Sustento del uso justo
de Materiales Protegidos
derechos de autor para
fines educativos

UCI
Universidad para la
Cooperación Internacional

MODELLING DESTINATION COMPETITIVENESS

A Survey and Analysis of the Impact of Competitiveness Attributes

Geoffrey I. Crouch

SUSTAINABLE
TOURISM

CRC

Technical Reports

The technical report series present data and its analysis, meta-studies and conceptual studies, and are considered to be of value to industry, government and researchers. Unlike the Sustainable Tourism Cooperative Research Centre's Monograph series, these reports have not been subjected to an external peer review process. As such, the scientific accuracy and merit of the research reported here is the responsibility of the authors, who should be contacted for clarification of any content. Author contact details are at the back of this report.

CONTENTS

LIST OF FIGURES

LIST OF TABLES

PREFACE

This study is based upon extensive earlier research by Professor Geoffrey I. Crouch and Professor J.R. Brent Ritchie. The list of references at the end of this report indicates a number of papers that have been published through this research program. For those who wish to learn much more about the conceptual model on which this current research project and report is based, readers are referred to the book, *The Competitive Destination: A Sustainable Tourism Perspective* (by J.R. Brent Ritchie and Geoffrey I. Crouch, CABI Publishing, 2003, Wallingford, Oxon, UK). Further information is also available at:
http://www.business.latrobe.edu.au/public/staffhp/gichp/destcomp.htm.

Acknowledgments

SUMMARY

OBJECTIVES OF STUDY

The aim of this study was to develop an insight into the importance and impact of the attributes which shape the competitiveness of tourism destinations. Research since the early 1990s has gradually shed light on the nature and structure of destination competitiveness. Some of this research has focussed on particular elements of destination competitiveness, such as price competitiveness, while other research has aimed at developing a more comprehensive understanding of destination competitiveness. General theories of competitiveness have been assimilated and adapted, and conceptual models of destination competitiveness have been developed which tailors these general ideas and theories to the particular characteristics of the tourism industry.

As a result, destination competitiveness theory has developed to the point that empirical study is now possible and desirable. In more recent years the conceptual models have been applied to analyse specific destinations or tourism markets. But one of the most pressing research needs is to better understand the relative importance of the attributes of competitiveness. Strategies for improving destination competitiveness must make decisions about where and how limited resources should be directed. Therefore, information which helps to identify which attributes are likely to influence competitiveness most effectively, are of considerable value.

METHODOLOGY

The general conceptual model of destination competitiveness developed by Crouch and Ritchie (1999) and further refined (Ritchie & Crouch 2003) was employed as the basis for this research. This model has been widely reported in the literature and has been the basis for a number of other research studies into destination competitiveness. The model identifies 36 attributes of competitiveness grouped into five main factors.

The study methodology involved a survey of 'expert' judgment by destination managers and tourism researchers with some knowledge or experience relevant to the topic. For reasons outlined, this approach was considered to be a better option given the significant data quality and availability problems that would be involved in seeking to investigate the attributes of competitiveness by other quantitative means.

The collection and synthesis of the expert judgment data was carried out using an online web portal. This enabled participants to respond in locations and at times which suited their circumstances. The methodological basis employed is known as the Analytic Hierarchy Process (AHP). AHP is a rigorous technique that enables the integration of multiple judgments for studying how decisions are made. This method is ideally suited to the objectives of this study which aimed to identify the relative importance of the attributes of destination competitiveness. Important attributes or criteria are not always influential. So in addition to estimating the importance of the attributes of competitiveness, the results of the AHP were further analysed to produce measures of attribute *determinance*. These measures were then tested statistically in order to identify which attributes were judged to exert the greatest determinant impact on destination competitiveness.

KEY FINDINGS

Of the 36 destination competitiveness attributes examined, the ten most important were found to be:

- Physiography and Climate
- Market Ties
- Culture and History
- Tourism Superstructure
- Safety and Security
- Cost/Value
- Accessibility
- Awareness/Image
- Location
- Infrastructure

The measures of attribute importance were integrated with the results of the survey related to the variation in destination performance to compute measures of attribute determinance. Ten of the 36 attributes were found to have determinance measures statistically significantly greater than average. The figure below identifies these ten

attributes and illustrates the relative magnitude of their determinance measure. The legend lists these attributes in descending order of their determinance.
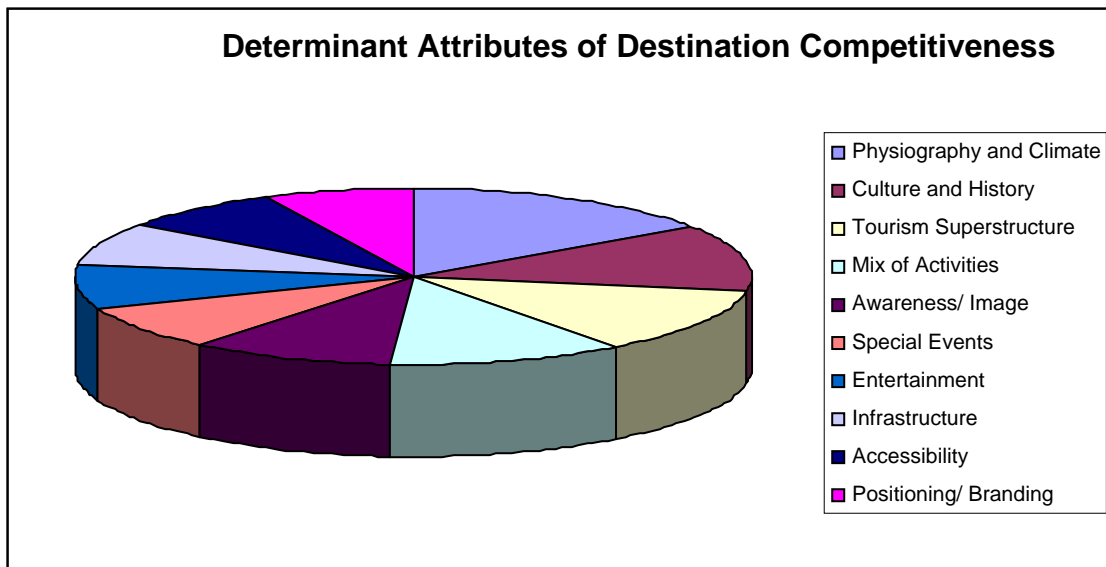
Six of these ten attributes formed the group of attributes known as *Core Resources and Attractors. Physiography and Climate* was found to be both the most important attribute as well as the attribute with the most significant determinance measure. The physical characteristics and climate of a destination have long been regarded as particularly important to the touristic attractiveness of a destination and so this result is not surprising. *Culture and History* was found to be the second most determinant attribute. Whereas *Physiography and Climate* represents the 'natural' qualities of a destination, *Culture and History*, represents the primary touristic attractiveness of a destination that is the product of 'human' rather than 'natural' processes. The third most determinant attribute was found to be *Tourism Superstructure*. The quantity and quality of tourism's built environment provides for tourist-specific needs such as accommodation facilities, restaurants, transportation facilities, recreation facilities, attractions such as theme parks, museums, and art galleries, exhibition and convention centres, resorts, airports, etc. This study therefore confirms the significance of these fundamentally important elements.

FUTURE ACTION

The results of this research provide an insight into the attributes of destination competitiveness which, in general, are estimated to have the strongest impact. The conceptual model of destination competitiveness provides a useful framework that can assist tourism destinations in managing their competitiveness. The model facilitates discussion and communication between the stakeholders involved in the management of tourism destinations and can be employed as a basis for auditing destination performance. Coupled with the results of this current study, there is now some evidence which helps to identify which competitiveness attributes may be more important or influential than others. This information can therefore help to guide the development of tourism policy and strategy designed to improve destination performance.

The research was based on the synthesis of 'expert' judgment. In future the tourism industry needs to develop objective measures and indicators of destination performance and competitiveness spanning all of the competitiveness attributes. At present this is not a practical possibility due to the lack of suitable, comparable, comprehensive data.

Chapter 1

INTRODUCTION AND BACKGROUND

The Economist (1998: 10) noted that

'There may be more tourists to go round, but there is also more competition between destinations as cities, countries and continents latch on to the charms of tourist revenue. … Like all consumer products, tourist destinations must persuade their customers that they have some combination of benefits which no one else can offer. Destinations are trying every bit as hard as airlines and hotels to establish themselves as brands, using all the razzamatazz of modern marketing. Every place tries to make the most of what it has got.'

How tourism destinations become, maintain, protect, or strengthen their competitive positions in an increasingly competitive and global marketplace is a challenge that has risen to prominence in the tourism industry. This challenge is characterised by a number of significant complexities. The first of these is that a tourism destination, by its nature, is very different from most commercially competitive products. The product of the tourism sector is an *experience* that is delivered by a destination to its visitors. This experience is produced not by a single firm but by all players, which impact the visitor experience; namely, tourism enterprises (such as hotels, restaurants, airlines, tour operators, etc.), other supporting industries and organisations (such as the arts, entertainment, sports, recreation, etc.), destination management organisations (whether private, public or private/public partnerships), the public sector (which provides public goods that serve tourists, such as roads, general infrastructure, etc. as well as government tourism departments or agencies), local residents, and other publics. The multiplicity of players involved in the supply and delivery of tourism services, and therefore the experience of the visitor, makes management of the destination product vastly more complex compared to the management of most simple products produced by single firms.

