The Fundamental Distinctive Applications of Networks in Tourism Industry: A Useful Mechanism for Trust

Majid Heidari[1], Amir Abbas Najafipour[2], Sepehr Farzan[3], Saeed Parvaresh[4]

[1]Corresponding author: Tourism planning, M.A, Allame Tabataba'i University, Tehran, Iran
Email: majidheidari244@gmail.com
[2]Tourism planning, M.A, Allame Tabataba'i University and Instructor of Higher Education Complex of Bam
[3]M.A. student of Industrial engineering, Science and Research branch, Islamic Azad University, Kerman, Iran
[4]M.A. student of Industrial engineering, Science and Research branch, Islamic Azad University, Kerman, Iran

Abstract

In the contemporary competitive business world, enterprises have to compete globally, but must also adjust to the surrounding environment in order to become more efficient and effective locally. Networks can play a significant role in accomplishing this, as they facilitate access to knowledge, resources, markets and technologies. 'Networks' are defined as social structures that enable the operators of small firms to build the level of trust necessary for them to share in the development of the local tourism product. Much of tourism development is predicated on the successful working of organizations alignment in the form of partnerships or "networks". However, tourism networks have been relatively neglected as an area of academic study. The literature suggests that there are a set of clearly identifiable benefits that are achieved through the networking process, which deliver gains to both the network's membership and its host community. A review of relevant literature considers the definition and description of networks, their benefits, and identifiable success factors. Discussion follows as to the main functions and benefits of tourism networks in relation to learning and exchange, business activity, and community values. Key issues that emerge include: structure and leadership, resourcing, engagement of participants, inter-organizational learning, and sustainability. The paper concludes by identifying significant success factors and indicators for business networks and consequential management implications with specific references to tourism destinations as learning communities. Finally, the relation between the tourism destination networks and the knowledge transfer is discussed.

Keywords*: Networks, Tourism destinations, Knowledge transfer, Trust, SMTEs.

Introduction

We live in a networked world. The concept of a network of friends, of businesses or indeed of computers is pervasive in our conversations, newspaper articles or business plans. For many, the increasing importance of innovation and adaptation to turbulent environments is changing the nature of interaction with other organizations and as a response we increasingly encounter more networked inter-organizational relationships such as alliances, partnerships, clusters and communities of practice. These organizational forms often involve interaction between numerous individual organizations such that the flows of information and resources between them are complex. As a result these networks of organizations are becoming a dominant organizational form in the 21st century (Cravens & Piercy, 1994). For many business sectors, the development of networks of organizations may be new or novel. For example, 'Just in Time' manufacture, which requires a network of suppliers working together, has been in place since the early 1980s. In comparison, tourism has always been a networked industry and the usual description of tourism as a fragmented and geographically dispersed industry belies a pervasive set of business and personal relationships between companies and managers in businesses such as national tourism offices, hotels, attractions, transport, tours, travel agents and restaurants. It is this network of relationships that allows the tourism industry to deliver its product and to overcome the problems of fragmentation (Fulop and Richards, 2002).

The study of networks may be considered to have a number of paradigmatic characteristics focusing on (Holmlund & Kock, 1998):

- Structural advantages and constraints on behavior;
- The discovery of groups through their relationships rather than a priori allocation to categories;
- The overall structure of multiple relationships in a group rather than that between a particular pair of alters (in the language of network analysis, a particular node is identified as 'ego' and those nodes that ego has relationships with are termed 'alters').

One consequence of this approach is that it makes problematic the classical economic concept of a market as a homogeneous collection of identical suppliers and buyers. Instead, studying networks presupposes that the individuals do not act in isolation and with perfect information, but that the behavior of individuals is profoundly affected by the pattern of relations that they may (proactively) develop. In studying networks the focus therefore is on relations rather than attributes, and on structured patterns of interaction rather than isolated individual actors. A second implication is that the fundamental basis for the study of networks is different from other areas which study the attributes of people or organizations. Instead, network analysis studies relationships (Knoke & Kuklinski, 1991).

Globally, tourism in developed countries is making greater use of partnership arrangements in order to develop sustainable economic tourism. Many of these partnership arrangements are formalized through the concept of the "network". Recognition of the importance of networks was highlighted in the now classical text of Michael Porter (1990) "The Competitive Advantage of Nations", in which he drew attention within a manufacturing context to competitive advantage being achieved through industry clusters. This cluster, partnership, or network concept has been adopted by some national economic organizations as part of their development strategies with the aim of establishing or building on strategic areas of strength, including within the tourism sector. However, it can be argued that the tourism industry provides the ideal context for study of networks. The network concept is based around relationships between entities such as organizations or people (termed nodes), and the

properties of networks studied by researchers relate to the structure of these relationships. Business networking in the tourism industry is a fairly new area of academic interest and research (Huson & Nanda, 1995). Crotts et al. (2000) see the main purpose of forming networks as making the firms involved in the network become more competitive. The advantage of forming networks in the tourism industry is that firms involved in the relationship contribute complementary components to achieve a level of satisfaction for all firms involved.

However, to date tourism networks have been a relatively neglected area of academic study. In this respect, this paper makes one contribution in presenting literatures from previous researches that focused on international tourism networks and drew learning points from the examination of relatively successful examples. The aim is to develop a strengthened understanding and knowledge of the phenomenon, success contributors, and management implications therein. Consequently, the paper commences with a review of relevant literature concerned with the definition and description of networks, their benefits, and identifiable success factors, and the research methodology applied is outlined. Discussion follows as to the main functions and benefits of tourism business networks and significant success factors. Conclusions are drawn relative to management implications.

The historical development of network theories

The historical development of the network concept is divided here into *two* broad schools of thought; one mathematically based and the other based in the study of the social sciences, with these two schools merging to some extent around the middle of the 20th century. From a mathematical perspective (as well as in the visualization of social networks used in early sociometry), a network may be represented by a diagram in which the various elements are represented by dots and the connections among them by lines that link pairs of dots. This diagram is called a graph, and the branch of mathematics known as graph theory constitutes the framework providing the formal language to describe such objects and their features. Graph theory is one of the few disciplines with a definite birth date. As for many other fundamental branches of mathematics, the origins of graph theory are humble, even frivolous. Whereas many branches of mathematics were motivated by fundamental problems of calculation, motion, and measurement, the problems which led to the development of graph theory were often little more than puzzles, designed to test the ingenuity rather than to stimulate the imagination (Biggs et al., 1976)

Today, the term social network analysis has superseded the earlier sociometry; however, both refer to the analysis of social networks in part utilizing graphical methods. Friendships among individuals, business relationships between companies, and trade agreements among nations are all examples of networks which have been studied by using these techniques. The origins of network thinking in social thought have been attributed to Simmel's fundamental distinction between 'groups' and 'webs of affiliation' (linked through specific types of connections). From these early origins, the analysis of networks has expanded into a number of different lines of research. A number of very diverse strands have shaped the development of present-day social network analysis. These strands have intersected with one another in a complex and fascinating history, sometimes fusing and other times diverging on to their separate paths. A clear lineage for the mainstream of social network analysis can be constructed from this complex history (Scott, 2000). From the sociological and anthropological point of view, networks form part of the structural tradition. In this tradition researchers hypothesize that variations in the pattern of relationships surrounding social

actors affect the behavior of the actors and that correspondingly, people also consciously manipulate situations to create desired structures. The concern of structural analysts with the direct study of networks of concrete social relations connects strongly back to post-World War II developments in British social anthropology (Wellman, 1988).

