pringle, 1995). As a result, it had and continues to have a major effect on the methods of operation in the tourism industry. However, it has not affected all functions and sectors equally. It has the greatest impact on the marketing and distribution functions. Airlines use technology to manage and streamline their operations and gain strategic advantage. Information technology has reshaped our commerce and society in general (Poon, 2003). Goods and services are provided to the consumers online (e-commerce, e-governance, e-banking) to mention but few.

Tourism enterprises need to understand, incorporate and utilize ICT strategically in order to serve their target markets, improve their efficiency, maximize profitability, enhance services and maintain long-term profit (McGuffie, 2004).

As far as Algeria is concerned, it is still, like most Arab countries, suffering from a lack of tourists due to several reasons; such as, security problems, poor technological Telecom Infrastructure, and the banking financial system is still crisp and closed; these are causes are weakening tourism in Algeria, as indicated by reports of World Tourism Organization.

Within the Algerian web tourism portal, there are a number of sites, belonging to both public and private sector, including the leading tourism portal called [_www.algeriantourism.com](http://www.algeriantourism.com) which provides direct contacts and bookings with several travel agencies, airlines, and hotels. The website also displays all the information relating to tourist trips organized successively in Algeria. Moreover,

the National Office of Algeria (ONAT) provides information about tourist sites classified by UNESCO. It also contains contact information of national tourist agencies, and to other tourist enterprises in the country- hotels, restaurants, camps, museums and tourist hangars. However, despite all this information, the web portal is not dynamic and lacks interactivity and linking the various actors in the tourism sector, especially hotels, and travel agencies.

AL DJAZAER SIYAHA: A PROPOSED MODEL FOR IMPROVING INFORMATION AND TOURIST SERVICES' QUALITY IN THE ETOURISM INDUSTRY

E-Tourism comprises a number of services provided by information and communication technology for the completion and promotion of tourism services and hotel across different networks, depending on the principles and foundations of e-commerce. In fact, the term goes further to include tourism mobile (m-tourism) that is used for electronic devices; such as, mobile phones. Thus, ICTs have been exploited in the construction and establishment of tourist entities which require a certain degree of technological know-how knowledge of patrons (Buhalis, 1998).

It contributes in a large volume to the electronic commerce where profits in this sector have exceeded \$89 billion in the world in 2004. In France, for instance, e-tourism reached 45% in 2005 of the e-commerce volumes. According to reports of the Arab Tourism Organization, 40 percent of the total numbers of tourists, globally 938 million tourists, have used electronic tourism services to either inquire or purchase travel and reservation services. The number of visitors to Orbitz.com amounted to 35 million, Yahootravel.com 80 million visitors, and expedia.com 50 million visitors.

Besides, it acquires 24% of the proceeds of various online electronic ads. According to *Forrester Research*, the e-tourism revenues of air and maritime travel tickets, online hotel reservations, and car rental for the year 2008 reached \$32.8 billion, compared to \$16.4 billion in hotels revenues (Buhalis, 1999).

Taking into account these data about the importance of e-tourism in promoting the tourism industry in Algeria, the authorities should be aware of the necessary use of ICT in tourism sector to improve tourism and make a dynamic sector in the economy. Therefore, Algeria should develop an eTourism Framework (e-TF) which is a market driven project with a balanced consortium of ICT professionals and tourism professionals whose expertise allows analyzing market needs, issue jobs and tourism training guidelines.

In order to fulfill the needs and demands of foreign tourists who intend to visit Algeria, the proposed model of *Al Djazaer Siyaha* (Algeria Tourism), which is an eTourism Internet program, must consider all relevant touristic factors. The proposed model for eTourism is divided into two sections. The first comprises web portal with online business services provided by the Ministry of Tourism, tourist agencies, and tourist enterprises to foreign tourists. The second section contains five variables of information quality leading to tourists' satisfaction and trust of the tourist online services. **Figure 1** illustrates the proposed model.

