Full Length Research Paper

Sustainable Heritage Tourism Marketing through Intelligence ICT Solutions

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The explosive growth in technology has made a significant impact on every aspect of the tourism industry. Sustainable Heritage tourism strategies have the potential to assist the conservation of local identities embedded in their respective cultural heritage, while supporting economic growth. The engagement between heritage tourism and ICT (information and communication technologies) represents an opportunity to preserve culture, create partnership and enhance destinations value in information society. The Internet is the most important innovation since the development of the printing press (Hoffman, 2000). Aim of this paper is to suggest that adequate tourism growth can be executed by the use of intelligent ICT solutions in the development of heritage tourism that would help to achieve a more globally responsible paradigm for the tourism industry and facilitate the management of destinations and the coordination of the local suppliers in India. The high number of visitors to heritage sites usually attracts by the issues of accessibility, transportation, and accommodation and information so these issues must be elucidated by management system. However, a conflict of interests is most likely to emerge but a proper management system should correlate the new technologies and information for creating a better image of heritage site. Different stakeholders are acquiring information and communication technology and working as catalyst in heritage marketing. This research illustrates the differences of opinion between respondents, and the implications that their preferences might have in shaping heritage tourism marketing strategies. There are a number of projects worldwide focused on the assessment of current e-services in tourism as well as the development of new ones. Over the last few decades, tourism has become one of the main sectors of the global economy, not only because of its contribution to the Gross Domestic Product (GDP) of different countries, but also because of the employment it generates. Although e-services have been widely used in the tourism industry, there are still some technological issues that need to be solved in order to make cultural heritage resources more readily accessible.

Key words: Tourism Marketing, Accessibility, Connectivity, Heritage.

INTRODUCTION

Tourism in India has the potential to do wonder in this upcoming industry of profit as well as fun. The outlook for travel industry in India looks extremely bright. "Conde Nast" rank India 6th amongst the top 10 tourist destination in the annual "Reader's Award" in 2004, which was 9th a year before. A key challenge for the enhancement of cultural heritage is to bridge the different perspectives of how tourism organizations and service providers can present their cultural heritage in a way that appeals to the interests of the international tourism audience. The goal is to generate value from local knowledge and information and make it available to consumers worldwide: virtually, via the Internet, and direct physical access. The use of ICT is necessary and it involves various stages of the operation of the heritage industry like content creation and communication, value enhancement, and market strategy. A basic prerequisite for sustainable tourism is allowing individuals and communities an opportunity to be included and connected. There is a need to develop the aspects concerning the use and development of tools,

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technologies, and methodologies to facilitate the efficient networking of information and communication systems in tourism. A tourism market may be defined as a set of relations between offer and demand within the scope of goods and services which serve to satisfy tourist needs, in a certain area, or as a set of relations between offer and demand arising as a result of tourist movements (Senečić, 1997). The five competing concepts are designed to develop a practical knowledge of the application of marketing techniques in the travel and tourism industry (Ranga M., 2014).

Production concept, which is based on the fact that tourist favor heritage sites that are safe and affordable. Concentration on effective distribution networks outweighs tourist's actual needs and wants. This may used primarily when tourist arrival is increasing and the focus is to provide economical services to attract more customers. Production concept comprises following questions:

• Where are our visitors coming from ?
• Is there a visitor perception that, the admission fee of heritage sites, was good value for the experience paid for, or do they think they paid too much for too little?

Product concept, which is based on ways to improve the quality, hospitality, experiences, and features to attract tourists. This philosophy tends to spend too much time adding features to their heritage sites, rather than thinking about what people actually need and want. Product concept comprises following questions:

• What experiences or recreational learning opportunities were they looking for?
• What were the attraction visit components of heritage sites?
• What reasons did we give them to return again to this attraction?

Selling concept, which places the focus on sales rather than what people actually need or want. Most of the time the product is misrepresented which results in high customer dissatisfaction. This concept may rely upon the generation of profits rather than conservation and preservation of the heritage sites. concept comprises following questions:

• How do we increase visitor participation?
• Convenience of purchasing entrance tickets?
• How do we manage the entrance tickets in seasonal upward and downward phase for generating the profit?