The study of inter-organizational relationships is a key area for research today, and the area has been studied from a dialectic perspective. The use of network analysis in other disciplines has slowly grown. Wilkinson (2001) discusses the use of network thinking in marketing and notes the use of network analysis methods by Iacobucci and Hopkins (1992) in marketing channel analysis, but suggests that researchers have made limited use of them to date. Within the marketing literature the study of distribution channels has been strongly influenced by the industrial marketing and purchasing group in Europe in the 1970s and by concepts of relationship marketing (Pavlovich, 2001). Today network analysis provides an analytical framework for the discussion of theories of society and globalization encouraged by a tendency towards alliances and linkages across organizations. In business and economics, network analysis represents a new organizational paradigm, based upon the competencies-based theories of the firm, where relationships shape and constrain organizational performance. This theory argues that organizations evolve according to the capabilities they can leverage from the external environment. In other words, a firm's performance is not only dependent upon the resources of the firm itself, but also upon those of other firms and the nature of their relationships (Wilkinson, 2001).

Networks or Networking; definitions and debate

Originally, the concept of a network was a metaphor for the complex interactions between people in the community. Drawing on generic network literature, it is possible to identify a range of different types of networks, and these may be classified in various ways. For example, classifications could include: network membership; nature of linkages between members; type of exchange or attraction; network function or role; and geographical distribution of the network. Furthermore, they may be described as informal, semi-formal or formal in nature (Shaw, 1997). However, with the development of quantitative approaches the concept of a network became formalized and related to mathematical theory. In graph theory a network is a "finite set of points linked, or partly linked, by a set of lines (called arcs) …called a net, there being no restriction on the number of lines linking any pair of points or on the direction of those lines. A relation is a restricted sort of net in which there can only be one line linking one point to another in the same direction, i.e. there are no parallel arcs". Transferred into sociology, a network is defined as a specific type of relation linking defined sets of persons, objects or events, and the sets of persons, objects or events on which a network is defined are called actors or nodes. Thus a network consists of a set of nodes, and ties representing some relationship between the nodes. Today, there are many definitions of a network but as pointed out by Jarillo (1988); many have been developed by applying this basic definition to new areas such as the study of organizations.

Shaw (1997) notes that the term 'network' has been loosely applied in entrepreneurial research, and, as a consequence, suggests there has been a general failure to recognize that networks and networking are different constructs. Much of the theorizing and research using the notions of 'network' and 'networking' as conceptually and methodologically poorly realized. The term network has been used as everyday speech rather than as an academic description of a particular phenomenon with a precise meaning. According to O'Donnell, Gilmore, Cummins, and Carson (2001), the popularity of the network construct has, in some

instances, led to misapplication and inconsistency; consequently, findings pertaining to entrepreneurs' networks are often confusing and contradictory. The elusiveness of definitional precision is in part explained by Gummesson (1994), who uses the term 'imaginary organization' to refer to the fact that networks are not tangible objects, but rather are social constructs comprising people, activities and thoughts that are not spatially limited to one specific location. The same argument is endorsed by Taylor and Thorpe (2004), for they suggest that the use of the term 'network' is not to represent a definable spatial entity made up of a finite, identifiable set of individuals, such as a physical business unit, but that it should be seen as a fluid entity with permeable boundaries.

Such varied conceptual starting points inevitably shape the different ways of knowing 'networks' and 'networking' and impact on how they are defined. Nevertheless, there seems to be a level of agreement that it is not the existence of a network that in itself has the potential to generate benefits, but rather it is the use of that network through the process of networking that actually brings about the gains for the network's membership. The critical element to this distinction rests on an understanding of how the ideas and patterns of action develop among groups and individuals. In short, a network might simplistically be viewed as the structure and scaffolding that supports and contains networking, but this is rich in social meaning, texture and the relationships involved in the process of networking (Halme, 2001). Thus, while there appears to be agreement that networks consist of a series of direct and indirect ties from one actor to a collection of others, the level of agreement about the formality required to bind these ties is at variance. However, the reality remains that it is not the existence of a network per se from which the benefits will accrue, but rather the use of that network through the process of networking that generates the desired outcomes (Shaw, 1997).

Networks; the Mechanism for Trust

'Social capital theory', according to Leana and Van Buren (1999), emphasizes the importance of relational capabilities in the management of the connections to the community in which a firm is embedded; and, hence is of particular importance to the smaller tourism firm given the central role played by its owner-manager. These authors use the term 'associability' to indicate an organization's ability to participate in collective goals and actions while subordinating their own individual goals and actions. They also refer to the propensity to 'trust' another party. As pointed out by Buoncore and Metallo (2005), the presence of high-trust relationships leads to higher levels of social exchange and cooperative behaviors. Associability and trust are identified by Leana and Van Buren (1999) as affective and skills-based dimensions of relational competencies.

Individual businesses engage in competition within a local economy, but they are also very much a part of the local social fabric that creates the sense of identity as a community. This relationship, combined with the notion of 'embeddedness' within the community, has concerned a number of analysts in the tourism organizational literature, (e.g., Lazaretti and Capone, 2005). However, it is the work of Brandenburger and Nalebuff (1997) that explains why businesses which compete might also need to cooperate with one another in order to achieve success. The reality remains that working in a network alongside other businesses with which one is in competition requires a degree of trust, a kind of relationship glue, for it is trust that engenders the kind of cooperation that is for the general as well as the individual good. Hence, from the perspective of social analysis, the importance of relational competencies is evident (Buoncore & Metallo, 2005).

It is possible to identify certain environmental conditions and facilitators of trust. According to some analysts these include: geographical isolation; organically 'grown' networks; high social density; co-location within a locality; person familiarity; frequency of communication; dependency of relationships over time; development of inter-organization norms of behavior. Working together successfully in a network is an evolutionary process, but one that nonetheless may be facilitated with public sector support. The role for the owner-managers of small tourism firms is to marshal their social capital in order to develop and exploit their networks of social, professional and exchange relationships. It is too simplistic to say that such relationships are purely instrumental, for trust is an essential ingredient in the development of relationships to the level where cooperation for business purposes can occur. Such trust is frequently dependent upon the strength of the social relationship. Networking is a process that acts as the structure or mechanism that permits owner-managers to develop that level of trust. Hence, networks can be seen as developing as a result of the networking process; and it might even be argued that it is the coalescence of organizational networks within a locality that leads to the creation of a business cluster (Van Laere & Heene, 2003).