An additional complexity is that the product itself consists of a vastly greater number and range of attributes. This is further compounded by the fact that each tourist experience is unique as there are few individual, standardised tourism services which, in the aggregate, ensures that every visitor takes home an experience shared only by themselves.

A further challenge to the management of destination competitiveness is that the goals of this competition are not always clear or congruent. There are often many diverse goals that are behind tourism development public policy and private enterprise. While some goals may address profit and economic return, other goals of interest may concern various environmental and social outcomes. Thus the management of destination competitiveness needs to be focussed on the attainment of the goals which that competitiveness is designed to achieve.

Managing destination competitiveness has therefore become a major topic of interest. Theories, frameworks, models, or processes that can assist in guiding the approach to this challenge offer the potential to provide some clarity and rigour to a complex management task.

Emerging in the 1990s, tourism researchers began to consider how destination competitiveness ought to be understood and measured. Over the past decade a body of research has grown which has sought to develop a theoretical and conceptual basis for approaching this problem. There has been some empirical research that has examined price competitiveness, together with other research which has begun to apply some of the developed models to data pertaining to specific destinations. The body of research has emphasised the fact that destination competitiveness cannot be boiled down to a small set of determinants. The general models that have been developed indicate that there is an extensive list of determinants which are relevant. But although the list is extensive, they are unlikely all to be of equal importance or influence in determining the competitive fortunes of destinations in general or, more particularly, of individual destinations in specific market segments.

Therefore, at this stage in the development of destination competitiveness theory and knowledge, having now achieved a good basis upon which to identify relevant attributes of destination competitiveness, there is particular value in turning the focus of research more towards assessing the relative importance of these attributes. The impact of a competitiveness attribute on the relative performance of a destination is a function of both the importance of the attribute as well as the degree to which destinations vary on the attribute. Although an attribute may be considered to be important, it will not be a determinant of competitiveness if there is little difference among destinations on the attribute. For example, if two destinations share a similar climate, climate will have little or no impact on the relative competitive position of either destination. Myers and Alpert (1968) used the term 'determinant attributes' to distinguish the factors that exert the strongest influence on, in the case here, the competitiveness of tourism destinations.

The aim of this research, therefore, was to investigate the determinant attributes of tourism destination competitiveness. The study was undertaken as a survey and analysis of expert judgment. Destination managers and tourism researchers provided their judgments regarding the most important or influential competitiveness attributes.

Chapter 2

DESTINATION COMPETITIVENESS THEORY

Interest in destination competitiveness has stimulated a number of research studies. Many of these have had the aim of diagnosing the competitive positions of specific destinations, including the United States (Ahmed & Krohn 1990), Sun/Lost City, South Africa (Botha, Crompton & Kim 1999; Kim, Crompton & Botha 2000), cultural tourism in Toronto (Carmichael 2002), Las Vegas (Chon & Mayer 1995), a casino resort (d'Hauteserre 2000), Australia (Dwyer, Livaic & Mellor 2003), Hong Kong (Enright & Newton 2004), Asia-Pacific (Enright & Newton 2005), Canadian ski resorts (Hudson, Ritchie & Timur 2004), South Australia (Faulkner, Oppermann & Fredline 1999), South Korea and Australia (Kim, Choi, Moore, Dwyer, Faulkner, Mellor & Livaic 2001; Kim & Dwyer 2003), Spain and Turkey (Kozak 2003; Kozak & Rimmington 1999), European cities (Mazanec 1995), Mediterranean resorts (Papatheodorou 2002), southeast Asia (Pearce 1997), and Zimbabwe (Vengesayi 2005).

Other research has focussed on particular aspects of destination competitiveness, including destination positioning (Chacko 1998), destination management systems (Baker, Hayzelden & Sussmann 1996), destination marketing (Buhalis 2000), price competitiveness (Dwyer, Forsyth & Rao 2000a, 2000b, 2000c, 2001, 2002; Stevens 1992; Tourism Council Australia 1998), quality management (Go & Govers 2000), the environment (Hassan 2000; Mihalic 2000), nature-based tourism (Huybers & Bennett 2003), strategic management (Jamal & Getz 1996; Soteriou & Roberts 1998), and package tours (Taylor1995).

A third group of research has sought to develop general models and theories of destination competitiveness. Crouch and Ritchie began to study the nature and structure of destination competitiveness in 1992 (Crouch & Ritchie 1994, 1995, 1999; Ritchie & Crouch 1993, 2000a, 2000b). Their aim has been to develop a conceptual model that is based on the theories of comparative advantage (Smith 1776; Ricardo 1817) and competitive advantage (Porter 1990). However, Gray (1989) notes that

> 'any general model of international trade must encompass an extraordinarily large number of causal variables... a single theory of international trade... cannot hope to account satisfactorily for all of the kinds of international trade which is undertaken in this world. What is needed, then, is a more flexible body of analysis that will allow studies of specialist sub-categories' (pp 98-99).

For this reason, Crouch and Ritchie developed a conceptual model that is tailored to the distinctive characteristics of destination competition. Figure 1 illustrates their model and full details can be found in Ritchie and Crouch (2003). Their model recognises that destination competitiveness is based upon a destination's *resource endowments* (comparative advantage) as well as its capacity to *deploy* resources (competitive advantage). The model also acknowledges the impact of global macro-environmental forces (e.g., the global economy, terrorism, cultural and demographic trends, etc.) and competitive micro-environmental circumstances that impact the functioning of the tourism system associated with the destination. The factors of destination competitiveness are represented in the model clustered into five main groups. In total, the model identifies 36 destination competitiveness attributes. Appendix A provides further detail on these attributes.

Dwyer and Kim (2003) and Dwyer, Mellor, Livaic, Edwards and Kim (2004) also undertook to contribute to the development of a general model of destination competitiveness. Their model also considers national and firm competitiveness theory as well as 'the main elements of destination competitiveness as proposed by tourism researchers … and many of the variables and category headings identified by Crouch and Ritchie' (Dwyer et al. 2004: 92). The Dwyer et al. (2004) model is illustrated in Figure 2. The primary elements of the model include resources comprising endowed resources, both 'natural' (e.g., mountains, coasts, lakes, and general scenic features) and 'heritage' (e.g., handicrafts, language, cuisine, customs, etc.) resources; created resources (such as tourism infrastructure, special events, shopping, etc.); and supporting resources (such as general infrastructure, accessibility, service quality, etc.). Destination management is the second core component of their model comprising government and industry. Their model then shows resources and destination management interacting with tourism demand and situational conditions to influence destination competitiveness and socio-economic prosperity.

Figure 1: Crouch and Ritchie Conceptual Model of Destination Competitiveness
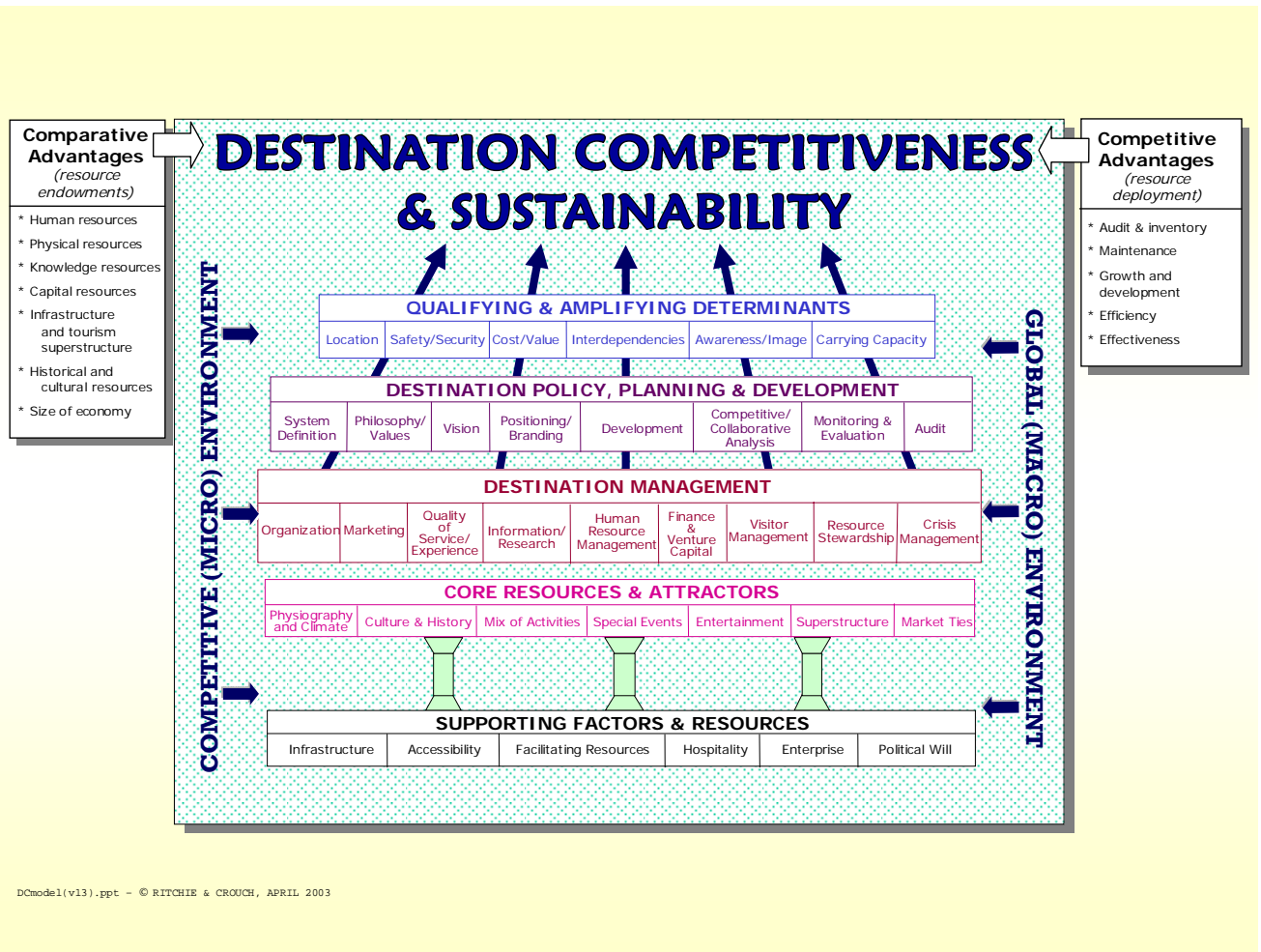
(Ritchie & Crouch 2003)