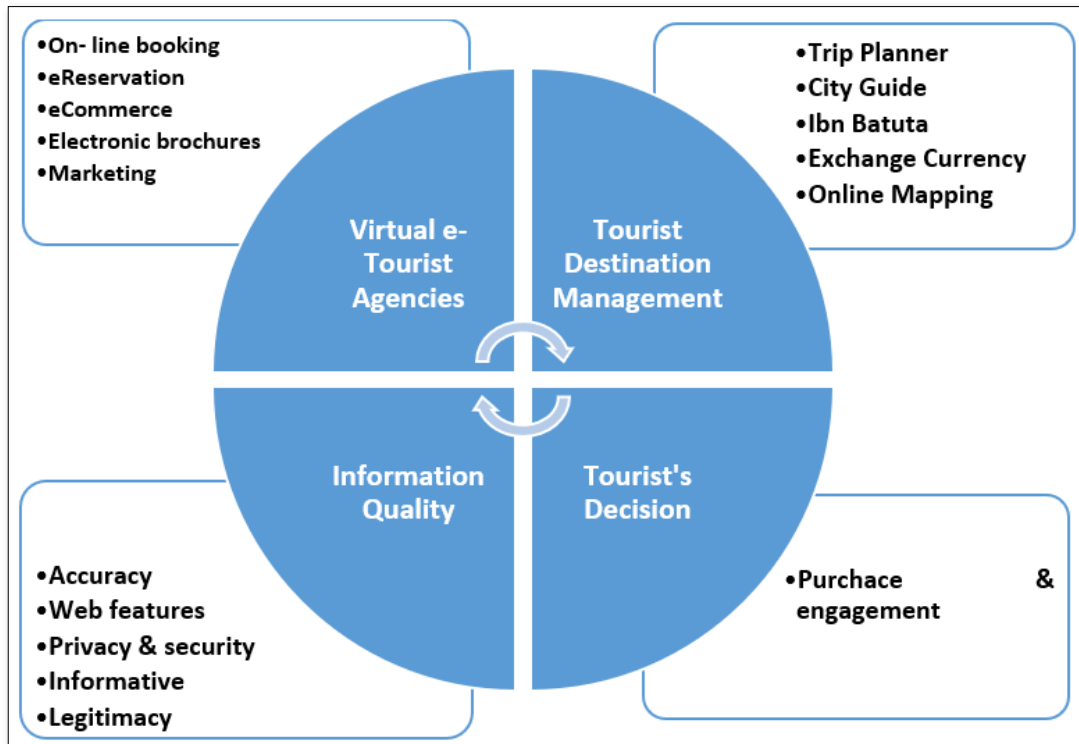


Figure 1. The proposed eTourism model Al Djazaer Siyaha (Algeria Tourism).

As seen above in **Figure 1**, the web program acts as tourist product provider. Tourist agencies exist primarily as intermediaries between suppliers of travel services; such as, airlines and hotels, and customers. The way of doing business in the tourism industry has been changed dramatically due to the development of information technology (Weaver, Backman, Cater, Eagles & McKercher, 2001). The rapid growth in the size of the e-travel service business is clear evidence of this. The Internet has become one of the most important platforms for travel-related service entrepreneurs to provide services and communicate information with their target customers. The number of travel-related websites has grown rapidly during the past decade, and the competition has become more intensive than ever. To survive, or even succeed, entrepreneurs need to be customer orientated. An e-service company should see things through customers' eyes, realize their needs, and design an online service system that can meet customers' expectations (Dolnicar & Laesser, 2007).

For instance, ICTs have revolutionized the business of travel in Spain. Booking 5.8 billion euros (\$7.9 billion) in online reservation in 2008, virtual travel agencies accounted for roughly one-third of the overall travel sector's revenues. Rather than losing ground during the economic downturn, online agencies managed to maintain revenue growth, albeit at a modest 2.7%. The data for virtual travel agencies in Spain is very positive: More than half of the money spent on travel and hotel reservations is via internet transactions, according to a 2008 report by DBK, a consulting firm. In addition, 53% of people are buying online reserve their travel, lodging and tickets for special events (Álvare, 2010).

In Algeria, traditional tourist agencies should make investments relating to technologies to ensure their long-term strategic viability. Besides, since traditional

tourist agencies have created unique values on their significant co-specialized assets and provision of value-added services for customers, thus competitors or new entrants might not be able to follow these.