Networks, Collaboration and Trust

The academic concepts that overlap with the study of networks are those of collaboration and trust. Collaboration can be defined as 'a process of joint decision-making among key stakeholders of a problem domain about the future of that domain'. As an example, the domain of interest for a tourism destination may be tourism planning, tourism marketing or other activity. A key reason for the interest in collaboration and networks in tourism development is the idea that tourist destinations can gain competitive advantage by bringing together the knowledge, expertise and other resources of their stakeholders (Kotler et al., 1993). Thus the concept of collaboration provides a reason for a network to exist.

Collaboration involves exchanging information, altering activities, sharing resources and enhancing the capacity of another for mutual benefit and to achieve a common purpose. According to Getz and Jamal (1994), collaboration is a process of joint decision-making among autonomous and key stakeholders of an inter-organizational domain to resolve problems of the domain and/or to manage issues related to the domain. Selin (1993) in his work on collaboration indicates that collaboration works through networks. Indeed, many researchers claim that the broadly based ownership of tourism policies can bring democratic empowerment and equity, operational advantages, and an enhanced tourism product. Araujo and Bramwell (2000) have concluded that the network of stakeholders involved in collaborative planning for Brazil's Costa Dourada Project included a relatively broad array of environmental and other interests and also provided some possibility that varied issues of sustainable development would feature in deliberations about the project's policies. Trust can be defined, first of all, as a state of favorable expectation regarding other people's actions and intentions and can be considered based on the law or a moral imperative. Trust can be a basis for individual risk-taking behavior, cooperation, reduced social complexity, order, and social capital. At the organizational level, actors tend to create stable relationships with trusted partners, and these stable ties accumulate, over time, into a network that provides network members with valuable information about future alliance partners (Hjalager, 2000).

The network concept and tourism

The term "network" is acknowledged to be complex. While there is growing interest in networks and partnerships, relatively little has been published with a specific tourism focus,

and most of which does exist is of recent origin. Networks in tourism may be more important than in other areas of the economy of many countries. For example, in an Australian study of 1500 enterprises across all sectors of the economy, Bickerdyke (1996) found that networks were prevalent in the service sector and that the largest number of networked firms in the service sector was involved in tourism. In fact, tourism has been defined as a system where interdependence is essential and collaboration and cooperation between different organizations within a tourism destination creates the tourism product (Pechlaner et al., 2002). Buhalis (2000) has stated that most destinations consist of networks of tourism suppliers and that the benefits of such networks are more profitable tourism destinations. A network approach to sustainability is necessary within an industry such as tourism, where a relatively large number of small actors with few resources cannot pursue sustainable development in isolation. Networks, whether based on informal local alliances, formal partnership agreements, not-for-profit local, regional or national tourism organizations, help to compensate for the fragmented nature of tourism (Bjork & Virtanen, 2005).

Tourism is seen as geographically dispersed in often remote areas distant from source markets, consisting of small independent businesses with a high staff turnover operating in a turbulent business environment. In such situations the survival of operators depends in part on collective action and thus the emergence of network structures is in the collective interest of tourism operators. Indeed, tourism's organization in a country can be considered as a series of hierarchical networks. Thus networks are a logical response to the context that tourism provides to business managers, and network theory may therefore help to understand the collective nature of organizational action, constraint and coordination within tourism (Wang and Fesenmaier, 2007). A second reason for collective action in tourism is that many of the main resources of a tourism destination that are used jointly to attract tourists are community 'owned'. These may be physical resources such as beaches, lakes and national parks; built resources such as museums, art galleries and heritage buildings; or intangible resources such as destination brands or the reputation for friendliness of local people. Such collective action does not necessarily require a network organization but, in a situation with a general lack of resources and where decisions related to tourism are not often seen within the government mandate, the response is often a network of interested stakeholders (Morrison et al., 2004).

There are a number of purposes for networks within tourism and Morrison et al. (2004) identify three types of network stakeholder. Networks of independent commercial operators provide an opportunity to influence planning, collect information and gain commercial advantage as well as a mechanism for leveraging resources such as marketing and business development activities, and to obtain public sector grant funding. Public/private networks may be used by government to stimulate economic development. Networks of tourism academics may provide information regarding changing business environment conditions, market research on customers or ideas for new business opportunities. Networks provide a practical business benefit. They provide a mechanism for passing customers from one organization to another, to the benefit of those organizations, and they provide the customer with a comprehensive tourism experience (Hislop, 2005). However, practically there is a limit to the number of these relationships, as managing relationships takes time and effort. Networks are found within particular types of operators as well as across tourism destinations. For example, in a study of events in Australia, Stokes (2006) identified networking of stakeholders where operators share similar issues and problems to that of tourism. In a hotel context, part of the reason for networks developing is to obtain information in a complex dynamic environment.

Tourism Networks

While there has been interest in business networks for some time in the generic management literature, it is only more recently that the topic has received concerted attention in the specific context of tourism development. Lynch et al. (2000) summarize benefits of networks to building profitable tourism destinations identified from a comprehensive review of literature (Table 1). The benefits are classified into three categories of: learning and exchange; business activity; and community. Through learning and exchange between network participants benefits are leveraged that have the potential to be translated into positive business activity and community outcomes. In each of the categories it can be observed that there is a strong bias towards those benefits of a largely qualitative nature. This highlights a key issue in relation to the value of networks; there exists a lack of measured benefits from networks, and many associated are qualitative and not easily quantified. Within the tourism literature, the use of the concept of a network appears logical and delivers a number of useful outcomes for the analysis of tourism destinations and organizations. Tourism is a networked industry where loose clusters of organizations within a destination; as well as networks of cooperative and competitive organizations linking destinations; cooperate and compete in dynamic evolution. The concept of a network and the techniques of network analysis provide a means of conceptualizing, visualizing and analyzing these complex sets of relationships. It provides a method for simplifying and communicating these relationships and so can be useful in promoting effective collaboration within destinations (Nilsson et al., 2005).

Table 1:

Benefits of networks for building profitable tourism destinations (Lynch et al. (2000))

Benefit category	Identified network benefits
Learning and Exchange	• Knowledge transfer • Tourism education process • Communication • Development of new cultural values • Accelerating speed of implementation of support agency initiatives • Facilitation of development stage of small enterprises
Business activity	• Co-operative activities, for example, marketing, purchasing, production • Enhanced cross-referral • Encouraging needs-based approaches, for example, staff development, policies • Increased visitor numbers • Best use of small enterprise and support agency resources • Extension to visitor season • Increased entrepreneurial activity • Inter-trading within network • Enhanced product quality and visitor experience • Opportunities for business development interventions • More repeat business
Community	• Fostering common purpose and focus • Community support for destination development • Increases or reinvents a sense of community • Engagement of small enterprises in destination development • More income staying locally

There are two reasons for the emphasis on community networks. The first is that tourism is connected to geographical places or communities with a social and cultural history that needs to be accounted for in any discussion of a tourism destination's development. This makes it very difficult to study tourism development at a local and regional level without being aware of, and taking into consideration, the relationship with the wider development of a society. In short, tourism has important political, economic and social dimensions, especially in rural areas, which stem not just from the fact that a destination draws visitors who spend money and so contribute to the local economy (Elbe, 2002). The second reason is the complexity and multiplicity of tourism, which makes it difficult to distinguish separately from other kinds of phenomena and from other industries in modern societies. The complex nature of tourism includes all parts of society; private enterprises, public organizations and voluntary associations. Tourism community networks are therefore seen as broadly common interest groups with actors involved in tourism to varying degrees at a local or regional levels. Interest groups, in the context of social organization can be defined as: An identifiable group of people who share common goals and values, who come together in a formal or informal organization to influence the outcome of particular economic or social processes to deliver decisions in their favor (Michael, 2006).

