

USE OF THE WEB FOR DESTINATION MARKETING BY REGIONAL TOURISM ORGANISATIONS IN THE ASIA-PACIFIC REGION

LOIS BURGESS¹, JOAN COOPER², CAROLE ALCOCK², KEIRAN McNAMEE² and BILL DOOLIN³

¹*Faculty of Business, Auckland University of Technology, New Zealand*

²*Faculty of Informatics, University of Wollongong, Australia*

³*Department of Management Systems, University of Waikato, New Zealand*

Abstract: The information-intensive nature of the tourism and travel industry suggests an important role for Web technology in the promotion and marketing of destinations. This paper evaluates the level of Web site development in Asia-Pacific Regional Tourism Organisations. The study uses the extended Model of Internet Commerce Adoption (eMICA) (Burgess and Cooper 2000), and highlights the utility of using interactivity to evaluate the relative maturity of commercial Web sites.

1. INTRODUCTION

Conventional wisdom contends that business Web site development typically begins simply and evolves over time with the addition of features as the site takes on more functionality and complexity. Past empirical research of commercial web sites support this notion, contending that firms imitate what others do on the Web, partially in a desire to keep pace with competitors or to gain an advantage over competitors in ones own industry by replicating what firms have done in other industries (Sumner and Klepper 1998), or build expertise in electronic commerce through progressive experience with Internet technologies (Poon and Swatman 1999, Van Slyke

The original version of this chapter was revised: The copyright line was incorrect. This has been corrected. The Erratum to this chapter is available at DOI: [10.1007/978-0-387-35692-1_36](https://doi.org/10.1007/978-0-387-35692-1_36)

K. V. Andersen et al. (eds.), *Seeking Success in E-Business*

© IFIP International Federation for Information Processing 2003

2000). Academic enquiry into this evolutionary process followed by firms is gaining momentum in particular industry sectors. One industry sector that is poised to reap the benefits that e-commerce has to offer is the Tourism Industry.

With reports of travel purchases and reservations being one of the fastest growing segments of the Internet community (Bernstein and Awe, 1999), there is little surprise that the number of tourism operators on the Web has changed considerably over the past few years. Although regions have taken advantage of government assistance to move their business online, they are still lagging behind other industries in the uptake of web technologies (Department of Industry, Science and Resources, 2000).

This paper reports the results of a study of Web site development in the Asia Pacific tourism industry. Tourism and travel are unusual products, in that they do not exist when they are purchased. Tourism and travel exist only as information at the point of sale, and cannot be sampled before the purchase decision is made (WTO Business Council 1999). The information-based nature of these products means that the Internet, which offers global reach and multimedia capability, is an increasingly important means of promoting and distributing tourism and travel services (cf. Walle 1996). The Internet is a potentially significant means of promotion and destination marketing for the Asia Pacific tourism industry.

2. TOURISM IN THE ISLANDS OF ASIA AND THE PACIFIC

Over the centuries, the Asia Pacific has been a vehicle for the exchange of cultures, ideas, crafts, beliefs, peoples and technologies between the East and the West. 1991 saw an awakening of interest in the region with respect to cultural exchange, trade and tourism (WTO, 2001). The number of tourists travelling to the region has grown exponentially. In an industry as competitive as tourism, and with beach tourism forming a considerable sector within the industry, islands have been extremely active in capitalising on the economic benefits from the development of tourism.

The Asia and Pacific region will be the focus of the worldwide tourism industry in the future. Over the last decade, tourist arrivals rose faster than any other region in the world, almost twice the rate of industrialised countries (WTO, 2001). Between 1980 and 1995, tourist arrivals in the region rose at an annual rate of 15% (WTO, 1996). The WTO (2001) projects that by the year 2010, the region will surpass the Americas to become the world's number two tourist region, with 229 million arrivals. The

region is now regarded as a major generator and receiver of tourism. This has been attributed to a number of factors including: strong economic growth, increase in disposable income and leisure time, easing of travel restrictions, successful tourist promotion, and a recognition by host governments that tourism is a powerful growth engine and generator of foreign exchange earnings (Singh, 1997).