Virtual etourist agencies

Al Djazaer Siyaha provides tourist agencies with several business approaches to get on the Internet:

- ✚ **Alliance with technology provider:** This is a one-stop solution for those traditional tourist agencies without any experience in electronic commerce technology. E-Commerce applications will be developed by one technology provider. This enables tourist agencies to acquire the most desirable ICT assets, and then combine them with their own expertise assets for assuring the success of its online products.
- ✚ **Portfolio partnering:** One technology provider may not be able to suit the needs of a tourist agency, especially for those who have various range of products and business in global market. In this case, it is more flexible to have partnership with different technology providers to get all the advantages of their IT assets.
- ✚ **Develop ecommerce technologies:** Traditional tourist agencies may invest to build their own electronic commerce technologies and get patent on it.
- ✚ Develop interactive virtual e-tourist agencies in Algeria with useful services such as:
 - A) Photos:** In the virtual web site, the travel agency should post much updated photos about the country: tourist sites, places of destinations that the Algerian e-tourist agencies tend to transport tourists to. This will promote eagerness in in both foreign and domestic tourists to travel and see the magnificent tourist places.
 - B) Webcasts:** A webcast is a media presentation distributed over the Internet using streaming media technology to distribute a single content source to many simultaneous listeners/viewers. A webcast may be distributed either live or on demand. Essentially, webcasting is-broadcasting over the Internet. The Algerian e-tourist agencies should benefit from this streaming technology by posting live videos about the different tourist locations and sites in Algeria as way of introducing the country to tourists. The videos should not only focus on the geographical sites, but also should include customs and traditions, such as marriage, wedding, fiancée and festival celebrations. However, the videos should not only concentrate on these customs and traditions but should also focus on other tourist potentials in Algeria; such as, national parks discussed above and the different activities that can be practiced there so that to fully attract the visitors and introduce the culture of the country. These videos will attract most tourists.
 - C) Electronic brochures:** Electronic brochures provide the ideal mechanism for delivering detailed information via e-mail and the web. They are especially useful for providing more comprehensive information than you might want to show on a Web page. Electronic brochures have many advantages, including:
 - Design fidelity is maintained across computer platforms.
 - Information is delivered to customers instantly.
 - Recipients can view or print documents.
 - Your printed branding standards are fully maintained.

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- Electronic brochures can be indexed by most search engines, extending their reach and value.

As far as Algerian e-tourist agencies, they should give more importance to electronic brochures. These should include every information regarding the services- provided by the tourist agency, tourist sites, and activities in Algeria to make tourists more interested in visiting our country.

D) Ebookings and ereservations: EBooking means making a reservation for a service via the Internet. It is also known as computer reservations system which is used to store and retrieve information and conduct transactions related to travel. Algerian e-tourist agencies can benefit from the eBooking system to help tourists' book for their airline tickets or for their hotel reservations. So, via eBooking system, they should rely on data base information of gateways for airlines, hotel, rental cars, and other services as well as airline tickets so that consumers will be accessible. Through this online system, tourists can interact with the travel agent, book online, and pay online also and get the receipt of their payment. They can pay online through credit cards, or through money transfer system.

Tourist destination management

A local tourism destination is a physical space in which a visitor spends at least one overnight. It includes tourism products; such as, support services and attractions, and tourism resources. It has physical and administrative boundaries defining its management, images and perceptions defining its market competitiveness. Tourism destinations incorporate various stakeholders, including a host community, and can nest, and network to form larger destinations.

Buhalis (2000) defined the term as "A unique entity, with a political and legislative framework for tourism marketing and planning". Tourism destination management systems are considered to play an increasingly important role in achieving and maintaining tourism sustainability. Tourism destination management can be regarded as a collection of multi-agent processes involving a wide range of stakeholders. It can apply many techniques, strategies and processes to shape the development and daily operation of tourism related activities. In the context of *Al Djazaer Siyaha*, the Algerian eTourism web program, tourism destination management can provide foreign tourists with various methods and applications to organize their trips successfully. These can be cited below as follows:

Trip planner: This tool has been available on the web since 1998. When used in *Al Djazaer Siyaha*, it offers foreign tourists with immediate pricing for complex international itineraries without rule restrictions, limited standard routes or the need to articulate dates for every flight on your trip while you are in the planning stage. In addition, Trip Planner helps tourists with the ability to organize their trips by assembling database of special services and fares available exclusively and offered by tourist agencies. This; in fact, creates a competition between tourist agencies to attract most of foreign tourists. Meanwhile, foreign tourists will find it easier to plan their trips, while visiting Algeria, in collaboration with tourist agencies.