Significant factors that have been attributed to the success of tourism networks have been identified by Morrison et al. (2004); these are set out in Table 2 in the form of a checklist. It can be observed that the network form of organization is complex and multidimensional in nature, central to which are degrees of co-operation as appropriate among individual and organizational entities. Benefits arising tend to be qualitative, somewhat elusive of quantitative measurement, and their evaluation will be dependent on the respective perspectives of those involved in active participation and/or support. While it has been possible to summarize a range of associated success factors, analysis of literature has failed to identify real sense of a managerial understanding of how tourism networks should be organized to best advantage. Therefore, a deeper understanding is required of the specifics of international tourism networks towards an increased understanding of success factors and management implications (Nilsson et al., 2005).

Table 2:
Network success factor checklist (Morrison et al. (2004))

Success factor	Description
Benefits	Learning and exchange translates into perceived and tangible commercial outcomes that provide social and economic gains within communities
Communication	Effective systems are in place that makes efficient use of business environments, social space and virtual cyber-space
Engagement	Comprehensive understanding, manipulation and management of a diverse set of member economic, social and psychological motivations
Inclusivity	Membership represents a healthy balance and interplay of public agencies, academic institutions, and the private sector as appropriate
Inter-organizational	Connects with a hub organization, core participants and is learning stimulated by a supportive infrastructure of formal and informal mechanisms, ultimately translating into commercial benefits
Leadership	A combination of hub organization and network champion play catalytic roles that are stimulated and supported as appropriate to the life cycle of the network
Objectives	Clearly identified, articulated and communicated
Purpose	Aims are linked to local, regional, national and international priorities that are able to transcend issues that may deflect the driving purpose, achieving commercial outcomes as appropriate
Resourcing	Continuity of sufficient financial, human and physical resources as the network starts-up and evolves
Structure	Fit for purpose, recognizes the benefits of the creation of communities of learning involving inter-connecting of a multi-tiered pyramid of networks as appropriate, and is supported by key public sector organizations

Networks in Tourism Marketing

The concept of networks in the general marketing literature is extensive and has begun to be employed in tourism. In the marketing literature Webster and Morrison (2004) write that network theories have been applied to word-of-mouth communication, relationship marketing, information acquisition, and the diffusion and adoption of new products and services. Arabie and Wind (1994) write that 'social networks and their patterns of relationships are a fundamental fact of market behavior and can and have been used effectively as a basis for marketing strategies'. In tourism, the idea that firms form destination marketing alliances is a common area for study, and Blumberg (2004) has examined cooperative networks in destination marketing in New Zealand. In her study, Blumberg found that one of the main challenges for a tourism destination management organization was the organization of cooperative networks to gain industry support for the destination's marketing activities. In an interesting study of destination marketing, Grangsjo (2006) has examined the balancing act between competition and cooperation that must be faced in marketing networks in tourism. She found that such networks encouraged and were supported by social capital developed through trust, communication and time spent together (Palmer & Bejou, 1995).

In the broader literature, communication, knowledge development and knowledge management are topics that are commonly examined from a network perspective. The consequences of networks for information flow include information needs, exposure, legitimation, routes, and opportunities (Haythornthwaite, 1996). Indeed, Monge and Contractor (1999) have discussed ten families of theories and their respective theoretical mechanisms that have been used to explain the emergence, maintenance, and dissolution of communication networks in organizational research: • Theories of self-interest (social capital theory and transaction cost economics); • Theories of mutual self-interest and collective action; • Exchange and dependency theories (social exchange, resource dependency, and network organizational forms); • Contagion theories, (social information processing, social cognitive theory, institutional theory, structural theory of action); • Cognitive theories (semantic networks, knowledge structures, cognitive social structures, cognitive consistency); • Theories of homophile (social comparison theory, social identity theory); • Theories of proximity (physical and electronic propinquity); • Uncertainty reduction and contingency theories; • Social support theories; • Evolutionary theories.

The importance of networks for learning is only slowly entering the tourism literature, although Cooper and Scott (2005) have examined the importance of networks for knowledge dissemination. Saxena (2005) has found that relational frameworks are the key sources of 'learning' for a region and has applied this idea as a way of improving the marketing of a region in the face of an increasingly changing external market environment. Tremblay (1998) makes a similar comment regarding learning by suggesting that in the context of high uncertainty tourism managers survive: through the establishment of network linkages encompassing information exchanges, trust-building communication network channels, quasi-integration, and joint planning. This kind of network alliance has many advantages; e.g. exploitation of scale and scope of economics, common supply-side coordination, technological and physical assets, coordinating complementary assets (Tremblay 1998).

Another key area for the study of inter-organizational learning in tourism is the area of sustainable development. Pavlovich (2003) indicates that 'internal ties' can further be used to build a portfolio of interconnections for knowledge building within destination networks. Saxena (2005) discusses how relationships provide relational capital that influences the

degree of learning by individuals in a region. Morrison et al. (2004) summarize the function of international tourism networks for learning and exchange of knowledge. Relational frameworks thus emerge as the key sources of 'learning' and successfully marketing a region in the face of an increasingly changing external market environment (Saxena, 2005).

Small Firm Networks and Tourism

   Networks are a phenomenon which is being given increasing attention in the management literature on small business development. At a generic level, a range of different types of networks are easily identified, and these may be classified in various ways. For example, Conway (1998 cited in Shaw & Conway, 2000) devised a network classification, which is provided in Table 3. This particular classification is useful as a means for conceptualizing and analyzing networks. While it is comprehensive, it does neglect the concept of the virtual network that exists only through cyber-technology, for example, via the Internet or e-mail; and, as a further omission, Halme (2001) notes that networks may also vary according to the type of organizational configuration that pertains. Inter-firm networks have become a popular form of organizational cooperative relationship, and increasing attention is being given to them by academics, analysts, planners and operators alike in the fields of hospitality and tourism. Within the context of the tourism sector, while it is recognized that networks serve multipurpose, one such function is their role in assisting the formation of alliances to facilitate the packaging of a series of related products or services at specific destinations. The cooperation required for a network to operate successfully is perceived as essential for any tourist destination (Soisalon-Soinnen and Lindroth, 2005).