Heath (2002) tailored a model of destination competitiveness 'that can be used as a frame of reference to enhance South Africa's tourism competitiveness' (p. 124). 'It … brings together the main elements of destination competitiveness as proposed in the wider literature and the main indicators of destination competitiveness as proposed by various tourism researchers such as Crouch et al. (2000) and Dwyer (2001)' (p.131). Heath's model consists of components which he labels 'foundations'. These include 'key attractors'; 'fundamental non-negotiables', such as personal safety and health; 'enablers', such as infrastructure; 'value-adders' such as location, and value for money; facilitators such as accommodation, and airline capacity; and 'experience enhancers' such as hospitality and authentic experiences. Another group of items in his model concerns 'the cement' covering stakeholders, communication, partnerships and alliances, information and research, and performance measurement. The model also emphasises various 'key success drivers', a 'tourism script' in the form of a strategic framework, 'building blocks' related to balancing development and marketing, a 'sustainable development policy and framework', and 'strategic marketing framework and strategy'.

Figure 2: Model of Destination Competitiveness
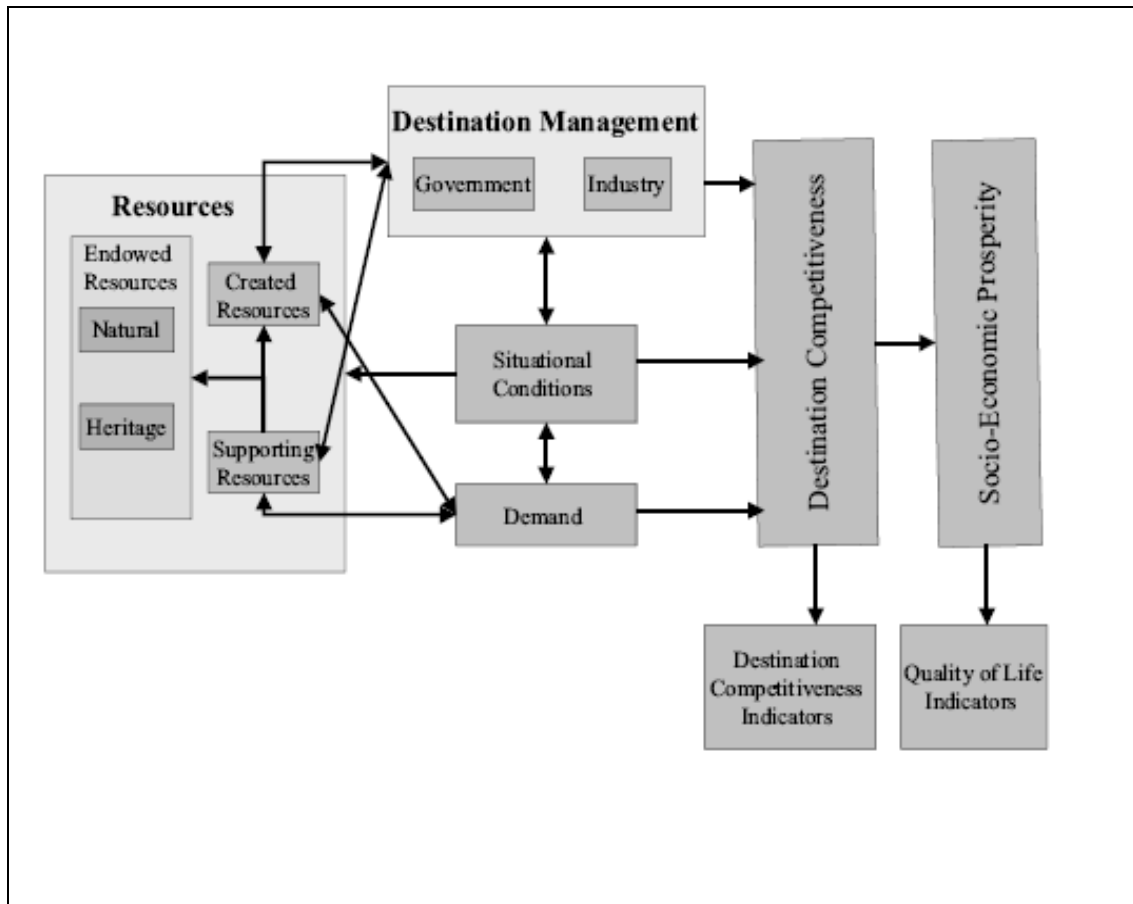
<div align="right">*(Dwyer et al. 2004)*</div>

Chapter 3

RESEARCH DESIGN

Methodology

The previous chapter discussed the theory and reviewed the literature and conceptual models of destination competitiveness. As the basis for this present research project which aimed to identify the *determinant attributes* of destination competitiveness from among the complete set of potentially important attributes, the conceptual model of Crouch and Ritchie (Crouch & Ritchie 1999; Ritchie & Crouch 2003), illustrated in Figure 1, was employed. This model was adopted for several reasons. First, the research upon which the model is based is the most extensively reported and cited in the research literature. Second, the model has been refined and progressively developed over an extensive period through a variety of means; including, research and consulting, conference presentations and discussions, focus group discussions, interviews with destination executives, computer-facilitated decision-support exercises, use in teaching courses on destination management, and feedback and introspection (Ritchie & Crouch 2003: 61). Third, the model was developed as a general model rather than as a situation-specific model. Thus the model was designed to be generally relevant to any destination and tourism market. As such, it seeks to consider all potentially important attributes rather than focusing on more narrow aspects of competitiveness, such as price competitiveness or the 'attractiveness' of a destination. Finally, the extensive exploration and articulation of the model reported in Ritchie and Crouch (2003) makes this conceptual model of destination competitiveness the most amenable to implementation by the tourism industry.

In order to identify the determinant attributes of destination competitiveness from among the 36 attributes proposed by this model, two potential approaches are conceivable. One approach would be to gather a vast volume of data and information covering the full panoply of measures or indicators for each of the 36 attributes combined with further data which, in one form or another, somehow provides a measure of the competitiveness of a large number of destinations. Assuming it was possible to obtain such information, in principal it would then be possible to investigate, by analysis, the relationships between the destination attributes and the measures of competitiveness. If the data involved were largely numerical, one or more of the various methods of dependence analysis could be employed for this purpose.

But the practicality of this approach is quite doubtful in the short term and possible even in the long term, for a number of reasons. First, the sheer volume of measures or indicators would be daunting. Ritchie and Crouch (2003: 258-264) provide an indicative set of subjective consumer measures and objective industry measures for each of the 36 attributes in their model. For example, for just one of these attributes – C*ulture and History* – they list 41 potential measures. Combining information for each of these into some sort of composite measure of this attribute would be problematic. Second, many of these attribute measures are themselves qualitative, multidimensional, abstract, or imprecise. Considerable research would therefore be needed initially just to come up with a rigorous scale or index that measures, for example, a destination's comparative culture and history. Third, finding suitable data for each measure would be a particularly challenging task. Indeed, it is likely that much of the data either does not exist or is of doubtful or varying quality. The likely secondary nature if this data would also ensure that the differing definitions employed across different destinations rendered cross-sectional analysis of such data inappropriate. Finally, deriving measures of the dependent variable; that is, the competitiveness of a set of destinations, is similarly problematic. While reasonable data exist that provide a means of quantifying visitor arrivals, visitor expenditure, visitor-nights, etc. few would agree that these are appropriate measures of destination competitiveness. They may be more suitable as measures of tourism demand. But Ritchie and Crouch (2003: 26-29) point out that destination competitiveness is more concerned with a destination's capacity to achieve a set of goals, some of which may relate to measures of demand but which often extend much further to address broader economic, social and environmental outcomes. Therefore, an undue emphasis on demand alone would be narrow and potentially misleading. Consequently, this numerical approach to the aim of this research does not appear to be viable at the present time.