Tourism is one of the most important sectors in the economies of Asia Pacific countries. In 2000, East Asia and the Pacific recorded record growth to reach 111.7 million arrivals (growth rate of 14.5% over 1999). (WTO, 2000). WTO statistics reveal that the East Asia and Pacific regions will continue to grow. Overall, the region has witnessed a general economic recovery, which has fuelled domestic and international tourism activities (WTO, 2001). Marketing campaigns have been more aggressive and directed towards selected markets. Many of the countries in the region have benefited from assistance provided by the WTO. For example, Malaysia's Rural Tourism Master Plan, aimed at providing guidance for controlled development of rural tourism and consultancy assistance in the areas of policy direction, infrastructure development, marketing and training (WTO, 2001).

The tourism industry provides a wide variety of products and services, including adventure tourism, culture and heritage, transport, accommodation, retail and hospitality. Regional destination marketing organisations called Regional Tourism Organisations (RTOs) form part of the industry structure, and it is these organisations that are the focus of the current study. RTOs form an important layer between central government and the local tourism industry, potentially providing a coordinated and comprehensive marketing effort, and acting as a portal for visitor access to tourism operators and service providers.

The purpose of this study is to evaluate the extent of Web site development in RTOs in the Asia Pacific region. This evaluation is achieved using an Internet commerce adoption metric developed by Burgess and Cooper (2000) in a study of the Australian regional tourism industry, the extended Model of Internet Commerce Adoption (eMICA). The Web sites of 34 Asia Pacific Tropical Island RTOs were evaluated using the eMICA model. Secondary objectives of the study were (1) evaluating the validity of the extended MICA as proposed in the Australian study in different national contexts, and (2) providing a comparative study across countries so as to add to the assessment of the "Net-readiness" of the tourism industry globally.

3. THE EXTENDED MODEL OF INTERNET COMMERCE ADOPTION

The Model of Internet Commerce Adoption (MICA) was originally developed for a study in the Australian metal fabrication industry (Burgess and Cooper 1998). The model proposes that in developing commercial web sites, organisations typically start simply by establishing a presence on the Web and build on functionality over time, as their expertise in the use of Internet technologies increases. In addition, as Web sites build on complexity, so will the number of modules incorporated into the site increase. MICA consists of three stages, incorporating three levels of business process – Web-based promotion, provision of information and services, and transaction processing. The three levels of business processes are similar to those proposed by Ho (1997) and Liu et al. (1997). The stages of development provide a roadmap that indicates where a business or industry sector is in its development of Internet commerce applications.

As sites move through the stages of development from inception (promotion) through consolidation (provision) to maturity (processing), layers of complexity and functionality are added to the site. This addition of layers is synonymous with the business moving from a static Internet presence through increasing levels of interactivity to a dynamic site incorporating value chain integration and innovative applications to add value through information management and rich functionality (Timmers 1998).

Since the original study, MICA has been applied to the government sector (Boon 1999) and tourism industry (Burgess and Cooper 2000) in Australia, resulting in its enhancement as an extended Model of Internet Commerce Adoption (eMICA). The central tenet of the extended model is that while businesses develop Internet commerce applications in stages as proposed by the original version of MICA, complexity and functionality vary greatly between applications, and even between businesses in an industry sector. In line with this, the extended model proposes that a number of additional layers of complexity, ranging from very simple to highly sophisticated, exist within the identified main stages of MICA.

