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A longitudinal study of the use of the web by regional tourism organisations (RTOs) in Australia

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Abstract

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Keywords

study, longitudinal, tourism, regional, organisations, australia, web, rtos

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A longitudinal study of the use of the web by regional tourism organisations (RTOs) in Australia

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Abstract

The information-intensive nature of the tourism and travel industry suggests an important role for Web technology in the promotion and marketing of tourist destinations. The rapid development of the Internet is also having profound impacts on the industry. In fact, travel and tourism has become the single largest category of products sold over the Internet (Tourism White Paper, 2007). With reports of travel purchases and reservations being one of the fastest growing segments of the Internet community it is no surprise that the number of tourism operators on the Web has increased considerably over the past few years. This paper presents the results of a study of the use of Web technologies by Regional Tourism Organisations (RTOs) in the Australian tourism industry over an eight year period from 2000 to 2008. The Extended Model of Internet Commerce Adoption (eMICA) (Burgess and Cooper, 2000) was used to assess the web sites of RTOs to determine the extent of adoption of web technologies for destination marketing. A significant finding of this study is the number of RTOs sites offering Stage 3 functionality (transaction processing). The results of the study add further support to the premise of the model, that is, in developing commercial websites, businesses in this industry sector typically start simply by establishing a presence on the Web and build on functionality over time, as their experience and expertise in the use of Internet technologies increases.

Keywords: Regional Tourism, Destination Marketing, Internet, World Wide Web, eMICA

1 Introduction

The information-intensive nature of the tourism and travel industry suggests an important role for Web technology in the promotion and marketing of tourist destinations. The rapid development of the Internet is also having profound impacts on the industry. In fact, travel and tourism has become the single largest category of products sold over the Internet (Tourism White Paper, 2007). With reports of travel purchases and reservations being one of the fastest growing segments of the Internet community it is no surprise that the number of tourism operators on the Web has increased considerably over the past few years. As one of the world's largest and most pervasive industries, the travel and tourism sector is as exposed as any other to the forces that are being brought to bear by ongoing developments in Information and Communication Technologies (ICT's). The rapid development of the Internet is also having profound impacts on the industry. In fact, travel and tourism has become the single largest category of products sold over the Internet (Tourism White Paper, 2007). Park and Gretzel (2007:46) suggest that the Web has in fact, revolutionised the way Destination Marketing Organisations "provide destination information and the manner in which they communicate and interact with consumers and practitioners".

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, 2004). Research contends that the search for information used to plan travel is likely to take longer involving the use of more information sources than the search for information on other consumer goods (Fodness and Murray, 1998). The information-based nature of tourism 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 (Park and Gretzel, 2007).

The tourism industry is also characterised by offering complimentary business. For example, tourists will use a range of travel services including air travel, car hire, accommodation and tour services. These services are typically provided by a number of different organisations. A well designed website can assist in planning a range of tourism and travel services and help ensure that the right choices are made, resulting in a more enjoyable experience for the tourist (Rita, 2000; Park and Gretzel, 2007; Tourism White Paper, 2007). It can also serve as a portal for services a tourist will need to plan their vacation. Tourism destinations "emerge as umbrella brands, hence, destination marketing organisations increasingly have to identify niche markets and develop their interactivity with potential tourists" (Rita, 2000, pg.2). Rita (2000:2) further proposes that each travel destination must have a major website "acting as a gateway providing a single entry point to the destination rather than relying on a fragmented number of individual Web sites".

This paper presents the results of a study of the use of Web technologies by Regional Tourism Organisations (RTOs) in the Australian tourism industry over an eight year period from 2000 to 2008. The Extended Model of Internet Commerce Adoption (eMICA) (Burgess and Cooper, 2000) was used to assess the web sites of RTOs to determine the extent of adoption of web technologies for destination marketing.

2 Regional tourism

Tourism has been identified as an important driver for regional development (WTO, 2004; Tourism Research Australia, 2008). The extent to which new opportunities may be developed will depend on the type and quality of a region's natural assets, the management capacities of regional tourism organisations and operators, and the degree of appropriate support from governments at all levels (Tourism Research Australia, 2007). Tourism also provides an opportunity for regions to develop and grow in a sustainable way.

The tourism industry provides a wide variety of products and services, including: adventure, culture, heritage, transport, accommodation, retail and hospitality tourism (Tourism White Paper, 2007). Regional destination marketing organisations called Regional Tourism Organisations (RTOs), also known as Destination Marketing Organisations (DMOs) form part of this industry structure, and it is these organisations that are the focus of the current study. RTOs form an important layer between Federal government and the local tourism sector, providing a co-ordinated and comprehensive marketing effort, and acting as a single entry point for visitor access to tourism operators and providers (Doolin et al., 2002).