Table 3:
Network classifications (Conway (1998) in Shaw and Conway (2000))

Classification	Description
Network membership	Diversity of actors (professional, user, social)
Nature of linkages	Formal versus informal
Type of exchange or transaction	Information, goods, friendship or power
Network function or role	Problem-solving or idea generation
Network morphology	Size, diversity, density, stability of links
Geographical distribution of network	Balance between local, national and international members

   Lazaretti and Capone (2005) point to the embeddedness of tourism firms within the local community and the significance of interactions between local non-economic and economic community members. Nonetheless, it remains important to differentiate between the levels of intensity of social embeddedness or engagement that will be exhibited by different kinds of network structures. Szarka (1990) provides evidence of this, offering three categories of network to embrace the economic and social determinants of small firm networks as follows:
• *Exchange networks:* comprise the companies and organizations with which a small firm has commercial transactions, where the unit of analysis is the firm;
• *Communication networks:* comprise the collection of organizations and individuals with which a small firm has non-trading links that inform its business activities; such as consultants and advisors, local and central government and its agents; where relationships are characterized by official and semi-official information flows;

• **Social networks:** comprise the linkages between family, friends and acquaintances; they have two components: the personal network involving concrete contacts with specific individuals, and secondly, the wider cultural dimension in which the actors operate.

Gibson, Lynch, and Morrison (2005) augment this debate by adding further categories to the analysis of networks as formal, semi-formal and informal. These are expanded as follows:
• **Formal:** a formalized set of actors who interact in the context of identified aims, for example, a regional tourism organization. While social interactions may be valued, these are subordinate to the formalized aims;
• **Semi-formal:** a formalized set of actors who interact in the context of identified aims, for example, a local business marketing consortium. Social interactions may be perceived as of equal importance to the formalized aims;
• **Informal:** a set of actors who meet mainly for social purposes but also exchange information which has instrumental (business) value. No formal membership or clear goals exist, as occurs, for example, in a neighborhood host families 'network'.

The Benefits of Networks for Small and Medium Sized Tourism Enterprises

Networks have become a fashionable topic in the tourism literature. Despite the fact that most of the insights into the relationship between networks and business activities started to emerge in the late 1980s and early 1990s, the concept and theory of network is not recent. The origins of network theory and practice may be found in research conducted in the late 1950s and 1960s. It was nevertheless from the mid-1980s onwards that network analysis and theory began to attract the attention of growing numbers of economists, planners, sociologists, geographers, psychologists and politicians. Since then, larger numbers of academics and practitioners have become sensitive to the importance of intra- and inter-organizational environmental design to an organization's profitability, efficiency and effectiveness as well as to employee motivation (Knoke, 1990). As a result of globalization, the vertical and horizontal integration of the industries, and the opening of the world's frontiers, competition in the tourism sector has increased significantly. Hence, businesses are becoming increasingly aware that their operation has to become more efficient and effective. Entrepreneurs are conscious that in order to compete globally, their companies have to interconnect tightly with the surrounding local environment in order to become more efficient in their operation, reduce costs, incorporate raw materials and recruit the most suitable human resources. In other words, increasing worldwide competition is pushing companies to become locally more efficient and effective. The organizational environment is crucial for the success of an organization because interdependence pervades organizations and is fundamental to understanding them. Individuals within a group, work groups within departments, and departments within organizations all depend upon each other (Morrison et al., 2004).

Organizations are becoming more like amorphous networks of interdependent organizations, where no element is in firm control. Even though such a network may have a focal organization, the focal organization is as dependent as the other organizations in the network. Network theory in the tourism sector dates back only a few years, as it has been recognized that relationships between enterprises can stimulate inter-organizational learning and knowledge exchange, resulting in qualitative and/or quantitative benefits to businesses, communities and destinations. Therefore, several studies have been made using networking, clustering and agglomeration theories to explain the role of tourism in influencing local growth and stimulating regional development (Saxena, 2005, Pavlovich, 2003). Despite the

growing literature on the importance of networks in the tourism sector, there is limited discussion on whether networks can be used as an innovative process to support tourism enterprises and contribute to local development. The relationship between innovation and networks is one of the most frequently discussed issues in economics and managerial science, but seems to be a new topic in the tourism field (Fukugawa, 2006). One proposal along these lines has been made by Morrison et al. (2002), and is described further in Table 4: it covers issues including membership, performance, benchmarks and the community. The existence of success measures for a network could provide public administrators with an objective basis for the provision of funding, but as the objective remains local economic development, it would be appropriate to include indicators that relate to increased job opportunities and to development of the physical environment; to focus on outcomes that appeal to both community and commercial audiences.

Table 4:
Success Indicators for Business Networks (Morrison et al. (2004))

Factors	Indicators
Learning and exchange	• Regular sampling of members' views on network benefits and efficiency • Collaboration between private, public and voluntary groups • Product development based on social and cultural capital and heritage • Regular informal and/or formal communication between actors • Support of key enterprising
Business activity	• Additional income generated and retained within communities • Evidence of extended visitor season • Evidence of market development, innovation and new product development • Evidence of a resource plan • Increased numbers of business start-ups • Increased repeat business • Increased visitor numbers • Leverage of resources that could not have been achieved without the network • Regular monitoring of business activity • Regular sampling of members' views on network benefits
Community	• Membership numbers • Organizational and sectoral analysis of membership • Regular sampling of members' views on network membership • Network conformity and contribution to social and ethical business policies

Tourism Destination Networks and Knowledge Transfer
The Knowledge transfer approach

For the contemporary tourism destination, knowledge transfer is essential for competitiveness and there is an increasing trend for destinations to intervene in the process rather than to remain passive. Yet, the effective transfer and use of knowledge is not an easy task – indeed, estimates suggest that whilst tacit knowledge accounts for 80% or more of the knowledge held in an organization, only 10% or 20% of that knowledge is utilized in a transfer

process. Here, the knowledge management literature provides insights into understanding the knowledge transfer process. Of course, knowledge transfer at the destination can happen informally through spontaneous or unstructured processes, but a well-managed destination does not leave it to chance, and manages and thinks through the process. Here, the key element is the imperative of transfer plus absorption, and a range of tools and activities can be employed to make it happen. Transfer occurs through peer-to-peer exchanges, iterative knowledge sharing, team learning and electronic discussion spaces. The core concept is to ensure the effective application of intellectual capital in a tourism organization or destination to achieve objectives and, over time, there has been a shift from creating knowledge repositories to integrating knowledge sharing and transfer into core business processes. Nonetheless, for effective transfer to occur, organizations must participate and be embedded within destination networks (Ladd and Ward, 2002).