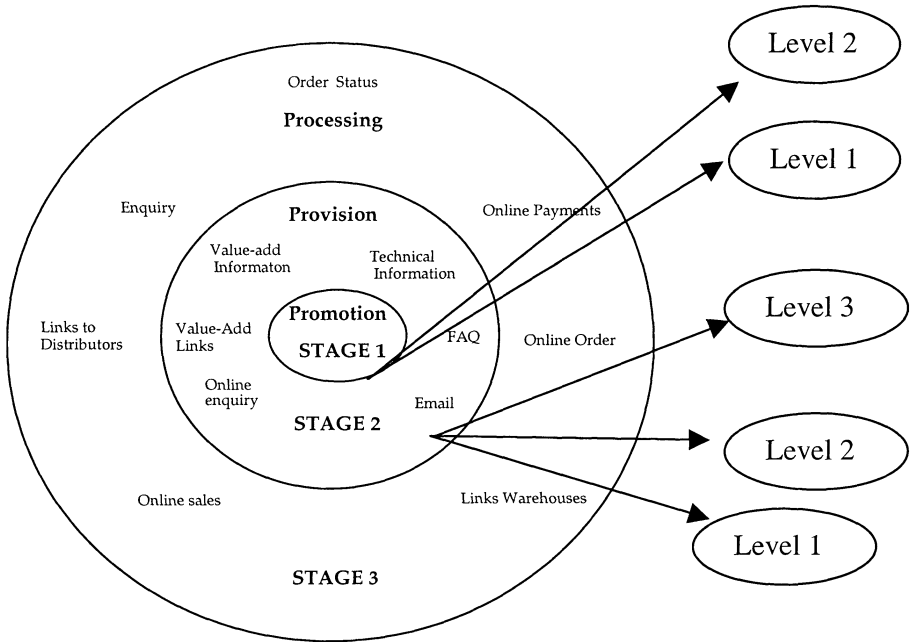


Figure 1. eMICA

The extended model (eMICA) adds several layers of sophistication of functionality and innovation within the three main stages, in order to accommodate the wide range of Internet commerce development evidenced in industries such as tourism. The full eMICA model (Figure 1) is summarised in Table 1 below.

EMICA	Examples of functionality
Stage 1 - Promotion	
Level 1 – basic information	company name, physical address and contact details, area of business
Level 2 – rich information	annual report, email contact, information on company activities
Stage 2 - Provision	
Level 1 – low level interactivity	basic product catalogue, hyperlinks to further information, online enquiry form
Level 2 – medium interactivity	higher-level product catalogues, customer support (e.g. FAQs, sitemaps), industry-specific value-added features
Level 3 – high interactivity	chat room, discussion forum, multimedia, newsletters or updates by email
Stage 3 - Processing	secure online transactions, order status and tracking, interaction with corporate servers

Table 1: The extended Model of Internet Commerce Adoption (eMICA); adapted from Burgess and Cooper (2000)

4. REGIONAL TOURISM

Tourism is a fragmented industry (Gretzel et al. 2000), and tourism promotion is a complex web of International, national, regional and local institutions frequently influenced by politics and personalities (Ryan 2001). RTOs have a role to play in providing comprehensive coverage of products and services in their region, irrespective of whether individual service operators have an independent online presence (Sharma et al. 2000).

RTOs play a major role in destination marketing, pooling the marketing resources of both public and private sectors to achieve a coordinated effect. RTOs play a major role in domestic and international marketing, destination management, regional tourism planning and development, and facilitating provision of services to tourism operators. Gretzel et al. (2000) note that destination marketing organisations often have to struggle with limited financial and human resources, and a lack of technical expertise.

5. METHODOLOGY

The web sites of 34 RTOs in the Asia Pacific region which were obtained from:

- Open Directory Regional Asia Travel and Tourism Website
(http://dmoz.org/regional/asia/travel_and_tourism/travel_guides)
- Google Directory Regional Asia Travel
(http://directory.google.com/top/regional/asia/travel_and_tourism/travel_guides)

were assessed using eMICA. Each site was examined in detail and the various functions performed by the site were noted in a spreadsheet file. The functions and features across all the sites were then grouped according to their level of interactivity and sophistication. Each RTO site was matched against this ordered list, the results are summarised in Table 2.

6. RESULTS OF THE STUDY

Each RTO site was then assigned an appropriate stage and level in eMICA based on the level of development of the site. The results of the Asia Pacific Tropical Islands' study are shown below in Table 2, together with the equivalent figures from the previous studies of Australian and New Zealand RTOs (Doolin et al 2001).

