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ICT AND TOURISM FOR DEVELOPMENT

Background paper by the UNCTAD secretariat

Executive summary

Information and communication technologies (ICTs) are a key driver for developing countries in organizing and marketing their tourism offer in order to gain more autonomy in their search for business. The diffusion of ICTs in the tourism industry enables tourism enterprises in developing countries to enter tourism markets and interact directly with consumers and foreign tourism distributors, leading to a process of disintermediation. Developing countries can propose online a large variety of tourism niches based on cultural and natural resources, and ensure the visibility of local tourism providers that are not usually marketed by service providers in developed countries. To what extent can ICTs enable tourism enterprises in developing countries to become more competitive on tourism markets? What policies and e-business strategies can be devised to ensure their access to international tourism markets on an equal footing? A large majority of developing countries have developed e-tourism websites over the past years using simple or more complex destination management systems (DMSs) to organize and promote their tourism resources on the Internet. To be successful, destinations and tourism enterprises in developing countries should combine public policy and private initiatives and foster the development of e-business practices in the local economy, including the adoption of e-business tools such as DMSs. Furthermore, to satisfy ever-demanding consumers, they should develop new tourism products and services, including dynamic packaging, and ensure relevant marketing to gain a strong position on the global tourism market.

CONTENTS

Introduction

1.   Tourism is an information-intensive sector and therefore has significantly benefited from ICTs. The distribution of tourism information and products over the Internet is the main area where technological innovation has had the most profound impact on tourism enterprises (producers and distributors). The diffusion of ICTs enables tourism businesses to make tourism products and services directly available to a large number of consumers at a relatively low cost, and to interact with them, as well as with other tourism producers and distributors. The increasing number of consumers that use the Internet to plan leisure or business trips represents a major incentive for developing countries to organize and develop their tourism offer and its promotion over the Internet.

2.   ICTs can be effective tools for developing countries to market their tourism offer and increase their customer base. By encouraging the development of e-business practices in the local economy, ICTs make it easier for countries to organize their tourism industry and stimulate cooperation among stakeholders. Despite the challenges posed in respect of the adoption and usage of ICTs in developing countries, tourism enterprises with well conceived websites are given an opportunity to access international tourism markets on an equal footing with competitors from developed countries. The use of ICTs for tourism development can produce economic benefits by generating increased revenue for the local economy and contributing to local development.

3.   Most of the off-line and on-line marketing and distribution of tourism in developing countries is currently carried out by service providers based in developed countries. It does not therefore necessarily reflect the interests, the tourism wealth, or policies of the destination countries. ICTs represent one of the most effective tools for remedying the imbalance by allowing countries to take charge of their own tourism promotion, generate more revenue for the local economy, and remain competitive by promoting new and complementary tourism offers online. Understanding the opportunities brought about by ICTs in the tourism industry, and implementing effective e-business solutions has become a priority for public authorities and tourism providers at national, regional and community levels in many developing countries.

4.   While a growing number of destination management organizations (DMOs) in developing countries have developed an online presence in the last few years, only a small share have so far been able to offer a fully fledged services web portal in the form of a destination management system (DMS) that would propose effective booking and transaction facilities. In order to take full advantage of ICTs and improve their competitiveness in tourism markets, developing countries have to instill e-business practices effectively among all stakeholders and integrate local tourism providers into DMSs.

5.   At its ninth session, held in Geneva from 22 to 25 February 2005, the Commission on Enterprise, Business Facilitation and Development agreed that an Expert Meeting be held on the topic of "ICTs and Tourism for Development". This note aims at providing background information for this Expert Meeting by providing a broad understanding of the implications of ICT developments for the tourism industry and examining effective e-tourism strategies that should be adopted by policy makers and enterprises in order to gain and maintain a strong position on the global tourism market.[1] This note consists of three main parts:

- Part A considers the role of ICTs for tourism development in developing countries and the strategic challenges for local tourism enterprises to successfully participate in international tourism markets.
- Part B provides an overview of current and future ICT trends and their implications for the tourism industry, including destination management systems, as well as best practices to facilitate business-to-consumer (B2C) and business-to-business (B2B) e-commerce.
- Part C discusses key elements of national and regional e-tourism strategies and policies put in place by developed and developing countries (including online marketing and new tourism products), as well as cooperation processes in the tourism industry. It focuses on the practical modalities of new business models that destination management organizations and tourism enterprises should adopt to improve their competitiveness in tourism markets.