Regional Tourism Organisations are typically public funded organisations with the primary role of promoting tourism throughout a region. RTOs may take many forms. In a broad sense, any organisation which promotes a region in terms of tourism related products and services could potentially be classified as an RTO (Burgess and Cooper, 2000). Traditionally RTOs have acted as an initial contact point for tourists and visitors and provide information on attractions, accommodation and services offered within that region. Since the late 1990's there has been a trend towards supplementing the traditional 'bricks and mortar' RTO with a website offering services via the World Wide Web (WWW). In Australia, this has in part been facilitated by a Government initiative aimed at providing funding to RTOs to develop Web sites to market regions during the 2000 Sydney Olympics.

This capacity compliments the traditional RTO locations throughout Australia and provides an alternative and more viable contact point particularly for international visitors who increasingly research their holiday destinations before arrival. A particular benefit of Web technology adoption by RTOs is seen as an increased ability for smaller businesses to compete online, enabling them to market their products and services to the global marketplace at a greatly reduced cost (Burgess and Cooper, 2000).

2.1 Regional tourism in Australia

The tourism sector in Australia consists of over 350,000 tourism related organisations spread across a diverse range of activities and products (Tourism White Paper, 2007). The industry consists mainly of small to medium size enterprises (SMEs), with more than 90% of businesses employing less than 20 staff. Australia has a vast interior, an extensive coastline with over 7,000 beaches and some of the world's most exciting and colourful regional areas and cities (Tourism White Paper, 2007). Australia also offers a diverse range of tourism experiences. Although Australia is around the same size as mainland USA and 50% larger than Europe, it has the lowest population density in the world with only two people per square kilometre (ABS, 2007).

Tourism plays a key role in the development of regional and rural Australia, accounting for

around 85,000 jobs or 7% of rural and regional employment (ABS, 2007; Tourism Research Australia, 2008). More than 70% of domestic and 23% of international tourist visitor nights are spent in rural and regional Australia. (Tourism White Paper, 2007).

Online technologies have had a huge impact on communications and product promotion and distribution in the tourism industry (Carson, 2008). In Australia, key markets are already using the Internet as a primary source of information about tourism goods and are increasingly looking to book and purchase that product online. However, there are concerns that access to tourism products is likely to be negatively impacted if online technologies are not effectively adopted and used by the entire tourism industry (Tourism NSW, 2005). Regional Tourism Organisations across Australia have developed websites that have been reportedly focused almost entirely on promotional functions rather than issues of integration and functionality (Carson, 2008). A study conducted by the Centre for Regional Tourism Research reports that using a website strictly for promotional purposes limits the capacity to exploit its potential for communication, research, product distribution and relationship management (Carson, 2008). The current study aims to determine whether or not RTO's have progressed beyond simply using their websites for promotional purposes and if they are leveraging higher levels of functionality and interactivity to better communicate with potential tourists.

3 The extended model of internet commerce adoption (EMICA)

Commercial Web site development typically begins simply and evolves over time with the addition of more functionality and complexity as firms gain experience with Internet technologies (Poon and Swatman, 1999; Van Slyke, 2000; Burgess and Cooper, 1998). 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, SME organisations typically start simply by establishing a presence on the Web and build on functionality over time, as their experience with and expertise in the use of Internet technologies increases. In addition, as Web sites build on complexity, so will the number of functional components 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 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.

Since the original study in 1998, MICA was 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 website functionality 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. Increased levels of interactivity are evident as sites progress through each of the stages/levels of the eMICA model.

The extended model (eMICA) adds several layers of sophistication of functionality and innovation within the three main stages, in order to accommodate a wide range of Internet commerce development evidenced in industries such as tourism. The eMICA model is summarised in Table 1 below. (source: Doolin et al., 2002, adapted from Burgess and Cooper, 2000).

