

# Evaluation of cyber-tools in cultural tourism

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### **Evaluation of Cyber-tools in Cultural Tourism**

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#### Abstract

Nowadays, e-services technology has demonstrated a pervasive character in the modern tourism industry. e-Services implemented by the tourism industry, e.g. e-tourism, appeared to produce significant cost reductions and market efficiencies. Since online services are continuously accessible, time and geographic differences do not hinder the interaction between tourism service providers and their customers anymore. By using ICTs, (small) tourism organizations can enlarge their markets or operate in niche markets by serving a specific group of customers. The increased use of ICTs has thus resulted in a significant change in the structure of the tourism industry. The present paper aims to provide an overview of experiences and findings that address the socio-economic impacts of e-services for the (cultural) tourist industry, on the basis of a systematic impact analysis. We use a SWOT approach to organize a systematic evaluation of various e-services effects, which are specifically differentiated for e-services and e-tourism (including cultural heritage) of socio-economic importance. The main sources to identify the strengths and weaknesses of e-services are the academic and management literature that describes the experience in practice of various stakeholders.

**Key words:** cultural economics; economic development; tourism development; cultural heritage; cyber-tools; e-

services; evaluation; SWOT analysis

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#### 1. Place Branding and Tourism

In our open world we observe an increasing competition between cities (or urban areas) in terms of economic performance, innovativeness, vitality, creativity or familiarity. There is an avalanche of indicator lists that aim to describe the relative ranking or rating of cities, by using growth indicators, wealth indicators, labour market indicators, foreign direct investment indicators, educational indicators, attractiveness indicators and the like. Investments to reach a high position on the national or international 'goals achievement ladder' are: public amenities, cultural facilities, accessibility investments, tourism and recreation attractions, educational and research institutes and the like (Law, 1992).

Cultural and tourist facilities have in the past decades become major attractivity poles of many cities world-wide. These facilities refer to historico-cultural heritage, performing arts, theatres and museums, or ecological values of urban areas (see Fusco Girard and Nijkamp, 2009). Against this perspective, cultural and ecological tourism is often regarded as an important contributor to sustainable urban development. But also in the domain of urban cultural and eco-tourism we witness a fierce competition among cities, both nationally and internationally. One of the vehicles to attract a maximum share of (inter)national tourist flows to a given destination is the use of e-services, which has led to new concepts such as e-tourism and e-heritage.

Nowadays we observe a rapid introduction of e-services as strategic and operational tools for place branding in the tourist sector. Place branding employs new methods from marketing science to advocate the differentiating features of cities that attract in particular visitors, based as a specifically designed place identity (see e.g. Ashworth and Kavaratzis, 2010; Skinner, 2008). Branding thus emphasizes those characteristics of cities that offer a value added to the normal basic services of any place. In the literature, the concept of cultural/entertainment branding (see e.g. Evans, 2003) has received quite some popularity as a strategic activity to favour the importance of cultural, leisure and entertainment industries in modern cities.

Place familiarity on the basis of cultural/entertainment branding is nowadays increasingly oriented towards the design and use of sophisticated e-services so as to attract a maximum numbers visitors to a city. Examples of such e-services are electronic booking systems for hotels or airlines, information supply to interested potential visitors, actual information provision, and route guidance support to tourists, and so forth.

In recent years, service provision and transactions through the internet have increased steadily. This is due to the successful implementation of various online ordering systems. Good examples are online shops of various booksellers, computer manufacturers, and various brands of clothing, etc. But tourism-related booking platforms have also contributed significantly to this increase. Amongst these are websites offering transportation services, accommodation and packages containing various tourism services (e.g. Expedia Inc., Travelocity, Airlines, etc.). For example, already more than one-half of all airline reservations are made through the Internet (Massey et al., 2007).

The market share of e-services in overall travel sales was 7.4% in 2006 for the European market. The United Kingdom and Germany have the largest online markets, constituting 38% and 22% of the European online travel market. Travel sales online in the European market reached 7.6 bln Euro in 2002 and 17.6 bln Euro in 2006. These figures indicate that e-services have become an important distribution channel in the tourism industry.

An important reason for consumers to use online services is the convenience offered. By using e-services consumers can easily compare characteristics and prices of various products without the need to travel and thus reduce their search costs (Bakos, 1998; Butler, 1991; Wirtz, 2001). Furthermore, as trust in the security of e-services has increased, consumers are more willing to use them.

Firms using e-services also experience significant cost reductions. This especially applies to marketing, transaction and administration costs (UNCTAD, 2005). e-Services, for example, give firms and organizations the opportunity to obtain detailed information about their customers at lower costs (Raventos, 2006). Furthermore, the offering of high-quality e-services increases consumer loyalty (Chen and Hitt, 2002; Rabinovich and Bailey, 2004).

Decreasing costs for both buyers and suppliers result in the geographic expansion of markets. Furthermore, the costs of market entry are also reduced when these new forms of distribution and marketing are used. The upsurge of e-commerce thus reinforces the competitive advantage of speed and flexibility and brings more firms into competition, both domestically and internationally.

Against this background, this present paper aims to provide an overview of experiences and findings that address the socio-economic impacts of e-services for the tourist industry, on the basis of a systematic impact analysis. A useful tool to organize a systematic assessment of various e-services effects is a SWOT (Strength-Weakness Opportunities-Threats) analysis, specifically differentiated for e-services and e-tourism of socio-economic importance. The paper is organized as follows. In Section 2 we will offer a concise overview of various contemporaneous features and trends in modern tourism. Section 3 will then be devoted to the presentation of the results of a SWOT analysis of the socio-economic impacts of e-services in general. Next, Section 4 will describe the results of the SWOT analysis of the socio-economic impacts of e-tourism including cultural heritage. The paper will be concluded with some retrospective and prospective remarks.