The second possible approach recognises the fact that, at least to some extent, the collective experience, knowledge, and insights of tourism destination managers, researchers and others who have spent time addressing the challenge of what makes a destination competitive, can provide a useful starting point for an analysis such as this. The human mind is capable of absorbing, assembling, sorting, and synthesising large amounts of evidence, information, experiences and data. New information that arises can lead to the reassessment or revision of the earlier perceptions. This Bayesian approach to estimation and inference implies that additional information can be used to reduce uncertainty and improve knowledge (Griffiths, Hill & Judge 1993). This *prior information* is not error-free but even 'some vague idea … from our own experience … or … from talking to 'experts' … [provides a basis for us to] update our state of knowledge (or level of uncertainty)' (pp. 764-765). Further

evidence of the validity of this approach comes from research into the conduct and performance of financial markets and gambling – both instances involving groups of individuals all seeking to obtain some advantage through the use of information and knowledge. Much research has shown that financial markets are very efficient in absorbing information such that the market price of shares reflects publicly available information efficiently. Gambling odds have also been shown to be efficient synthesisers of knowledge from groups of individuals ranging from sports events to election outcomes.

The point to be made from this is that judgment based on experience, expertise and insight is, in itself, a valuable source of information. Gathering and analysing expert judgment on the attributes of destination competitiveness is a viable approach, whereas the data-oriented approach described above is of doubtful practicality and rather daunting complexity. At least as a first step, a study based on an analysis of expert judgement seems to be a much more sensible starting point as a means of estimating the relative importance and determinance of each of the large number of attributes involved.

Notwithstanding the fact that this study was based on the gathering and analysis of expert judgments, a rigorous method for undertaking this task was required. A discussion of the rationale and approach follows in the next section.

Analytic Hierarchy Process

The process of forming a judgement is a form of decision-making. Decisions or judgments require the weighing up of an array of information spanning multiple decision attributes. To study or to facilitate decision-making, various multi-attribute decision-making techniques have been developed (Yoon & Hwang 1995; Chen & Hwang 1992; Hwang & Lin 1987; Louviere 1988; Yu 1985). Moutinho, Rita and Curry (1996) and Curry and Mouthino (1992) have examined the application of such methods in a tourism context and have identified the advantages of the Analytic Hierarchy Process (AHP). They note that the 'decisions which face tourism planners typically involve variables which are difficult to measure directly and even if all variables can be measured accurately there are still severe problems to be faced in obtaining numeric measures of the relative importance of decision variables. The AHP was designed as an all-purpose method for achieving these aims' (Moutinho, Rita & Curry 1996: x). They further note that 'Managerial decision making in tourism is a complex, multivariate process. Effective decision-support models need to be capable of incorporating a wide range of environmental variables, many of which may be extremely difficult to quantify. Moreover, decision makers are also required to achieve a balance between a range of conflicting objectives…' (Curry & Moutinho 1992: 57).

The basis of the AHP recognises that, in principal, all decisions can be structured in the form of a decision tree or decision hierarchy. The apex of the hierarchy is the goal or outcome of a decision and successive layers of the hierarchy represent levels of decision criteria or factors. The main branches represent the main decision factors and the sub-branches identify the further division of these into sub-factors. The last (lowest) level of the hierarchy then specifies each of the alternatives or possible decision options under consideration. 'The flexibility of the technique is that many decision-making situations can be easily represented in the form of a decision tree or hierarchy. Apart from this, AHP imposes very little structure on the model-building process. Thus models can be developed to represent the decision-maker's own perception of the criteria and alternatives involved' (Crouch & Ritchie 2005: 3).

This flexibility therefore enables any decision model that can be conceived in the form of a decision tree or hierarchy to be modelled using the AHP approach. A glance at Figure 1 reveals that the Crouch and Ritchie model of destination competitiveness in fact has such a general structure. The goal may be defined as; 'to improve destination competitiveness of destination X' or 'to select the most competitive destination' for example. The five main factors and the 36 sub-factors illustrated in the model then become the next two layers in the decision hierarchy. If the goal were to be 'to improve destination competitiveness of destination X', the alternatives could be defined as several different strategies designed to achieve this goal and the process would then proceed as an evaluation of the likely performance of each strategy with respect to each sub-factor taken one at a time. Alternatively, if the goal were defined as 'to select the most competitive destination' using the conceptual model of destination competitiveness, the alternatives would then be defined as the set of destinations from which the most competitive destination was to be selected, and the process would proceed by evaluating each destination in terms of their performance on each of the sub-factors of competitiveness. In either of these two example decision problems, the process then continues by assessing the next level in the hierarchy which involves assessing the importance of each sub-factor with respect to their 'parent' factor, and then the importance of each main factor with respect to the decision goal. Although this summary of the process has worked from the base of the hierarchy to its apex, the process can equally be carried out in the reverse direction.

Further details on AHP are available in Saaty (1977, 1980, 1994) and Saaty and Vargas (1991). The AHP method has been used extensively over the past 30 years in a wide variety of fields and contexts[1] and has a scientific basis in mathematical psychology (Saaty 1977). Additional applications of AHP in a tourism context

---

[1] See also http://www.expertchoice.com/hierarchon/references/reflistb.htm for a comprehensive bibliography on AHP and its application.

include Ananda and Herath (2002), Calantone and di Benedetto (1991), Chen (2006), and Deng, King and Bauer (2002).

To reiterate, the aim of this research was to investigate the *determinant attributes* of tourism destination competitiveness. Determinant attributes are those attributes which exert the greatest influence on a decision. An attribute can only be a *determinant* attribute if it is both – 1) an important attribute and, 2) an attribute that displays considerable variation across the possible alternatives. So in this research study, the focus of the data collection and analysis was not on a decision goal itself but instead on the importance of the decision criteria and the differences between the alternatives with respect to each criterion. In this regard, the research has similarities to the approach adopted by Armacost and Hosseini (1994) and Finnie, Wittig and Petkov (1993). In order to gather both types of information, the AHP model was therefore defined so that the goal of the decision was 'to determine the most sustainably competitive tourism destination'. The five factors and 36 sub-factors from the Crouch and Ritchie model identified two levels of decision attributes in the decision hierarchy. The base of the hierarchy – the decision alternatives – was defined as a set of tourism destinations.

Using this model structure, each 'expert' that participated in the study went through a process whereby the two levels of attributes were evaluated with respect to their importance toward the decision goal. They also evaluated the competitiveness or performance of each destination against each of the 36 sub-factors. For each participant, this process yielded both forms of data required for the estimation of determinant attributes. A discussion of the survey instrument that was used for this purpose and data collection process is described in the next section.

Survey Instrument and Data Collection

Participants in the survey were to be individuals with varying levels of experience and expertise on the topic of destination competitiveness. The survey task required participants to make judgments regarding the relative importance of each of the five main factors and 36 sub-factors identified in the Crouch and Ritchie model of destination competitiveness. Participants were also asked to express their judgment regarding the relative performance of each destination within a set of three. The three destinations were self-selected by each participant. Typically participants chose their own destination, or one that they were particularly familiar with, plus two other destinations that they regarded as close competitors with the first. A set of three destinations was regarded as the optimal number for the purpose of this study as it was regarded as large enough to provide meaningful comparisons but not so large that the length of the survey process would become a deterrent to participation.

As participants located in different parts of the world were to undertake the task using the AHP, a web portal version of the AHP was employed for this purpose. This would avoid the need for each participant to install a commercially available software package of the AHP on their own personal computers. *Expert Choice*©[2] provides a web portal version of the AHP in which any decision model structure can be developed as described above. The structure of the Crouch and Ritchie model was replicated in Expert Choice. Each participant in the survey was provided with their own unique username and password so that they could access Expert Choice and the destination competitiveness model online. A detailed set of instructions was prepared and made available on the internet. Each participant was asked to follow these instructions as they used Expert Choice to enter their judgments regarding the importance of the factors of destination competitiveness as well as their judgments regarding the performance of the three destinations they had selected for this purpose.

The process followed by each participant is described by the detailed set of instructions which are shown in Appendix B. In summary, once a participant had logged into the Expert Choice destination competitiveness web portal, there were three levels of judgment tasks required. The first task was to compare the five main factors of competitiveness (*Supporting Factors and Resources*; *Core Resources and Attractors*; *Destination Management*; *Destination Policy, Planning and Development*; and *Qualifying and Amplifying Determinants*) in order to assess the relative importance of each main factors. The second task was to repeat this process for the set of sub-factors within each of these five main factors. The third task then involved an assessment of the relative performance of the three self-selected destinations with respect to each of the 36 sub-factors in the model.

For each of the three tasks, Expert Choice set up the model so that, for each set being assessed, a series of pair-wise comparisons was undertaken by each participant. In other words, each judgment involved the participant making a judgment only about the relative importance or performance of two items at a time, but pair-wise judgements were required for all possible pair-wise combinations. It is possible for participants to indicate inconsistent judgments. To illustrate, suppose that factor 1 was judged to be more important than factor 2 and that factor 2 was judged to be more important than factor 3. If the participant then judged factor 3 to be more important than factor 1, such a judgment clearly involves inconsistency. To check for and control such

---

[2] *Expert Choice*© is a software product of *Expert Choice Inc.* Further information on Expert Choice is available at http://www.expertchoice.com.

inconsistencies, Expert Choice calculates an inconsistency measure. Participants are provided with this measure and requested to check and modify their judgments whenever the measure is unacceptably high.