A. The role of ICTs for tourism development

ICTs and tourism as natural partners

6.   Tourism is a service industry composed of tangible elements, namely tourism products and services such as hotels, leisure enterprises and transport, and intangible elements such as rest, relaxation, culture, adventure and authentic experiences. The heterogeneous, intangible, perishable[2] and international character of tourism products explains the importance of information and the relevance of ICTs for this industry.

7.   ICTs are having a deep and positive impact on tourism through global reach, improved information flow and efficiency gains from improved organization. The Internet in particular has drastically changed the distribution of tourism products and services and is driving substantial changes in the market structure and consumer behaviour. It represents a growing distribution channel, complementary to traditional ones, for consumers, tourism enterprises such as hotels, transport companies, leisure companies and distributors, including travel agencies, tour operators and DMOs. The Internet gives tourism providers in developing countries an opportunity to access international tourism markets directly and promote a diversified tourism offer based on their cultural and natural resources.

8.   ICTs are a driving force for stimulating cooperation among tourism stakeholders and therefore make it easier for developing countries to take charge of their tourism organization, promotion and branding image. ICTs are essential tools for the integration of tourism businesses at the local level into tourism distribution networks, provided appropriate strategies, competences and cooperation mechanisms are developed and implemented by all stakeholders.

Travelers in the Internet age

9.   The number of tourists has grown impressively over the past three decades, reaching 760 million in 2004 compared to about 160 million in 1970. According to the World Tourism Organisation (WTO), the number of international tourism arrivals is expected to increase by 4.1 per cent annually to reach close to 1.6 billion international arrivals by the year 2020.[3] Although international flows and revenues are concentrated within a relatively small number of developed countries in Western Europe and North America, destinations in developing

countries have increased their market share over the years, totalizing 34.5 per cent of total international tourism arrivals in 2004 (compared to 12.7 per cent in 1970). East Asia and the Pacific have attracted over 55 per cent of international tourism arrivals in developing countries. Apart from East Asia and the Pacific, developing countries have not been able to significantly increase their tourism foreign earnings, capturing only just over 30 per cent of international tourism receipts amounting to US$ 523 billion in 2003. Table 1 compares international tourism arrivals and receipts in the top 10 destinations in developed and developing countries in 2003. For the large majority of developing countries, their share in the international tourism market, in terms of both international tourism arrivals and receipts, is still small.

Table 1
International tourism arrivals (million) and receipts ($billion) for the top 10 developed and developing countries in 2003

Top 10 developed countries	France	Spain	United States	Italy	United Kingdom	Canada	Austria	Germany	Hungary	Greece
International arrivals	**77**	**52.3**	**43.5**	**39.8**	**24.2**	**20.1**	**18.6**	**18**	**15.9**	**14.2**
Top 10 developing countries	China (including Taiwan and Hong Kong)	Mexico	Turkey	Malaysia	Thailand	South Africa	United Arab Emirates	Egypt	Singapore	Tunisia
International arrivals	57.1	18.7	13.3	10.6	10.1	6.6	5.9	5.7	5.7	5.1
Top 10 developed countries	United States	Spain	France	Italy	Germany	United Kingdom	Austria	Greece	Canada	Australia
International receipts	64.5	41.8	37	31.2	23	22.8	14.1	10.7	9.7	8.1
Top 10 developing countries	China (including Taiwan and Hong Kong)	Turkey	Mexico	Thailand	Malaysia	Republic of Korea	Egypt	Indonesia	India	Morocco
International receipts	28.0	13.2	9.5	7.8	5.9	5.3	4.6	4.0	3.5	3.2

Source : UNCTAD elaboration of data from the World Tourism Organization.

10.   While the majority of the sales of tourism products and services still happen off-line, travel-related Internet usage continues to grow at a rapid rate. The global Internet population (over 712 million in 2003)[4] continues to experience strong growth. Developing countries' target tourism markets are likely to be organizing their travel arrangements online. According to recent studies, consumers all around the world are turning to the Internet first to find travel information and 54 per cent of online travel consumers start travel research with an online travel agency. For the purchase of online travel, consumers are evenly split between travel agencies and airline web sites.[5]