#### 2. In the Footprints of Mark Twain

Mark Twain was a well-known American novelist and writer about many places of attraction in Europe. His writings offer an interesting picture of the peculiarities and place identities of various cities in Europe, as he was able to describe positive and negative features of the places visited by him in a balanced way. He was fond of Heidelberg and his sharp, but also humoristic observations on this city offer a great example of advanced tourism literature (see Pieper, 1995). He needed to visit physically all the places he was interested in. In that period e-services did not exist. But thanks to this absence of services we have nowadays an artistic impression of many cities.

Nowadays, e-services technology has assumed a pervasive character in the modern tourism industry. e-Services implemented by the tourism industry, e.g. e-tourism, appeared to produce significant cost reductions and competitive advantages. For example, the direct interaction with customers, through online reservation systems, meant a reduction in commissions paid to travel agencies by hotels and airlines, etc. Since online services are continuously accessible, time and geographic differences do not hinder the interaction between tourism service providers and their customers anymore. As online information can easily be translated, language barriers are also removed. By using ICTs, (small) tourism organizations can thus enlarge their markets or operate in niche markets by serving a specific group of customers. Small family hotels, for example, are now potentially able to serve guests from around the world at low costs.

The increased use of ICTs has thus resulted in a significant change in the structure of the tourism industry. In the United States, for example, 56 percent of the users of the Internet plan their holidays online (hotel and airline reservations), whereas 23 percent consult both travel agencies and the Internet, and 10 percent exclusively uses travel agencies (UNCTAD, 2005).

Not only do e-services form a new channel to sell tourism services, they also changed the way in which tourism organizations communicate with their customers. This led to the development of new products and services. For example, by means of e-services (e.g., photos, video, audio, texts, testimonials, etc.), tourist destinations and cultural attractions can differentiate themselves by making their intangible characteristics or selling-points tangible. Furthermore, tourism organizations can now provide their customers with comprehensive, timely and relevant information either before, during or after their travels. By using e-services these organizations can now customize the services offered to meet the requirements of customers. Assistance can be given to customers throughout the journey and services providers can react immediately to changes in wishes by changing the services offered.

To conclude, by using ICTs tourism organizations are able to integrate various activities in the supply chain and offer personalized and enriched tourism experiences (UNCTAD, 2005).

The tourism industry is a key factor in the marketing of destinations in developing countries and thus has an important role in economic development (UNCTAD, 2005). The presence of multiplier effects makes that these increased tourism revenues are spread into multiple sectors. e-Services form very efficient and cost-effective instruments to promote new destinations.

Although the use of e-services had many advantages, it is also important to mention a few caveats. Automated e-services, for example, provide little room for socially rich human interactions and when the distance is too large and trust absent, this may deter customers from purchasing services.

The innovations and changes in the structure of the tourism industry may also result in local and regional tourism suppliers being replaced by global players and thus in a loss of employment. This may be unfavourable in case jobs are scarce in a region. The rise of eservices in the tourism industry has already affected the role of traditional travel agents.

An important requirement for businesses to benefit from the usage of online services is that customers have access to the Internet and the appropriate skills to use it. However, the vast majority of the world population does not have access to the Internet (Dimitris and Ourania, 2004). Even between the various member states of the European Union discrepancies exist in the maturity and application of e-commerce. We may thus conclude that human contact will remain an important factor in the tourism industry, particularly when the planning of a journey is complex. Travel agents will in the future, therefore, still form a major distribution and information channel.

Not only do ICTs allow firms to market their services but cultural heritage attractions may also benefit from the new options given. These options are related to the increased access to and the preservation of cultural heritage. Both form major contributors to the enhanced knowledge and appreciation of customs, artifacts, folklore, etc. (see Poria et al., 2003).

By using various e-services the 'consumption' of cultural heritage is not limited to visiting the respective site but also expanded into the pre- and post-visit stages (see Cuccia and Cellini, 2007; Garrod and Fyall, 2000; Strauss and Lord, 2001). Next, this may influence visitors positively in terms of enjoyment and enrichment. This may increase their appreciation of the cultural heritage and thus the support of its preservation. The use of ICT may also enhance the experience during the visit. Delivering dynamic and targeted information, for example, contributes to the education and satisfaction of the visitor. Offering location-based services results in people spending more time at the point of interest (e.g., museum).

To ensure the preservation of cultural heritage for future generations the implementation of appropriate information systems and technologies is crucial. e-Services provide excellent opportunities to store and retrieve information in various manners and thus may significantly contribute to the preservation of cultural heritage. ICTs are in particular useful for mapping cultural heritage and the creation of inventories of various heritage assets. Furthermore, relevant documentation and descriptions, which were often only accessible to experts, have now become part of the public domain. e-Heritage does not only increase awareness, but the systematic archiving of information also assists decision-makers in conducting their tasks. In this manner the use of e-services in decision-support situations may result in the improvement of the quality of the decisions being made (Buhalis and Law, 2008).

In the remaining parts of the paper we will offer a concise systematic record of the opportunities and threats of e-services and e-tourism, on the basis of principles from a SWOT analysis method. The main question to be addressed then is whether e-services, e-tourism and e-heritage have become 'paramount' to the overall success on different scales, from company or organization to city, region or country.

#### 3. SWOT Analysis for e-Services Impact Assessment

To offer a systematic overview of the various effects it is meaningful to use a SWOT (Strengths-Weaknesses Opportunities-Threats) analysis in which past, current and future effects are assessed from a broad socio-economic perspective. This will be undertaken here by means of a systematic analysis of various e-services effects in the tourist sector.

The main source of our research on various socio-economic effects of e-services is qualitatively identified on the basis of the information found in academic and management publications discussing real-world findings and experiences of various stakeholders (such as cities, regions, and organisations) with e-services, e-tourism. This information is here concisely reviewed and summarized.

