

Regional Tourist Destinations – The Role of Information and Communications Technologies (ICT) In Collaboration amongst Tourism Providers

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REGIONAL TOURIST DESTINATIONS – THE ROLE OF INFORMATION AND COMMUNICATIONS TECHNOLOGIES (ICT) IN COLLABORATION AMONGST TOURISM PROVIDERS

ABSTRACT

The tourism industry can be seen as one of the first business sectors where business functions are almost exclusively using information and communications technologies (ICT). This has impacted on the way in which regional tourism destinations are promoted. The method of promoting regions via the development of regional tourist destination websites or portals using Internet technologies is increasingly being adopted both in Australia and around the world.

This paper investigates whether this approach is the most effective to achieve increased awareness and subsequent visitation of a region. Are there other ways to achieve a similar outcome? One such alternative is via a bottom up approach achieved through co-opetition or collaboration established within the group of local tourism industry operators. This cooperative networking is made possible via the use of ICT to facilitate the establishment of virtual business networks amongst tourism operators in a local community, cascading into an informal secondary tourism network within that region.

In many Australian regional areas the tourism bureau has been the key node for local tourism, but this structure has been fraught with many problems. Little is known about their effectiveness in delivering services to local small and medium tourism enterprises (SMTEs). The role of tourism bureaus in local tourism networks is changing and a study of this dynamic is provided here as an example of the interaction between top down and bottom up approaches.

Published case studies from around the world are considered demonstrating alternative approaches to using ICT to promote a region and communicate with potential visitors. Future empirical research is required to more fully understand the effectiveness of the different approaches.

INTRODUCTION

Tourism is fundamental to the world economy. The World Travel and Tourism Council (World Travel and Tourism Council 2004) reports travel and tourism in 2004 made a contribution of 10.4% (both direct and indirect contributions) to worldwide GDP, expected to increase to 10.9% in 2014. Similarly travel and tourism represented 8.1% of employment in the worldwide economy, projected to increase to 8.6% in 2014 and travel and tourism demand was valued at US\$5490bn, and is anticipated to represent US\$9558bn in 2014. For many regions, reliance on tourism is considerable with tourism representing the lifeblood to the local economy. This is especially true for many less developed nations as well as rural and regional areas in developed nations.

In 2003-04 the tourism industry share of GDP in Australia was 3.9% (approximately \$7.2 billion), which is the lowest share of GDP in Australia since the Tourism Satellite Account was first compiled in 1997-98 (Australian Bureau of Statistics

2005). This is the third consecutive decline since the share peaked in 2000-01. The tourism industry share of total employment declined slightly in 2003-04 to 5.6% compared to its share of 5.9% between 1997-98 and 2000-01 (Australian Bureau of Statistics 2005). This decrease in contribution of tourism to GDP in Australia can be attributed to a number of factors including a decline in domestic tourism (Australian Bureau of Statistics 2005), as well as the impact of factors such as terrorism (9/11) the wars in Afghanistan and Iraq, Severe Acute Respiratory Syndrome (SARS) and the worldwide economic downturn (Australian Bureau of Statistics 2005; World Travel and Tourism Council 2004).

The tourism industry can be seen as one of the first business sectors where business functions are almost exclusively using information and communications technologies (ICT) (Garzotto et al. 2004). The challenge for the tourism operator is the provision of accurate, localised data, increasingly via IT, whilst maintaining a trust relationship with the tourist. Developments and continued growth in ICT and its application in the tourism sector has empowered the tourism consumer and is driving significant change within the tourism industry (Werthner & Klein 1999a). An example of this is the emergence of artificial intelligence and mobile computing.

A shift of power to the buyer is also evident in that the modern day tourist has ready access to the World Wide Web and a store of information. The tourist consumer has more choice when buying travel products also because of the options provided by on-line travel agents and direct marketing by airlines.

Consumers make purchase and repurchase decisions based on the totality of the experience available at a destination (Williams & Palmer 1999). It is important to understand the nature of the tourist's consumer behaviour so that the process of decision making can be influenced. Even though consumer behaviour of the tourist is changing (Werthner & Klein 1999a), IT has an important role to play in assisting tourist operators deal with and respond to these changes.

Collaboration around technology may assist in the promotion of the destination and enhance economic development of regions, especially given the shift in power to the tourist as earlier outlined. Collaboration around IT is only one aspect of this response.