11.   Online travel purchasing is developing faster in some markets than others but is gaining ground in the main tourist suppliers worldwide, namely North America and Western Europe. In the United States, where tourism is mostly domestic and consumers are confident in booking online through national tourism providers, the share of consumers who booked their travel online in 2004 reached 50 per cent, versus 30 per cent in 2000.[6] Of total e-commerce sales of US$ 144.6 billion in 2004, travel was the largest category of B2C e-commerce revenues in the United States, with US$ 52.4 billion.[7]

12.   Market trends increasingly reveal the growing demand for diversified travel experiences, from seaside resorts (often linked to mass tourism) to cultural discoveries. Cultural and natural heritage, educational, health or wellness and medical tourism are becoming fundamental drivers for choosing a destination and correspond to what is being offered in destinations in developing countries. Tourism niches such as ecotourism – one of the fastest growing segments of the tourism industry[8] – are increasingly promoted by DMOs in many developing countries, allowing them to diversify their tourism offer. The online promotion of tourism niches by developing countries complements the product offer of online travel distributors from developed countries, which often promote "static" packages (versus dynamic packages that allow consumers to customize their travel) and international hotel chains in developing countries.

Trends and developments in the online tourism market

13.   Today's online tourism is a very dynamic market, and the number of providers, both generalists and niche players, is rapidly increasing. The market is experiencing a gradual consolidation in the hands of the larger and better funded companies mainly based in North America and Europe. Significant concentration exists, especially in the United States, where the travel integrators IAC, Sabre and Cendant represent over 90 per cent of the online travel agency market.

14.   As was the case for the tourism industry before the Internet, information on tourism opportunities in developing countries is mainly generated and maintained by overseas service providers, who also conduct most of the sales transactions and pocket a large percentage of the profits. For the last few years, online giant travel agencies such as the top three US online travel agencies (Expedia, Orbitz and Travelocity)[9] have ruled the online tourism business. However, websites run by direct tourism providers such as hotels and transport companies are attracting travellers seeking better prices by avoiding third-party distributors.

15.   Distribution systems have reduced the market share of traditional travel agents, although high street travel agents still dominate the market in terms of distribution. Major traditional tour operators have joined leading suppliers of e-business solutions to the travel industry that often power a large number of websites. In addition, the emergence of travel-specific search engines has also amplified the aggregation of the travel industry and competition among the players. They allow customers to find the best value or lowest price for air tickets and hotels, browsing databases of a large number of distributors that often promise the lowest fare.

16.   Over the years, travel distribution has had to adapt its infrastructure and adopt new technologies to support the changing needs of the industry, focusing more on transactions ("transaction-centric") than on customers. In developed countries, considerable resources are being invested by tourism providers to design user-friendly destination management systems

based on innovative ICT-based tools offering various functionalities to meet their customers' expectations. At the same time, ICTs reduce operating costs, improve business processes, and provide tourism producers with additional opportunities to present and sell their products, as well as to naturally establish partnerships with carriers, global distribution systems (GDS), tour operators, travel agencies and national tourism offices.

17.   The growing adoption of the Open Travel Alliance (OTA) standard based on Extensible Markup Language (XML)[10] greatly facilitates the exchange of information between tourism enterprises such as airlines, hotels, car rental enterprises and travel integrators such as Cendant, Sabre, Expedia, Orbitz, and SITA. The OTA XML standard serves to improve the ability of consumers to search and book in a single online operation, as well as increasing aggregation processes in the industry. However, only a few large tourism players in developed countries are benefiting from technological innovations. The majority of developing countries are mainly concerned with setting up informative e-tourism websites to market their destinations.

18.   The Internet has become an essential and growing channel of distribution where tourism providers are "co-opetitors", balancing between cooperation and competition. For instance, an airline or a hotel will gain profits by selling products directly to consumers, but also by participating in other distribution networks to reach more consumers and sell available seats or rooms until the last minute. Identifying the best price has become a real challenge for consumers, and direct tourism sellers such as hotels in developing countries should be attentive to their pricing policy vis-à-vis other distributors when proposing their prices on their own websites.

B. Managing and promoting destinations

Opportunities and challenges

19.   For many developing countries, especially the LDCs,[11] tourism represents a viable means of economic diversification. With the deployment of ICTs in developing countries and the relatively improved access to the Internet in recent years, many national DMOs such as national tourism offices have developed e-tourism websites with the objective of reaching consumers worldwide directly. Destination management and promotion are key strategies to respond to consumers' expectations, ensure sustainable development and improve the relative position of destinations in developing countries on the global tourism market.