Table 1: The extended Model of Internet Commerce Adoption (eMICA) (Doolin et al., 2002, adapted from Burgess and Cooper, 2000).

eMICA	Examples of functionality
Stage 1 - Promotion	
Layer 1 – basic information	company name, physical address and contact details, area of business
Layer 2 – rich information	annual report, email contact, information on company activities
Stage 2 - Provision	
Layer 1 – low level interactivity	basic product catalogue, hyperlinks to further information, online enquiry form
Layer 2 – medium interactivity	higher-level product catalogues, customer support (e.g. FAQs, sitemaps), industry-specific value-added features
Layer 3 – high interactivity	chat room, discussion forum, multimedia, traveller reviews newsletters or updates by email
Stage 3 - Processing	secure online transactions, order status and tracking, interaction with corporate servers and databases, Web 2.0, User Generated Content

4 Methodology

The purpose of the current study is to extend the earlier work of Burgess and Cooper (2000; 2002; 2004), in order to track the evolution of Australian RTO Web sites, providing a longitudinal view of the adoption and use of Web technologies by RTOs. Regional Tourism Organisations in Australia with a website were used as the population of this study.

The sample was drawn from various sources, including search engines (for example, Google and Yahoo) utilising keyword searches using the names of each region; Australian and State Tourism Authority websites and tourism directories, such as:

1. Open directory regional Asia travel and tourism website [http://dmoz.org/regional/asia/travel_and_tourism/travel_guides];
2. Google directory Regional Asia travel [http://directory.google.com/top/regional/asia/travel_and_tourism/travel_guides];
3. The Register of Australian Regional Tourism Associations [<http://www.ozemail.com.au/~fng/rta/>];
4. Travel Australia Internet Directory [<http://www.travelaustralia.com.au>];
5. Northern Territory Regional Tourism Association [<http://www.nt.gov.au/tra/shtml>];

6. Queensland Tourism Industry Directory [<http://www.qttc.com.au/rta/htm>];

The number of RTO url's (uniform resource locator) obtained for each evaluation is detailed in Table 2, below. It should be noted, that the number of registered RTO sites fluctuated during the longitudinal study (2000-2008), however, this is due to a number of reasons:

1. Prior to the Olympics in Sydney in 2000, RTOs were provided with grants up to \$16,000 from the Australian Government to develop websites to promote regions during the Olympics. Many RTOs who took advantage of this program were subsequently unable to sustain funding levels to continue to operate their website (personal communication, Manager, Register of Australian Regional Tourism Association, 2002);
2. A number of RTOs are operated by independent bodies comprising boards made up of tourism operators. Due to budget restrictions, in a number of cases, RTO sites were maintained and updated by members with skills in website development. If this expertise was subsequently lost, the RTO website was discontinued (personal communication, Manager, Register of Australian Regional Tourism Association, 2002). As a result many registered RTO sites became unavailable;
3. In some instances, new RTOs were formed and as a result, new Web sites emerged; and
4. More recently, there has been a move by Tourism authorities in Australia, in particular, New South Wales to encourage RTOs to amalgamate in order to pool resources, skills and to leverage on the benefits of economies of scale.

For each of the evaluations (2000; 2002; 2004; 2008) all RTO url's were verified and the Web sites were then evaluated using eMICA. Each Web site was examined in detail by an experienced research assistant. To ensure consistency in the evaluations across RTO sites and to add rigour to the research, a senior member of the research team randomly selected RTO sites for a second evaluation. The various functions performed within the sites were entered into a spreadsheet. The functions and features identified were then grouped according to their level of functionality, sophistication and interactivity. Each RTO site was then matched against the functional components representing the stages and levels of eMICA, the results of which are depicted in Table 2, below.

Table 2: Website Evaluation Results

Stage of eMICA	2008	% of total sites	2004	% of total sites	2002	% of total sites	2000	% of total sites
Stage 1 Level 1	0	0.00%	0	0.00%	3	1.32%	6	3.19%
Stage 1 Level 2	1	0.65%	0	0.00%	2	0.88%	6	3.19%
Stage 2 Level 1	4	2.61%	5	2.56%	71	31.28%	53	28.19%
Stage 2 Level 2	7	4.58%	60	30.77%	61	26.87%	58	30.85%
Stage 2 Level 3	83	54.25%	113	57.95%	18	7.93%	22	11.70%
Stage 3	30	19.61%	17	8.72%	3	1.32%	1	0.53%
Listing Only	3	1.96%	0	0.00%	3	1.32%	4	2.13%
Under Construction	2	1.31%	0	0.00%	0	0.00%	1	0.53%
Unable to Access	23	15.03%	0	0.00%	66	29.07%	37	19.68%
Total	153	100.00%	195	100.00%	227	100.00%	188	100.00%

5 Results

Following the evaluations, each RTO Web site was assigned an appropriate stage and level in the eMICA model, based on the level of development of the site. In 2000, the majority (70.74%) of RTO sites were developed at Stage 2 of eMICA. Within this stage, approximately forty two percent (42.55%) of sites were leveraging the benefits of online tools for promotion of the unique features of their respective regions. All sites developed at this Stage, incorporated the standard functional features of Stage 1, such as email contact and use of images depicting unique geographic features of the region, along with a description of these features. However, the level of functionality and sophistication varied across the three levels comprising Stage 2 development. For example, one site was categorised as Stage 2, level 2 of eMICA. This site consisted of a few pages, with limited evidence of high-level interactivity, comprising a limited number of links to providers and members. Conversely, only one site (.53% of all sites) had moved into Stage 3 development, offering online credit card payment for accommodation and tour bookings and sale of souvenirs.