Whilst centralised bodies such as tourist bureaus promote a tourist destination and disseminating information about a region, others see the importance of demonstrating a unified face of a destination by the actual tourist operators themselves. Yet a proliferation of 'html document-based' websites (Joo 2002) with respect to operators located there exists. This means that tourists are not provided with a concerted and unified tourist experience which they are increasingly coming to expect.

The Internet and tourism

The Internet is especially relevant to tourism since it enables knowledge about the consumer or tourist to be gathered, as well as vice versa. Online technologies within the tourism industry have significantly impacted on communications, transactions and relationships between the various industry operators and with the customer, as well as between regulators and operators (Galloway, Mochrie & Deakins 2004; Sharma, Carson & DeLacy 2000; Sheldon 1998; Werthner & Klein 1999a; World Tourism

Organisation 1999) Some of the impacts of and benefits from the Internet are outlined elsewhere (Clayton & Criscuolo 2002; Dogac et al. 2004).

The benefits from IT, particularly the Internet, for tourism are substantial. These benefits are no longer dependent on proprietary information systems as has been the past experience, since the Internet is a commonly available technology. The Internet, Dogac, *et al.*(2004) argues, enhances the level of collaboration between tourist operators and brings about greater levels of interoperability with internal and external applications, previously available to tier 1 players via proprietary systems.

Awareness of the functionality of the Internet, as well as resources and expertise necessary to take advantage of this functionality may be lacking, especially with respect to SMTEs. It is not clear that individual SMTEs are able to use this intelligence, or recognise its value. Information potentially available therefore is lost. Also infrastructure issues, such as access to broadband, may impede its use.

IT, co-operation and co-opetition

Increasingly business network behaviour is becoming more prominent in research and is of interest to the tourism industry. A sharing of information, either in a centralised or more collaborative way, would assist in maximization of the value of information and knowledge. Scholars have identified the need for greater collaboration in the industry(Joo 2002; Palmer & McCole 2000; Picoli 2004; Werthner & Klein 1999a), recognising the need to exploit technologies to become more responsive to the market.

This is made possible by the spawning of online technologies. Joo (2002) argues that IT is a critical driver of integration and co-operation as depicted in Figure 1. “Information technology enables businesses to integrated business activities or functions” (Joo 2002, p. 59) that otherwise would not be possible to achieve. This integration though requires internal integration of processes and systems as well as externally with other organisations and this has acted to impede co-operation in the past.

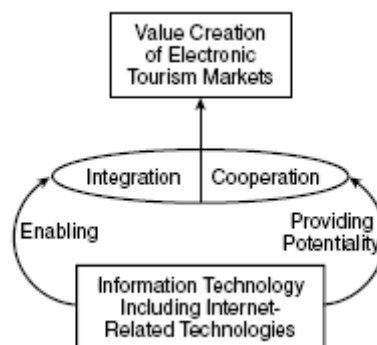


Figure 1: Relationship between Information Technology and Integration of Co-operation (Joo 2002, p. 59)

Eikebrokk and Olsen (2005) completed a study looking at the incidence and impact of co-opetition on e-business success. Co-opetition can be defined as the simultaneous cooperation and competition between businesses that occurs as a consequence of the formation of virtual organisations amongst competitors in a marketplace (Eikebrokk & Olsen 2005; Palmer & McCole 2000). Table 1 outlines a typology or classification of inter-organisational relationships (IORs) and demonstrates where co-opetition is placed in relation to competition and co-operation.

Direction of Relationship	Vertical	Arms-Length Exchange	Vertical Multifaceted Relationships e.g. IBM-Intel	Alliances between buyers and suppliers
	Horizontal	Traditional Competitive Markets	Horizontal Multifaceted Relationships e.g. Apple-IBM	Alliances between non-competitors e.g. Siecor
		Competition	Co-opetition	Cooperation

Table 1: Typology of inter-organisational relationships (Dowling et al. 1996, p. 156)

The study of co-opetition is in its infancy however is of interest since it is an example of collaboration that can occur around IT. Co-opetition is particularly important for SMTEs located in tourist destinations since they coexist, vying for tourist expenditure yet reliant on each other to promote the destination as a whole.

Co-opetition requires alliance partners to possess a willingness and ability to cooperate (Eikebrokk and Olsen 2005). Whilst calls are made for tourist operators to adopt and use IT as well as striking a balance between cooperation and competition (Werthner & Klein 1999b), the existence of multifaceted relationships incorporating both competitive and collaborative relationships can create new management concerns. This goes beyond the scope of this paper but certainly these are issues requiring consideration, particularly with respect to tourist destinations.