20.   Tourism enterprises of developing countries could gain autonomy and save costs by promoting and selling products directly to consumers provided they have an effective website. ICTs are a driving force for tourism producers in managing their assets, making decisions in yield management (allowing price management and systematic inventory control), cutting down commissions to third-party distributors, collecting information on customers and designing marketing strategies for different market segments.

21.   Contributing factors for the successful integration of local tourism enterprises into international tourism markets are adequate e-tourism strategies that focus on tourism innovation in terms of tourism products and adoption of e-business tools such as destination management systems. DMSs are the IT infrastructure used by DMOs for the collection, storage, management and distribution of information and for the transaction of reservations and other commercial activities. The main beneficiaries of a DMS are potential travelers, the

providers of tourism products and services, national travel agents and outbound travel agents, national tourism institutions, IT providers and investors.

22.   While considerable resources are being invested by tourism providers in developed countries to design user-friendly DMSs offering various functionalities (e.g. online booking systems and customer relationship management), developing countries have so far mainly developed simple e-tourism websites offering information that could satisfy consumer expectations in travel planning but do not offer secure booking or payment facilities. The distribution of tourism products on the Internet complements traditional distribution channels (travel agents, national tourism offices, tourism producers, call centers, etc.) because a large number of DMOs do not yet have the capacity to develop an effective e-tourism website and cannot rely only on uncertain online revenues.

23.   A review of the status of e-tourism initiatives undertaken by national DMOs in LDCs, based on an informal survey of national tourism websites, highlighted the main challenges encountered in the development of an effective DMS.[12] Resilient barriers still hamper DMOs' efforts to fully exploit the potential of the Internet and compete on an equal footing. They include the lack of infrastructure, affordable access to ICT, human capacity and vision about e-business strategies and policies that enterprises and policy makers could adopt in order to develop and maintain comparative advantages in the global tourism market. DMOs and tourism enterprises should adapt their business processes to be able to meet consumers' needs and successfully distribute their products and services on a global scale.

24.   One of the major challenges is to foster the support and commitment of local tourism providers, and it is therefore crucial to create awareness among tourism producers of the benefits of a DMS at an early stage. In developing countries, the tourism industry tends to be fragmented and heterogeneous, encompassing a wealth of tourism SMEs that could be better organized and promoted. According to the World Tourism Organisation, 85 per cent of accommodation enterprises in developing countries are small and medium-size. However, small businesses such as hotels have often been excluded from global tourism distribution channels. Before the advent of the Internet, local hotels often had no other choice than to sell their room capacity at a low price to well-known tour operators, ensuring them small but stable revenue throughout the year. Destinations marketed that way may have gained in popularity, increasingly in the form of low-price package vacations that encouraged the development of "mass tourism", but earned very low returns.

Functionalities and services of DMSs

25.   DMSs can provide solutions for business-to-business (B2B) and business-to-consumer (B2C) e-commerce. They facilitate the linkages between local tourism providers and help them manage their tourism resources and contribute to their valorization. The adoption and usage of e-business practices will facilitate the evolution of the traditional tourism systems and the integration of tourism enterprises into the digital economy.

26.   As far as B2C relationships are concerned, the primary function of a DMS is to provide consumers with comprehensive and accurate information for the preparation of their travel, as well as online booking facilities. With regard to B2B, DMSs provide tourism enterprises with the means to be better integrated into tourism supply chains by promoting personalized and enriched tourism experiences directly to a large number of consumers.

27.   Depending on the level of requirements and the availability of resources, different functions of a DMS can be implemented gradually. DMOs begin with the management of information on tourism products and services and their online promotion. A large majority of e-tourism websites in developing countries have still not moved to more sophisticated functions such as online booking facilities or customer management functions. Building effective DMSs supposes that DMOs integrate accurate information about all tourism resources, as well as a wide range of dynamic services in the form of personalized advice or brochures to respond to consumer expectations with regard to things to do or places to stay.

28.   ICTs help DMOs and tourism providers organize their resources (databases, data processing), network with business partners, and distribute and market products on the web. ICTs also help them identify consumers' needs, competitors and partners. Since the Internet also creates opportunities for cross-selling tourism products, B2B platforms should be implemented to help tourism buyers and sellers identify partners in a simple and effective way.

