

Impact case study template (REF3b)

Title of case study: Integrated e-Services for Advanced Access to Heritage in Cultural Tourist Destinations (ISAAC)

1. Summary of the impact (indicative maximum 100 words)

The European funded ISAAC Project aimed to enhance the relationship between heritage and tourism in urban destinations through a novel Information Communication Technology (ICT) environment. The platform provided integrated and user-friendly tourism e-services facilitating an advanced access to European cultural heritage assets. Within this project the Sunderland team worked with a wide community of stakeholders to identify intangible aspects and stories worthwhile to be told within a destination. These stories were integrated in an interpretative strategy independent of, but aligned with destinations' current marketing and positioning strategies. The specific impact focuses on three destinations, Leipzig, Amsterdam and Genoa.

2. Underpinning research (indicative maximum 500 words)

Tourism is a key generator of the resources necessary to preserve and enhance cultural heritage in a sustainable way. A successful relationship between cultural heritage and tourism depends on the implementation of a positive communication process that makes the heritage experience attractive and meaningful. The tourist encounter can be significantly enhanced through effective and engaging heritage interpretation, which plays a crucial role in assisting the visitor's process of learning. As interest in heritage attractions continues to grow, managers are faced with providing new and exciting ways to convey their messages to visitors. Interpretation should relate what is being displayed or described to something within the personality and the life experiences of the visitor. ICT solutions can help a great deal in the interpretation process, creating added value by providing better services. But successful implementation depends on a high level of cooperation across sectors, research disciplines and borders.

This case study is based on a European project on Integrated e-Services for Advanced Access to Heritage in Cultural Tourist Destinations (ISSAC) in which Nicole Mitsche played a leading role. **Other UK academics involved in the project include Dan Knox, currently based at the University of the West of England, Franciska Vogt, from the University of Westminster and Krassimira Paskaleva-Shapira, the project coordinator currently based at Manchester Metropolitan University.** The project paved the way towards a more efficient use of ICT services in urban destinations by gathering the appropriate range of expertise needed to address this problem. It provided a novel user-friendly IT based platform to support the accessibility of European cultural heritage and its interpretation. The project brought together 14 European institutions – including universities, ICT companies, local authorities and cultural organisations – pooling knowledge and experience in the fields of digital culture and heritage, e-tourism and urban management.

Research led by Nicole Mitsche at the University of Sunderland fed directly into the project. The Sunderland team worked with a wider community of stakeholders to identify intangible aspects and stories worthwhile to be told within a destination. These stories were integrated into an interpretative strategy independent of, but aligned with destinations' current marketing and positioning strategies (Mitsche et al 2008 and Mitsche et al 2009). The community of stakeholders included destination, attraction and business managers, local communities and heritage groups. The Sunderland team also worked on a user survey of current digital and non/digital cultural tourism media (Mitsche & Bauernfeind 2007 and Bauernfeind & Mitsche 2008). The study, which highlighted the importance of heritage interpretation in both on-site and on-line experience, provided critical information on the relative merits of live and digital interpretation media. Among other things, the study recommended to widen the appeal of digital platforms adapting them to different knowledge levels and needs using appropriate

interpretative media.

3. References to the research (indicative maximum of six references)

Key outputs from the research described in the previous section are listed below with evidence about the quality of the research

Mitsche, N., Vogt, F., Knox, D., Cooper, I., Lombardi, P., & Ciaffi, D. (2013). Intangibles: enhancing access to cities cultural heritage through interpretation. *International Journal of Culture, Tourism and Hospitality Research*, 7(1) pp. 68–77.

Bauernfeind, U., Mitsche, N. (2008). The Application of the Data Envelopment Analysis for Tourism Website Evaluation. *Journal of Information Technology and Tourism*, 10 (3) pp. 245-258

Mitsche, N., Vogt, F., Knox, D., Cooper, I., Lombardi, P., & Ciaffi, D. (2009). Intangibles: enhancing access to cities cultural heritage through interpretation. In S. Lira, R. Amoeda, C. Pinheiro, J. Pinheiro & F. Oliveira (Eds.) *Sharing cultures: Proceedings of an international conferences on Intangible Heritage, Pico Island, Azores, Portugal* (pp. 319-327). Barcelos, Green lines Instituto.

Mitsche, N., Reino, S., Knox, D. & Bauernfeind, U. (2008). Enhancing cultural tourism e-services through heritage interpretation. In P. O'Connor, W. Höpke & U. Gretzel (Eds.): *Information and Communication Technologies in Tourism: Proceedings of ENTER an International Conference held in Innsbruck, Austria, January 2008* (pp. 418-429) Vienna-New York: Springer.

Mitsche, N. & Bauernfeind, U. (July 2008) *The use of technology for cultural heritage interpretation – examples from three cities*. Unpublished paper presented at Selling or Telling? Paradoxes in Tourism, Culture and Heritage: ATLAS annual Conference, Brighton, United Kingdom.

Mitsche, N., Bauernfeind, U. (June, 2007) *Evaluation of technology and non-technology based heritage interpretation media – a case study*. Keynote speech at Tourism Society Annual Conference: "Getting there - Future Access to Special Places". Aviemore, Scotland,

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Integrated e-services for advanced access to Heritage in Cultural Tourism Destinations (Project no FP6-IST-2006-035130) September 2006 to August 2009. Source: IST programme under FP6. Total Budget €86280 Competitive grand. Peer reviewed.

