A flexible database approach for regional heritage and tourism information management

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ABSTRACT

This paper describes an approach to an information system for heritage tourism. A model of heritage tourism is used as a basis for considering information needs. By adopting visitor experience as the focus for the system both the resource management and tourism marketing aspects are incorporated with beneficial results. In IT terms, this focus on the visitor experience has two significant consequences. The system developed has a balance of user driven content and provided material, much like successful ecommerce approaches. Second is a need for dynamic and interactive linkages, expressed through information visualisation approaches. The tone of supplied information is also personalised while not losing sight of vital tourist information such as opening hours. All of this reflects the idea that heritage is ongoing and evolving, and is supported by a visitor centred management model. Such an approach gives rise to significant challenges for the implementation of such a system.

1. INTRODUCTION

Heritage tourism has been a rapidly growing area of development in the tourism industry in recent years. Heritage tourism poses some particular management challenges, which can be met, in part, with the innovative use of Internet technologies to inform and educate the public. There is a need to present heritage information as a living resource: updateable, adaptable, incorporating new views and interpretations of the past. This approach reflects changing understanding of heritage as being not simply past history but also the ongoing stories of our lives.

A client who has a strong association with heritage tourism approached us in 2002 to discuss the development of a website for the Southern Heritage Trust – a voluntary organisation whose project brief is to promote the heritage sites of southern New Zealand. In discussions with the client the extent of the challenges of managing heritage sites became apparent. Issues that were identified included:

♦ The wide range of sites that can be defined as "heritage" is not confined to old buildings and architectural sites. For example, national parks, animal and plant species, buildings, cemeteries, industrial sites, personal stories, cultural artefacts, indigenous components are all aspects of heritage.

♦ There is a conflict between preserving artefacts or resources and allowing reasonable access for the public. Sometimes it is preferable not to promote a particular site rather than risk the inevitable damage that visitors would unintentionally bring.

♦ Generating an income from heritage sites, funding restoration and preservation.

Figure 1: The relationship between visitor centred management, visitor experience, and the condition of the resource (Hall and McArthur 1993 p22)

♦ The variety of themes that provide links for visitors to heritage sites. This may be limited to a specific type of site, such as gas works or brewery sites, or a specific time frame. Some visitors pursue literary themes or genealogical connections. Recently New Zealand has hosted a wave of visitors who wish to experience "Lord of the Rings" sites – another emerging aspect of heritage.

♦ The importance of capturing the visitor experience. The two main benefits could be to help manage the sites ("I visited the monument on a wet day and found the track very muddy, make sure you bring good shoes as the trip is very worthwhile") and to add a personal aspect to the information on the site ("I remember meeting Norman Kirk in 1968 and he told me…")

These factors are well encompassed by adopting a visitor centred model of tourism management.

It is perhaps not coincidental that such a user focussed model is also used to describe sucessful ecommerce approaches (see Alter 2002). Rather than simplying adopting and trying to emulate the model of Amazon or that of Sourceforge, however, it is important that we understand the context of the tourism users: who are they?; what is their subject matter?; and what content might they wish to explore.

2. WHAT IS HERITAGE?

Hall and McArthur, (1993), define heritage as "the things we want to keep". The word is connected with a sense of inheritance, that which we will pass on to future generations. As individuals we often pass on things of value such as jewellery and houses. Each individual will also have experiences and memories, which define their personal heritage. As a community, it is more difficult to define what things are representative of our heritage. The community heritage can include tangible artefacts or natural resources, as well as intangibles such as knowledge, memories and cultural practices. Different groups within each community have their own set of cultural values.

Problematic is the concept of "we": who is able represent the community in order to define a community's heritage? Historically, the dominant culture has played this role. Aplin (2002) points out that 'New World' countries such as New Zealand have been "generally markedly Eurocentric" in their heritage perceptions. Hence there has been an emphasis throughout the past century on the preservation of Victorian buildings at the expense of recognition of Maori achievement and culture.

Aplin (2002) describes heritage as a subjective concept that "depends on a person's background, life

experiences, and personality…groups of people, perhaps with a common socio-economic, cultural or ethnic background, may share many aspects of their perceptions". Given the personal nature of the concept of heritage, the challenge is to present heritage information in a manner which allows for these many views and perceptions.

3. VISITOR EXPERIENCE IN HERITAGE WEBSITES

Existing heritage websites in New Zealand have tended to focus on recognised commercial attractions such as Larnarch's Castle. By broadening the definition of heritage to include the narratives of previous and current generations, the rich knowledge of the local community can also be included. The website visitor is able to travel a heritage "journey" which traces the stories of the land itself.

Recent years have seen a shift in focus for heritage sites, from "preserve and protect" to an emphasis on the visitor experience. Interpretation, in the form of "educational activity which aims to reveal meaning and relationships through the use of first hand objects, by firsthand experience and by illustrative media" (Tilden, 1977) is used to improve the visitor's understanding and appreciation of the site. The use of interpretation of heritage sites by experts can add considerable value to the visitors' experience. Allowing the participants to tell their own stories is another effective tool in providing the visitor with a link to their own cultural experiences.