The study by Eikebrokk and Olsen (2005) included 339 SMEs from three industry sectors (tourism, transportation and food and beverage) located in Finland, Norway and Spain. Whilst they found that the incidence of co-opetition was highest for the tourism industry, this research asserts that relationships between independent operators or SMTEs are an under utilised phenomena in the tourist sector (Palmer & McCole 2000). Developments in information technology (IT) facilitate this coming together of businesses in a collaborative network. This paper explores how this is possible and provides arguments and examples of both approaches – top down and bottom up.

REGIONAL TOURIST DESTINATIONS

A tourism destination typically comprises numerous autonomous suppliers, often SMTEs. Potentially the destination is represented by multiple web sites that fail to

demonstrate the tourist experience that is that location. Often these tourist operators are vying for limited tourism dollars and the complementary nature of their operations is not understood.

Werthner and Klein (Werthner & Klein 1999a) suggest that destinations fail to facilitate the planning and booking of travel by the tourist. They assert this reflects a lack of agreement as to a business and cooperative model for the destination in its entirety (Froschl & Werthner 1997). ‘Most of the destination sites are purely informational servers, booking is mostly not supported’ (Werthner & Klein 1999a, p. 261). They suggest destinations need to deal with a number of issues - namely forming co-operative strategies over and above what may exist, for example by way of portal, and by covering the entire product range, particularly regarding the airline segment.

A framework to consider electronic tourism markets

A classification is provided by Joo (2002) to describe electronic tourism markets or collaborative networks. This framework identifies an evolution of electronic tourism markets as advances in internet technologies have occurred. Joo (2002) considers there are two important dimensions to plot this evolution – integration of processes both internal and external to the firm, as well as the degree of co-operation between players. The authors assert that alongside co-operation, co-opetition is an important consideration for the reasons previously discussed. The interplay of these dimensions results in four possible types of electronic tourism markets. These are depicted in Figure 2 below.

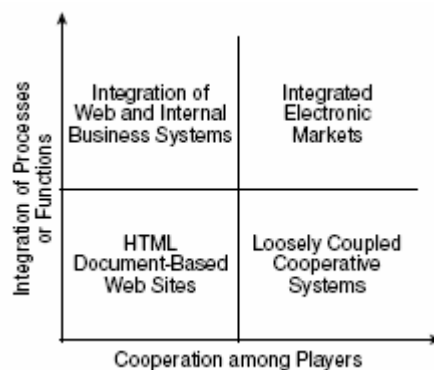


Figure 2: A classification of electronic tourism markets
(Joo 2002, p. 59)

Traditionally with respect to tourist destinations, the level of integration and the degree of co-operation and the requisite sharing of information has been low. Tourist destinations, at least in Australia, would tend to fall into quadrants 1 and 2 – with SMTEs using html websites and with some integration of the web with their business systems. Portals set up typically by regional tourist bureaus attempt to operate in quadrant 3 as they provide tourists with a ‘one-stop travel service’ (Joo 2002, p. 60). As discussed however these sites tend to lack integration with local tourist operators and so do not fully represent a region.

The Role of The Tourist Bureau – A Centralised Approach

The Tourism Bureau is often a key node in the complex nature of business

relationships within the local tourism industry (Gartrell 1991; Jamal & Getz 1995; O'Neill 1998; Wöber, Hwang & Fesenmaier 2003), yet little is known about their effectiveness in delivering services to small business operators (Middleton & Clarke 2001) as distinct from visitors. While traditionally a part of the local (public) visitor service sector, tourism bureaus are becoming equally important in the private tourism business sector, as they also make it possible for motel and tourist tour operators to disseminate information about their services, the industry to become better organised at a local level, especially in regional and rural areas, and they can also help in revamping dying towns as an energising part of a tourism cluster. The latter role brings them directly into the network of small business that make up the local tourism industry, and the importance of tourism business networks to the local economies of many countries means that it is necessary to understand the changing role of tourism bureaus in these networks.