Once a participant has entered their judgments at each node of the decision tree (i.e. the set of elements of the model that branch from that node) and checked these for consistency, the result is a matrix of judgments which indicates the relative importance (performance) of the row/column pair combination. Computationally, AHP then reduces this matrix to an eigenvector of weights (Moutinho, Rita & Curry 1996), summing to the value of one, which indicates the relative importance (or performance) of each item in the set of items for that node in the decision tree. As these eigenvector weights pertain to a particular 'parent' or 'branch' node in the decision tree, rather than to the decision goal, these values are termed 'local' weights.

When all judgments for each node have been completed, the AHP is then able to combine the eigenvectors across the different levels of the hierarchy to produce 'global' weights, which sum to the value of one at each level of the hierarchy rather than at each node of the decision tree. Applying these weights to the performance measures for each destination related to each competitiveness sub-factor enables the additional computation of performance scores for each destination at all levels above the sub-factors (i.e. for each main factor as well as in respect of the decision goal). For the purpose of this research study, however, this final integration of the data to produce these overall results for the destinations was not of interest here since this study was concerned instead with the data pertaining to the global importance weights for the 36 competitiveness sub-factors as well as the dispersion in destination performance scores at each of these sub-factors.

Participants

A convenience sample of 83 individuals participated in the project. Target participants were individuals having some experience or knowledge regarding the management, and therefore the competitiveness, of tourism destinations. In broad terms, two groups of 'experts' were involved; namely, managers within some form of destination management organisation (DMO) (such as national tourism administrations, state or provincial tourism offices, regional tourism organisations, convention and visitor bureaux, and similar types of bodies) and tourism researchers with expertise in one or more areas of destination management and marketing. As the research was conducted in English, the majority of the respondents were European, North American and from Australia/New Zealand.

Only eligible respondents were permitted to participate. This was managed through a pre-registration process which gathered basic information about each respondent including the identity of the DMO or university with which they were associated. Each eligible participant was provided with their own unique username and password for access to the Expert Choice online portal. The convenience sample of participants was recruited via email and direct postal mail to DMOs, through newsletters, membership organisations, a tourism research online bulletin board, direct communication with tourism research scholars and contacts, and word-of mouth communication that was generated by these efforts. Table 1 summarises the features of the survey participants. On average, participants indicated that they had a total of 18 years of relevant experience.

Table 1: Participant Characteristics

Personal Features	Mean	Standard dev.	Min.	Max.
Years experience[1]	12.5	10.6	0	40
Additional experience[2]	5.8	5.5	0	25
Age	44.6	11.8	23	73
Gender	male = 69%		female = 21%	
DMO Features	**Mean**	**Standard dev.**	**Min.**	**Max.**
% govt. funded	62.9	33.8	0	100
% industry funded	11.6	16.8	0	70
% funded by taxes	8.5	23.9	0	100
% commercial funding	9.6	13.8	0	59
% other funding	4.1	9.5	0	35

DMO Scope	Percent		DMO Governance	Percent
			Government	32.1
International	10.7		Industry	7.1
National	14.3		Govt/indust. partnership	60.8
State/provincial	21.4			
Regional/rural	32.1		**Nationality**	**Percent**
Large urban centre	7.1		North American	33
Small urban centre	10.7		Australia/New Zealand	33
Other	3.6		Europe	26
			Asia	6
			Other	2

Notes: 1. Experience at present organisation.

2. Previous relevant experience.

Chapter 4

ANALYSIS AND DISCUSSION

The AHP eigenvector importance weights (both local and global weights) plus the local destination performance weights produced by Expert Choice for each respondent were transferred to SPSS for statistical analysis. Table 2 presents the AHP results for all local weights. The key information in this table includes the means and standard deviations of the importance weights.

The results show that, of the five main destination competitiveness factors, the *Core Resources and Attractors* category stands clearly above the other four in terms of the importance of this group of attributes Within each of these main factors, the results reveal that the sub-factors displaying the highest local importance weights are *Physiography and Climate*, *Accessibility*, *Positioning/Branding*, *Quality of Service/Experience*, and *Safety and Security*. In order to illustrate these results more clearly, Figures 3 to 8 below present box plots for each set of results (i.e. the five main factors followed by the results for the sub-factors within each main factor).

Figure 3: Box plot of Main Factor Importance Weights
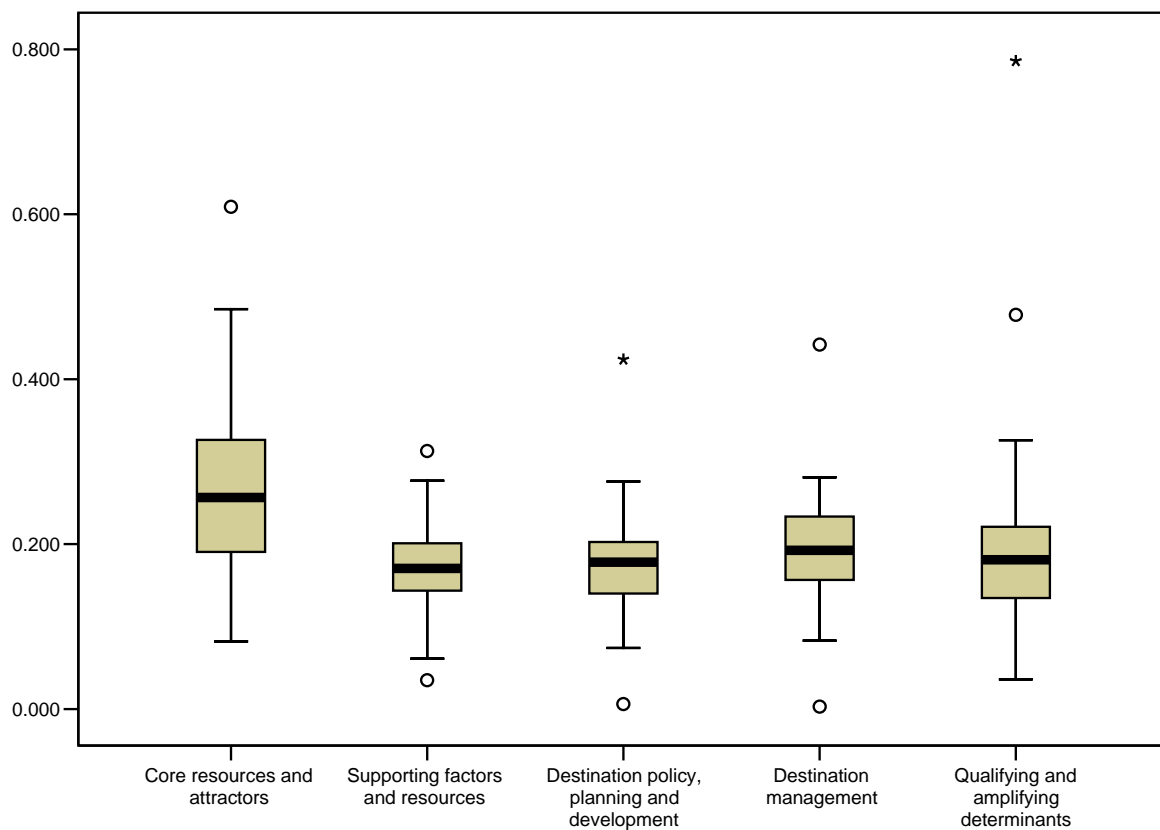
Notes:

1. The black bar in a box plot represents the average value of the importance weights.

2. The shaded box illustrates the interquartile range in the results (i.e. 50% of the results lie within the box).

*3. The o and * indicate outliers.*

4. The lines ending with a 'T' indicate the minimum and maximum values, or 1.5 times the interquartile range when outliers are present.

Table 2: Destination Competitiveness Local Attribute Importance Eigenvector Weights