A number of new RTO sites were evidenced in 2002, an increase of 49 sites from 188 in 2000 to 227 in 2002. Over this two year period, the number of sites which developed to stage 3, offering some form of eCommerce capability, increased by 8.72%. Although this is a small proportion (1.32%) of all sites (227), it indicates that RTOs were adopting more sophisticated technologies and therefore, higher-levels of functionality and interactivity. Typical functionality at this stage included online booking and payment by credit card. However, only one of the sites developed to this level offered secure online credit card payment. The number of sites that had established themselves at Stage 2, decreased to 66.08%, with 2 sites previously situated in Stage 2, moving to Stage 3 development, incorporating an online booking system. Within Stage 2, the level of functionality and sophistication of sites

identified at levels one, two and three varied vastly. For example, some sites provided numerous internal and external links to further information and incorporated value-added features characteristic of the Tourism industry such as information on location, weather, climate and services provided within the region. Others offered additional features such as maps, itinerary planners, news and media releases and in some cases, a photo gallery.

The 2004 study revealed that 17 (8.72% of all RTO sites) sites had been developed to incorporate Stage 3 functionality. This represents an increase of 15.68% over the four year period from 2000 to 2004. There were no sites observed at Stage 1 development. Again however, the majority of sites (91.28%) were located in the various levels of Stage 2 development. The majority of these sites, however, displayed functionality consistent with Level 3 of Stage 2, that is, high-level promotion. Consistent with the 2002 and 2004 studies, functionality and sophistication varied greatly across the sites within this category. Typically, these sites had incorporated features and functionality consistent with level 1 (basic product catalogue, hyperlinks to further information, online enquiry form) and level 2 (higher-level product catalogues, customer support (e.g. FAQs, sitemaps), industry-specific value-added features) of Stage 2 along with features of level 3 (chat room, discussion forum, multimedia, newsletters or updates by email).

In the current study (2008), of all sites evaluated 30 (19.61%) had progressed to Stage 3 development (provision). In the majority of cases, these sites are offering full eCommerce functionality, high-level interactivity and sophisticated unique features. Typical features include event ticket sales, an option for businesses to submit a link, online flight bookings, adventure travel and accommodation bookings, along with secure credit card payments. The sites located within Stage 2, again varied greatly, according to the level of development within this stage. Higher levels of interactivity were evidenced within level 3 of this stage of development, along with more sophisticated functionality and features. For example, one site offered a real time web camera facility, another offered live weather forecasts, another a shopping hub, live advertisements, free downloads, virtual tours of the region, online games, online interactive magazine, user reviews, campaign video and local jobs listing.

6 Discussion

As stated earlier, although the number of RTO websites has fluctuated over the eight year period in which the study was conducted, the results obtained from the longitudinal study provide valuable insight into the evolutionary process of adoption of web-based technology by businesses in this industry sector in Australia.

Since the first study undertaken in 2000, RTO websites in Australia have progressed from a basic web presence to higher levels of development consistent with stages 2 (provision) and 3 (processing) of eMICA. This result lends support to the notion proposed by Burgess and Cooper (2000), that businesses in this industry sector typically begin simply by establishing an Internet presence and move to higher levels of development (characterised by greater sophistication, functionality and interactivity) as they become more familiar and experienced with the technology and the value that can be derived from its use as a promotional tool. This is evidenced in the following:

1. In 2000, there were 12 (6.38%) sites situated in Stage 1 of eMICA, six in each of the two levels comprising this stage of development. By 2008, there was only 1 site (.65%) located in this stage.

2. In 2000, the majority of RTO sites (70%) were located in the various levels of Stage 2 of eMICA. The highest percentage of these sites comprised Stage 2, level 2 development. By 2008, the number of sites located in Stage 2, dropped to 61%. Of these sites, the majority (54%) had moved to level 3 development.
3. Over the 8 years between 2000 and 2008, the number of sites that had progressed to Stage 3 increased from 1 (.53%) to 30 (19.61%).