A general search among academic and management databases on the topic of e-services effects yielded initially on the query of e-services, a total of 1469 matches. After narrowing down the search criteria exclusively to literature containing empirical academic research, and by stipulating that the advantages and disadvantages of the various e-services should be explicitly discussed, only 28 sources remained. From these sources, a list of advantages and disadvantages of e-services, of e-tourism, and of e-heritage was compiled. It turned out that the advantages clearly exceeded the disadvantages. Finally, the results from the advantages and the disadvantages of various relevant e-services are used as an input for compiling a SWOT analysis. Appendix 1 summarizes the e-services, e-tourism and e-heritage advantages, disadvantages (in decreasing order of number of literature sources found) and lists the publications in which these were found.

#### 3.1 SWOT analysis of e-Services

In this section we will offer a systematic description of the most important strengths, weaknesses, opportunities and threats of e-services in general (see Table 1).

#### Strengths and Opportunities of e-services

A clear strength of e-services is the reduction of costs for both the consumers and the businesses; they enable buyers to locate and purchase many products and services from retailers in an efficient way. Businesses of all types and sizes use e-services to reduce marketing costs, such as costs for printed material, reduction in administration costs etc. Furthermore, e-services increase the size, reach and scope of markets for products and services. The emergence and ongoing development of new forms of communication has removed many of the barriers that impeded traditional market performance, including imperfect information relating to the willingness and ability to supply or purchase, at a given price, a vast portfolio of goods and services.

With less time spent on waiting and planning, and with more time on pleasure, consumers like to make reservations and receive tickets at home via travel websites. Increasingly, ICTs enable travellers to access reliable and accurate information as well as to undertake reservations in a fraction of the time, cost and inconvenience required by conventional methods. The development of ICTs and particularly the Internet empowered the 'new' tourist, who is now becoming knowledgeable and is seeking exceptional value for money and time. Fast responses to requests and the possibility of accessing various information sources on the Internet are important advantages of booking online. The Internet provides consumers with an increasing number of options for obtaining information and organizing their trips, for extending travel choices, and for obtaining price transparency in a highly competitive online environment.

#### Table 1. SWOT table for e-services

Strengths	Weaknesses	
S1: Local and regional employment	W1: Increased number of bankruptcies of local firms	
S2: Economic and social development	W2: Unemployment	
S3: Revenues for service providers	W3: Lower levels of customer loyalty	
S4: Tourist spending	W4: Less social interactions between buyers and suppliers	
S5: Cost reduction for consumers and producers	W5: Exclusion of persons not having access to the Internet or	
S6: Purchases and attraction of customers	the skills to use ICT	
S7: Price and cost reductions of (air) transportation	W6: Lack of knowledge and of skilled people	
S8: Comparability of products and prices	W7: Lack of personal service	
S9: Increase market share	W8: Security issues	
S10: Quality of information	W9: Lack of experience	
S11: Improvement in the decision-making process for	W10: Time consuming	
customers	W11: Psychological barriers	
O1: Attract and foster new markets	T1: Market entry of larger (international) firms	
O2: Development of new businesses and services	T2: Competition in vulnerable local markets	
O3: Rise in useful competition	T3: Intensification of price competition	
O4: Time-savings for customers	T4: Destruction of local cultures/customs	
O5: Price transparency	T5: Fear of innovative competitors	
O6: Integration of distribution channels	T6: Bankruptcies of local firms	
O7: Reduction of market entry barriers		
O8: No geographic distance		
O9: Possibility of better service		
O10: Contribution to the reputation/image of the		
businesses		
O11: Access to and awareness of other cultures		
O12: Reducing social and cultural distances		
O13: Higher process efficiency		
O14: Differentiation through niche markets		
O15:Internationalisation and globalisation		
O16: Economic and social development		
Opportunities	Threats	

An important opportunity of e-services is the critical role played by the competitiveness of tourism organisations and destinations, as well as for the entire industry as a whole. e-Services and e-commerce enable firms to determine where they are and what they need to do to develop their competitiveness, and has reinforced the natural competitive advantages of speed and flexibility. The Internet brings many more companies into competition with one another by expanding geographic markets and reducing entry barriers; it can raise the rivalry within the industry and increase the pressure for price discounting. The Internet offers new possibilities and instruments to meet the customer needs and it provides new products and services, so that the rivalry among existing companies within an industry has increased. In addition, it enables small companies to establish their niche market and to easily reach many interested customers all over the world. Differentiation is demonstrated and 'tangibilised' through photos, text, graphics, testimonials, awards, etc.

Another important opportunity is that people have more and more access to other cultures and points of view adopting new consumption patterns, seeking new life experiences, and becoming more open to changes in habits and values. Some argue that diversity is enriching, and globalization means just that. Others consider that globalization brings about cultural homogeneity facilitating the expansion of the dominant culture over the local and peripheral ones.

#### Weaknesses and Threats of e-services

A number of traditional local and regional markets were replaced by global e-markets based upon fast-growing, new technologies that brought producers and consumers into close and cost-efficient proximity. Furthermore, ICTs have reduced the market share of traditional agents such as bookstores or travel agents. However, high-street agents still dominate the market in terms of distribution. Human contact remains important, particularly when the demand is complex and the security of online transactions remains an issue for consumers.

Another weakness of e-services is the potential exclusion of persons (and regions) with no or limited access to internet. Many (rural) regions have no access to Internet and lack also technological skills and knowledge. They still struggle in terms of internet and electronic commerce utilisation. Indeed, the vast majority of the world population does not even have access to the Internet and lacks the technological skills and knowledge to do so.

#### 3.2 SWOT analysis of e-tourism

In this section we offer a systematic description of the most important strengths, weaknesses, opportunities and threats of e-services related to tourism.