|	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
CORE RESOURCES & ATTRACTORS	72	.527	.082	.609	.26744	.011717	.099420	.010	.682	.283	.844	.559
Special events	77	.274	.024	.298	.12396	.006377	.055955	.003	.829	.274	1.553	.541
Physiography and climate	77	.673	.015	.688	.18756	.013052	.114528	.013	2.326	.274	7.784	.541
Culture and history	77	.324	.016	.340	.15361	.007484	.065672	.004	.552	.274	.828	.541
Mix of activities	77	.480	.017	.497	.16809	.008631	.075740	.006	1.638	.274	5.493	.541
Entertainment	77	.204	.019	.223	.10410	.004915	.043131	.002	-.051	.274	.045	.541
Superstructure	77	.746	.001	.747	.14713	.010830	.095036	.009	3.918	.274	21.885	.541
Market ties	77	.313	.009	.322	.11566	.006565	.057604	.003	.852	.274	2.061	.541
SUPPORTING FACTORS & RESOURCES	72	.278	.035	.313	.17446	.005931	.050323	.003	.074	.283	.625	.559
Infrastructure	69	.401	.062	.463	.17254	.007050	.058560	.003	2.165	.289	9.743	.570
Accessibility	69	.342	.054	.396	.19099	.007475	.062092	.004	1.062	.289	2.271	.570
Facilitating resources	69	.284	.036	.320	.14723	.005532	.045951	.002	.437	.289	3.395	.570
Hospitality	69	.328	.038	.366	.17335	.006371	.052925	.003	.586	.289	2.307	.570
Enterprise	69	.269	.044	.313	.15657	.005881	.048853	.002	.739	.289	1.870	.570
Political will	69	.347	.038	.385	.15936	.007112	.059074	.003	1.191	.289	3.241	.570
DESTINATION POLICY, PLANNING & DEVELOPMENT	72	.418	.006	.424	.17579	.006423	.054497	.003	.863	.283	5.905	.559
System definition	69	.148	.030	.178	.11217	.003541	.029416	.001	-.376	.289	.288	.570
Philosophy/values	69	.285	.026	.311	.12006	.005262	.043711	.002	1.063	.289	5.064	.570
Vision	69	.222	.026	.248	.12564	.004422	.036731	.001	.589	.289	2.235	.570
Positioning/branding	69	.505	.034	.539	.16071	.009486	.078793	.006	2.625	.289	9.371	.570
Development	69	.208	.043	.251	.12846	.004174	.034671	.001	.916	.289	3.364	.570
Competitive/collaborative analysis	69	.211	.035	.246	.11528	.003406	.028292	.001	1.138	.289	6.378	.570
Monitoring and evaluation	69	.225	.038	.263	.11974	.004375	.036344	.001	.933	.289	3.744	.570
Audit	69	.355	.026	.381	.11797	.006503	.054021	.003	2.548	.289	10.236	.570
DESTINATION MANAGEMENT	72	.439	.003	.442	.19146	.007481	.063479	.004	.328	.283	2.901	.559
Organization	67	.237	.006	.243	.10400	.004705	.038515	.001	.476	.293	2.351	.578
Marketing	67	.272	.045	.317	.12843	.006005	.049154	.002	2.103	.293	6.208	.578
Quality of service/experience	67	.265	.070	.335	.14315	.006199	.050737	.003	1.892	.293	4.943	.578
Information/research	67	.165	.036	.201	.11200	.003542	.028996	.001	.450	.293	1.514	.578
Human resource development	67	.128	.037	.165	.10375	.003379	.027661	.001	.160	.293	.335	.578
Finance and venture capital	67	.130	.026	.156	.09904	.002790	.022837	.001	-.243	.293	.930	.578
Visitor management	67	.157	.026	.183	.10128	.003032	.024820	.001	-.108	.293	2.367	.578
Crisis management	67	.216	.023	.239	.09513	.004687	.038368	.001	1.400	.293	4.497	.578
Resource stewardship	67	.211	.040	.251	.11319	.004483	.036699	.001	1.454	.293	4.091	.578
QUALIFYING & AMPLIFYING DETERMINANTS	72	.750	.036	.786	.19086	.011816	.100260	.010	3.232	.283	17.403	.559
Location	63	.485	.037	.522	.17490	.010391	.082475	.007	1.617	.302	5.084	.595
Safety/security	63	.611	.024	.635	.19432	.013226	.104979	.011	2.306	.302	6.898	.595
Cost/value	63	.377	.062	.439	.19100	.008549	.067858	.005	1.713	.302	3.529	.595
Interdependencies	63	.154	.031	.185	.12614	.004726	.037511	.001	-.632	.302	-.102	.595
Awareness/image	63	.300	.022	.322	.17294	.007634	.060594	.004	.046	.302	.501	.595
Carrying capacity	63	.353	.013	.366	.14062	.006927	.054979	.003	.486	.302	3.927	.595
Valid N (listwise)	63											