29.   Interesting examples at the regional and national levels are the DMSs developed by the Caribbean Tourism Organisation (CTO) and by the Tourism Authority of Thailand. Both systems include B2C and B2B platforms allowing tourism buyers and sellers to identify partners simply and effectively. The examples of B2B travel trade portals www.onecaribbean.org and www.thaitravelmart.com have been dealt with in some detail in the UNCTAD *Information Economy Report 2005*.

30.   In order to promote e-tourism development, UNCTAD has developed a DMS as part of the E-Tourism Initiative, [13] a technical assistance package aimed at promoting the application of ICTs in tourism so as to enable developing countries to exploit their tourism resources. The initiative is structured around a comprehensive package that includes ICT-based tools and a methodology based on a partnership-building approach. Its main goals are to support the traveler decision process and to allow developing and least developed countries to organize, market and distribute online aggregated tourism services from SMEs, traditionally kept out of the market. The final objective is to increase developing countries' inbound tourism flow, maximize the linkages among stakeholders, and enhance their autonomy in the management of their destination.

Effective web marketing strategies

31.   E-tourism websites should be consumer-centric. Consumers are increasingly looking for customizable travel that must be supported by technological innovations, such as flexible personalized options depending on the type of activities, accommodation, duration of stay and price, or online advice for recreation based on similar requests/profiles. [14] E-tourism websites should integrate the following key principles that will contribute to their effectiveness:

- Maximize ease of use: the layout and site navigation must be clear and straight forward;
- Provide accurate information in several forms (e.g. e-brochures, virtual tours);
- Suggest ideas for holidays: places to go and things to do;
- Differentiate the tourism offer: niche markets, customized ("do it yourself" approach) products and dynamic packaging;
- Optimize interaction with the customers and offer timely responsiveness;

- Propose content in the languages of targeted tourism markets and customize the layout and content in the light of the targeted market;
- Find out how to improve the service and product offer to tune into customers' experience;
- Ensure the quality of service and product offers;
- Link with outbound and inbound tourism distributors and ensure search engine optimization;
- Provide information on the security of transactions.

32.   Beyond the facilities deployed to promote a destination, the risk will be that the offer does not match the consumer in the end. Accordingly, DMOs need to have a comprehensive vision of existing and potential market segments, tourism evolution and prospects, consumers' tourism-related Internet usage and tourism behaviour to be able to translate them into web-based technologies and adequate services (languages, presentation, content) and marketing campaigns. To this end, several methods and types of information can be used, including the collection and analysis of statistics on national and international tourism flows, the classification of consumers according to socio-economic factors and type of vacations, and the definition of behavioural patterns.

The need to adopt new business models

33.   In order to ensure the long-term sustainability of a DMS, DMOs should develop accurate business models according to local conditions. Business models should provide technological, financial and marketing solutions for the providers and users of the DMS, namely tourism providers (accommodation, transport and leisure companies), travel agents, tour operators, and consumers. The systems should facilitate interoperability between local tourism enterprises and foreign brokers and tourism portals, including traditional tour operators, online agencies, Internet travel-specific search engines or online intermediaries specialized in tourism niches.

34.   An economic and financial analysis is required to define the economic benefits for all participants in the system. A revenue analysis should be carried out in order to define the best options for a cost-revenue model to differentiate the costs and revenues according to the different categories of tourism providers and final users of the DMS.

35.   Many tourism SMEs operate without any technological system or have developed an information website that does not yet offer booking facilities. By integrating these SMEs into their DMS, DMOs bring them into the new e-business environment of the tourism industry and offer them the technological tools to conduct their operations online. An annual fee could be charged according to the level of services supplied by the DMS. However, the experience of several DMSs in both developing and developed countries shows that a free subscription for tourism enterprises guarantees their larger participation in the DMS.

36.   In terms of reservation services, the majority of DMOs in developing countries support the promotion of tourism in their country mainly by advertising the contact details of tourism providers. Some DMOs have developed booking engines in partnership with ICT providers and have defined transaction fees applicable to the different participants in the DMS. In the case of www.doitcaribbean.com, the booking engine serves many hotels and hotel groups and has processed two million bookings over the last five years. Most of the hotel rates are better than the normal published rates and are commissionable to travel agents

at 10 per cent of the gross selling price and 14 per cent for CTO agents. These commissions are higher than the industry average. In addition, the DMS offers a wider variety of Caribbean hotels than any other Internet site and provides the best possible rates from the 400 participating hotels.[15]

37.   Another source of revenue involves selling online advertising banners to offer local tourism providers online marketing opportunities and global reach. A partnership agreement with marketing and communication enterprises can be concluded to this end.