Stage of eMICA		Tropical Islands	New Zealand	Australia
Stage 1	Level 1	-	-	4.1%
	Level 2	-	3.8%	4.1%
Stage 2	Level 1	21%	30.8%	36.6%
	Level 2	47%	46.2%	40.0%
	Level 3	32%	15.4%	15.2%
Stage 3		0%	3.8%	0.7%
Total		100%	100%	100%

Table 2: Comparison of the Asia Pacific Results

The majority (97%) of the Asia Pacific Tropical Island RTO sites were developed to Stage 2 of eMICA, and incorporated the standard functional attributes of the first stage of development, such as email contact details, the use of photographic images, and a description of regional tourism features. However, the level of functionality and sophistication varied greatly across the three levels comprising this second stage of development, as discussed below. None of the sites evaluated were developed to Stage 3. However one site provided a link to an accommodation provider with the capability of offering secure online credit card payment for accommodation.

The major differentiation in the Asia Pacific Tropical Island RTO sites lay within Stage 2 of the eMICA model. Those sites located within the first Level of Stage 2 had some form of navigation structure such as buttons with links to different parts of the site. They had numerous internal and external links to further information, and incorporated value-added features characteristic of the tourism industry such as key facts (on location, climate, weather and services), maps, itineraries, news and media releases, and a photo gallery. Often, there would also be a more interactive feature such as a currency converter or a Web-based contact form. These sites also contained information on accommodation, attractions, activities and events in the region, usually in the form of a list organised by category and with contact details and/or links to the third-party operator (where available). Some of these lists appeared to be database-driven using technology such as “active server pages” (ASP).

At Level 2 of Stage 2, the value-added tourism features became increasingly interactive, and included electronic postcards, interactive maps, downloadable materials, special offers, guest books, and the use of Web cams. Sites at this Level incorporated some form of online customer support, such as FAQs, a site map or an internal site search engine. User interaction also included the use of Web-based enquiry or order forms. Information on accommodation, attractions, activities, dining, shopping, and events was provided via searchable databases, with searches available by type and/or location within the region. As sites progressed to Level 3, the key feature was the facility to accept online bookings for accommodation, tours and travel. Nine of the sites had advanced value-added features that included multi-language support, multimedia, newsletter updates by email, streaming video, and a QuickTime virtual tour.

Comparing the results of the Asia Pacific Tropical Island RTO Web site evaluations with the Australian and New Zealand studies (Burgess and Cooper 2000, Doolin et al, 2001) indicates that a majority of sites in all three studies are at Stage 2 of development. However at Stage 2 Level 1, there was a variance in that although Australia and New Zealand had a similar result (approximately 30%) there was a smaller percentage (21%) of the tropical island sites at this level. Similarly at Stage 2 level 3 almost double (47%) of Tropical Island websites were at this level of development.

In all cases, most of the organisations in this industry sector are at a relatively advanced stage of adoption of Internet commerce. The majority have incorporated various levels of functionality consistent with the three Levels identified at Stage 2 of eMICA. This is consistent with the focus of this industry sector on tourism promotion and the provision of information

and services that enable potential tourists to the regions to make informed travel decisions and choices.

7. DISCUSSION

The information-intensive nature of the tourism industry fits particularly well with interactive media like the Web, and indications are that tourism Web sites are constantly being made more interactive (Goodrich 2000a, Gretzel et al. 2000, Hanna and Millar 1997, Marcussen 1997, WTO Business Council 1999). Moving from simply broadcasting information to letting consumers interact with the Web site content allows the tourism organisation to engage consumers' interest and participation, increasing the likelihood that they will return to the site, to capture information about their preferences, and to use that information to provide personalised communication and services. The content of tourism destination Web sites is particularly important because it directly influences the perceived image of the destination and creates a virtual experience for the consumer. This experience is greatly enhanced when Web sites offer interactivity (Cano and Prentice 1998, Gretzel et al. 2000, Legoherele et al. 2000).

Interactive Web site presentation runs a spectrum from information provision, through brochure ordering and inquiry services, to booking and payment online (Marcussen 1997). A summary of the key features of 25 "best practice" destination marketing organisations, evaluated by the World Tourism Organization, is presented by Goodrich (2000b). These features included navigational assistance and branding on the home page, multiple means of communication (including the use of colour, photographs, maps, symbols, and multimedia), interactivity, rich information on a wide range of topics, the use of managed and updated databases, and multilingual support. Standing and Vasudavan (1999) used a similar list of functions in their evaluation of Australian travel agents' Web sites. Their features included provision of product, service and destination information, transaction capability, customer interaction and feedback, and links to value-added information sources. Although Standing and Vasudavan were evaluating travel agencies, it is interesting to note that relatively few sites provided higher levels of interactivity such as online booking, payment and customer service.