Marketing concept, which focuses on what tourist need and wants. This concept is about the importance of satisfying the tourist's needs to achieve satisfaction level. Heritage sites are developed around preservation and conversation for fulfilling the needs and wants of the tourist. Marketing concept comprises following questions:

• Was our on-site experience (the visit) as good in reality as our marketing pieces "made it look"?
• Why did they decide to visit the site or attraction in the first place?
• What experiences or recreational learning opportunities were they looking for?
• Did the site/attraction meet or exceed their "**expectations**" of what they would seedo-and experience here or did it "fall short" of the visitors expectations (from marketing brochures and related advertising)?
• What is the attractions "physical and psychological carrying capacity" and did we exceed it? Were we too successful in attracting visitors and couldn't give visitors a quality experience because of too many visitors?
• How do we design and structure our advertising materials to get the attention of, and RELATE to target market groups?

Societal marketing concept, which not only uses the same philosophy as the marketing concept, but also focuses around the products benefit to the betterment of society as a whole. Greater emphasis is put on environmental impacts, population growth, resource shortages, and social services.

• What were their best or most powerful "memories" of their visit?
• What are their age groups and other socio-economic backgrounds?
• What did they spend money on – and how much?

REVIEW OF LITERATURE

As of December 2012, 962 sites were listed as World Heritage sites (UNESCO World Heritage Centre,) with 745 cultural sites, 188 natural sites and 29 mixed. These sites were located throughout the world in 157 countries. Designation as a World Heritage site brings increased tourist flow generating income through ticket sales, concessions and associated tourism amenities such as restaurants and hotels. As a particular World Heritage site gains attention, positive benefits increase in the areas of publicity, government support and donations. However, simultaneously growing concerns may also arise about the impact of tourist levels on the overall sustainability of the site for future generations. Ironically the growth in tourists may adversely affect sustainability efforts. So, positive effects of designation can frequently result in a negative impact upon these treasured sites. The success of a site must balance its visitation and preservation. An interdisciplinary approach to explore the issues and debates surrounding the designated World

Heritage sites is provided by Rakic (2007). Her study included heritage professionals across forty five countries. She used online questionnaires and semi-structured interviews to garner results. Four key themes were identified in her literature review phase: *Tourism management and marketing*, *policy and conservation*, *significance of World Heritagesite status and implications of World Heritage site* listing for the local population. McKercher (2004), considered the impact of cultural tourism development. Cultural tourism includes sites that have cultural importance to the local communities, but may not be of interest to the typical tourist. When a cultural site is designated as a World Heritage site it draws a new group of tourists that may never have visited the site prior to the designation. Ho and McKercher researched the Cultural Heritage sites as a form of tourism product; they sought to determine if heritage became a commodity. Marketing is defined as a management function that identifies, anticipates and satisfies customers in a profitable manner (Misiura, 2006). In relation to World Heritage sites, marketing is tailored to a specific tourism niche. This research discussed three contributing factors to marketing UNESCO World Heritage sites: Political contributions, Visitor management, Brand equity. The *political climate* of a country affects tourism promotion (Ryan and Silvanto, 2010).Listing as a World Heritage site impacts political decisions on the branding and marketing of the site. Ryan and Silvanto exposed how political instability and democracy are important in the promotion of the World Heritage sites and affect the development of tourism. The study explored 54 counties and 94 sites to see how the level of democracy affected promotion. It was cited that countries with political instability experienced decreases in the level of tourist activity. A *relationship exists between marketing and visitor management* at World Heritage sites (Fullerton, McGettigan, and Stephens, 2010). This study examined if a balance can be created between visitor impacts and site maintenance. Tourism viewed as successful only on the merits of increase visitors numbers can in fact prove detrimental to the sites if increased visitor numbers puts a strain on site preservation. Brand awareness provides an identity to the user and can evoke a sense of trust and loyalty (Misiura, 2006). *Brand equity* relies on several factors based on

loyalty, perceived quality, associations and awareness (Portia, Reichel, and Cohen, 2011). The World Heritage site name can be regarded as a brand. The branding of UNESCO World Heritage sites allows for a set of associations and expectations to be created. The UNESCO brand also evoked certain feelings or perceptions by customers. Brand awareness is a marketing tool for UNESCO World Heritage sites. Carter and Bedard (2001) and Carter and Richer (1999) have focused on the operators in the tourism industry. Developments of the e commerce and DMO (Development Management Organizations) and their changing value chains are analyzed intelligently and clearly so that importance of internet presence for consumers, intermediaries, travel media and other players in the industry is noted and understood through their works. Marcussen (1999) attempts to provide an overview of innovative developments in distribution of travel and tourism services in Europe. It documents the wealth of statistical data on travel and related transactions in the European tourism industry. Werthner and Klein (1999) demonstrate how the World Wide Web has profoundly changed the production, distribution and consumption of touristic products, and conclude that ICT is probably the strongest driving force for changes within the tourism and hospitality industry, and the major contributor to the achievement of competitive advantage. Dodds, et al. (2010) show that the adoption of ICT has leveraged the effectiveness and efficiency of the tourism industry, thus enabling it to achieve sustainable competitive advantage.