The key to understanding the transfer of knowledge across a destination is to recognize the importance of the type of knowledge to be transferred and the medium to be used for the transfer. It is therefore important to accurately assess the type of knowledge to be transferred and to understand the destination context within which it is exchanged. Chua (2001) examined the transfer of three types of knowledge. His three types of knowledge were as follows:

(1) *Codifiable,* or effectively explicit knowledge, as measured by the extent to which the knowledge can be articulated or represented in documents and words. This knowledge may be substantive, for example, in blueprints, or it may be procedural, for example, in a recipe for carrying out a task; (2*) Teachable:* Teachability is the ease by which the knowledge can be taught to another person; (3) *Complexity:* Complexity refers to the number of critical and interacting elements of the knowledge needed to accomplish a given task.

Of course technology is at the heart of effective knowledge transfer and sharing. As we move into an era of e-knowledge, technology facilitates more rapid transfer. In particular, the World Wide Web is the perfect medium for the easy mass distribution of information across a destination network, as well as the use of intranets. This technology is the foundation of destination-wide systems of knowledge transfer and sharing, not only within the destination, but also with customers and suppliers worldwide. The most effective use of technology for knowledge transfer and sharing now lies in the use of knowledge portals – an approach that is being adopted by many destinations. Portals are a powerful medium for transferring knowledge. They provide an integrated framework linking users with knowledge in a single point of access, effectively providing a 'virtual workplace'. Portals use content management tools, online collaboration tools, are secure and can be both customized and personalized. Essentially, portals are becoming the centerpiece of knowledge management systems for destinations, linking the technology and the people elements and allowing the producers and users of knowledge to interact (Ladd and Ward, 2002).

Knowledge transfer within destination networks

Whilst it is recognized that knowledge transfer across tourism destinations is important, compared to other fields the tourism sector is relatively undeveloped. As a result, tourism has not, until recently, been subject to a knowledge management approach and destinations are not as competitive as they could be. This, then, is the challenge for tourism. The knowledge-based economy is not simply the preserve of hi-tech industries, and in fact represents the use of knowledge to benefit all sectors of the economy, including tourism. There are two reasons for this failure. Firstly, tourism knowledge generators – researchers, consultants and others –

belong to a 'community of practice', with common publications and language – a community of practice that does not include the practitioners at a destination. This concept of different 'communities of practice' may be partly to blame for the lack of gearing between those that generate knowledge and practitioners at tourism destinations. Whilst this goes some way to explaining the poor record of knowledge transfer in tourism, other authors state that in addition, many of the prior conditions necessary for the successful transfer and adoption of knowledge are not present in tourism. This problem is related to the very nature of tourism destinations. Destinations are characterized by:

• A dominance of small enterprises which are often single person or family owned. As a consequence, knowledge must be highly relevant to their operation if they are to adopt and use it; • Fragmentation across a variety of sectors – accommodation, transport, food and beverage; • Vocational reinforcers, such as poor human resource practices, which militate against the continuity of knowledge absorption. These include the employment of seasonal and part-time workers, high labor turnover and a poorly qualified sector which inhibits knowledge absorption. It is therefore more difficult to achieve effective knowledge transfer to employees who have a low commitment (Magnusson and Nilsson, 2003).

If knowledge transfer is to be effective in tourism destinations then the process needs to be mapped and understood. Hjalager's (2000) model of four channels works well, with knowledge transferred according to the sector of tourism and the use of the knowledge. Her four channels are: (1) *The technological system*; (2) *The trade system*, where transfer takes place through trade associations and tends to be sector or destination-based; (3) *The regulatory system*, where knowledge of, say, fire regulations is transferred; (4) *The infrastructure system*, including managers of parks and natural resources, where there is a greater tendency to accept and use knowledge.

Knowledge transfer models for destination networks

There are three models of knowledge transfer that are useful to destination networks:

(1) *At the level of the destination organization*, the transfer of knowledge within knowledge creating organizations refers to the process where tacit knowledge is transformed into explicit knowledge through the interaction of employees and management in cross-functional teams. The focus here is on interaction between individual knowledge and organizational knowledge. This approach has been championed by Nonaka (1991);

(2) *At the destination level*, organizational learning refers to a method where organizations build competitive advantage through effective transfer management and constant updating of information. It requires the development of knowledge transfer structures that stress learning agents within the organization who respond to and communicate internal and external information to co-workers. In tourism this approach includes outreach strategies and networking concepts within communities of practice. This relates to one of the oldest forms of transfer used in tourism – that of 'extension';

(3) *For tourism destinations*, the model of absorptive capability is very relevant, as many of the users of tourism knowledge lack experience in the field. SMEs, for example, will only use knowledge if it is highly relevant to their operation. Here, the idea of organizational capability is about filling the 'gap' between intention and outcome by making tacit knowledge explicit. The absorptive capability model refers to the fact that organizations have to respond to inputs of knowledge and that their ability to do so will depend in part on the organization's existing knowledge; effectively, the greater the knowledge stocks, the more effective will be the assimilation of new knowledge. It will also depend upon the size, internal structure, and

division of labor, leadership and competency profile of the receiving organization. Clearly then, destinations will vary in their ability to engage in knowledge transfer and this will in turn impact upon their performance and competitiveness (Braun & Hollick, 2006).

Applying knowledge management in destination networks

There are to date only a small number of examples and applications of knowledge management across destination networks. However, recognition of the significance of the approach is growing as practitioners recognize the value of knowledge sharing not just within organizations but also across destination networks, and in particular the encouragement of partnerships within the destination (Peters et al., 2002). It is characterized by the fact that the early phases of knowledge management were dominated by the phrase 'knowledge is power'. The new thinking argues 'sharing is power', and this creates 'communities of knowledge' at the destination level. However, it must be recognized that, at the destination level, learning between organizations needs certain conditions to be effective. These conditions include: • Continuous innovation for competitiveness and new destination products; • Interactive knowledge sharing, facilitated by the Internet and 'destination knowledge portals'; • Stable relationships with high levels of trust. For tourism SMEs this may require a period of training and induction; • Effective knowledge processes within organizations to generate knowledge stocks (Richards and Carson, 2006).

This new thinking has given rise to the concept of sharing 'knowledge capital' and relates back to discussions on the nature of knowledge as a 'resource'. Knowledge itself does not deliver growth; it has to be incorporated into the production of goods and services because it is linked to human capital and labor markets. Here, networks of organizations at the destination recognize that the same knowledge can be used by more than one organization but that the cost does not increase in terms of accessing that knowledge. This is reflected in the fact that tourism enterprises are showing increased interest in cooperation across organizational and geographical boundaries. In other words, the traditional notion of the enterprise as a closed, self-regulating system is being complemented by a broader conceptualization that includes ideas such as strategic alliances, outsourcing, virtual enterprising, and externalization of resources. Effectively, the enterprise has become a networked organization and its success will depend upon the degree to which it can leverage strategic advantage from its networks. For tourism destinations, this concept is best illustrated by the dominant form of organization in tourism (i.e., SMEs) (Richards and Carson, 2006).