The Web sites of the Tropical Island RTOs display a greater range of functionality than the earlier studies, and can be distinguished on the basis of the level of interactivity they offer to the consumer of tourism information and services. In fact, the eMICA model uses interactivity as the primary

means of establishing the various stages of Internet commerce adoption. This study confirms the usefulness of Web site interactivity for this purpose. The results of the study suggest that in the tourism industry, major milestones in Internet commerce development are:

- moving beyond a basic Web page with an email contact, to providing links to value-added tourism information and the use of Web-based forms for customer interaction;
- offering opportunities for the consumer to interact with the Web site through (a) value-added features such as sending electronic postcards or recording their experiences and reading others' experiences in Web-based guest books, and (b) the provision of online customer support via internal site search engines and searchable databases;
- the beginnings of Internet commerce transactions with the acceptance of online bookings for accommodation, travel, and other tourism services;
- full adoption of Internet commerce, where consumers are able to complete transactions online through secure Internet channels.

None of the Tropical Island RTO sites displayed interactivity at this last transactional level. Perhaps, as Burgess and Cooper (2000) note, this is not an unusual finding, given that the organisations in this industry sector are in the business of promoting regions and their unique features and offerings primarily through the provision of value-added information and services. As noted earlier the WTO (WTO, 2001) involvement in this region through provision of support and incentive programs to the Tourism Industry Sector may account for the higher level of development (47% at Stage 2 Level 3) of the Tropical Island RTO websites.

Further adoption of Internet commerce is likely to depend on the future role taken by public and private sector involvement in future development programs.

8. CONCLUSION

This paper has evaluated the Web sites of the 34 Asia Pacific Tropical Island Regional Tourism Organisations. The RTOs generally displayed a high level of interactivity, consistent with their role in providing comprehensive destination marketing for geographic regions in which many local tourism operators lack an Internet presence. However, almost all the RTOs stopped short of offering consumers the capability to complete their tourism and travel transactions online. Progression beyond this point is likely to depend on the overall maturing of Internet commerce use by domestic and international consumers.

The outcome of the research provides further confirmation of the staged approach to development of commercial Web sites proposed by the extended Model of Internet Commerce (eMICA). Further, the comparative results of all three studies suggest that regional tourism organisations in the Asia Pacific Region are at a similar, relatively sophisticated stage of development on the Internet commerce roadmap.

REFERENCES

- Berstein, J. and Awe, S.C., (1999) 'Wired travellers: travel and tourism Web sites', *Reference Services Review*, Vol. 27, No. 4, pp. 364.
- Boon, O. (1999) *Evaluating the Adoption of the Internet: A Model Towards World's Best Practice*. Unpublished Honours thesis, Deakin University.
- Burgess and Cooper (1998) *The Status of Internet Commerce in the Manufacturing Industry in Australia: A survey of Metal Fabrication Industries*. Proceedings of the Second COLLECTeR Conference on Electronic Commerce, pp. 65-73. Sydney.
- Burgess, L. and Cooper, J. (2000) *Extending the Viability of MICA (Model of Internet Commerce Adoption) as a Metric for Explaining the Process of Business Adoption of Internet Commerce*. International Conference on Telecommunications and Electronic Commerce. Dallas (November).
- Cano, V. and Prentice, R. (1998) *Opportunities for Endearment to Place Through Electronic 'Visiting': WWW Homepages and the Tourism Promotion of Scotland*. *Tourism Management* 19 (1), pp. 67-73.
- Department of Industry, Science and Resources, (2000) *Regional Online Tourism Program 2000-2001 Guidelines* [URL: www.isr.gov.au/sport_tourism/publications/_grants/_2000-01_Tourism/RTPGlines.pdf]
- Doolin, B., Burgess, L., Cooper, J., Alcock, C (2001) "Internet Commerce Adoption by New Zealand and Australian Regional Tourism Organisations: A Comparative Study Using eMICA" ICECR-4 Dallas, Texas, November.
- Doolin, B, Burgess, L and Cooper, J "Use of the Web for Destination Marketing in Regional Tourism" Proceedings 2nd We-B Conference, Perth, Australia, November, 2001.
- Goodrich, J.N. (2000a) *Internet Distribution of European Travel and Tourism Services*. [Book review]. *Journal of Travel Research* 39 (August), pp. 115-116.
- Goodrich, J.N. (2000b) *Marketing Tourism Destinations On-Line: Strategies for the Information Age*. [Book review]. *Journal of Travel Research* 39 (November), pp. 240-241.
- Gretzel, U., Yuan, Y.-L. and Fesenmaier, D.R. (2000) *Preparing for the New Economy: Advertising Strategies and Change in Destination Marketing Organizations*. *Journal of Travel Research* 39 (November), pp. 146-156.
- Hanna, J.R.P. and Millar, R.J. (1997) *Promoting Tourism on the Internet*. *Tourism Management* 18(7), pp. 469-470.
- Ho, J. (1997) *Evaluating the World Wide Web: A Global Study of Commercial Sites*. *Journal of Computer Mediated Communication* 3(1). Available: <http://www.ascusc.org/jcmc/vol3/issue1/ho.html>.