Although the number of sites offering Stage 3 functionality increased during the eight year period from 2000 to 2008, development has been at a much slower rate than that evidenced from the promotional (Stage 1) and provision (Stage 2) stages of eMICA. This may support the findings from other studies (see for example, Lawson et al., 2003) that businesses perceive the barrier between Stages 2 and 3 to be a much “harder” barrier than that which exists between Stages 1 and 2 of eMICA. An important finding to note, however, is that sites developed to Stage 3, were observed to be mainly operated by RTOs in Western Australia (WA). This may be attributed to the fact that a WA-based software company developed and began rolling out software for this industry sector which enables RTOs to make the leap from Stage 2 to Stage 3 in WA in 2004. The same software company has recently embarked on a marketing campaign in NSW and Queensland. If RTOs in these states adopt this and other recently developed software we may see a spike in the number of RTOs moving out of Stage 2 and into Stage 3 (full eCommerce development) in the future.

Another important observation is that some RTOs have starting to experiment with Web 2.0 technology, incorporating low-level User Generated Content (UGC) in the form of traveller reviews. According to Gretzel et al. (2000:148) “looking at other consumers’ comments/materials on online travel review sites was the most frequently used source of information” by consumers when booking travel. However, the incorporation of higher levels of UGC functionality such as blogs and wiki’s was not evidenced in any of the RTO sites evaluated.

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 (Doolin et al., 2002; Gretzel, 2000; WTO, 2003; Burgess et al., 2004; Park and Gretzel, 2007). Moving from simply broadcasting information to enabling consumers to 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. This can be facilitated further, through the adoption and use of Web 2.0 technology, such as UGCs as “add-ons” to supplement existing information provided on the site (Cox et al., 2008). According to Cox et al. (2008) travellers have a preference for travel sites that enable them to book flights, accommodation, rental cars and which give consumers access to reviews of travel products. 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 (Gretzel et al., 2000; Legohérel et al. 2000; Burgess et al. 2000; 2004; Doolin et al. 2002).

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 (2000). These features include 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. Features of travel agent Web sites include 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 value added customer service.

The Web sites of Australian RTOs (the focus of the current study) display the same range of functionality as these 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 further confirms the usefulness of Web site interactivity for this purpose. The results of the study support our earlier studies (Burgess and Cooper, 2000; Doolin et al., 2002; Doolin et al., 2003; Burgess et al., 2002; Burgess et al., 2004), suggesting that in the tourism industry, major milestones in Internet commerce development are:

1. 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;
2. 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 reviews, and (b) the provision of online customer support via internal site search engines and searchable databases;
3. The beginnings of Internet commerce transactions with the acceptance of online bookings for accommodation, travel, and other tourism services; and incorporation of Web 2.0 technologies such as UGC;
4. Full adoption of Internet commerce, where consumers are able to complete transactions online through secure Internet channels.

Only 30 of the Australian 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, their unique features and offerings primarily through the provision of value-added information and services. RTOs interviewed during the course of an earlier study, stated that the primary reason they had not progressed to Stage 3 (full online e-commerce transactions) was while it was a viable proposition to take bookings on behalf of its members they did not have the facilities or experience required to deal with cancellations and refunds. On this basis, they were acting as a “referral” agency only for third party products. This appears to have been addressed by many RTOs, particularly those in Western Australia, through the integration of booking software. Further adoption of Internet commerce is likely to depend on the future role taken by RTOs.

7 Conclusion

This paper has presented the results of a longitudinal study that evaluated the Web sites of Australian Regional Tourism Organisations using eMICA. The RTO Web sites generally displayed a high level of interactivity, consistent with their role in providing comprehensive destination marketing for geographic regions in which many individual local tourism operators lack an Internet presence. However, the majority of RTOs (62%) stopped short of offering consumers the capability to complete their tourism and travel transactions online through the RTO sites. Progression beyond this point is likely to depend on the overall maturing of Internet commerce use by domestic and international consumers, the adoption of software which enables seamless handling of bookings and payment and incorporation of Web 2.0 functionality in the form of consumer reviews, blogs and wiki's.

The results of the study suggest that regional tourism organisations in Australia are at a relatively sophisticated stage of development and are leveraging the opportunities that the Web presents as a viable tool for promotion of regions within Australia. Further, the results of the study provide additional confirmation of the staged approach to development of commercial Web sites proposed by the extended Model of Internet Commerce (eMICA).

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