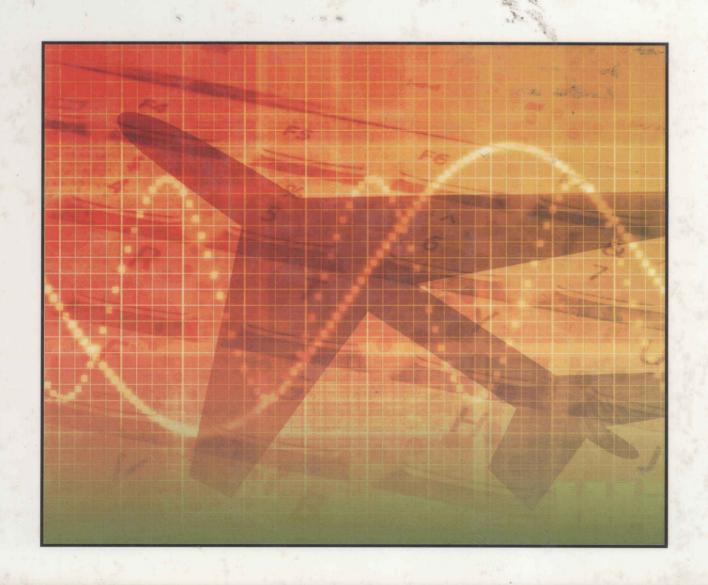
DIGITAL CULTURE AND E-TOURISM

Technologies, Applications and Management Approaches



Digital Culture and E-Tourism:

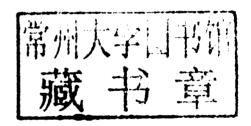
Technologies, Applications and Management Approaches

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Foreword

During the past three decades digital technology has slowly but steadily gained recognition from the cultural organizations and memory institutions of society. As a result of this increased engagement, there has been a shift in the role of heritage institutions from being repositories and keepers of heritage into that of active information and communication hubs. In the Information Society, communities are embracing cultural tourism as a potential generator of economic activity for the 21st century. It is expected that the combination of digital cultural heritage and e-tourism will work as potential catalyst and trigger of opportunities for economic revival. It is likely that these advancements will result from the materialization of new service-oriented heritage industries.

Digital cultural heritage is a term used to describe artifacts such as digital collections from museums, archives, libraries and other cultural institutions. The term is also indicative of activities involving the creation, preservation, and dissemination of heritage through education, entertainment, research and tourism-oriented digital applications.

Though closely related to artifacts, the heritage industries themselves are not totally object-oriented but rather emerge as part of the search for subjective and highly personal meaningful experiences usually associated to memories and nostalgia. Therefore, the discipline of digital cultural heritage cannot be treated as a simple entity but must be understood as a complex system where diverse knowledge communities converge to create multifaceted phenomena. The wide span of coverage requires careful inquiry in areas such as art history, design, business planning and marketing strategy. Additional areas that must be surveyed include the human sciences, particularly anthropology and psychology, and a diversity of theories and techniques employed in the communications fields that are constantly being developed and revised.

Written by respected professionals involved in the creation of this digital cultural heritage, this volume seeks to fill an urgent need for accurate and timely information about the latest developments in the field. Professional and managerial personnel involved in developing infrastructures and administrative policies, as well as those who work in the arts, humanities and sciences either as researchers or producers will find the book to be a resourceful compilation.

Lily Díaz Helsinki, 25 October, 2010

Preface

INTRODUCTION

This edition fosters multidisciplinary discussion and research on the adoption of information and communication technologies (ICT) in the contexts of culture and tourism. Its key objective is to be the leading scholarly scientific reference edition for all those interested in, researching and contributing to the cultivation of a regional and global vision for the management of cultural content and tourism.