METHODOLOGY

Aim of this paper is to suggest that adequate tourism growth can be executed by the use of intelligent ICT solutions in the development of heritage tourism that would help to achieve a more globally responsible paradigm for the tourism industry and facilitate the management of destinations and the coordination of the local suppliers in India.

Objective

To oversview the Review Of Literature For Understating Role Of Heritage Tourism Marketing,

Outline The Intelligent ICT Solutions In The Development Of Heritage Tourism That Would Help To Achieve A More Globally Responsible Paradigm For The Tourism Industry In India,

This Research Illustrates ICT solutions in order to Shape Heritage Tourism Marketing Strategies.

THE INTELLIGENT ICT SOLUTIONS

The Internet has dramatically changed the way in which consumers plan and buy their holidays and other tourism products. It has also affected how tourism and hospitality providers promote and sell their products and services (UNCTAD, 2002). Indeed, the tourism and hospitality industry is one of the industries to adapt quickly to ICT and the e-marketing practice. The transition has been swift and comprehensive to such an extent that the structure of the industry is changing (Gratzer and Winiwarter, 2003), and the competitiveness of the marketplace is altered (Bulhalis, 2003). Development of Information and Communication Technologies (ICT) has transformed the contemporary business environment. ICT is a broad terminology referring to multiple communication technologies which range from simple and complex namely Cell Phone applications (SMS), Digital Cameras, Internet, Wireless (WiFi and WiMAN), VOIP,GPS, GIS, Convergence (data, voice, media), Digital radio, These technologies are creating a new global market place, which is more competitive- Tourism is expected to benefit economic development in several ways:

1. Through allowing Heritage Information access to global markets,
2. By providing new opportunities to export a wider range of services,
3. By improving the efficiency of web sites and communications facilities.
4. It has led to new information economy which is digital in nature.

A key challenge for the enhancement of cultural heritage is to bridge the different perspectives of how tourism organizations and service providers can present their cultural heritage in a way that appeals to the interests of the international tourism audience. Utilizing the ICT infrastructure, communities are helped to become more strategic and entrepreneurial in managing their heritage. ICT adoption can make a difference is tourism (UNCTAD, 2005).