The role of the 'typical' bureau has changed over the years from that of providing information to tourists to a business bureau. This change has not come easily because of the often contradictory actions of stakeholders, of disparate customers' expectations, and of rapid change in the small business and tourism industry environments in recent years, particularly with respect to IT. The traditional role of tourist bureau was to seek to lead tourists to a mixture of local history, colour and if possible controversy as a public service. The bureau, whilst still having a major role to play in promoting a regional area and the destination as whole as well as coordinating tourist operators, acting as a hub to facilitate the sale of the entire tourism product for the destination including the flight segment (Werthner & Klein 1999a, p. 261).

A portal can be defined as an information gateway using Internet technologies. It provides a single point of access through a web browser to a range of information located on the Internet. Typically, portals are customer-facing and are used by the customer to view products and services and to place orders, which they can later track. The portal can also be used as a point of collaboration between business partners allowing the exchange of business intelligence (Turban et al. 2004). In this manner the portal addresses the problem of information overload. In the case of the tourism sector these portals can take many forms but all have a single defining characteristic. They serve as a collection point for a range of information relating to a specific tourist destination and in so doing also provide a single point of content management for the available information. This management is a critical aspect in providing accurate and timely information to the tourism consumer. Some portals can be used to initiate customer relationship management (CRM) allowing tourism operators to push value-added products to targeted customer segments at the customer portal (Turban et al. 2004, p. 322).

Decentralised Approaches and Collaborative Commerce

As discussed, one challenge that faces tourism is to develop cooperation through business led strategies (Palmer & McCole 2000, p. 200) to provide an integrated face of the tourist destination. This Palmer & McCole (2000) advocate could replace 'hierarchical tourist boards'. These authors suggest that a 'virtual organisation' structure or collaboration around ICT by SMTEs is a more effective way of

promoting tourism destinations since it reflects actual product offerings and activities the tourism will experience. This approach reflects quadrant 4 in Joo's (2002) typology – integrated electronic markets – as outlined.

This integrated model provides a one-stop travel service providing a virtual tour of the offerings of the destination via the Internet. There is 'potential to create 'virtual cooperation' (Palmer & McCole 2000, p. 198) where tourists can peruse a website to plan their visit to a particular destination. The creative linking of Internet websites facilitates the profiling of enquiries in a way that allows potential tourists to develop their own package of experiences from a visit to a destination.

The tourism sector virtual organisation is a network of independent tourism sector competitors linked by ICT to share skills, costs, assets and broaden access to markets. Virtual organisations are more flexible and responsive to business changes that occur in their operating environment because of their use of ICT to facilitate the rapid interchange of business information

Palmer & McCole (2000) observe that the success of a tourist destination offering relies on the formation of a network of tourist operators who are independent but at the same time interdependent (Gartrell 1991; Kotler, Bowen & Makens 2003). It is suggested that rural and regional SMTEs consider the advantages that co-opetition provides in creating business value within the tourism sector.

Collaborative Commerce

In essence what is suggested above – integrated electronic markets or virtual organisations - is collaborative commerce (c-commerce). C-commerce is the use of technology, especially internet-based technology that promotes collaboration in business, enabling the coming together of 'partners' to take advantage of situations that emerge in the market (Fairchild & Peterson 2003; Holsapple & Singh 2000; Turban et al. 2004). It refers to collaborative management of the information flows between business entities.

In dynamic environments such as those that presently exist within the tourism sector, c-commerce potentially enables small independent tourism players to form partnerships is an expeditious way to keep up or to access unique or 'pioneering' resources (Ring & Van De Ven 1992, 1994). The premise behind the formation of these networks is the realisation by a single organisation that it 'is unable or unwilling to cope with the complexity and risks of its environment' (Cravens, Shipp & Cravens 1993) and does not possess the skills and expertise needed to compete in that environment. This sharing of resources can 'improve performance, increase knowledge and competitive position' (More & McGrath 2003a, p. 1), especially for SMTEs and overcome the proliferation of individual SMTE web sites and the lack of information sharing that characterises tourist destinations.

Cooperation between suppliers can add value to the tourism destination product (Leiper 2004; Palmer & Bejou 1995) in that a holistic experience of the destination is available to the tourist at the time of considering their holiday, as well as after the event in that a complementary view of the destination, reflecting the experience of the consumer, is provided whilst visiting a region.

Web service technology with respect to information travel systems facilitates 'interoperability among many heterogeneous systems such as flight reservations and hotel bookings' (Dogac *et al.* 2004, p. 21). Whilst these systems may not come into play with respect to regional tourist destinations, potentially such links would enable the browser to plan and organise their holiday. Certainly as suggested by Palmer & McCole (2000) hyperlinks to such sites as accommodation, airlines, car rental sites and the like would facilitate this process. Complementarity achieved in this way would enable the tourist to see the destination holistically rather than from the perspective of individual tourist operators.