For this reason, the book delivers research articles, position papers, surveys and case studies aiming:

- To provide a holistic and multidisciplinary discussion on how technology supports new unforeseen digital highways for the provision of cultural content and tourism services
- To promote the international collaboration and exchange of ideas and know how on digital culture and electronic tourism
- To investigate how emerging technologies and new managerial models and strategies can promote sustainable development for culture and tourism
- To promote the issues of digital culture and electronic tourism as key pillars of the knowledge society

OBJECTIVE OF THE BOOK

In a turbulent world, culture and tourism provide two of the most fascinating aspects of human life. Creativity, imagination, brilliant colours, music, sounds, artifacts, and spectacular places are becoming the required connectors for humanity. In a global perspective, the new capacities of emerging technologies, such as pervasive and ubiquitous computing, semantic knowledge portals, broadband and satellite networks, Web 2.0 and semantic web, open source software, and set new tools, define new horizons for human creativity and connectivity.

In the digital world of the knowledge society, the development of infrastructures for the provision of services to citizens for access to cultural content and tourism services requires a multifold analysis of social, business, and technological factors. It seems that, unfortunately, there is a significant gap in the performance of current approaches and a key absence of scholar publications that will provide a fruitful dialogue.

In the context of the knowledge society, the key inquiry is to go beyond the traditional barriers for the open access to cultural content and integration with learning and working. On the other hand, critical deficits in economic and social performance of tourism are evident due to the inefficiencies of current technological approaches that treat the tourism connection to information technology as a database problem. Our strategic fit is that culture and tourism require an integrated approach emphasizing content, context and multiple, dynamic views of interactions.

The main objectives of this edition are summarized as follows:

- To provide the leading edge approaches and applications of ICTs in culture and tourism
- To provide the state-of-the art for government consultation and advice for academics/practitioners/policy makers and managers of the culture and tourism industry
- To contribute to the literacy of digital culture and electronic tourism

Target Audience

The audience for this book includes:

- Government Officers
- E-Culture and E-Tourism consultants, experts
- Academics and researchers in the field both in universities and business schools
- Information technology directors and managers
- · Quality managers and directors
- Politicians
- Professors in academia,
- Policy Makers
- Government officers
- Students
- Human resource directors
- Libraries and information centres serving the needs of the above
- Corporate heads of firms
- Senior general managers
- Managing directors
- Board directors

Among others, the book "Digital Culture and E-Tourism: Technologies, Applications and Management Approaches" addresses the following topics:

Digital Culture and Electronic Tourism: The Research Domain

- The digital culture and electronic tourism domain: philosophical routes, demonstration of various communities, success stories, lessons learned
- Digital culture and e-tourism key issues: effective strategies, diffusion models and reference theories

Deployment of ICTs in museums/cultural centres, policy issues, integration issues, extensibility, interoperability

Digital Culture and Electronic Tourism: The Theories

- Sociological/economic theories and models
- Content vs community manifestations
- Collaborative/context aware/personalised approaches

Digital Culture and Electronic Tourism: The Technologies

- Culture and tourism portals
- Push/pull technologies
- Web 2.0
- Semantic web
- Adaptive and personalised technologies
- Metadata and content standards
- Free and open source software
- Ubiquitous and pervasive technologies
- Intelligent agents
- Content/knowledge management systems
- Emerging technologies
- Grid technologies

Digital Culture and Electronic Tourism: The Practices

- Digital culture and electronic tourism practices in different educational/learning contexts
- Surveys of digital culture and electronic tourism adoption in education
- Future of digital culture and electronic tourism

Digital Culture and Electronic Tourism: The Applications in Domains

- Domain applications: museums, schools, labs, experimental approaches, educational/school portals
- Tools/emerging technologies and new generation applications
- Challenges for the future; specification of government policies for the promotion of digital culture and electronic tourism
- Roadmaps for the future

Before closing this preface, we would like to thank sincerely IGI-Global staff for this opportunity to edit this book and their help and support during the development of the book.