#### Strengths and Opportunities of e-tourism

The emergence of the Internet and developments in ICT have opened new markets and have considerably altered existing ones. It gives an opportunity to access international tourism markets on an equal footing, targeting potential tourists directly. The full economic impact of the Internet and related ICTs led to a shift in entrepreneurial equilibrium. Using the Internet to market their offers, tourism policies and strategies are based on effective tourism innovations (e.g., new tourism products and services, technology). Firms search for and seek to exploit new market opportunities by taking advantage of actual or perceived economic disequilibria. Thus, most entrepreneurs, both new and experienced ones, tend to view opportunity recognition and evaluation as an important step towards launching new, or improving existing, products and services. Furthermore, e-services in tourism forced local industries to adopt new standards even to compete in their traditional markets. In return, if successful in adhering to these standards, the local industry may be rewarded with new markets. It contributed to increased world integration by adding new services and lowering costs. The range of services can extend from product and services information, inventory levels and locations, price, and quality, to order forms, online transactions, help desks and feedback. But, it can also increase switching costs for the consumer; this can increase the barriers for new entrants and increase the value for the costumers.

The Internet has changed tourism consumer behaviour dramatically. Prospective travellers have direct access to a much greater wealth of information provided by tourism organisations, private enterprises and increasingly by other users/consumers. Internet and cyberspace have changed radically the way people work, and interact socially among each other. It is likely to affect also the way to assess the economic value of resources, such as cultural heritage or the natural environment. People become more aware of new tourist destinations and new styles (eco-tourism, health spas, etc). The use of e-services (internet) has changed the way tourists plan and arrange their trips. They offer competitive courses (in foreign countries) at low cost. Destinations offer on their websites tourist information, at times quite basic and at times quite sophisticated, sometimes even with an indication of suggested cultural itinerary and tours.

An important opportunity is the increasing efficient connection between clients and the rest of the chain and the possibility to add other conveniences such as hostesses and guides. The Internet enables consumers to engage directly with suppliers and to challenge the role of intermediaries. Trust can be built between customers and online businesses through positive experience of past transactions. As a result, suppliers can re-engineer the entire process of developing, managing and marketing tourism products and destinations. Thus, e-tourism enables the tourism industry to have a simpler and efficient interaction with the customer as well.

A final advantage is the creation of various forms of e-heritage. Both the tangible and intangible side of the cultural heritage of a site, a city or a region, play an important role in developing the attraction capacity of a specific city or region. The current development in ICT points towards the creation of various forms of e-heritage. But, still many challenges need to be faced and resolved, before it could really create intelligent environments capable of assuring efficient ways of archiving goods and making the world heritage more accessible (see also Table 2).

#### Weaknesses and Threats of e-tourism

Although an increasing use of e-services in tourism can contribute to the development of new jobs, in other places it can also decrease local and regional employment. Tourist operators can directly assemble and manage tourism packages in other countries without the need for any local direct employee.

A weakness of e-tourism is that customers regularly display low levels of loyalty to any particular site and appear to be motivated by the search for bargains. Bargain-hunting behaviour is fuelled by recent trends towards shorter, but more frequent trips and a tendency for consumers to piece together hybrid desires in one holiday (e.g., taking cheap flights but staying in four star hotels). Customers are moving towards more reliance on self-service technologies, but with higher expectations of choice, value, customization and convenience. A final weakness is that tourists are often overwhelmed by the huge amount of available information online and cannot locate what they plan to find, e.g., vacation planning on the web may be a frustrating experience. One important cause for usability problems is that vacation planning is highly dynamic and contingent upon an individual's background knowledge, his or her personal characteristics, tasks, and stages of vacation planning. This, as well as the potential complexity of travel arrangements, can run counter to the arguments for disintermediation, so that intermediaries or travel agents who undertake part of the travellers' requirements remain.

Another threat to e-tourism appears when the encounter between the host community and tourists happens under difficult conditions. Under certain circumstances, it may lead to adverse stereotyping of tourists, who can be negatively perceived as noisy and unfriendly, and in competition with residents for services and goods. At times, the tourists' presence can lead to the destruction of local customs or to the staging of some, with the consequent loss of community spirit and the development of a feeling of alienation, invasion or deprivation. When tourists are overtly present, residents can feel invaded and move away from certain zones resulting in conflicts of interests between tourists and host community. It is important to assess the carrying capacity of a site/city/region, and use it as a tool to manage destinations.

Strengths	Weaknesses	
S1: Local and regional employment	W1:Extra expenses	
S2: Additional sources of revenue	W2: Destruction of local customs	
S4: Reduction of prices	W3: Only access for educated people	
S5: Simplification of bookings and reservations	W4: New legislation necessary	
S6: Efficiency	W5: Low levels of loyalty	
S7: Declining costs	W6: Complexity of travel arrangements	
S8: Increasing consumer expenditure	W7: Online space is broad and highly diversified	
S9: Local wealth and socio-economic growth	W8: Too much choice	
S10: Disintermediation	W9: Stress on destinations (overcrowding, nuisance,	
S11: Matching capacity and demand	resource depletion, etc.)	
S12: Direct and improved communication		
S13: Identify market segments		
S14: Foster new markets and services		
S15: Information science		
S16: Decision-making process		
S17: Changes in the structure and operations of		
travel tourism industries		
O1: Attraction of new enterprises	T1: Increasing real estate prices	
O2: Access to other cultures and reduction of social	T2: Decreasing expenditure power	
distance	T3: Decreasing local and regional employment	
O3: New consumption patterns	T4: Use of urban and quiet spaces	
O4: Flexibility	T5: Specialisation	
O5: Spatial behaviour of new visitors		
O6: Environmental psychology?		
O7: Behaviour of people		
O8: Costumer-tailored services		
O9: Customer satisfaction		
O10: Quality and reputation destination (image)		
O11: New networks and clusters		
O12: Competitiveness of the sector		
O13: Less economic barriers		
O14: Development relationships with customers		
O15: Position in the international market		
O16: Innovative tourism products		
O17: Reinforce the destination image		
018: Better access to information about cultural		
heritage		
O19: Sustainability		
Opportunities	Threats	

On the basis of the relevant effective SWOT-elements, we now confront the strengths and weaknesses with the opportunities and threats factors in a strategic choice matrix (which is the essence of a SWOT analysis). This is done in order to identify the main strategic points of attention with respect to the variety of socio-economic effects of e-services for various stakeholders at different scales from company or organization to city, region or country.