Figure 4: Box plot of *Core Resources and Attractors* Local Importance Weights
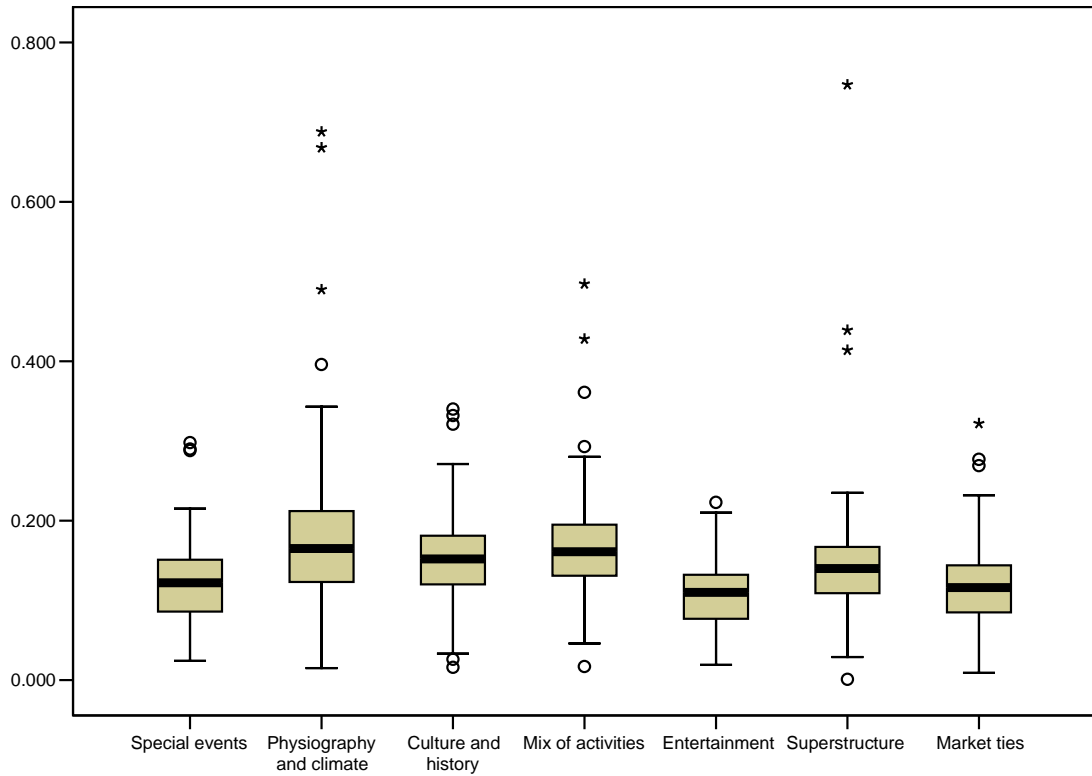
Figure 5: Box plot of *Supporting Factors and Resources* Local Importance Weights
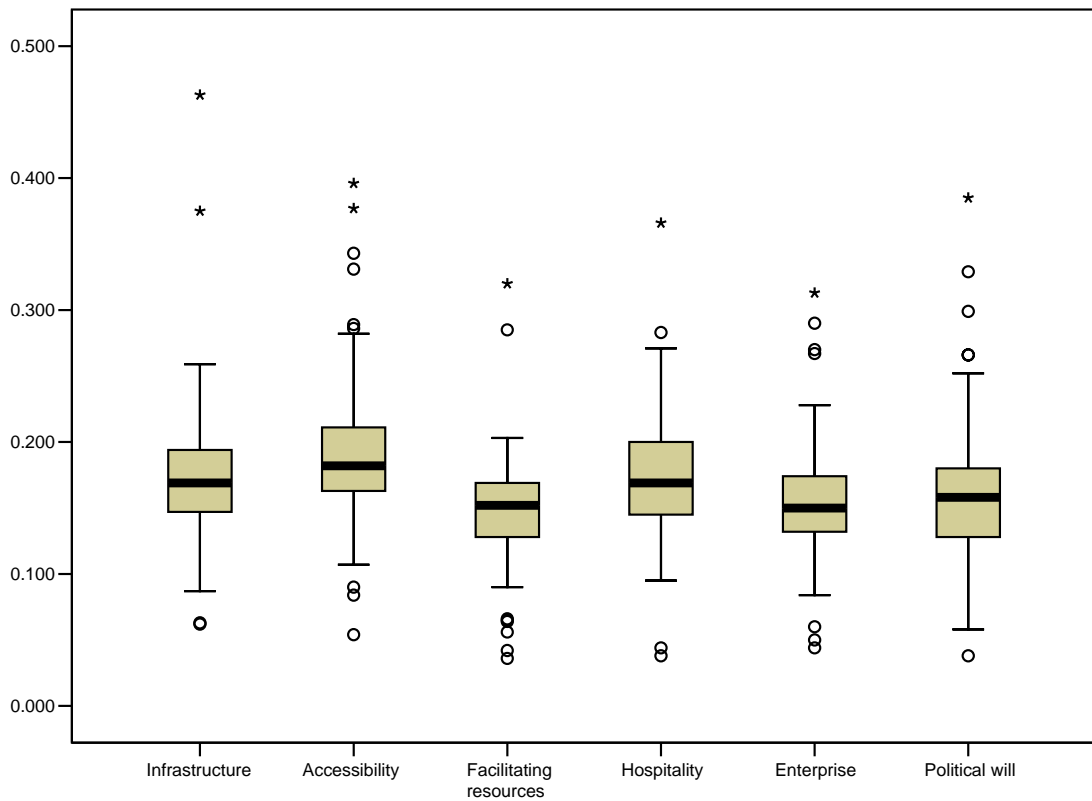
Figure 6: Box plot of *Destination Policy, Planning and Development* Local Importance Weights
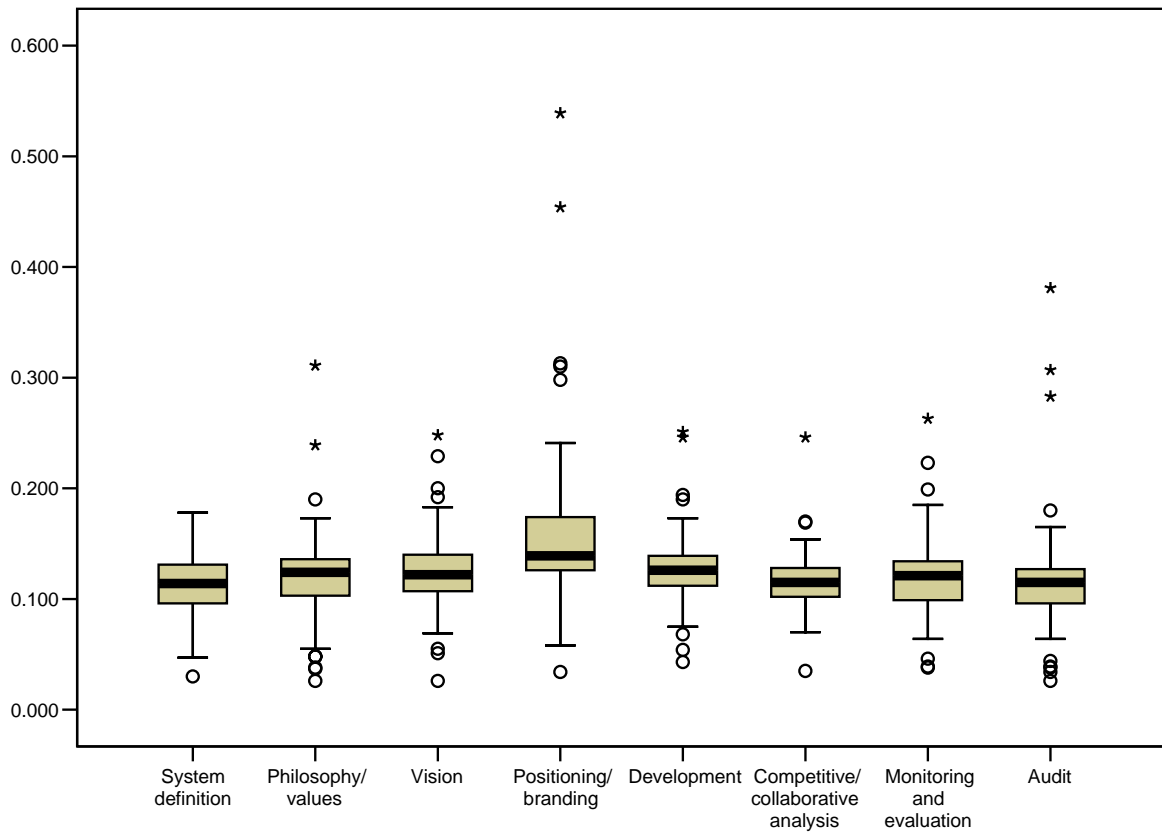
Figure 7: Box plot of *Destination Management* Local Importance Weights
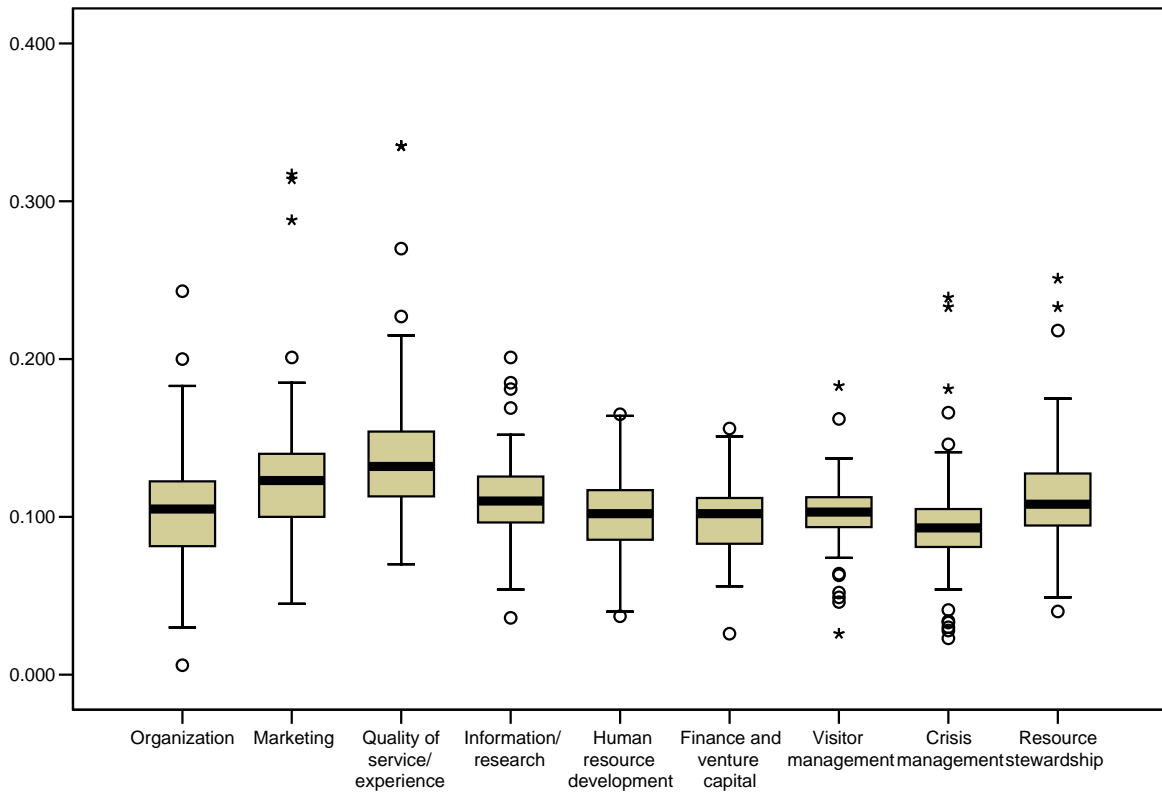
Figure 8: Box plot of *Qualifying and Amplifying Determinants* Local Importance Weights
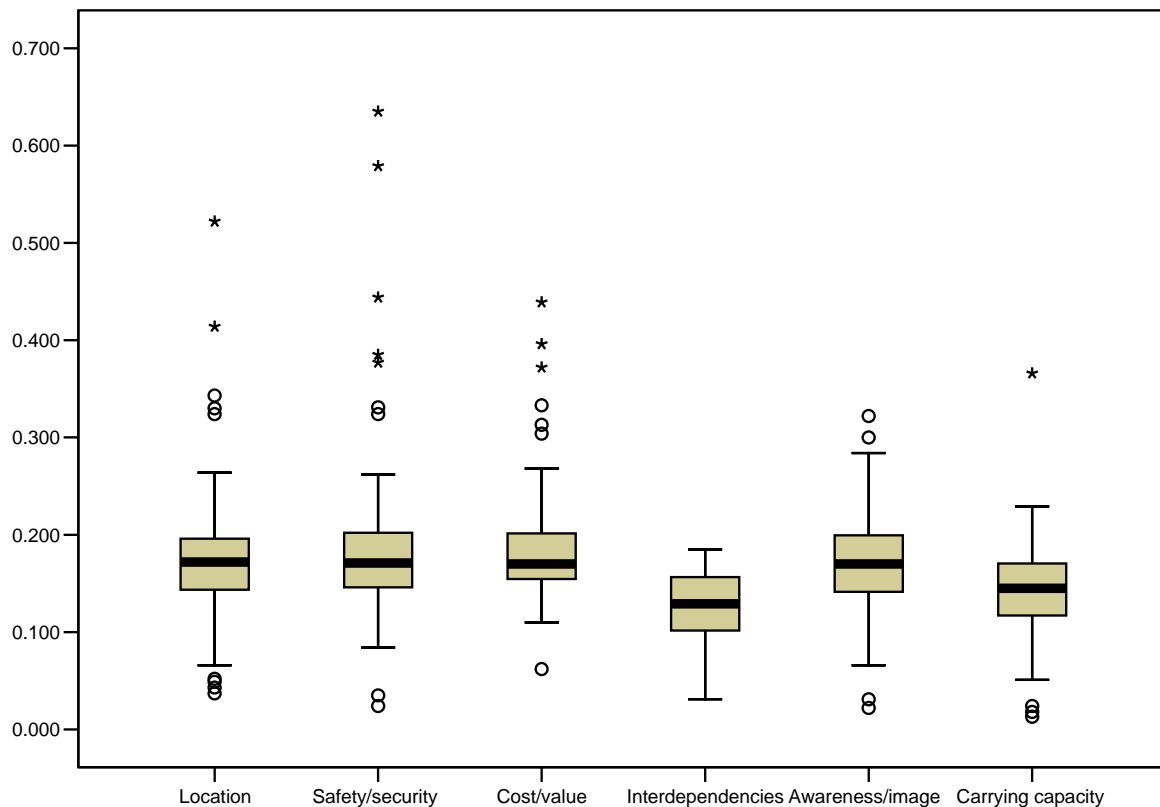
Table 3 similarly summarises the results of the global attribute importance weights. As discussed earlier, whereas the 'local' weights sum to the value of one within each node of the decision tree, these 'global' weights sum to the value of one across the complete set of the 36 sub-factors of destination competitiveness. Computationally AHP achieves this by multiplying each local weight by its parent node (main factor) importance weight. The purpose of deriving global importance weights is to enable direct comparison of weights for all 36 competitiveness sub-factors. Therefore it is possible to display a box plot of these global weights within the one figure. Figure 9 displays the resulting box plots.