City guide: It is a book of information about a place designed for the use of visitors or tourists. In the case of the Algerian eTourism web program, City Guide usually

includes information about sights, accommodation, restaurants, transportation, and activities. Maps of varying detail and historical and cultural information are often included.

Ibn Batuta: Working as tourist guides in tourist agencies, they are made visible, through their online profiles, to foreign tourists. In case a foreign tourist needs a tourist guide for his tour in Algeria, it is up to him to choose one from the list the most available, appropriate, and convenient to him. In this case, *Ibn Batuta*. i. e. the tourist guide, chosen by the foreign tourist will assume the success of the trip through his knowledge and management skills.

Exchange currency: As foreign tourists need money to exchange in the visiting country, the web program will provide them with this ability through daily updates of currency exchange.

Online mapping: Algerian e-tourist agencies should also focus on online mapping which is a way of using maps online to provide a number of functions. They should provide maps about locations of the different tourist sites, their locations, the roads, the cities, the villages, and places of different activities conducted. They should turn to the Internet for more personalized information. So, through online mapping, tourist agencies will be able to make maps for individuals based on their particular needs. Thus, the map is much more than a graphic of roads; it is a custom-made printing specifically based on a desired route.

INFORMATION QUALITY

There are five criteria that comprise the information quality level of Al Djazaer Siyaha, eTourim Web Program, to determine its validity. These are as follows:

- ✚ **Accuracy:** It is an important principle in tourism industry that promotes trustworthiness, honesty, sincerity, and truthfulness. Information accuracy depends on content reliability and validity, which leads to users' trust on the web program.
- ✚ **Web features:** The use of web design, functions, and languages improves the usability of the website that attracts users. The graphic used, colors, the way information arranged in the website are the important elements that can attract visitors; in addition to the design that should represent the content's theme. It should be interactive, have easy navigation features, and promote relevant hyperlinks to motivate users, and; therefore, lead to engagement decision. Therefore, the Djzaer Siyaha should be of a quality, a very good structure, interactive, provided search engine with quick option and downloadable audio, video, and documents. In addition, it should support visitors with customer-oriented decision support system to help them make choices to increase the success of the business.
- ✚ **Privacy and security:** Customer have the right to ensure that data that provided to the e-tourism website while performing any transaction are protected from any potential harm. Privacy policy, information protection policy, clear payment and refund procedures must be included in the website in order to gain visitors' trust.
- ✚ **Informative:** Customer purchase and engagement decision should be enhanced by the fact that quality of the information contains all necessary information and linked to the relevant source of information. The information must be up-to-date, complete

and useful to the web visitors.

- ✚ **Tourist decision (purchase & engagement):** Tourist decision in e-commerce is highly depending on the information quality of the website. Therefore, the aforementioned factors of information accuracy, web features, security and privacy, and informative characteristics will directly influence tourists' decision in eTourism web portal.

CONCLUSION

ICT evolves constantly by providing new tools for improving the tourism industry. It promotes interactivity between tourism enterprises and consumers, and as a result, it contributes in developing, managing, and marketing tourism products. This paper has discussed the situation of Algerian tourism and proposed ways of improving sustainable tourism in the future. The key change resides in investing and exploiting the huge potentials of ICT by Algerian tourist agencies to improve tourism industry and turn it into a productive sector. Through ICT, tourist agencies can be in full interactivity with tourists: Providing them with data and special offers and helping them with eBooking and online payment. Tourist facilities through the internet are useful to tourists and help them to better plan for their trips.

Therefore, ICT will raise opportunities and provide huge advantage for tourist agencies to enhance their innovation and competitiveness; the future of eTourism will be focused on ICT that will enable organizations to focus on their profitability through a network of partnerships. Therefore, ICT will bring some important changes in the tourism industry such as:

- eTourism will replace traditional tourism
- tourists will give more importance to eBookings and eReservations
- Interactive multimedia will be the key element in tourism marketing
- Webcasts and electronic brochures will raise eagerness in tourists and motivate them to organize tours to visit the different tourist sites and destinations they saw in live cameras.
- Tourist products will be available online through ICTs.
- ICTs will raise competitiveness among tourist agencies in Algeria in providing the different services and the best special offers.

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