#### 4. A Strategic Choice Matrix Approach

By means of a 'Strategic Choice Matrix' (SCM), a tool that focusses on strategy formulation and strategic choice(s) (see Kourtit and Nijkamp, 2010), it is now possible to determine and filter the most important Strength and Weakness factors that may affect the Opportunities and Threats included in the SWOT-analysis. The SCM is used to answer two main questions: 1) What is the most important Strength factor (S) and how can it be used to participate in, or take advantage of, Opportunities (O) (SO strategies) and counter or avoid Threats (T) (ST strategies)?; and 2) What is the most important Weakness factor (W) and can it be eliminated or improved in order to participate in Opportunities (O) (WO strategies) and counter or avoid the impact of Threats (T) (WT strategies)? The answers to these questions can support the development of appropriate - strategic - e-services policies for tourist destinations.

To determine the degree of importance of various effects, the rank order is assessed by the number of literature sources found. Once the relevant effects have been reviewed, strategic choices are made by selecting those effects that will significantly influence policy and business strategies, viz. a combination of Strengths (S) and Weaknesses (W) elements for e-services or e-tourism along with their impact on Opportunities (O) and Threats (T). All this information can aid the development of appropriate strategic policies for various stakeholders.

#### 4.1 Design of strategic options

#### e-Services

From the results of Table A.1 (see the upper part of the Appendix) it can be concluded that the most important Strength factor is time saving and reduction in costs, which comes in the first position on the basis of the highest number of references, followed by no geographic distance and increasing competition.

Further, Table A.1 of the Appendix shows that the most important Weakness factor is a lack of knowledge and skills related to e-services. Secondly, the exclusions of actors with no or limited access to the internet, often in less developed regions, is an important weakness. The following critical policy and business strategies are identified to face the challenge of e-services based on the most important Strength (S) and Weakness (W) points in order to take advantage of (future) opportunities (O), (SO and WO). Serving as a basis for actions and selective (urban) policy activities, the two most prominent strategies are:

 Create and foster new market opportunities by opening distribution channels (reintermediation). Make available capital requirements to reduce market entry barriers on national and international level (e.g., internationalisation, globalisation) for potential new entrants. Create and foster new market opportunities for traditional local small and medium-sized enterprises (reduce bankruptcies of local small firms). It is important to stimulate market expansion towards global e-markets for those small- and mediumsized enterprises to: (1) provide (local and traditional) product and services to customers and businesses (B2C and B2B) world-wide without making extra costs (cost-efficient); (2) achieve time-savings for customers (less time spent on waiting and planning); and (3) to bridge the gaps that exist between them and multinationals in their local environment. Small firms have the opportunity to make a niche by addressing a specific group of customers around the world (e.g. differentiation through niche markets). eMarkets can be used to cut costs and reduce marketing costs compared to traditional channels, such as administration costs, and printed material.

2. Investments in education and training in certain regions to encourage a greater proportion of (regional/local) business with technological skills and knowledge necessary to manage and market their website. This can support them operating in special niche markets and can reinforce the natural competitive advantages of speed and flexibility of such organisations. Differentiation through niche markets reduces both the competition in vulnerable local markets and the intensification of price competition. Furthermore, geographic distance will no longer be a critical point for them to create new businesses or high costs such as transport costs, marketing costs, administration costs, etc. These e-businesses can provide flexible shipping dates, rapid data transmission on the Internet, quick response time which influences customer satisfactions and booking or buying behaviour. As a result, response behaviour becomes an essential factor for the success of firms in the tourist sector.

In addition, critical strategies are also needed to face the challenge of e-services. They are based on the most important Strength (S) and Weakness (W) factors, in order to avoid or reduce the impact of (future) Threats (T), (**ST** and **WT**). Serving as a basis for actions and selective urban and business policy activities an important strategy is:

1. Innovation and technological forces can help to tackle threats such as 'traditional markets', substitute products/services, fierce for local competition and rivalry among existing firms within an industry. e-Services can bring cultural, creative and innovative activities into a new focus, which can contribute to the creation of new products and markets, a revitalised business climate, a vital urban environment. Innovation and technological forces can help regions to acquire better access to Internet and provide technological knowledge and skills to locals. By this, these regions and the businesses located in these areas become less dependent on the domestic market and less ignore international markets and their modern expectations.

#### *e*-Tourism and *e*-heritage

From the results of Table a.1 (see the lower part of the Appendix), it can be concluded that the most important Strength factor is a more efficient customer service, which comes in the first position with the highest number of references, followed by the possibility to change the behaviour of tourists.

Furthermore, it appears that the most important Weakness factor is the fact that the online space is huge and much diversified, followed by a lack of support for complex travel arrangements.

The following critical policy and business strategies are needed to face the challenge of e-tourism and e-heritage. They are based on the most important Strength (S) and Weakness (W) factors in order to take advantage of (future) Opportunities (O), (SO and WO). Serving as a basis for actions and selective (urban) policy activities, these strategies are:

1. Improving e-tourism customer services of businesses located in more remote and less well-known areas to attract more visitors and to change their opinion about certain cultures and traditions. In this way, the local economy can benefit, as well as cultural and social relationships between different groups of people. Furthermore, local and regional companies can act in a quick and efficient way, mainly when there is a high

level of interaction with other companies (directly access to numerous worldwide suppliers or customers) that are involved in their production. This will result in benefits and opportunities for the whole chain of suppliers converging to the consumer by offering more flexibility (information becomes more accessible) and efficient customer services to increase customer satisfaction.

2. Use e-tourism to better link demand and supply of tourism services (by transparency and information) in order to improve the level of sustainability of the sector, to enhance communication between businesses and clients, and to structure the management process of their distribution function. To provide up-to-date information in location-based systems, (potential) visitors become more aware of the importance and richness of the environment they want to visit. Thus, comprehensive and accurate information on tourism services and products, and tourism experiences can have a positive impact on the visitors' behavior (more eco-friendly) that contributes to sustainability in the region; and changes the structure and processes in the sector and creates (new) business opportunities.