A web site which having virtual space (infinite) and can be used to display objects. Virtual visit allow access to the site for those audiences who have no possibility to travel to the destination and thus the sites better meet its mission of enabling public access. A unique attribute of heritage consumption is that its benefits are experiential and may be divorced from the place itself (Prentice and Duncan, 1994). Virtual travel experiences are especially appropriate in the case of heritage sites in which physical visitation is discouraged in order to conserve the resource or is not possible for financial or other reasons. Web sites play an important role in the creation of sustainable tourism. An essential element of sustainable development of cultural tourism is the
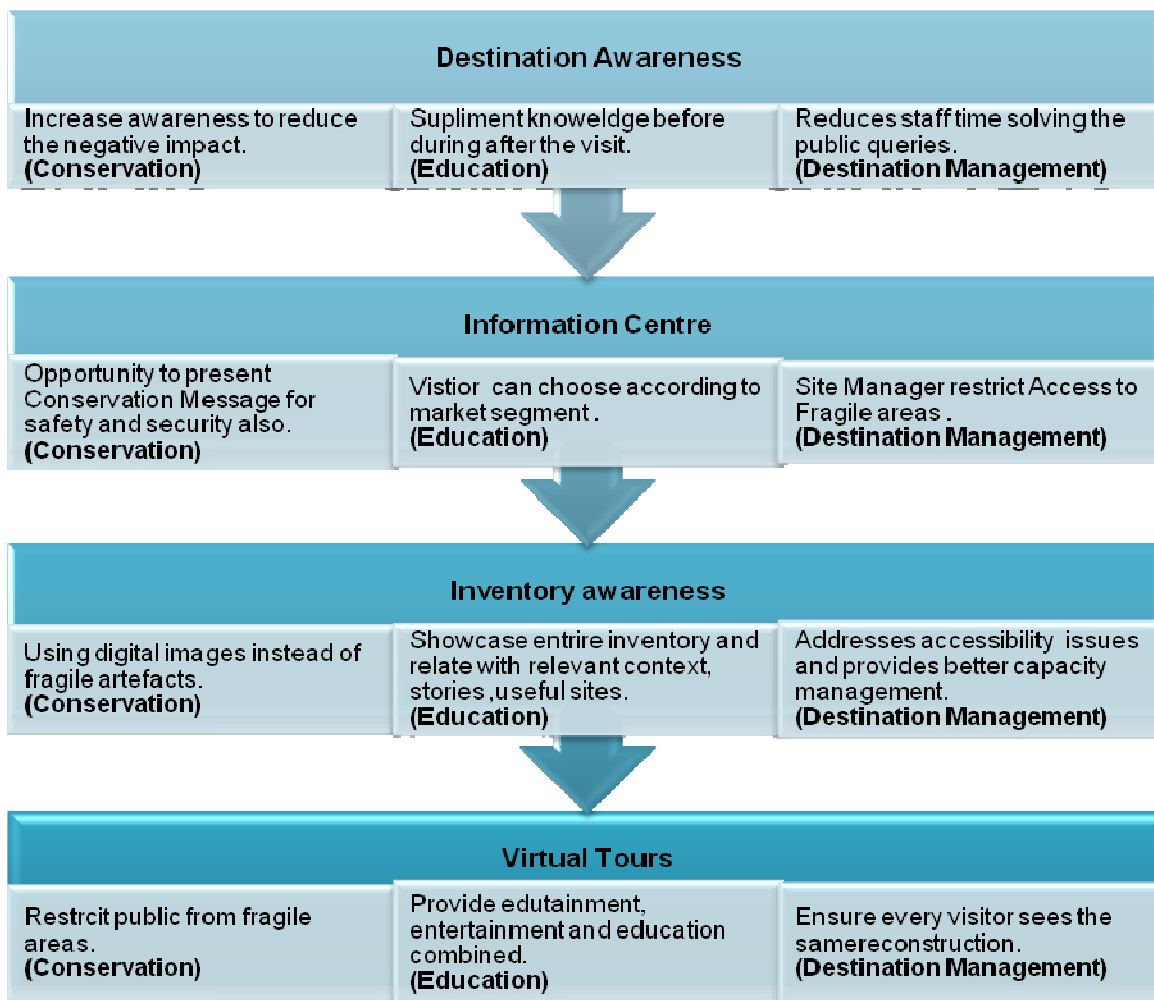
behavior of visitors at the site. As explained in figure (1) Quality of information about heritage encourages visitors to understand the characteristics of heritage and the need for its protection and helping visitors to enjoy the site appropriately. On the other hand, the promotion can significantly help in achieving financial and educational goals. Good presentation on the Internet can attract more visitors, if the site carrying capacity allows it. Then it increases the profit that can be used to fund educational activities, solve management problems and reach the goals and objectives of the site.

Promoting e-tourism requires the committed involvement of public authorities. The necessary infrastructure such as broadband Internet access has to be made available, tourism information has to be provided, and DMSs that cater for local tourism interests have to be designed. Public and private partnerships have been proposed as a way to pool locally available human, financial and technical resources to promote e-tourism. E-tourism has evolved from a technology trend to a mainstream tourism business reality, creating opportunities as well as challenges for both practitioners and researchers in the area (Papathanassis and Buhalis, 2007).According to Choi, et al. (2007) destination marketing organizations (DMOs) are facing intriguing challenges to provide quality information online in an era of information overload. Insufficient knowledge of tourist's online information preferences and search behaviour has hindered them from effective information management. To remedy part of this challenge, it is recommended that a sound Internet-based Marketing Information System be constructed in such a way as to incorporate decision support solutions for customer relationship management, market research, marketing communications, logistics, and product development (Harmon, 2003).

