

Chapter LVIII

Mobile Technologies and Tourism

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ABSTRACT

This chapter examines the potential of mobile technologies for the tourism industry. Mobile technologies have the capacity to address not only the pre- and post- tour requirements of the tourist, but also to support the tourist on the move. It is this phase of the tourist activity upon which mobile technologies can be expected to have the greatest impact. The development of applications for the mobile tourist will allow for the creation of a new range of personalised, location and time specific, value added services that were not previously possible. Before such applications can be widely deployed, however, some fundamental technical and business challenges need to be addressed. Despite these challenges, mobile technologies have the potential to revolutionise the tourist experience, delivering context specific services to tourists on the move.

INTRODUCTION

Tourism is one of the world's largest and most rapidly expanding industries, contributing over 10% to global GDP (WTTC, 2003). Information and communication technology (ICT) has played a critical role in its development, as evidenced for example by the development of massive global distribution systems (GDSs) and airline computerised reservation systems (CRSs), as well as enterprise systems, such as

FIDELIO for the hospitality industry. Until relatively recently most ICT applications dealt with enterprise operations of the B2B type. The Web has had a "liberating" effect by making possible the introduction of B2C applications (e.g., using a Web site for the distribution of product information, destination promotion, online bookings, and e-commerce in general).

The B2C applications have been relatively "static" systems offering support in the pre- and, to some extent, post-tour phase of a trip.

For example, they support information retrieval on places to visit, online reservations, personal Web pages, and so forth. A key gap in ICT applications, however, has been the lack of support for the tourist on the move (e.g., “Where is the nearest hotel?,” “How do I get to the museum from here?,” etc.). Solutions such as kiosks, Internet cafes, and the increasing availability of Internet connections in hotel rooms address only part of the problem, as they still require the tourist to be wired (“tethered”). The answer lies in developing applications which address the mobility issue *directly* by delivering applications on wireless-enabled platforms such as mobile phones and PDAs to tourists while they are on the move. Herein lies the challenge: at its simplest the issue is one of providing information-rich, “bandwidth guzzling” content (colour photos, graphical and audio-visual content) via “capacity-challenged” hardware platforms and communications infrastructure. Thus, exhortations to develop applications that provide “personalised” services “in context” are not surprising, both because they are desirable (CSTB, 2003) and also because for the foreseeable future, hardware limitations will dictate it.

Despite the challenges, the vision is clear enough:

... the opportunity for providing location dependent information and reservation is critical for tourism[,] and the constantly moving consumer ... will support a whole new way of communicating, accessing information, conducting business, learning and being entertained while on the move... With access to any service anywhere, anytime from one terminal, the old boundaries between communication, information, media and entertainment will gradually disappear, offering convergence between technologies and tourism services. (Buhalis, 2003, p. 323)

In a sense the issue is transitional, for it is not difficult to foresee that, in the longer term, wireless forms of communication will be the dominant technology, and that technology and business challenges will be addressed. However, regardless of the duration of the transitional period, certain fundamental issues need to be addressed: Why are mobile technologies of interest to tourism? What are the key components of a mobile system? What kind of services are required by the mobile tourist? What are the issues involved in applications development for mobile services? Case studies of existing applications in tourism will be used to illustrate some of these points. This chapter will answer these questions and evaluate the potential impact of mobile technologies on tourism.

INFORMATION REQUIREMENTS FOR MOBILE TOURISTS

Using “old” and “new” tourism models (O’Looney, 2004) has highlighted some aspects of information use by tourists. In the “old Tourism Model”, tourists used guidebooks, paper maps, and printed media. They were inundated with cluttered and broad-based advertising, and lacked the ability to focus or follow-up on a topic. Furthermore, much of this information was out of date soon after printing. Guidebooks can also be hard to follow: it is not easy to link locations on a map with information in guidebooks, one must read through lots of information in order to get what one wants, and such guides are designed for the “general” tourist (Brown & Chalmers, 2003). Web information searches, when available, essentially mimicked the traditional library service, providing vast amounts of unstructured data. In contrast, the ‘new tourism model’ uses mobile phones, PDAs, laptops, and electronic maps; it provides a personalised, information-rich, and location-

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