For such cooperation to occur though a number of factors need to be present (Chi & Holsapple 2005). C-commerce requires a new approach by management incorporating new relationships, new assumptions, trust and a shift in culture that values partnerships. This requires a view of the organisation that sees other organisations as an extension of itself, rather than sees others as competitors (Levy, Loebbecke & Powell 2003).

Information Technology (It) And Regional Tourism Destinations – Examples

Example 1

Galloway, Mochrie & Deakins (2004) have examined how the development of internet-based virtual business forums assists business owners in rural areas overcome difficulties they face. Whilst studies have identified the benefits of the use of internet amongst SMTEs in rural and regional areas, these authors argue that there is little evidence to suggest that this is being converted into action.

Reasons cited for a lower uptake of the internet in more remote regions are several and are discussed in a number of papers (Gray & Juhler 2000; Huggins & Izushi 2002; Leatherman 2000; Martin & McKeown 1993; Smallbone *et al.* 2002; Thomas *et al.* 2002). Smallbone, *et al.* (2002) suggest this is a paradox in that the Internet offers the potential to overcome the disadvantages that remote locations raise.

Internet forums can be defined as 'an online facility that provides local businesses with an internet portal using the locale, or an industry particular to the locale, as the unique selling point, or common brand' (Galloway, Mochrie & Deakins 2004, p. 250). This acts as the anchor and provides more of a profile to entice visitors to the web site that represents the location or destination.

Example 2

Cultural tourism is a good example of the way in which online technologies have influenced the tourism industry. Cultural tourism focuses on the presentation of an areas cultural heritage, ranging from environmental attractions through historical, artistic, archaeological and folkloric components. The recent emergence of cultural tourism has been facilitated by the use of Internet technologies. A specific example of this form of tourism is the MEDINA (Mediterranean by Internet access) project started in 2002 and due for completion in 2005 which established a cultural web

portal for fourteen Mediterranean countries (Garzotto *et al.* 2004). Access to the portal by a tourist is achieved through mobile devices (e.g. personal digital assistants or smartphones) and allows the tourist to make informed decisions concerning cultural sights.

Example 3

In their study Palmer & McCole (2000) examine independent businesses with unique resource locators (URLs) located in one area (the Greater Belfast area in Northern Ireland) and followed links out of these sites to see where they led.

They found little evidence to show the use of websites for cooperative tourism in the study area, with the opportunity for the browser to gain a complete view of a region therefore being lost. They comment, 'in light of the technological development in marketing communication there is a notable lack of cooperative initiatives in the marketing of destinations between individual businesses using the methods of electronic commerce' (Palmer & McCole 2000, p. 203).

By developing a strategic approach that adopts a clear identity focusing on the destination and its features encapsulated in an integrated website, the forum concept has significant merit with respect to regional tourist destinations. This networking of SMTEs is supported by Gonzalez (2004) who suggests a coming together of, or cooperation amongst small players is required to generate a sense of identity that provides an experience of the destination. This coming together is possible via the use of ICT through the establishment of networks amongst tourism operators in a local community, cascading into a secondary tourism network in the region. This aggregation of SMTEs such as restaurants, hotels, tours, souvenir shops and other retail outlets and other tourist activities in a community is one way collaborative commerce can occur. This however needs to be 'tested' in the Australian environment.

Conclusion

A deeper analysis of the position and function of tourist bureaus within local business networks is important to the development of local tourism in general. Further research into the impact of this centralised approach is required. Additional research into bottom up approaches via co-opetition or c-commerce is also required to more effectively and conclusively explore and identify the benefits of each approach. It may be possible that due to prevailing factors present in different locations different approaches may be more effective. Identification of these factors is important to make these determinations.

The question remains though, is c-commerce or integrated electronic markets applicable to all operators in tourist destinations? Who identifies this opportunity and why do others either not recognise this or do not consider it to be appropriate for them? What are the prerequisites for its implementation? To what extent has this realisation transformed the tourism industry from the supply side particularly? Further research is being undertaken by the authors to address these issues.

Consideration of the role and effectiveness of centralised tourist bodies will be reviewed - there may be a place for both centralised agencies and collaboration of tourist operators in that they may have complementary roles to play in the promotion of tourist destinations. The coexistence of all four quadrants largely due to the presence of impediments to the uptake of e-commerce, both internal and external to the tourist operator may be the reality.