ON – Site Heritage Attraction In India

In 1972, the General Conference of UNESCO adopted a resolution with overwhelming enthusiasm creating thereby a 'Convention concerning the protection of the World Cultural and Natural Heritage'. The List of recorded sites on the World Heritage now stands at 981 which include both cultural and natural wonders, and endowment that is shared by all mankind and the protection of which is the concern of the entire mankind. India is an active member State of the World Heritage from 1977 and has been working in close co-operation with other International agencies like ICOMOS (International Council on Monuments and Sites), IUCN (International Union for the Conservation of Nature and Natural Resources) and ICCROM (International Centre for the study of Preservation and Restoration of Cultural Property). There are 30 World Heritage Properties in India out of which 24 are Cultural Properties and 6 are Natural Properties. List of world heritage sites in India is

Figure 1: Showcase of Heritage website for adequate marketing .

Destination Awareness

| Increase awareness to reduce the negative impact. (Conservation) | Supliment knoweldge before during after the visit. (Education) | Reduces staff time solving the public queries. (Destination Management) |

Information Centre

| Opportunity to present Conservation Message for safety and security also. (Conservation) | Vistior can choose according to market segment . (Education) | Site Manager restrict Access to Fragile areas . (Destination Management) |

Inventory awareness

| Using digital images instead of fragile artefacts. (Conservation) | Showcase entrire inventory and relate with relevant context, stories ,useful sites. (Education) | Addresses accessibility issues and provides better capacity management. (Destination Management) |

Virtual Tours

| Restrcit public from fragile areas. (Conservation) | Provide edutainment, entertainment and education combined. (Education) | Ensure every visitor sees the samereconstruction. (Destination Management) |

Source: Buhalis, 2008

produced by the MHRD, Government of India in 2013. (Table 1)

Competitiveness Index

Established economies are increasingly feeling the impact of aging populations through the growing pressure on social care systems and the changing requirements needed to meet the mobility and leisure habits of people. At the same time, new demand is unfolding in developing regions such as the BRIC countries (Brazil, Russia, India, and China) and beyond, changing the profile of the international traveller.

Figure 1 shows, India is ranked 11th in the region and 65th overall, gaining three places since the last edition. As with China, India is well assessed for its natural resources (ranked 9th) and cultural resources (24th), with many natural and cultural World Heritage sites, rich fauna, many fairs and exhibitions, and strong creative industries. India also has quite good air transport (ranked 39th), particularly given the country's stage of development, and reasonable ground transport infrastructure (ranked 42nd), although the quality of roads (85th) and of ports (79th) require further improvement.

In addition, India remains a relatively price competitive destination (20th), even in the regional context. However, some aspects of its tourism infrastructure remain somewhat underdeveloped (ranked 95th). *ICT infrastructure also remains somewhat underdeveloped and underexploited (111th).* Another area of concern is the policy environment, which is ranked 125th because of the long time and high cost required to start a business, a restrictive visa policy (132nd), and low level of commitment in GATS agreements for tourism services (114th). Other areas requiring attention are health and hygiene standards (109th) and the country's human

Table 1. List of World Heritage Sites in India.

• Agra Fort (1983)	• Mountain Railways of India (1999)
• Ajanta Caves (1983)	Qutb Minar and its Monuments,Delhi (1993)
• Buddhist Monuments at Sanchi (1989)	• Red Fort Complex (2007)
• Champaner-Pavagadh Archaeological Park (2004)	• Rock Shelters of Bhimbetka (2003)
• ChhatrapatiShivaji Terminus (formerly Victoria Terminus) (2004)	• Sun Temple, Konârak (1984)
• Churches and Convents of Goa (1986)	• TajMahal (1983)
• Elephanta Caves (1987)	• The JantarMantar, Jaipur (2010)
• Ellora Caves (1983)	• Kaziranga National Park (1985)
• Fatehpur Sikri (1986)	• Keoladeo National Park (1985)
• Great Living Chola Temples (1987)	• Manas Wildlife Sanctuary (1985)
• Group of Monuments at Hampi (1986)	• Nanda Devi and Valley of Flowers National Parks (1988)
• Group of Monuments at Mahabalipuram (1984)	• Sundarbans National Park (1987)
• Group of Monuments at Pattadakal (1987)	• Western Ghats (2012)
• Hill Forts of Rajasthan (2013)	*Source: UNESCO Report (2013)*
• Humayun's Tomb, Delhi (1993)	
• Khajuraho Group of000 Monuments (1986)	
• Mahabodhi Temple Complex at Bodh Gaya (2002)	