- Legoherel, P., Fischer-Lokou, J. and Gueguen, N. (2000) Selling Tourism on the Web: Analysis of the Balance of Power Between Seller and Consumer During Information Exchange and Negotiation. *Journal of Travel & Tourism Marketing* **9**(3), pp. 49-64.
- Liu, C., Arnett, K.P., Capella, L. and Beatty, B. (1997) Web Sites of Fortune 500 Companies: Facing Customers through Home Pages. *Information and Management* **31**(1), pp.335-345.
- Marcussen, C.H. (1997) Marketing European Tourism Products via Internet/WWW. *Journal of Travel & Tourism Marketing* **6**(3/4), pp. 23-34.
- Poon, S. and Swatman, P.M.C. (1999) An Exploratory Study of Small Business Internet Commerce Issues. *Information & Management* **35**(1), pp. 9-18.
- Ryan, C. (2001) The Politics of Promoting Cities and Regions: A Case Study of New Zealand's Tourism Organisations. Unpublished paper, Department of Tourism Management, University of Waikato.
- Sharma, P., Carson, D. and DeLacy, T. (2000) National Online Tourism Initiatives for Australia. *Journal of Travel Research* **39** (November), pp. 157-162.
- Standing, C. and Vasudavan, T. (1999) Effective Internet Commerce Business Models in the Travel Agency Sector. Proceedings of the Fourth Pacific Asia Conference on Information Systems, pp. 88-99. Hong Kong (June).
- Sumner, M. and Klepper, R. (1998) Business Strategy and the Use of Web Sites. *International Conference on Telecommunications and Electronic Commerce* (November).
- Timmers, P. (1998) Business Models for Electronic Markets. *Electronic Markets* **8**(2), pp. 3-8. University of Texas (2000) 'Measuring the Internet Economy' Austin Center for research in Electronic Commerce.
- Van Slyke, C. (2000) The Role of Technology Clusters in Small Business Electronic Commerce Adoption. Proceedings of the Fifth COLLECTeR Conference on Electronic Commerce, 8 pp. Brisbane (December).
- Walle, A.H. (1996) Tourism and the Internet: Opportunities for Direct Marketing. *Journal of travel Research* **35**(Summer), pp. 72-77.
- World Tourism Organization (1996) WTO Tourism Statistics database [Online] Available: <http://www.world-tourism.org/statserv.htm>
- World Tourism Organization Business Council. (1999) Chapter 1: Introduction. In *Marketing Tourism Destinations Online: Strategies for the Information Age*. Madrid: World Tourism Organization. Available: <http://www.world-tourism.org/isroot/wto/pdf/1133-1.pdf>
- World Tourism Organization (2000) "WTO in Asia and the Pacific 2000" Available: <http://www.world-tourism.org>