References

- Australian Bureau of Statistics 2005, *5249.0 Australian national accounts: Tourism satellite account*, Commonwealth of Australia, Belconnen.
- Chi, L & Holsapple, CW 2005, 'Understanding computer-mediated interorganizational collaboration: A model and framework', *Journal of Knowledge Management*, vol. 9, no. 1, pp. 53-75.
- Clayton, T & Criscuolo, C 2002, *Electronic commerce and business change*, National Statistics, viewed 16 April 2005, <<http://www.statistics.gov.uk/cci/article.asp?ID=139>>.
- Cravens, DW, Shipp, SH & Cravens, KS 1993, 'Analysis of co-operative interorganizational relationships, strategic alliance formation, and strategic alliance effectiveness', *Journal of Strategic Marketing*, vol. 1, no. 1, pp. 55-70.
- Dogac, A, Kabak, Y, Laleci, G, Sinir, S, Yildiz, A, Kirbas, S & Gurcan, Y 2004, 'Semantically enriched web services for the travel industry', *SIGMOD Rec.*, vol. 33, no. 3, pp. 21-7.
- Dowling, MJ, Roering, WD, Carlin, BA & Wisniewski, J 1996, 'Multifaceted relationships under cooperation: Description and theory', *Journal of Management Inquiry*, vol. 5, no. 2, pp. 155-67.
- Eikebrokk, TR & Olsen, DH 2005, 'Co-opetition and e-business success in SMEs: An empirical investigation of European SMEs', paper presented to Proceedings of the 38th Annual Hawaii International Conference on System Sciences (HICSS'05), Big Island, Hawaii, January 03 - 06.
- Fairchild, AM & Peterson, RR 2003, 'Business-to-Business value drivers and ebusiness infrastructures in financial services: Collaborative commerce across global markets and networks', paper presented to 36th Hawaii International Conferences on System Sciences (HICSS 36), Hawaii, January 06 - 09.
- Froschl, KA & Werthner, H 1997, 'Informed decision making in tourism management - closing the information circuit', in AM Tjoa (ed.), *Information and Communication Technologies in Tourism '97: Proceedings of the International Conference in Edinburgh, Scotland, 1997*, Springer-Verlag, New York, pp. 75-84.

- Galloway, L, Mochrie, R & Deakins, D 2004, 'ICT-enabled collectivity as a positive rural business strategy', *International Journal of Entrepreneurial Behaviour and Research*, vol. 10, no. 4, pp. 247-59.
- Gartrell, RB 1991, 'Strategic partnerships for convention planning: The role of convention and visitor bureaus in convention management', *International Journal of Hospitality Management*, vol. 10, no. 2, pp. 157-65.
- Garzotto, F, Paolini, P, Speroni, M, Pröll, B, Retschitzegger, W & Schwinger, W 2004, 'Ubiquitous access to cultural tourism portals', paper presented to Database and Expert Systems Applications, 15th International Workshop on (DEXA'04), Zaragoza, Spain, August 30 - September 03, 2004.
- González, MV 2004, 'Application of information technologies in the commercialization and management of tourist products and destinations, in intermediate regions: Reticular integrated strategies', paper presented to WISICT '04: Proceedings of the winter international symposium on Information and communication technologies, Cancun, Mexico.
- Gray, C & Juhler, C 2000, *The impact of information and communications technologies in EU rural areas*, Small Business Research Trust, Knutsford, Cheshire.
- Holsapple, CW & Singh, M 2000, 'Toward a unified view of electronic commerce, electronic business, and collaborative commerce: a knowledge management approach.' *Knowledge and Process Management*, vol. 7, no. 3, pp. 151-64.
- Huggins, R & Izushi, H 2002, 'The digital divide and ICT learning in rural communities: Examples of good practice service delivery', *Local Economy*, vol. 17, no. 2, pp. 111-22.
- Jamal, TB & Getz, D 1995, 'Collaboration theory and community tourism planning', *Annals of Tourism Research*, vol. 22, no. 1, pp. 186-204.
- Joo, J 2002, 'A business model and its development strategies for electronic tourism markets', *Information Systems Management*, vol. 19, no. 3, pp. 58-69.
- Kotler, P, Bowen, J & Makens, J 2003, *Marketing for hospitality and tourism*, 3 edn, Prentice Hall, Upper Saddle River, NJ.
- Leatherman, JC 2000, *Internet-based commerce: Implications for rural communities*, U.S. Economic Development Administration, viewed 15 April 2005, <<http://www.eda.gov/PDF/leatherman.pdf>>.
- Leiper, N 2004, *Tourism management*, 3 edn, Pearson Education Australia, Frenchs Forest, NSW.
- Levy, M, Loebbecke, C & Powell, P 2003, 'SMEs, co-opetition and knowledge sharing: The role of information systems', *European Journal of Information Systems*, vol. 12, no. 1, pp. 3-17.