Figure 2. Rank of India at Competitive Index
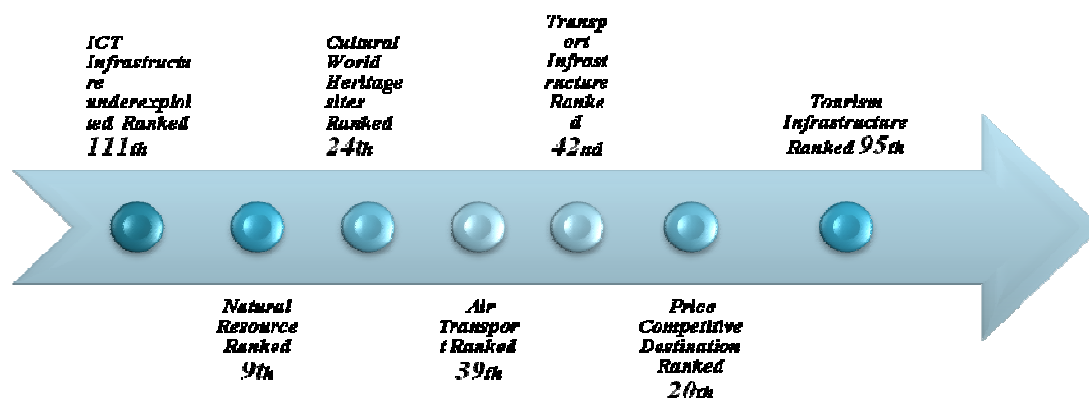
Source :Report of World Tourism Organization (W.T.O), 2013 .

resources base (96th).

RECOMMENDATIONS

The current ICT system has certain limitations. For instance, accessing information through Internet and www is an intelligent mean of getting the information, but many a times, the information is highly fragmented. One shall arrive at it only after intelligent navigation, which is time consuming and may mislead in the process. Sometimes, presentation of information in the web is not intelligent too. In respect to these hurdles, the following points should be taken care of:

• There is a need for a well-structured Information System or Intelligent System technologies in tourism industry to facilitate the access of tourist information by

the users.

- Collaborative networking should be established between all stakeholders and both the policy makers and the entrepreneurs should work together to raise awareness of e-tourism through training and education regarding conservation, preservation etc.
- Search engines for specifically to promote cultural and heritage sites should be developed. Facilities to browse according to the topic portals can be made.
- While stressing on e-development initiatives on tourism industry, Paul Ridoutt recommends some *policy implications*. She feels that e-tourism strategies should be integrated with broader framework of national ICT policies. Contributions and involvement of public authorities is essential in providing infrastructure and human capacity, which encourages the ICT usage. A long-term sustainable tourism industry cannot be developed without government's support and cooperation.
- Economic opportunities will be created for entrepreneurs and the broader tourism sector, both within and external to the provincial protected areas, through targeted marketing investment and concession agreements. It is essential to build a user friendly model for rural tourism, keeping in mind the ICT tools, cultural policy, state and local region. Information from the local communities can be also protest and preserve cultural heritage.
- A common ICT based heritage tourism development strategy can be evolved using the points of convergence between cultural sector and tourism industry. Such a strategy common to the culture and tourism sectors on a regional level could be an appropriate solution to overcome major challenges associated with ICT based heritage tourism development. It enables a delicate balance between both accessibility to heritage and its preservation.

CONCLUSION

Tourism is a profit driven industry and ICTs should contribute to profitability. This can be achieved through driving increases in revenue, reductions of production and operational cost and increase of awareness and promotion. Emerging tools can support production increase, improvement of load factor/occupancy levels and enhance scheduling. Airlines for example, use technology to forecast demand, schedule and monitor load factors before deciding on route capacity, frequency, hub and spoke operations. ICTs evolve constantly, providing new tools for tourism marketing and management. They support the interactivity between tourism enterprises and consumers and as a result they re-engineer the entire process of developing, managing and marketing tourism products and destinations. This paper has identified ICT Solutions which can impact on

the tourism industry in the future. ICT can open up new prospects for cultural and tourism policies through the convergence of resources preservation and development. A common ICT based heritage tourism development strategy can be evolved using the points of convergence between cultural sector and tourism industry. Such a strategy common to the culture and tourism sectors on a regional level could be an appropriate solution to overcome major challenges associated with ICT based heritage tourism development. It enables a delicate balance between both accessibility to heritage and its preservation.

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