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This chapter aims at building an analytical framework that expands the current scholarship on Social Network Sites (SNS) to the domain of museums. SNS are web-based services that allow their users to create public or semi-public profiles and use these to create lists of other users with whom they share a connection, with the possibility to make their networks visible to themselves and also to make these networks visible at various degrees of public access. These technologies also allow for communication between members of a network within various degrees of control and privacy. The emergence and growing popularity of SNS, with examples of general public services such as Twitter, Facebook and MySpace, niche versions such as those allowed by the Ning platform, and the current trend of including SNS capabilities in media sharing services such as YouTube and Flickr, has brought to museums new opportunities and challenges to engage in dialogue and connect with a variety of publics. The chapter discusses ongoing research into the role online activities play in the communications and branding strategies of museums, and how theory and technology might be applied to develop an analytical framework for a specific case, the Panama Viejo Museum. The main question that the chapter addresses is how to measure the degree the use of Social Network Sites and their impact in the online practices of museums, and proposes as response a framework for museum SNS analytics.

Chapter 2

Web 2.0 offers exciting possibilities and challenges for extending the museum visit, engaging new visitors and attracting distant audiences. However, the digital media technologies that enable distributed, shared and user/novice-generated audiovisual content can be deployed by experts in other fruitful ways to augment and rejuvenate actual visits to interpretation centres. Going beyond the e-guide, integrated audiovisual media can offer original new visions of ancient cultures, bring intangible as well as physical heritage to the museum, and make exploring it a lively and vivid contemporary experience. Developing and exhibiting original digital art to make the museum visit more dynamic requires new ways of researching, funding, supporting and curating exhibitions. This chapter contextualizes and reviews two recent European case-studies which aim to enhance the museum visit, noting how they were funded and developed, commenting on these approaches and reviewing how improved infrastructures might support attractive, rejuvenating dynamic vision in the future.

Chapter 3

Service design is establishing itself as a method for developing services and service business. Service needs, new ideas and ways to utilise technology are encountered when the customer and the end user participate in the design process. This chapter focuses on service design methods and the process of how service design can help in innovating customer-orientated service concepts for e-tourism. Service design connects the areas of cultural, social and human interaction. Use of design methods acts as a link between the different views in the service design process. Service design is an emerging field where the terminology and methods are still developing. Service design looks at service development from the designer's point of view. Design thinking has the ability to create concepts, solutions and future service experiences for users.

Chapter 4

People frequently need to find knowledge related to places when they plan a leisure trip, when they are executing that plan in a certain place, or when they want to virtually explore a place they have visited in the past. In this chapter we present and discuss a set of methods for searching and browsing spatio-temporally referenced knowledge related to cultural objects, e.g. artifacts, photographs and visiting sites. These methods have been implemented in the semantic cultural heritage portal CultureSampo that offers map-based interfaces for a user to explore hundreds of thousands of content objects and points of interest in Finland. Our goal is develop and demonstrate novel ways to help the user 1) to decide where to go for a trip, and 2) to learn more about the neighborhoods and points of interest during the visit.

Chapter 5

Nowadays tourism activities tend to be increasingly personalized and diversified. Tourism industrial chain can be enriched and the development of tourism industry can be diversified when cultural and creative elements are added to tourism fields. This study takes cultural and creative tourism as the theme, and studies the characteristics and planning framework of cultural and creative tourism, and finally put forward development strategies of tourism cultural and creative industry including building tourism creative zone, combining tourism image slogan with creative elements, emphasizing creative design and marketing in terms of traveling souvenirs, adding the creative elements to tourism festivals and activities, developing tourism market through popular film and television hot spots and performance arts, innovating through combining tourism and other states of matter.

Chapter 6

The tourism sector has embraced the digital technologies at a number of levels. One of the most prominent ones is the web, which firstly was used as a world-wide showcase to publish and distribute information about tourism resources of interest, such as places, events and accommodations. Later, more advanced uses appeared, such as e-commerce (electronic ticket, room or flight availability check, direct room booking, to name a few), route planning (e.g., ticket brokers, flight combinations), virtual visits, tourist feedback, interactive geospatial information systems, review portals, user-generated multimedia content or even encyclopaedias. All these information resources and digital services have empowered the prospective tourists to control many aspects of their trips. In this regard, the tourists have the potential to effectively become their own travel agents.

