

E-Tourism and Its Prospects for Enhancing Sustainable Development

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Received: 10/02/2026 Accepted: 20/06/2026 Published: 30/06/2026

Abstract: Tourism is one of the most important economic sectors on which countries rely to support development pathways, due to its ability to stimulate investment and create job opportunities. The digital revolution and the development of information and communication technologies have produced a radical transformation in the tourism industry, giving rise to a new pattern known as e-tourism, which has become an effective tool in promoting sustainable tourism. This research paper aims to shed light on the concept of e-tourism and to clarify its importance in supporting sustainable development, while anticipating its future prospects, particularly in the Algerian context. The study relies on the descriptive-analytical method by analyzing relevant concepts and applied models. The paper concludes that e-tourism represents a strategic tributary for achieving sustainable tourism development, provided that digital infrastructure, an appropriate legal and regulatory framework, and the activation of electronic planning and marketing tools are made available.

Keywords: e-tourism; sustainable development;; e-marketing; geographic information systems.

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Introduction:

The tourism sector has witnessed profound transformations in light of the rapid development of information and communication technologies, which have produced new tourism patterns that have strongly imposed themselves on the reality of tourism activity, foremost among them e-tourism. This pattern is no longer a complementary option but has become a developmental and strategic necessity that states seek to adopt in order to enhance the competitiveness of the tourism product, improve service quality, and provide real-time information to the various actors in the sector.

In this context, e-tourism has emerged as one of the modern approaches to achieving sustainable tourism development, as it contributes to the rational use of tourism resources and strengthens the economic, social, and environmental dimensions of development. Many countries, including Algeria, seek to adopt this orientation by developing digital infrastructure and updating the regulatory and legislative frameworks related to tourism activity in a manner consistent with the requirements of the digital economy.

I. Sustainable Development :

The concept of sustainable development is considered one of the modern concepts in the field of environment and economic development, which has grown as awareness of environmental and social issues increased in order to revive the economy and adjust opportunities for equity. The United Nations Development and Environment Programme defines it as: "development that meets the basic needs of all and expands the opportunity for society to satisfy their aspirations for a better life and to spread values that encourage consumption patterns within the limits of environmental capacities that society reasonably seeks to achieve."¹

¹ Abdel Rahman Al-Ayyeb, *Comprehensive Performance Control of the Enterprise in Algeria in Light of the Challenges of Sustainable Development*, PhD dissertation, University of Sétif, Algeria, 2011, p. 12

Advanced tourism countries seek to set long-term plans and studies to create a kind of stability for this sector; they have come to adopt comprehensive policies that extend over a medium or long time horizon while avoiding short-term development plans. Thus, developing the tourism sector through sustainable development has been reflected in international or regional agreements and charters such as the European Charter for Regional Planning and the “Manila” report related to heritage, which stated in 1988 that tourism is capable of providing suitable conditions; and within global research conducted by the new international organization it was noted that tourism can play a positive role in creating balance and cooperation among countries.¹

It meets current needs and aims to satisfy the requirements of tourism and tourists, taking into account the scale of tourism activity and the various dimensions of sustainable development collectively. Accordingly, we say that sustainable tourism requires political choices in addition to economic, social, and environmental aspects, and it also requires a broader vision and in-depth planning. To achieve and implement sustainable tourism development, the following are necessary:²

1. The presence of entry centers at tourist sites to organize the movement of tourists and provide them with necessary information.
2. The necessity of visitor centers that offer comprehensive information about sites and provide essential guidance on how to interact with the site; it is preferable that local residents, trained in site management and handling natural data, staff these centers.
3. The necessity of laws and regulations that ensure control over the number of incoming tourists, secure services and information for them, and provide safety and protection without causing any environmental harm.

¹ Economic and Social Council, Draft Report on Contributions toward Defining National Tourism, Sixteenth Session, United Nations, November 2000, pp. 56–57.