From a different angle, the following critical strategies are needed to face the challenge of e-tourism and e-heritage. Here, they are based on the most important Strength (S) and Weakness (W) points, in order to avoid or reduce the impact of (future) Threats (T), (ST and WT). Serving as a basis for actions and selective urban and business policy activities, we propose the following strategy:

Improvements of information can help the comparison of websites with tourist information, at times quite basic, and at times quite sophisticated, possibly with an indication of suggested cultural itinerary and tours, as well as information about cultural economic values of tourist destinations. All this will provide reliable and appropriate links between distinct and homogeneous sources of information. This can affect the user's behaviour towards a more sustainable use of ICT tools and the information from databases based on location and area, time and user profile relevance.

#### 5. Concluding Remarks

Cities and regions are challenged to create a 'City' or 'Region' that constantly delivers better, creative and innovative local quality products and services. They want to offer a place/destination where the 'visitor', in his or her role as worker, traveler or private person, is welcome. This takes place through the systematic definition of a place's innovative positioning and branding strategy and its related objectives. This will make it possible to take corrective action to keep the city on track in a very competitive market for destinations, and to achieve a unique position compared with other city competitors, strongly supported by modern ICT tools.

These tools provide for what are called 'e-services' and these can support place branding planning and help the city's stakeholders (urban decision makers, city marketers, but also private companies, and, for instance, representatives of civic organizations) to promote the city's tourist sites and activities to maximize the number of visitors.

In this paper we have presented a SWOT analysis of the socio-economic of e-services in general and e-tourism. The main sources to identify the strengths, weaknesses, opportunities and threats of e-services were the academic and management literature that describes the

experience in practice of various stakeholder cities (e.g. tourist cities and regions, tour operators, airline carriers, hotels and cultural or eco-facilities with ICT tools (e.g. virtual tours, multilingual interactive maps, online booking facilities, mobile devices etc.)). All in all, more advantages than disadvantages where found.

In general, e-services appear to be powerful and competitive tools in regional tourist industry and in an open economy. e-Services enhance competitiveness in the tourist industry sector, where intense competition among cities and business heightens the need for strong brand identity and for developing new marketing and strategic priorities for creative and innovative urban development and attracting potential (cultural) visitors from all over the world.

e-Services, e-tourism and e-heritage give an opportunity to access international tourism markets on an equal footing, marketing the attractiveness of a certain (cultural) destination, its unique selling points, viz. tourism policies and strategies, in order to enhance their value chain so as to generate growth in tourist visits and expenditures. With the full economic impact of e-services, e-tourism and e-heritage, it is increasingly obvious that a shift in entrepreneurial equilibrium (balance between supply and demand forces) is taking place.

Our literature findings suggest that the successful implementation of various online ordering systems in the various areas of tourism, such as transportation services, accommodation and packages containing various tourism services via the Internet, has increased steadily in terms of increased revenue, sales, tourists' spending, purchases and retention of customers, reduced prices, cost reductions (of (air) transportation), enhanced assess to cultural heritage for customers, etc. in a relatively short period of time.

The dynamic growth of the use of e-services, e-tourism and e-heritage has resulted in dramatic changes in the structure and operations of the travel tourism industries in particular. Changes are particularly obvious in the way e-services, e-tourism and e-heritage are supporting the interactivity between destinations and tourism enterprises and consumers or tourists and are enhancing the economic value of resources, such as cultural heritage or the cultural and natural environment. And, as a result, they are re-engineering the entire process of developing, managing and marketing various tourism products and destinations. The structure of an entire industry is changing and this process creates new (business) opportunities by taking advantage of actual or perceived economic disequilibria (such as changes in technology).

Since online services are continuously accessible, time and geographic differences no longer hinder the interaction between tourism service providers and their customers. The customer can easily compare different prices and gain knowledge about products and destinations, and thus the price becomes the most important decision criterion. This means that people also have access to other cultures and points of view and they adopt new consumption patterns, seek new life experiences, and become more open to changes in habits and values (diversity is enriching). Thus, online services can develop interdisciplinary knowledge to facilitate the flow of tourists and deliver the tourist to the 'product' in an efficient and cost-effective way. This has improved the tourism process, by making it more efficient and financially effective.

The reorganization of the tourism market together with the effective use of ICT allows cities to build their own brand images, develop new products, promote their tourism resources and expand their customer base to ultimately increase tourism foreign earnings and contribute

to local development. It offers cities an online body to market this diversity, culture and heritage, as well as to facilitate the marketing and provision of associated tourism products.

A SWOT analysis is meant to calculate various socio-economic aspects of various eservices, e-tourism and e-heritage. Such an analysis systematically follows the confrontation of the strengths and weaknesses with the opportunities and threats factors, whereby past, current and future effects are assessed in a Strategic Choice Matrix (also the essence of SWOT analysis). This helps to determine the existing fit of various e-services in a particular environment and to devise effective strategies in response to issues in the socio-economic environment for various stakeholders in various cities, regions, countries and sectors; the matrix indicates what options suit the key issues.

Based on the SCM analysis we conclude that e-service policies should be directed in particular towards small- and medium-sized enterprises by the creation and fostering of new market opportunities by reducing the market entry barriers for new entrants and improving the opportunities for existing enterprises. In addition, investments in education and training should encourage enterprises to manage and market e-services in regions lagging behind. Differentiation by exploring niche markets reduces the competition in vulnerable markets.

Considering e-tourism and e-heritage, we conclude that the most important strategy is to improve e-tourism customer services in more remote and less well-known regions. e-Tourism services should be used better to link demand and supply in order to improve: (1) the level of sustainability of the sector; (2) the communication between business and clients; and (3) structure the management process of their distribution function.