Chapter 7

The technology advances of the 19th and 20th century have introduced a Digital e-ra, where a potential tourist is able to tailor his own travel package with a mouse – click movement. The virtual travel agencies and tourism – related web sites use internet as a marketing communicational tool for promoting their products and/ or services. Therefore, the decision making processes of booking vacations seems to change dramatically as e – tourism brought revolutionary changes in the tourism industry's structures. The web tourists have the chance to do comparative e – travel shopping from suppliers from all over the world fast and easily. Based on this assumption, the purpose of this study is to examine whether internet is a powerful communicational tool for people over the other forms of gathering information

for a destination. Furthermore a main objective is to identify whether the available information in the web can promote adequately Greece. Results of the study confirmed that internet is a powerful communicational tool in tourism industry, as per young people's perspectives. However, booking a holiday through the web might be tricky for an inexperienced user. The negative aspects of e –bookings are the factors that reinforce the validity of the other sources of information.

Chapter 8

Starting with an overview of the technology diffusion in European Tourism industry, the chapter describe the Destination Management System as the key managerial approach able to combine the potential of the new technological applications with the managerial and market needs that Tourism industry is facing, towards the support and promotion of Tourism Network Systems. The creation of ICT enabled virtual network systems is presented as a means through which small and medium firms can collaborate horizontally, vertically and diagonally, achieving economies of scale and scope, profiting from cost effective use of technology and reaching customers in a more efficient and effective way.

Chapter 9

This chapter's main objective is to provide a new conceptualization of the tourism which has major implications for management approaches, business models and strategy techniques of the sector. The objective is to try to reconcile the complexity of the environment with the managerial techniques and strategies that aim to create sustainable competitive advantage. We will begin with a review of tourism characteristics of supply and demand side. Then we will analyze the paradigm shifts that are taking place overall in the new economy and the main challenges they bring on in the tourism context. Subsequently, we will discuss the need to realize a shift in tourism conceptualization and management in itself. We will move our focus of analysis away from traditional, mechanical views of tourism to dynamic approaches that take into account the behavior of the overall system and help identify key leverage points of change and transformation.

Chapter 10

This chapter focuses attention on an often overlooked aspect of digital heritage content, namely by whom how, and with what purpose such content is created. We evaluate digital materials that are anthropological and archaeological in nature, both digitized archives and newly created materials. In our

work and efforts to understand and represent different cultural perspectives, we have encountered differences in cultural knowledge systems that have shown the need for cross-cultural consultation and communication as an essential first step in the creation of digital content for new systems of representation and knowledge transfer. Our efforts focus on developing a new educational framework that allows for knowledge exchange at different levels and between different entities, challenging the perpetuating hierarchical relationships between community and experts.

Chapter 11

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This chapter aims to shed light on the nature of architecture, its technological and cultural ramifications on tourism industry. It elucidates the background of issues regarding the interaction between the fields of cultural production (architecture) and cultural consumption (tourism). The chapter argues that power of tourism industry has reached, under the pressure of global economics, to a capacity to turn even daily architecture into instruments of touristic show. In this context, technology is utilized as an instrument to produce such iconography only as a surface articulation. Thus, architecture becomes a commodity of touristic consumption in this current socio-economic and cultural context. The pressure of tourism industry seems to create a significant split between the architecture and its location in terms of specific cultural roots. This tendency is discussed as a potential threat to sustainability of tourism industry itself since it damages its own very source, that is to say, richness of cultural differences.

Chapter 12

The chapter provides an overview of the most advanced technologies for tourism sector, with emphasis on pervasive environments, which represent innovative systems based on an efficient integration of virtual reality and affective world. The aim is to show how tourism industry might exploit the current advances in Information and Communication Technologies (ICT), such as virtual reality, web-based technologies, mobile devices, etc., to catch tourists' attention and gain competitive advantages over competitors. In particular, these technologies are capable of promoting touristic destination in a global perspective and affect potential tourist decision-making process, by investigating the main characteristics and possible integrations. Moreover, especially pervasive environments are efficient tools to entertain and attract tourists' interest, by showing potential destinations in an innovative and exciting way capable of influencing users' decision-making process. In addition, the chapter outlines the possible implications for both marketers and tourists.

Chapter 13