² Abdel-Baset Wafa, Sustainable Tourism Development between Strategy and Contemporary Global Challenges, Dar Al-Nahda Al-Arabia, 2005, p. 57.

4. The necessity of sound management of natural and human resources in the area, capable of preserving these endowments for future generations through trained human elements.
5. Environmental awareness and education by first educating local residents about the importance of the environment and its preservation; often local residents are those who seek to damage and destroy their environment for material reasons, not realizing that they are destroying their livelihood and their children's future. Therefore, emphasis must be placed on environmental awareness and education for local residents and site workers, with attention to the presence of informational signs that stress this importance.

Determining the carrying capacity of the tourist site, so that the number of tourists arriving in the tourist area is set without congestion and overcrowding, so as not to affect the natural and social environment on the one hand and the tourists on the other, who should find an attractive environment that provides them with services and activities

II. E-Tourism :

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II.1- Concept of E-Tourism

The concept of e-tourism is considered one of the modern concepts in tourism science that strongly overlaps with the concept of e-commerce; its beginning dates back to the emergence of the World Wide Web and the entry of the Internet into the global trade market.

The International Organization defines e-tourism as: "those services provided by information and communication technologies for the purpose of performing and promoting tourism and hotel services across various open and closed networks, relying on the principles and foundations of e-commerce; in reality its concept goes beyond that, as it even includes mobile tourism (m-tourism) used for mobile electronic devices such as mobile phones, personal digital assistants, and

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others. Thus, information and communication technologies are used by all companies in the tourism sector — institutions, bodies, and individuals — and this technology may be exploited in constructing and establishing tourism entities whose operation also requires a certain level of technological knowledge among their operators, such as smart hotels that rely in their construction and management on modern technologies.”¹

It refers to “the use of electronic commerce in the field of travel and tourism to obtain more effective facilitation for tourism suppliers and consumers. E-tourism encompasses all tourism operations, from offering tour programs and booking and organizing tours via the Internet and applications linked to information and communication technology. E-tourism is a tourism pattern in which offers of tourism services converge with the desires of tourists who wish to accept these tourism services through the Internet.”²

It is also defined as: “those services provided by information and communication technology for the purpose of executing and promoting tourism and hotel services across various open and closed networks, relying on the principles and foundations of electronic commerce³.”

From this standpoint, it can be said that e-tourism comprises all activities related to tourism transactions, foremost among them advertising tourism services on the

¹ Basel Marwan, *The Tourism Sector in the Context of Globalization*, Dar Al-Hanaa for Publishing, Lebanon, 2008, p. 18.

²Touaibia Ahmed, *Electronic Tourism as an Approach to Promoting the Tourism Sector*, Working paper presented at the Eighth International Conference entitled: *Tourism Development as a Renewable Source of Financing to Combat Poverty and Underdevelopment in Algeria and Some Arab and Islamic Countries*, Tamanrasset, Algeria, 19–20 December 2009, pp. 201–202.

³ Bakhti Ibrahim, &Shaoubi Mahmoud Fawzi, *The Role of Information and Communication Technology in the Development of the Tourism and Hospitality Sector*, article published in *Al-Bāhith Journal*, Issue No. 7, 2009/2010, p. 276.

Internet through virtual stores or online sales sites; exchanging information and interaction between tourism service providers and the tourist; concluding deals and contracts via the Internet; settling financial obligations through electronic payment means; distributing and delivering tourism services and following up procedures either via the Internet or through conventional channels. This makes e-tourism broad enough to include all information or services that tourism companies provide to other companies or that tourism companies provide to the consumer via the Internet or other electronic communication means that fall within the scope of tourism. Practically realizing e-tourism requires four basic stages, which are¹:

- Collecting tourism data (offers, prices, maps, reports, etc.).
- Digitizing the collected data using various technological means.
- Publishing the collected information electronically via the web and through multimedia electronic media, and in more than one language.
- Providing agencies, offices, and tourism and hotel institutions with a networked Internet connection and electronic mail in addition to telephone and fax.