C. Key elements of e-tourism strategies

Policy implications

38.   Tourism involves many different actors from the public and private sectors. The involvement of the public sector is necessary in terms of tourism planning and policy. E-tourism strategies should be integrated within the broader framework of national ICT policies addressing ICT access and liberalization of telecommunication infrastructure, capacity building, the adaptation of the legal and regulatory framework, and trust-building issues related to online transactions.

39.   Public authorities contribute to the development of a national brand image and the integration of tourism enterprises in DMSs, coordinate the interests of the various stakeholders and provide initial resources. Considering the constraints faced by developing countries in terms of infrastructure, human capacity and limited local adoption of e-business, public authorities and DMOs at the national, regional and local levels should play a central role in encouraging the participation and inclusion of tourism enterprises in global tourism markets.

40.   Governments should identify tourism niches that are most likely to increase the attractiveness and competitiveness of their destination. Eco-tourism, cultural and natural heritage tourism, health and medical tourism and adventure tourism are some of the tourism niches that are increasingly marketed by destinations and tourism enterprises in developing countries.

41.   Governments should support ICT usage by SMEs and consumers, including in remote areas, by providing easy and low-cost access to broadband solutions. They should create awareness of the potential of e-tourism and provide incentives for the development of tourism enterprises' websites (for hotels, for instance) that could be referenced on the DMO e-tourism website. They should develop capacity building through education programmes and training in relevant fields including ICT, web management, marketing, language abilities and cultural understanding.

42.   In order to set up a DMS, Governments and DMOs should organize consultative meetings with relevant partners. In addition, sharing knowledge with other destinations that have implemented an e-tourism strategy helps identify the challenges and available options. In order to define the strategic, administrative and technological aspects of the DMS, feasibility studies should be conducted, and a consensus on objectives, targets and relevant actions should be reached by all stakeholders.

Public and private partnerships

43.   Collating, presenting and marketing tourism information is a challenging task for developing countries. A viable option for DMS stakeholders is to adopt a strategy closely associating public intervention and private initiative and optimizing the interaction with customers. Defining a tourism strategy based on destination resources, consumer demand and the interest of local communities is the first step in engaging in an e-tourism strategy and starting to build the image of the destination, using a DMS as a promotional tool and eventually as an online reservation system.

44.   The establishment of a DMS depends on the costs involved and the capacity of DMOs to run different functionalities – in light of the technological, human and financial resources available and the capacity of the various stakeholders. The success of the development of a DMS is mainly associated with its organizational structure and the cooperation mechanisms established between the Government and the private sector.

45.   Partnerships can be developed on a global, regional, national and/or local level, depending on the scope of activities and the extent of cooperation agreed upon. Governments in developing countries should seek partners that can contribute not only to the technical development of the DMS, but also to the development of new products and services (e.g. niche tourism distributors), marketing actions, information technology and funding. The private sector is better prepared to exploit DMSs commercially, and the experience of developed and developing countries in this regard shows that in many cases efficiency is achieved by concluding a partnership with ICT companies that will develop and operate the DMS.

46.   Partnerships enable all concerned, private or public stakeholders, to coordinate their resources and objectives, creating economies of scale by pooling human, financial and technical resources, as in the case of regional or intraregional e-tourism promotion. The DMSs gradually set up by both developed and developing countries demonstrate the importance of coordinating public policy and private initiatives and forming solid partnerships.

Creation of value

47.   Several elements such as efficiency, technological innovation and complementarities with other distribution channels contribute to create value in an e-tourism strategy. The promotion of tourism niches by developing countries for which many of them enjoy a competitive advantage and the development of DMSs that offer tourism enterprises and consumers respectively an innovative way to promote and obtain tourism information (e.g. search engine, trip planner, interactive maps and virtual tours) are contributing factors to the creation of value.

48.   DMOs can propose innovative quality products in the form of self-tailored packages and product-centric specifics that will meet the expectations of travelers. ICTs could be used to present dynamically tourism products by travel experience (activities) or preferences (duration of stay, type of accommodation, price). The E-Tourism Platform developed as part of the UNCTAD E-Tourism Initiative for developing countries integrates this functionality.