Conclusion and Discussion

This paper has focused on network concept and its distinctive applications and implications in tourism industry. Within the tourism context, the research has revealed that multiple ranges of network types exist. These can be classified according to organizational type, inter-organizational configuration, degrees of formality, and extent of intensity of co-operative relationships between members, functions and aspired benefits. Once established their success is predicated on a range of factors including: objectives and purpose; organizational structure and leadership; human, financial and physical resourcing; member engagement; and inter-organizational learning. Benefits arising may be of a business activity and/ or wider community nature and the elusiveness of their quantification due to their largely qualitative nature remains a research challenge. Crucially, the core of the network has been established as inter-organizational learning and knowledge exchange, and the "glue" a sense of

community and collective common purpose. This may lead to the concept of a "learning community". For those professionals and agencies concerned with the management of the sustainable and profitable development of tourism destinations a key finding is that of the concept of configuring them as "learning communities". This aspect has been clearly illuminated through the research and illustrated as a workable and effective practice. A learning community is concerned with the concept of networks of networks, meshing and interconnecting diagonal, horizontal and vertical organizational types and configurations as appropriate.

One promising area of research for tourism researchers is to adapt or influence wider inter-organizational network thinking through examining the applicability of concepts developed in other areas to the study of destination management. Clearly, the effectiveness of a tourism destination requires operators to work together. One of the maxims of tourism business is 'Sell the Destination First' and refers to the imperative of developing a common message and approach amongst a disparate set of tourism operators within a destination. The concept of tourism destinations as systems is widespread in the tourism literature and is based on the idea of interaction between the different parts of the tourism system. Network theory provides an alternative view of a tourism destination as a series of relationships between businesses which link various parts of the tourism system. In this view then, chaos and change in a tourism destination system would be marked by changes in the relationships among the operators involved in the destination. Here, network thinking may provide an alternative conceptualization of the dynamics of the development of destinations. The idea of destination networks as systems prompts another area where there is potential for tourism research. This lies in the area of exchange of information amongst the network of stakeholders within a destination. Such information exchanges are vital for the efficient management of a destination and help to develop a distinct culture and trust among members as well as to stimulate effective communication between organizations such as the regional tourism office and its members.

However, network analysis is useful not only within destinations but also to examine linkages between tourism and other sectors of the economy. For example, prior research has shown that knowledge management is an important element in the management of tourism destinations. Network analysis based upon exchange of information offers the opportunity to diagnose where linkages between actors may be enhanced (for example between academia and tourism operators). Within this broad framework, network analysis methods have found similarities between the characteristics of tourism Internet site linkages and scale-free networks and have highlighted the possibility of using these new techniques to improve our knowledge of the structure and the behavior of a tourism system.

In conclusion, the concept of networks and network analysis fits naturally with the study of tourism and tourism destinations. Tourism destinations naturally lend themselves to be conceptualized as networks and the approach offers researchers the opportunity to study destinations in a way that can potentially contribute significantly to the wider literature and our understanding of how tourism functions. Perhaps finally, in this way, tourism can become a leading area for study rather than a follower of research trends in other areas.

References

Arabie, P. and Wind, Y. (1994). Marketing and social networks. In S. Wasserman and J. Galaskiewicz (Eds) Advances in Social Network Analysis (pp. 254–73). Thousand Oaks: Sage Publications.

Araujo, L. and Bramwell, B. (2000). Stakeholder assessment and collaborative tourism planning: The case of Brazil's Costa Dourada project. In B. Bramwell and B. Lane (Eds) Tourism Collaboration and Partnerships: Politics, Practice and Sustainability (pp. 272–94). Clevedon: Channel View.

Bickerdyke, I. (1996). Australia: The evolving structure and strategies of business networks. In Local Economic and Employment Development (ed.) Networks of Enterprises and Local Development: Competing and Co–operating in Local Productive Systems (pp. 203–16). Paris: Organization for Economic Co–operation and Development.

Biggs, N.L., Lloyd, E.K. and Wilson, R.J. (1976). Graph Theory 1736–1936. Oxford, U.K: Clarendon.

Bjork, P. and Virtanen, H. (2005). What tourism project managers need to know about co–operation facilitators. Scandinavian Journal of Hospitality and Tourism, 5 (3), 212–30.

Blumberg, K. (2004). Cooperative networks in destination marketing: A case study from Nelson/Tasman region, New Zealand. Paper presented at the Networking and Partnerships in Destination Development and Management Annual Conference, Naples, Italy.

Brandenburger, A. M., & Nalebuff, B. J. (1997). Co-opetition. New York: Currency Doubleday.

Braun, P. and Hollick, M. (2006). Tourism clusters: Uncovering destination value chains. Paper presented at the 2006 CAUTHE Conference, Melbourne.

Buhalis, D. (2000). Marketing the competitive destination of the future. Tourism Management 21 (1), 97–116.

Buoncore, F., & Metallo, C. (2005). Tourist destination networks, relational competencies and "relationship builders" — the central role of information systems and human resource management. In: C. Petrillo, & J. Swarbrooke (Eds), Networking and partnerships in destination development and management: Proceedings of the ATLAS annual conference 2004 (pp. 377–398). Arnhem: ATLAS.

Chua, A. (2001). Relationship between the types of knowledge shared and types of communication channels used. Journal of Knowledge Management Practice.

Conway, S. (1998). Developing a classification of network typologies. Cited in Shaw, E. & Conway, S. Networking and the small firm. In S. Carter, & D. Jones-Evans (Eds). (2000). Enterprise and small business. Harlow: Financial Times/Prentice Hall.

Cravens, D.W. and Piercy, N.F. (1994). Relationship marketing and collaborative networks in service organizations. International Journal of Service Industry Management 5 (5), 39–53.

Crotts, J.C., Buhalis, D. and March, R. (2000). Introduction: Global alliances in tourism and hospitality management. In J. C. Crotts, D. Buhalis and R. March (Eds) Global Alliances in Tourism and Hospitality Management (pp. 1–10). Binghamton, NY: The Haworth Hospitality Press

Elbe, J. (2002). Utveckling av Turistdestinationer Genom Samarbete. Doctoral thesis no. 96, Företagsekonomiska Institutionen, Uppsala University.

Fulop, L. and Richards, D. (2002). Connections, culture and context: Business relationships and networks in the Asia–Pacific Region. In C. Harvie and B.C. Lee (Eds) Globalisation and SMEs in East Asia: Studies of Small and Medium Sized Enterprises in East Asia. Cheltenham: Edward Elgar.

Getz, D. and Jamal, T. (1994). The environment–community symbiosis: A case for collaborative tourism planning. Journal of Sustainable Tourism 2 (3), 152–73.

Gibson, L., Lynch, P. A., & Morrison, A. (2005). The local destination tourism network: Development issues. Tourism and Hospitality Planning & Development, 2(2) 87–99.

Grangsjo, Y.v.F. (2006). Hotel networks and social capital in destination marketing. International Journal of Service Industry Management 17 (1), 58–75.

Gummesson, E. (1994). Making relationship marketing operational. International Journal of Services Management, 5(5), 5–20.