Electronic services in the field of tourism and travel have developed, such as online booking, electronic ticket sales, and other services via websites and other information and communication technology means. In this regard, the official launch of “a new electronic portal aimed at promoting the Algerian tourist destination” was announced. The Minister of Tourism explained at a meeting held on the occasion of World Tourism Day under the slogan “Tourism and Digital Transformations” that this portal (in three languages: Arabic, French, and English) introduces Algeria’s tourism diversity, the main available destinations, travel agencies, hotels and classified restaurants, types of transport, alongside highlighting culinary arts and the richness of traditional crafts.

¹ Bakhti Ibrahim, &Shaoubi Mahmoud Fawzi, *ibid.*, p. 277.

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Mr. Ben Massoud indicated that the Amazigh language will soon be “included in this portal after signing a framework agreement with the High Commission for Amazighity,” recalling in the same context “the implementation of a special program to expand digitization to support cooperation and the relationship between the administration and the citizen,” and the imminent completion of “an electronic tourist guide in the form of a mobile application” with the participation of “startups run by young people who present creative ideas in travel and in promoting the Algerian tourist destination¹.”

II.2- Importance of E-Tourism and Factors of Its Development:

E-tourism, in its broad sense, is the fruit of highly advanced scientific achievements across many interrelated fields; it is the result of a series of developments, especially the revolution in information and communication technology that moved humanity from the traditional era to the information age and the knowledge-economy society. It offers substantial benefits to the national economy, the most important of which are:

- Providing tourism information 24 hours a day, 7 days a week, which facilitates the tourist consumer's access to the information and data they need about tourism services via the Internet, which allows multiple forms of written and visual information through visiting the site, browsing the product itself, or even enabling the tourist to design the tourism program they desire without being bound to a prearranged itinerary and according to the cost they can afford.
- Reducing the costs of provided tourism services, thereby giving the tourism product a comparative advantage due to lower prices; the use of e-tourism can reduce tourism marketing costs through electronic mail.

To achieve quality in tourism services, modern information and communication technology must be used in various tourism fields, for several reasons summarized as follows²:

¹ <https://elwassat.com/national/7198>

² Bakhti Ibrahim, &Shaoubi Mahmoud Fawzi, The Role of Information and Communication Technology in the Development of the Tourism and Hospitality Sector, op. cit., pp. 280–281.

- The desire of sector workers to introduce their work, products, and services to many tourists and to provide faster and cheaper means of contact when needed.
- Electronic publication of all information related to tourism organizations and the services they provide, which tourists wish to know without traveling to the tourism institution.
- Attracting a new category of tourists who are connected to the Internet.
- Publishing tourism information to tourists in a timely manner, since any delay in publishing leads to the loss of that information's relevance.
- Advertising and promoting the organization's products and services to attract the largest possible number of tourists.
- Allowing tourists to make reservations via the Internet (electronic commerce).

Enabling the provision of fast and diverse services to tourists.

II.3- Requirements of E-Tourism in Algeria: Information technology is the fundamental pillar for building a digital economy that keeps pace with global developments and accesses the world of electronic commerce; however, e-tourism in Algeria is weak compared to other countries as a result of the weakness of e-commerce. Therefore, a number of pillars are required for the construction of a sustainable tourism industry, and perhaps the most important requirements for the growth and development of e-tourism are the following:

- Availability of an institutional and regulatory framework:

This concerns the existence of a governmental or private institution that adopts e-commerce systems, as well as partnerships between the private sector and civil society that help create a conducive environment for project implementation. Governments, represented by the Ministry of Tourism and the relevant bodies, can provide financial support to companies and tourism intermediaries to use Internet applications, supply databases on tourism resources, and support websites.