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## Appendix. A Review

**Table A.1** Expected consequences of e-services, e-tourism and e-heritage

Advantages e-services	Literature research sources
Increase in sales and marketshare	Boyer et al., 2002; Plepsys, 2002; Gratzer et al. 2004; Nielsen/NetRatings, 2005; Gefen and Straub, 2003; Berger et al., 2007 Marcussen, 2003; Dimitrios and Ourania, 2004 UNCTAD, 2005; Berger et al., 2007
Increase in spending and commerce	Bakos, 1998; Werthner and Klein 1999; Wirtz, 2001; Pan and Fesenmaier, 2006; Massey et al., 2007
Increase in purchases and retention	Tedeschi, 1998; Morrison et al., 1999; Gefen, 2000; Rabinovich and Bailey, 2004; Gefen and Straub, 2006; Watabe and Iwasaki 2007; Buhalis and Law, 2008
Increase in local and regional employment	Riganti, 2007;
Reduction in costs of producers	Bakos, 1997, 1998; Connolly et al., 1998; Vogt and Fesenmaier 1998; Hedstrom et al., 2003; Oorni and Klein, 2003; Dimitrios and Ourania, 2004; Rabinovich and Bailey, 2004; UNCTAD, 2005; Raventos, 2006; Buhalis, 2007; Stockdale, 2007; Watabe and Iwasaki, 2007
Increase competition	Timmers, 1998; Porter, 2001; Scavarda et al., 2001; UNWTO, 2001; Plepsys, 2002; Buhalis, 2003; Hedstrom et al., 2003; Dimitrios and Ourania, 2004; Ruddock, 2006; Riganti, 2007; Buhalis and Law, 2008
Reduction in costs of consumers (time-saving)	Roehl and Fesenmaier, 1992; Vogt and Fesenmaier, 1998; O'Connor, 1999; Siebel and Hous, 1999; Werthner and Klein, 1999; Main, 2001; O'Connor and Frew, 2001; Scavarda et al., 2001; Chen and Hitt, 2002; Plepsys, 2002; Pechlaner et al., 2002; Singh, 2002; Dimitrios and Ourania, 2004; Rabinovich and Bailey, 2004; Pan and Fesenmaier, 2006; Berger et al., 2007; Riganti,2007; Watabe and Iwasaki, 2007; Buhalis and Law, 2008
No geographic distance	Peterson et al., 1997; Starr, 2000; Porter, 2001; Scavarda et al., 2001; Wirtz, 2001; Matlay and Addis, 2002; Jeong et al., 2003; Matlay and Westhead, 2005; Stockdale, 2007; Watabe and Iwasaki, 2007; Buhalis and Law, 2008
Organizational/institutional reputation	Block and Roering, 1979; Boulding and Kirmani, 1993; Fodness and Murray, 1997; Ruyter et al., 2001; Buhalis and Law, 2008
Increase market share	
Dramatic changes in the structure and operations of travel tourism industries	Jeng, 1999; Werthner and Klein, 1999; Dimitrios and Ourania, 2004; Kim et al., 2004; UNCTAD, 2005; Pan and Fesenmaier, 2006; Berger, 2007; Buhalis and Law, 2008
Attracting a growing number of consumers through self- services	UCLA, 2000; Travel Industry Association, 2001; Raventos, 2006; Stockdale, 2007
Contact and operations efficiency	Werthner and Klein 1999; Pan and Fesenmaier 2000,2006; Matlay and Westhead, 2005; UNCTAD, 2005; Stockdale, 2007; Buhalis and Law, 2008
New opportunities	Scavarda et al., 2001; Buhalis and Law, 2008
Economic and social development	UNCTAD, 2005; Stockdale, 2007
Price transparency	Clemons et al., 2002; UNCTAD, 2005; Buhalis, 2007; Watabe and Iwasaki, 2007; Buhalis and Law, 2008
Internationalisation and globalisation	Buhalis, 1998; UNCTAD, 2005; Buhalis and Law, 2008
Differentiation	Scavarda et al., 2001; UNCTAD, 2005
Adding value	Buhalis and Law, 2008
Interconnection and distribution	UNCTAD, 2005

Disadvantages of e-services	Literature research sources
Decrease purchasing of customers	Gefen and Straub, 2003
Fear of innovative competitors	Scavarda et al., 2001; Dimitrios and Ourania, 2004
Local firms go bankrupt/taken over by a larger	Chaston, 2001; Matlay and Westhead, 2005
international player	
Reducing market share	UNCTAD, 2005
Lack of knowledge and skilled people	Braliev and Yatromalakis, 2002; Stat Bank, 2002; Dimitrios
	and Ourania, 2004
Lack of personal service	Wolfe, et al., 2004; Buhalis and Law, 2008)
Security issues	Wolfe, et al., 2004; Buhalis and Law, 2008)
Lack of experience	Wolfe, et al., 2004; Buhalis and Law, 2008)
Time consuming	Wolfe, et al., 2004; Buhalis and Law, 2008)
Psychological barriers	Buhalis and Law, 2008
Physical barriers when internet is not available	Buhalis and Law, 2008