Halme, M. (2001). Learning for sustainable development in tourism networks. Business Strategy and the Environment, 10(2), 100–114.

Haythornthwaite, C (1996). Social network analysis: An approach and technique for the study of information exchange. Library and Information Science Research 18 (4), 323–42.

Hislop, D. (2005). The effect of network size on intra-network knowledge processes. Knowledge Management Research and Practice 3 (4), 244.

Hjalager, A.M. (2000). Tourism destinations and the concept of industrial districts. Tourism and Hospitality Research 2 (3).

Holmlund, M. and Kock, S. (1998). Relationships and the internationalism of Finnish small and medium-sized companies. International Small Business Journal 16, 46–63.

Huson, M. and Nanda, D. (1995). The impact of Just-In-Time manufacturing on firm performance in the US. Journal of Operations Management 12 (3), 297–310.

Iacobucci, D. and Hopkins, N. (1992). Modeling dyadic interactions and networks in marketing. Journal of Marketing Research 29 (1), 5–17.

Jarillo, J.C. (1988). On strategic networks. Strategic Management Journal 9 (1), 31–41.

Knoke, D. (1990). Political Networks: The Structural Perspective. Cambridge: Cambridge University Press.

Knoke, D. and Kuklinski, J.H. (1991). Network analysis: Basic concepts. In G. Thompson, J. Frances, R. Levacic and J. Mitchell (Eds) Markets, Hierarchies and Networks (pp. 173–82). London: Sage Publications.

Kotler, P., Haider, D.H. and Rein, I. (1993). Marketing Places: Attracting Investments, Industry, and Tourism to Cities, States and Nations. New York: Free Press.

Ladd, D.A. and Ward, M.A. (2002). Of environmental factors influencing knowledge transfer. Journal of Knowledge Management Practice 3, (http:www.tlainc.com/ jkmp3.htm accessed 15/3/04).

Lazaretti, L., & Capone, F. (2005). Networking in tourist local systems. In C. Petrillo, & J. Swarbrooke (Eds), Networking and partnerships in destination development and management: Proceedings of the ATLAS annual conference 2004 (pp. 485–498). Arnhem: ATLAS.

Leana, C., & Van Buren, H. (1999). Organizational social capital and employment practices. Academy of Management Review, 24(3), 538–555.

Lynch, P. A., Halcro, K., Johns, N., & Buick, I. (2000). Developing small business networks to build profitable tourist destinations. Destination Development Conference, 13–14 September, Östersund.

Magnusson, J. and Nilsson, A. (2003). To facilitate or intervene – A study of knowledge management practice in SME networks. Journal of Knowledge Management Practice 4 (http:www.tlainc.com/jkmp4.htm accessed 15/3/04).

Michael, E. J. (2006). Public policy — the competitive framework. Melbourne: Oxford University Press.

Morrison, A., Lynch, P. and Johns, N. (2004). International tourism networks. International Journal of Contemporary Hospitality Management 16 (3), 197–202.

Nilsson, P. A., Petersen, T., & Wanhill, S. (2005). Public support for tourism SMEs in peripheral areas: The Arjeplog Project, Northern Sweden. The Services Industries Journal, 25(4) 579–599.

Nonaka, I. (1991). The knowledge creating company. Harvard Business Review 69 (6), 96–104.

O'Donnell, A., Gilmore, A., Cummins, D., & Carson, D. (2001). The network construct in entrepreneurship research: A review and critique. Management Decision, 39(9), 749–760.

Palmer, A. and Bejou, D. (1995). Tourism destination marketing alliances. Annals of Tourism Research 22 (3), 616–29.

Pavlovich, K. (2001). The twin landscapes of Wautoma: Tourism network and sustainability through the Land care Group. Journal of Sustainable Tourism 9 (6), 491–504.

Pavlovich, K. (2003). The evolution and transformation of a tourism destination network: The Wautoma Caves, New Zealand. Tourism Management 2(2), 203–16.

Pechlaner, H. Abfalter, D. and Raich, F. (2002). Cross-border destination management systems in the Alpine region: The role of knowledge networks on the example of AlpNet. In R.B. Bouncken and S. Pyo (Eds) Knowledge Management in Hospitality and Tourism (pp. 89–108). New York: Haworth.

Peters, M., Weiermair, K. and Withalm, J. (2002). Small and Medium Sized Enterprises Alliance Through Research in Tourism (SMART–UP). In K.W. Wober, A.J Frew and M. Hitz (Eds) Information and Communication Technologies in Tourism (pp. 145–56). Vienna: Springer Verlag.

Porter, M. (1990). The Competitive Advantage of Nations. New York: Basic Books.

Richards, F. and Carson, D. (2006). Foundations of innovation: The role of local government in the production and distribution of knowledge in regional tourism systems. Paper presented at the 2006CAUTHEConference, Melbourne.

Saxena, G. (2005). Relationships, networks and the learning regions: case evidence from the Peak District National Park. Tourism Management 26 (2), 277–89.

Scott, J. (2000). Social Network Analysis: A Handbook (2nd ed). London: Sage Publications.

Selin, S. (1993). Collaborative alliances: New intraorganizational forms in tourism. Journal of Travel and Tourism Marketing 2 (2/3), 217–27.

Shaw, E. (1997). The impact which [sic] social networks have on the development of small professional service firms. University of Glasgow, Glasgow, unpublished PhD thesis.

Soisalon-Soinnen, T., & Lindroth, K. (2005). Regional tourism co-operation in progress. In: C. Petrillo & J. Swarbrooke (Eds), Networking and partnerships in destination development and management: Proceedings of the ATLAS annual conference 2004 (pp. 511–522), Arnhem: ATLAS.

Stokes, R. (2006). Network-based strategy making for events tourism. European Journal of Marketing 40 (5/6), 682–95.

Szarka, J. (1990). Networking and small firms. International Small Business Journal, 8(2), 10–21.

Taylor, D., & Thorpe, R. (2004). Entrepreneurial learning: A process of co-participation. Journal of Small Business and Enterprise Development, 11(2), 203–211.

Tremblay, P. (1998). The economic organization of tourism. Annals of Tourism Research 24 (4), 837–59.

Van Laere, K., & Heene, A. (2003). Social networks as a source of competitive advantage for the firm. Journal of Workplace Learning, 15(6), 248–258.

Wang, Y. and Fesenmaier, D.R. (2007). Collaborative destination marketing: A case study of Elkhart county, Indiana. Tourism Management 28 (3), 863–75.

Webster, C.M. and Morrison, P.D. (2004). Network analysis in marketing. Australasian Marketing Journal 12 (2), 8–18.

Wellman, B. (1988). Structural analysis: From method and metaphor to theory and substance. In B. Wellman and S.D. Berkowitz (Eds) Social Structures: A Network Approach. Cambridge: Cambridge University Press.

Wilkinson, I.F. (2001). A history of network and channels thinking in marketing in the 20th Century. Australasian Marketing Journal 9 (2), 23–52.