- Availability of a defined legal framework at both international and local levels: E-tourism is an integral part of international trade operating within the General Agreement on

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Trade in Services of the World Trade Organization¹, within an integrated legal system that imposes legislation and regulations organizing the work of institutions and tourism agencies in line with what e-tourism requires, such as electronic payment, electronic signature, and other electronic transactions. In addition, specific legal legislation should be established to regulate the work of tour guides, including a statement of their obligations, working conditions, and the level of knowledge required of those practicing this profession, taking into account sufficient familiarity with modern technological means and handling computers and the Internet network as the real tool of e-tourism.

- **Advancement in information technology:** E-tourism depends on a modern and advanced communications base to provide broad opportunities for access to Internet services. In addition, it is necessary to encourage the emergence of the electronic ²intermediary in the tourism sector by promoting the establishment of a network of parallel websites for all actors in the tourism sector — in hospitality, airlines, travel agencies, tour guides, and other tourism work sectors — in cooperation with traditional intermediaries in tourism, as both complement each other. It also requires creating new models of institutions and bodies dedicated to tourism activation that base their work on advanced websites on the Internet and providing technical and informational support for these sites. These sites must be designed according to internationally recognized standards so that they can compete with other tourism sites in other countries.

- **Availability of e-commerce:** Algeria must take the necessary measures to develop e-commerce for airline tickets and services, hotel services, transport and car rental companies, and

¹ See: Iqbal Jassim Jaafar, *Electronic Tourism and Its Impact on the Development of the Travel and Tourism Industry: The Experience of the United Arab Emirates (A Comparative Study)*, Arabian Gulf Journal, Vol. 46, No. 3-4, 2018, p. 164.

² Iqbal Jassim Jaafar, *ibid.*, p. 165.

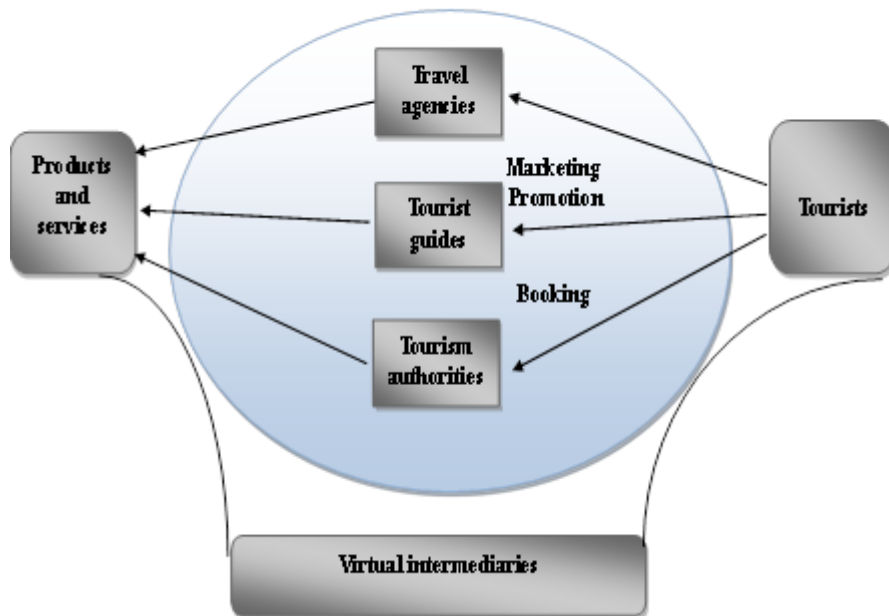
tourist restaurants by using automated reservation systems via the Internet, updating electronic banking payment methods, expanding the use of credit cards, and promoting information culture.

- **E-marketing:** E-marketing offers many advantages for tourism, primarily by providing the information and data that tourists need about destinations and the services offered, and it gives a wide marketing opportunity for tourism websites to attract tourists.