Internet technology is capable of providing an interactive interpretation of heritage information. A good example of this is the United States Holocaust Museum website, (Figure 2, http://www.ushmm.org/museum/exhibit/online/phistories/) which provides, amongst other information, personal stories of holocaust survivors. The stories are presented sensitively with quotes providing the links to the full story. Visitors are not by bland statistics of x million dead, but rather, touched by "That was the last birthday gift from my parents". This is also an example of "dark tourism". Dark tourism itself is an example of Niche Tourism, see for example the growth of Lord of the Rings tourism. A particular challenge for this project is how to present to links between various niches. Dunedin, for example, for some visitors is a major centre of late-victorian civil engineering works, a goal of the tourism industry is to get these visitors to stay and see the penguins (or visa versa), yet recognise that for many, an old gas works is not their idea of fun.

Rather than presenting information in a linear manner through timelines and static linked pages, the
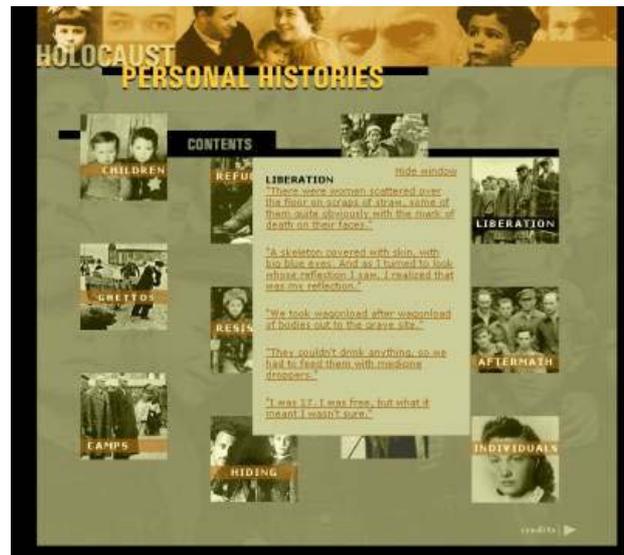
Figure 2: The Holocaust Museum.

links present in the website should also relate to the experience of the visitor. Each visitor brings to the website their own experiences and interests so that a page presenting the Wahine sinking may invoke strong memories of the experience for a survivor, may link to associations of other tragedies such as the Tangiwai rail disaster for the student studying New Zealand disasters, or to a history of NZR ferries for a ship enthusiast.

The web is not a linear medium. Links can be formed between information in any desired direction. The key lies in the use of categories within the underlying database. Each fact is characterised by a selection of keywords. Keywords for the Wahine story might include shipping, disasters, ferry, Wellington, Cook Strait, 1970's. Displaying these connections would encourage exploration of any of these areas. For a fully interactive experience visitors to the web page should also be able to define their own connections between the pieces of information.

The Smithsonian Institute has an online exhibition of objects (Figure 3 http://www.si.edu/revealingthings/) which utilises cutting edge software. Thinkmap® is a Java driven visualisation technology which allows multiple connections to be made between objects and concepts. Plumbdesign, the designers of Thinkmap®, understand that by revealing unexpected connections, the visitor experience can be greatly improved. "Context enhances information; the user sees the connections between interrelated information and has the opportunity for serendipitous discovery." (http://www.plumbdesign.com/services/practices/information_design)
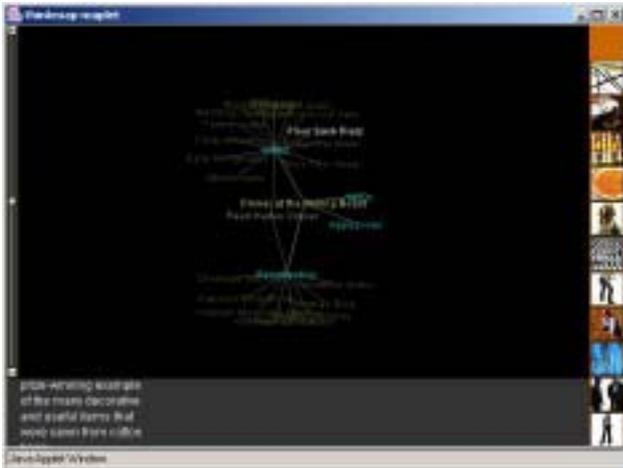
Figure 3: Thinkmap allows visitors to explore and build links at the Smithsonian

A final example of an effective use of the blend of information and visitor experience is the beta version of the Amazon restaurant service. http://www.amazon.com . There you can select a restaurant (in selected US cities), view menus, check prices and, eventually, book a table. Links are provided to other restaurants ("Customers who looked at this menu also looked at these menus:") and the facility to search for menu items is planned. Most valuable are the customer reviews. Like the Amazon book reviews, these are not promotional but are honest appraisals from ordinary people. Both positive and negative reviews are published, which encourages a sense of trust in the system.

4. MODEL OF HERITAGE TOURISM IT

Heritage sites have much to offer visitors. Presenting heritage information via the Internet provides an opportunity to enhance the visitor experience in several ways while also providing a platform for the management of sites.

1. By providing additional information

2. By presenting connections to other sites

3. By inviting visitor feedback.

The solution could be a data driven website which incorporates four features:

1. Accurate information on each listed heritage site.

2. Effective linkages between the various site categories.

3. Opportunities for visitors to the heritages sites to add new, meaningful links on the web page.

4. Opportunities for visitors to the heritage sites to add notes in the form of personal stories to the web page.

5. CONCLUSION

This paper has described an approach to an IT system for heritage tourism. We have identified the importance of using a visitor experience focussed model. Further research is ongoing into the issues of implementation of such a system.

Acknowledgements

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