- Martin, WJ & McKeown, SF 1993, 'The potential of information and telecommunications technologies for rural development.' *The Information Society*, vol. 9, no. 2, pp. 145-56.
- Middleton, VTC & Clarke, JR 2001, *Marketing in travel and tourism*, 3 edn, Butterworth-Heinemann, Oxford.
- More, E & McGrath, GM 2003a, 'Encouraging e-commerce collaboration through seed funding consortia', paper presented to 2003 European Applied Business Research Conference, Venice, Italy, 9-13 June.
- O'Neill, JW 1998, 'Effective municipal tourism and convention operations and marketing strategies: The cases of Boston, San Antonio, and San Francisco', *Journal of Travel & Tourism Marketing*, vol. 7, no. 3, pp. 95 - 125.
- Palmer, A & Bejou, D 1995, 'Tourism destination marketing alliances', *Annals of Tourism Research*, vol. 22, no. 3, pp. 616-30.
- Palmer, A & McCole, P 2000, 'The role of electronic commerce in creating virtual tourism destination marketing organisations', *International Journal of Contemporary Hospitality Management*, vol. 12, no. 3, pp. 198-204.
- Picoli, G 2004, *Making IT matter: A managers guide to creating and sustaining competitive advantage with information systems*, The Center for Hospitality Research, Cornell University School of Hotel Administration, Ithaca, New York.
- Ring, PS & Van De Ven, AH 1992, 'Structuring cooperative relationships between organizations', *Strategic Management Journal*, vol. 13, no. 7, pp. 483-98.
- 1994, 'Developmental processes of cooperative interorganizational relationships', *Academy of Management Review*, vol. 19, no. 1, pp. 90-118.
- Sharma, P, Carson, D & DeLacy, T 2000, 'National online tourism policy initiatives for Australia', *Journal of Travel Research*, vol. 39, no. 2, pp. 157-62.
- Sheldon, PJ 1998, *Tourism information technology*, CABI Publishing, New York.
- Smallbone, D, North, D, Baldock, R & Ekanem, I 2002, *Encouraging and supporting enterprise in rural areas: Report to the small business service*, Centre for Enterprise and Economic Development Research, Middlesex University Business School, viewed 15 April 2005, <<http://www.sbs.gov.uk/content/analytical/research/finalruralreport.pdf>>.
- Thomas, B, Sparkes, A, Brooksbank, D & Williams, R 2002, 'Social aspects of the impact of information and communication technologies on agri-food SMEs in Wales', *Outlook on Agriculture*, vol. 31, no. 1, pp. 35-41.

- Turban , E, King, D, Lee, J & Viehland, D 2004, *Electronic commerce 2004: A managerial perspective*, Pearson Education Inc., Upper Saddle River, New Jersey.
- Werthner, H & Klein, S 1999a, 'ICT and the changing landscape of global tourism distribution', *Electronic Markets*, vol. 9, no. 4, pp. 256-62.
- 1999b, *Information, technology and tourism: A challenging relationship*, Springer Computer Science, Springer, Vienna, Austria.
- Williams, AP & Palmer, AJ 1999, 'Tourism destination brands and electronic commerce: Towards synergy?' *Journal of Vacation Marketing*, vol. 5, no. 3, pp. 263-75.
- Wöber, KW, Hwang, YH & Fesenmaier, DR 2003, 'Services and functions provided by European city tourist offices: a longitudinal study', *International Journal of Tourism Research*, vol. 5, pp. 13-27.
- World Tourism Organisation 1999, *Marketing tourism destinations online: Strategies for the information age*, Madrid.
- World Travel and Tourism Council 2004, *Progress and priorities 2004/2005*, World Travel and Tourism Council, viewed 7 March 2005, <<http://www.wttc.org/aboutWttc/pdf/P&P2004.pdf>>.