- **Websites:** Websites of all kinds are a fundamental factor in presenting the true image of Algerian tourism and strengthening Algeria's destination, although weakness still prevails due to the absence of effective search engines, poor content, lack of modern applications, and absence of actual references, including the lack of introductory video clips for tourist destinations — photographs alone are insufficient. Websites also do not use awareness and educational tools for either tourists or citizens, resulting in a lack of diversity and attractiveness of the tourist destination. For example, social media platforms play an important role in guidance and image improvement in addition to raising awareness among residents and tourists. Below is a modern model of the tourism sector in the Internet

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era¹:

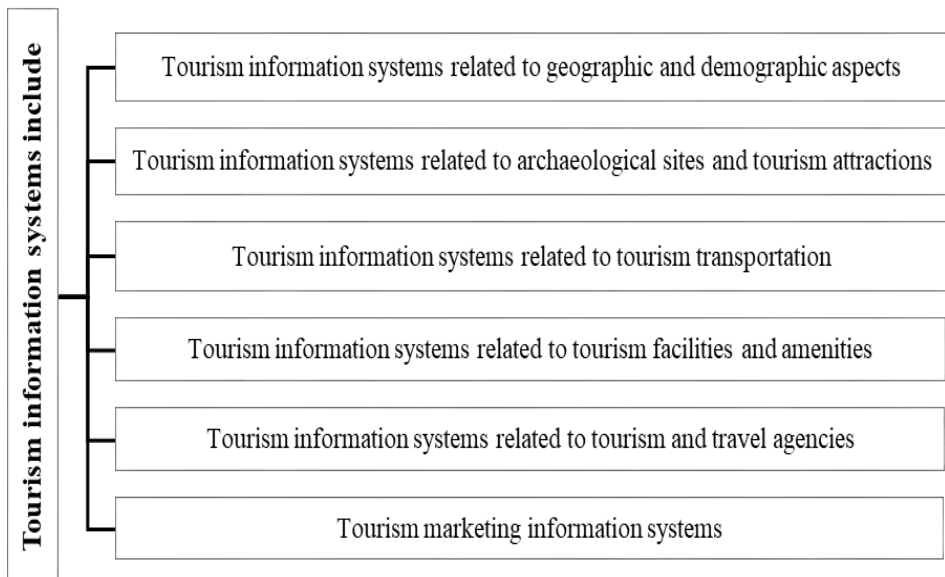


Among the effects resulting from virtual competition driven by the use of information and communication technologies is the emergence of new institutions serving the tourism and hotel sector, as is the case in other sectors that rely on this technology for their income. These include Internet infrastructure companies, online service institutions — including electronic intermediary institutions that seek to facilitate communication between tourism sector institutions and tourists via the network — and also financial and banking institutions on the Internet (electronic banks) through which tourism activity services can be paid for, such as booking airline tickets, hotels, car rentals, and others. There is no doubt that the

¹ Bakhti Ibrahim, &Shaoubi Mahmoud Fawzi, The Role of Information and Communication Technology in the Development of the Tourism and Hospitality Sector, op. cit., p. 279.

latter will contribute effectively to the development of the tourism sector¹.

Geographic Information Systems: is defined as the system that performs the tasks of collecting tourists' data via the Internet, classifying, analyzing, and distributing it, and using electronic tools and means to achieve that. Hence the importance of using GIS software in marketing tourist sites becomes evident².



III. Tourism Planning and Sustainable Development:

Tourism planning is defined as “drawing an estimated future picture of tourism activity in a given country over a specified period. This requires inventorying the country’s tourism resources in order to determine the objectives of the tourism plan and to achieve rapid and orderly tourism development through preparing and implementing a coherent program

¹ Bakhti Ibrahim, &Shaoubi Mahmoud Fawzi, *ibid.*, p. 283.

² Ahmed Mohamed Ahmed Omeira, *Building a Marketing Information System for Tourist Sites in Aqaba Governorate Using ARCGIS 9.3 Software*, Master’s thesis in Business Administration, Middle East University, 2011, p. 24.