49.   DMOs should guarantee the credibility of the system by providing unbiased information and offering an easy-to-use, attractive website. DMOs need to have a comprehensive vision of existing and potential market segments, tourism evolution and prospects, consumers' tourism-related Internet usage and tourism behaviour to be able to translate them into web-based technologies, customer-centered services and marketing campaigns. They can target specific tourism markets by offering subsites in different languages, and they can customize their presentation and content accordingly. In order to market their tourism products efficiently, destination and tourism providers should keep abreast of technological developments and standards.

50.   DMOs should advertise the existence of their e-tourism website. To do so, they should use all marketing channels and technology available such as tourist guides, brochures, fairs, TV, radio, newspapers, direct marketing via email, search optimization on major Internet search engines, and cross-linking to traditional and online travel distributors to increase their worldwide visibility.

D. The way forward

51.   DMOs and tourism enterprises in developing countries urgently need to adopt ICTs and adapt business processes and management structures to globalization in order to become competitive in this new marketplace. A positive impact of ICTs on the tourism industry in developing countries depends on a national enabling ICT environment that relies on multiple factors such as access and infrastructure, education and capacity-building, and an adequate legal framework. As part of their strategy, Governments should not only create awareness of ICT opportunities but also encourage and support the adoption of e-business practices by all stakeholders in the tourism industry at the national, regional and local levels.

52.   Public authorities, DMOs and tourism enterprises should fully understand the opportunities and challenges of e-tourism and overcome the barriers that still hamper the use of ICTs. The main barrier is not so much the technology but the adoption of e-business practices in operations. They should raise awareness among tourism enterprises about the potential of ICTs for tourism development. They should also develop capacity building through education programmes and training in relevant fields (including ICT, web management and marketing). The use of ICT tools such as DMSs should assist them in their efforts to market their tourism offer globally and to ensure the strategic management of their destinations to ultimately improve their competitiveness on tourism markets.

53.   Public authorities, DMOs and tourism enterprises all have an important role to play in ensuring effective and successful promotion of their destinations by building on a solid partnering industry able to capitalize on the benefits brought about by the Internet. To achieve effective and global e-tourism inclusion, there is a need for DMOs to integrate tourism enterprises and partner with ICT companies in order to deal with technological solutions and with certification authorities, building alliances with local bodies or international providers that enable consumers to transact securely online.

Notes

[1] A more detailed analysis on the issue can be found in the *Information Economy Report 2005*, which devotes a chapter to "Taking off: e-Tourism opportunities for developing countries" (available as of mid-November at www.unctad.org/ecommerce). The UNCTAD *E-Commerce and Development Report 2001* also devoted an article to e-commerce and tourism. An expert meeting on electronic commerce and tourism was held in 2000 (TD/B/COM.3/EM.9/2).

[2] When a seat on a plane or a room in a hotel is not sold on the day, its revenue is lost.

[3] WTO, Tourism 2020 Vision, http://www.world-tourism.org/facts/2020/2020.htm

[4] Source: ITU 2005 data.

[5] Nielsen//NetRatings Quarterly Travel Benchmarking Survey (June 2005), see at http://www.nielsennetratings.com/pr/pr_050621.pdf and http://www.gmi-mr.com/

[6] Source: Center for Excellence in Service at the Robert H. Smith School of Business, University of Maryland, Rockbridge Associates, Inc. (February 2005), reported by http://www.emarketer.com

[7] Source: Forrester research, August 2004 .

[8] UNDESA (2003), *A new approach to sustainable tourism development: Moving beyond environmental protection*. See http://www.un.org/esa/esa03dp29.pdf

[9] Source: Keynote Systems , November 2004. Expedia, Travelocity and Orbitz, all owned by Cendant Corp., comprise about 77 per cent of the online market in the United States.

[10] For a discussion on OTA and XML, see *E-Commerce and Development Report 2001*. A list of OTA members is available at http://www.opentravel.org/members.cfm#

[11] Tourism ranks among the first foreign currency earners for 11 LDCs (Comoros, Eritrea, Gambia, Laos, Maldives, Samoa, Sao Tome and Principe, Tuvalu, Uganda, Tanzania, Vanuatu) and second for 8 LDCs (Benin, Cambodia, Cape Verde, Haïti, Nepal, Rwanda, Senegal and Sierra Leone).

[12] See chapter 4 of UNCTAD's *Information and Economy Report 2005* at http://www.unctad.org/ecommerce.

[13] For more information, see http://etourism.unctad.org

[14] eTourism: information technology for strategic tourism management. D. Buhalis, 2003.

[15] See at http://www.onecaribbean.org/