4. Details of the impact (indicative maximum 750 words)

The ISAAC project had a practical impact in the fields of heritage and tourism, integrating dispersed knowledge on cultural tourism and local heritage. The project enhanced the relationship between heritage and tourism in three civic tourist destinations through a novel Information Communication Technology (ICT) environment that provided integrated and user-friendly tourism e-services facilitating advanced access to European cultural heritage assets

The main focus of the project was the development of an ICT architecture capable of offering tourists and other users customised e-services for retrieving and accessing complex multimedia information, based on cutting edge service orientated data mining and multi-agent technology. The platform was developed by the team and implemented in three European cities, Genoa, Amsterdam and Leipzig. The ISAAC architecture was organised in four different layers, a repositories layer, a communication and harmonization layer, an applicative services layer dedicated to specific applications e-services and a multi-modal human interface layer.

The ISAAC architecture was designed to incorporate all stages of the cultural experience, from the pre-visit to the post-visit. A key innovation was the transition from single, isolated technologies to an integrated platform with compelling e-services which were selected after an evaluation phase. They include an interactive map with a virtual tour, event calendar, itinerary planning, profiling, tourism satisfaction software and mobile clients (ISAAC 2009a, p14). The feedback on the prototype was positive overall. The evaluation report highlighted the “usefulness of the prototype for city partners” and the fact that “all cities aim to use the platform at the end of the project” (Mitsche, Vogt & Cooper, 2009, p 43).

Research developed at the University of Sunderland fed directly into the content and structure of the ISAAC digital platform. As part of the work packaged 1 the Sunderland team led a user survey of current digital and non/digital cultural tourism media, which fed directly into the platform (Mitsche et al 2007). The study recommended that the digital platform should appeal to different market sectors (tourists and locals) related to their different knowledge levels and needs using appropriate interpretative media. This was achieved through focusing on interaction, senses and good content provision and interpretation. The latter focuses on the technology, interpretation and eGovernance from the point of view of the various stakeholders - tourists/residents/other stakeholders – and the full life-cycle tourist experience - pre/during/post – visit - while underlining unique experiential and symbolic selling points.

The University of Sunderland also participated in the development of interpretative strategies for the partner cities of Amsterdam, Genoa and Leipzig (Mitsche et al. 2008). As part of Work Package 4 a number of workshops were organised enabling cooperation and communication between destination managers, stakeholders and communities. An interpretative strategy was produced that could be taken up by the partner cities and by any other cities independent from, but aligned with their current marketing and positioning strategy development level.

As a result of this work a number of non-technological innovations were introduced mostly related with interpretation including: the integration of cultural heritage, tourism and IT in the interpretation process; the use of stories in positioning and destination management; the integration of a variety of tangibles and intangibles in flexible and interpretative systems; the tour based bundling approach to enlarging tourist footfall; the production of a novel city platform for aggregated user content and the development of a new methodological approach to active participation based on blended focus groups and user preference evaluation approaches (ISAACa, pp 68-77).

The three partner cities started from different stages in the process of developing interpretative strategies, and each independently decided which novel stories to tell. Amsterdam focused on the concept of hidden treasures (ISAACb), Leipzig on the district of *Plagwitz* and the diverse cultural scene set within the *Gründerzeit* architecture (ISAACd), and Genoa on the *Palazzi Rolli* (ISAACc). The specific contents of these themes have been integrated and translated into the terms of the ISAAC test cases, ensuring their sustainability beyond the life of the project.

The ISAAC project resulted in a new set of e-services for Genoa tourists and residents with “material and immaterial ‘stories’ running along cultural and touristic itineraries throughout the city” (ISAAC, 2009a, p 85). The ISAAC project also caused “significant changes in the city’s in-house reorganisation around digital modernisation, particularly in how it exploits promotes and manages its cultural heritage” (ISAAC, 2009,a p 85). The participation in the ISAAC project also led to a new platform for Leipzig tourists and residents where “users gets an overview of the topic Grunderzeit and the different Grunderzeit districts” (ISAAC, 2009a, p97). The municipality of Leipzig believes that the platform will increase the attractiveness of its cultural heritage. Finally Amsterdam gained “a new e-service with a virtual tour through the architectural history of Amsterdam” as well as research on “cultural heritage marketing”, user needs and on “tangible and non tangible aspects of cultural heritage”. (ISAAC, 2009a, p91).

5. Sources to corroborate the impact (indicative maximum of 10 references)

The following partners can be contacted to corroborate the impact of the ISAAC project

- ISAAC Coordinator (1)
Manchester Business School, UK
- City of Amsterdam (beneficiary) (2)
Directie Communicatie - Communications Department

The following reports related to the ISAAC project are available for consultation at <http://www.isaac-project.eu/publications.asp>

ISAAC (2009a) *ISAAC publishable final activity report*

ISAAC (2009b) *ISAAC task 4.1 Amsterdam's Interpretative Strategy Report English*

ISAAC (2009c) *ISAAC task 4.1 Genoa's Interpretative Strategy Report Italian*

ISAAC (2009d) *ISAAC task 4.1 Leipzig's Interpretative Strategy Report German*

Mitsche, N., Vogt, F., Cooper, I. (2009) *ISAAC Deliverable 5.3 - Workshop based ongoing validation activities and final demonstration*

Mitsche, N., Vogt, F., Knox, D., Cooper, I., Paskaleva, K., Azorin, J., Lombardi P & Ciaffi, D. (2008) *ISAAC Deliverable 4.1 Report on Interpretative Strategies for the Cities of Amsterdam, Leipzig and Genoa*

Mitsche, N., Bauernfeind, U., Reino, S & Knox, D (2007) *ISAAC-Deliverable 1.2 Report on user surveys of current digital and non digital cultural tourism media*