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characterized by encompassing branches of tourism activity and the country's tourist areas¹." It plays a crucial role in developing tourism activity, since it is a scientific approach to organizing and managing tourism activity in all its elements and forms. Its advantages include²:

1. It helps tourism development to identify and conserve tourism resources and to make appropriate use of them in the present and future.
2. It helps integrate and link the tourism sector with other sectors, and to achieve the objectives of public policies for economic and social development at all levels.
3. It provides a suitable basis for decision-making to develop tourism in both the public and private sectors, through studying the current and future reality while taking into account the political and economic matters determined by the state to develop and activate tourism.
4. It supplies information, data, statistics, maps, plans, reports, and surveys, and makes them available to those who request them.
5. It assists in preparing detailed plans to raise the tourism level of some distinguished and lagging areas.
6. It helps establish appropriate foundations for implementing continuous development plans, policies, and programs by creating bodies and institutions to manage the activity.
7. It aids the continuity of evaluating tourism development and the ongoing progress in developing this activity, emphasizing positives and overcoming negatives in subsequent years.

Algeria has embarked on developing the tourism sector and has drawn up a plan to strengthen it and organize the work of travel agencies to improve the overall climate of the tourism sector, in light of developments in information and

¹ Al-Roubi Nabil, Tourism Planning, University Cultural Foundation, Alexandria, 1987, p. 65.

²Shamsin Nadim, Principles of Tourism, Tourist Geographical Association, Damascus, 2001, p. 82.

communication systems. It also aims to activate e-tourism by linking national tourism administrations electronically and coordinating among them regarding the presentation of information and electronically referring the visitor to tourism companies that adopt e-tourism as a marketing method for their tourism offers. The second phase consists of creating the infrastructure that enables tourism institutions in Algeria to complete commercial transactions and settle the amounts due, as well as enabling the tourist to purchase offers and pay for them electronically. In the final phase, integrated e-tourism is applied, whereby the entire tourism sector can benefit from e-commerce services and complete tourism financial transactions electronically, in addition to linking tourism with other commercial and economic activities in different countries¹.

In this context, the Algerian Ministry of Tourism and Traditional Industries established a website on the Internet; this site, TUOR ALGRE.DZ, includes many data related to the tourism sector in Algeria to introduce the visitor to Algeria's tourism components, and it contains a list of accredited tourism companies².

From the foregoing, we conclude that tourism development should aim to achieve a balanced and continuous increase in tourism resources, in addition to rationalizing and deepening productivity in the tourism sector; therefore it requires coordination of different policies within the country due to tourism's linkage with various other activities such as transport, customs, trade, and services in general.

Conclusion:

E-tourism imposes itself as a strategy based on information and communication technology, and the move to adopt e-tourism mechanisms is among the fundamentals of

¹Selali Boubaker, Prospects of Electronic Tourism in Light of the Experiences of Tunisia and Jordan, Master's thesis in Economic Sciences, El Hadj Lakhdar University, Batna, 2013-2014, p. 75.

² Algerian Ministry of Tourism and Traditional Industries Website: www.touralger.dz.com

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work in modern tourism activity. It has resulted in global economic developments; thus, developing tourism services and focusing on quality have become among the most important concerns of the tourism sector. Accordingly, developing the tourism sector and adopting the principles of e-tourism and expanding the use of information technology is an urgent necessity. E-tourism constitutes a blend of tourism and information technology and plays a prominent role in achieving development in general and tourism development in particular. In conclusion, effective e-tourism can help developing countries craft a positive image and promote their tourism resources.

Recommendations:

- Strengthen the information and communication technology infrastructure in Algeria.
- Promote awareness of the concept of e-tourism and the importance of using it to develop and advance tourism in the Arab world in general and Algeria in particular.
- Support cooperation programs among countries in the field of technology and information technology and draw on the expertise of countries in this field.
- Adopt the principle of tourism planning to achieve integrated development across all sectors.
- Use geographic information systems in tourism planning and tourism use through maps produced for tourists and decision-makers.
- Establish a comprehensive national database and update it continuously, with specific databases for tourist areas.

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