Advantages of e-tourism	Literature research sources
Increase local and regional employment	Riganti, 2007
Additional sources of revenue	Dimitrios and Ourania, 2004; UNCTAD, 2005; Riganti, 2007;
	Buhalis and Law, 2008
Attraction of new enterprises	Riganti, 2007; Scavarda et al., 2001; Buhalis and Law, 2008
Reduce prices	Scavarda et al., 2001
Simplifying commercialization channels	Scavarda et al., 2001
Deliver products in an efficient and cost effective way	Boucouvalas, 2002; Buhalis, 2003; Buhalis and Law, 2007
Declining costs of (air) transportation	Choi et al., 1997; Bakos, 1998; Starr, 2000;
	Scavarda et al., 2001; Wirtz, 2001
More access to other cultures and adopting new	Scavarda et al., 2001
consumption patterns	
Increase consumer expenditures	Scavarda et al., 2001
Flexibility	Bieber, 1989; Scavarda et al., 2001
	Pan and Fesenmaier, 2006
Right decisions	UNCTAD, 2005
Foster new markets and services	Kirzner, 1973,1979; Scavarda et al., 2001; Brynjolfsson and
	Kahin, 2002; Matlay, 2003a,b; Matlay and Addis, 2002; Matlay
	and Westhead, 2005; UNCTAD, 2005; Riganti, 2007
Changing the behaviour of people	Bonn et al., 1998; Scavarda et al., 2001; Hedstrom et al., 2003;
	Mills and Law, 2004; Luo et al., 2004; UNCTAD, 2005; Pan
	and Fesenmaier, 2006; Berger et al., 2007; Riganti, 2007;
	Buhalis and Law, 2008
Offer customer-tailored services (customer satisfaction)	Newhagen and Rafaeli 1996; Werthner and Klein 1999; Pan and
	Fesenmaier, 2006; Riganti, 2007
Contributing to local wealth	Dimitrios and Ourania, 2004; UNCTAD, 2005
Improve destination image and promotion	Dimitrios and Ourania, 2004; UNCTAD, 2005
The new environment is not a <i>substitute</i> , but a <i>complement</i>	Porter, 2001; Scavarda et al., 2001; Hedstrom et al., 2003;
	UNCTAD, 2005; Riganti, 2007
Development of network and clusters enhance local	Gulati and Garino, 2000; Buhalis and Molinaroli, 2003;
environment	Dimitrios and Ourania, 2004; Pan and Fesenmaier 2006
Enhance competitiveness	Hedstrom et al., 2003; Riganti, 2007; Stockdale, 2007; Buhalis
	and Law, 2008
More efficient and accurate customer service	Barnes and Hunt, 2001; Scavarda et al., 2001;
	Singh, 2002; Matlay, 2003a, b; Dimitrios and Ourania, 2004; Bai
	et al., 2004; Bieger et al., 2005; Matlay and Westhead, 2005;
	UNCTAD, 2005; Raventos, 2006; Stockdale, 2007; Buhalis and
	Law, 2008
Disintermediation	UNCTAD, 2005; Stockdale, 2007
Efficient processes	Buhalis, 1998; UNCTAD, 2005; Stockdale, 2007; Buhalis and
	Law, 2008

Minimal economic barriers	Scavarda et al., 2001
Easy access to the service and assisting customer	Scavarda et al., 2001; Stockdale, 2007
throughout his journey	
Matching capacity and demand	Scavarda et al., 2001;Dimitrios and Ourania, 2004; UNCTAD, 2005
Direct communication/ Access to customer	Gulati and Garino, 2000; Boyer et al., 2002
Development of the tourism sector	UNCTAD, 2005
Identify market segments and develop relationships with	Stockdale, 2007
customers	
Improve position in the international market	Dimitrios and Ourania, 2004
Reinforce the urban domestic (destinations competition)	Castells and Hall, 1994; Glaeser, 1998; Graham, 2002; Cohen-
	Blankshtain and Nijkamp, 2003; Dimitrios and Ourania, 2004;
	UNCTAD, 2005; Raventos, 2006
Online cooperation and developing entrepreneurial networks	Hitt et al., 2001; Dimitrios and Ourania, 2004; Buhalis, 2003
Enhancement of the long term profitability	Berger et al., 2007
Foster a lively society of travellers	Berger et al., 2007

Disadvantages of e-tourism	Literature research sources
Increases in real estate prices	Riganti, 2007
Decrease in expenditure power	Riganti, 2007
Decrease local and regional job employment	Scavarda et al., 2001
Extra expenses	Riganti, 2007
Destruction of local customs	Riganti, 2007
Change in the use of urban spaces	Riganti, 2007
Only educated people	Scavarda et al., 2001
Give up some activities	Scavarda et al., 2001
New legislation	Scavarda et al., 2001
Low levels of loyalty	Stockdale, 2007
Complexity of travel arrangements and too many choices	Werthner and Klein 1999; Pan and Fesenmaier, 2006;
	Stockdale, 2007
Online space is huge and highly diversified	Radosevich 1997; Jeng 1999; Stoltz 1999;
	Pan and Fesenmaier 2000, 2006

Advantages of e-Heritage	Literature research sources
Enhancing and widening the access to cultural heritage	Scavarda et al., 2001; Hedstrom et al., 2003; Riganti, 2007; Dias, 2007
Increasing the social awareness of the access to cultural heritage value	Hedstrom et al., 2003;Riganti, 2007; Stockdale, 2007
Create maps of heritage values	Riganti,2007
Societal changes and economic growth	Riganti, 2007
Positive social impacts	Hedstrom et al., 2003; Riganti, 2007
Increase customer acquisition and reduce social distance between cultures	Hedstrom et al., 2003; Riganti, 2007
Creation of various forms of e-Heritage	Hedstrom et al., 2003; Scavarda et al., 2001; Riganti, 2007
Creating inventories of movable and non-movable heritage assets and goods	Hedstrom et al., 2003; Riganti,2007
Storing and retrieving information to make informed decisions	Raventos, 2006; Berger et al., 2007; Riganti, 2007 Simão Dias, 2007
Sustainability	Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975; Simão Dias, 2007
Affect visitor's behaviour	Li and Buhalis, 2005; Pan and Fesenmaier, 2006; Simão Dias, 2007; Buhalis and Law, 2008
The spatial behaviour of the visitors: time and place (geographical science)	Dias, 2007
Environmental psychology: measuring contingent valuation of the information using stated preferences	Dias, 2007
Information science: apply the technology acceptance	Dias, 2007

theory	
Willingness-to-pay	Dias, 2007
Improved communication	Dias, 2007
Learning experience	Boucouvalas, 2002
Strengthening social cohesion (cultural economic values)	Riganti, 2007
Linking the tourists' available services and cultural	Hedstrom et al., 2003; Dimitrios and Ourania, 2004; Riganti,
resources with those that remain not accessible (cultural	2007
economic values)	

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