The most important ten destination competitiveness attributes are shown to be (in descending order of importance):

1. Physiography and Climate
2. Market Ties
3. Culture and History
4. Tourism Superstructure
5. Safety and Security
6. Cost/Value
7. Accessibility
8. Awareness/Image
9. Location
10. Infrastructure

While these attributes of destination competitiveness were judged by respondents to be the most important, as explained earlier, unless destinations vary significantly with respect to an attribute, an important attribute may not necessarily be a *determinant attribute*.

Table 3: Destination Competitiveness Global Attribute Importance Eigenvector Weights

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Special events	68	.105	.005	.111	.03275	.002111	.017404	.000	1.375	.291	4.791	.574
Physiography and climate	68	.265	.004	.269	.05119	.004999	.041224	.002	2.787	.291	11.148	.574
Culture and history	68	.194	.009	.202	.04249	.003353	.027649	.001	3.028	.291	15.659	.574
Mix of activities	68	.142	.008	.150	.04508	.003227	.026606	.001	1.653	.291	4.008	.574
Entertainment	68	.068	.003	.071	.02871	.001947	.016056	.000	.778	.291	.452	.574
Superstructure	68	.146	.000	.147	.03882	.002986	.024624	.001	2.146	.291	7.413	.574
Market ties	68	.091	.004	.094	.03039	.002078	.017138	.000	1.073	.291	2.120	.574
Infrastructure	63	.119	.009	.128	.03115	.002157	.017117	.000	3.107	.302	16.097	.595
Accessibility	63	.097	.005	.102	.03449	.002038	.016175	.000	1.342	.302	4.007	.595
Facilitating resources	63	.066	.006	.071	.02597	.001483	.011767	.000	.993	.302	2.456	.595
Hospitality	63	.082	.007	.089	.03089	.001740	.013810	.000	1.189	.302	3.846	.595
Enterprise	63	.049	.008	.056	.02714	.001211	.009608	.000	.547	.302	.915	.595
Political will	63	.053	.005	.058	.02755	.001369	.010862	.000	.460	.302	.697	.595
System definition	63	.031	.004	.035	.01934	.000943	.007486	.000	.197	.302	-.265	.595
Philosophy/ values	63	.037	.004	.042	.02036	.001066	.008464	.000	.051	.302	-.396	.595
Vision	63	.036	.005	.041	.02146	.000961	.007625	.000	.247	.302	-.114	.595
Positioning/ branding	63	.082	.004	.086	.02729	.001660	.013178	.000	2.207	.302	7.078	.595
Development	63	.043	.003	.046	.02236	.000927	.007361	.000	.181	.302	1.126	.595
Competitive/ collaborative analysis	63	.044	.003	.046	.02026	.000955	.007581	.000	.519	.302	1.270	.595
Monitoring and evaluation	63	.045	.005	.050	.02088	.001029	.008169	.000	.934	.302	2.260	.595
Audit	63	.047	.003	.050	.02044	.001119	.008879	.000	.920	.302	2.435	.595
Organization	63	.063	.001	.065	.02038	.001326	.010522	.000	1.277	.302	4.162	.595
Marketing	63	.067	.006	.073	.02499	.001410	.011191	.000	1.607	.302	4.768	.595
Quality of service/ experience	63	.060	.009	.069	.02802	.001553	.012323	.000	1.272	.302	2.192	.595
Information/ research	63	.058	.005	.062	.02201	.001253	.009943	.000	1.649	.302	4.245	.595
Human resource development	63	.052	.005	.057	.02008	.001059	.008406	.000	1.283	.302	4.984	.595
Finance and venture capital	63	.043	.006	.048	.01939	.000918	.007286	.000	.884	.302	3.154	.595
Visitor management	63	.037	.006	.042	.01970	.000964	.007650	.000	.502	.302	.847	.595
Crisis management	63	.050	.003	.053	.01853	.001148	.009109	.000	1.174	.302	3.186	.595
Resource stewardship	63	.060	.006	.065	.02201	.001260	.010002	.000	1.736	.302	5.385	.595
Location	63	.082	.004	.086	.03127	.002133	.016927	.000	.970	.302	1.334	.595
Safety/ security	63	.163	.001	.164	.03691	.003366	.026716	.001	2.474	.302	8.378	.595
Cost/ value	63	.114	.007	.121	.03465	.002389	.018959	.000	2.262	.302	8.035	.595
Interdependencies	63	.074	.002	.076	.02355	.001506	.011955	.000	1.192	.302	4.575	.595
Awareness/ image	63	.082	.003	.085	.03196	.002112	.016764	.000	.864	.302	1.482	.595
Carrying capacity	63	.086	.002	.088	.02596	.001916	.015209	.000	1.474	.302	4.608	.595
Valid N (listwise)	63											

Figure 9: Box plot of Destination Competitiveness Global Attribute Importance Eigenvector Weights
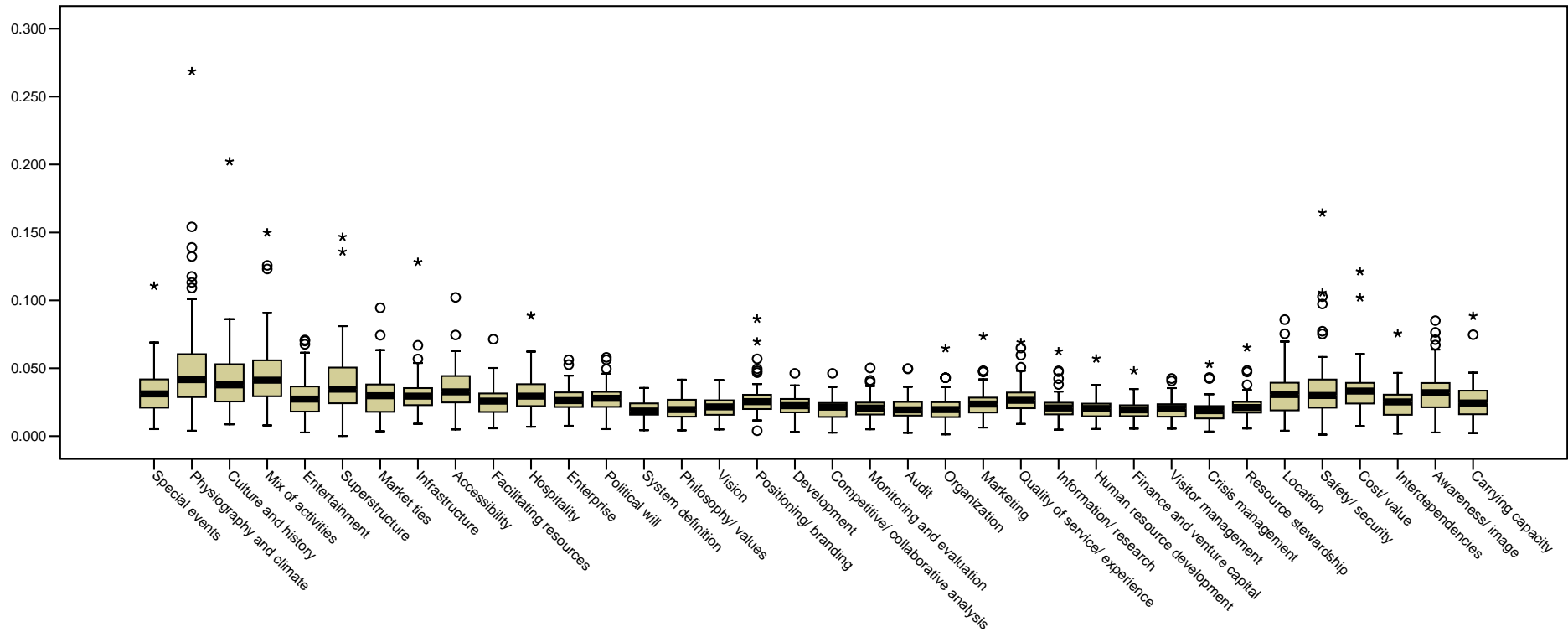
Based on the Myers and Alpert (1968) concept of determinant attributes, Armacost and Hosseini (1994) proposed an analytical method for computing attribute determinance. In brief, if IW_i represents the global importance weight of the i th attribute, $i = 1 , \ldots , n$, then

$$\sum_{i=1}^{n} IW_i = 1 \qquad (1)$$

and if PW_{ij} represents the local performance weight of the j th destination with respect to the i th attribute, $j = 1 , .. , m$ (in this study $m = 3$), then

$$\sum_{j=1}^{m} PW_{ij} = 1, i = 1,...,n \qquad (2)$$

Equations 1 and 2 provide the data for computing attribute determinance. To understand how the variability of destinations with respect to a particular attribute can be computed, consider the case where there are no differences across destinations. In this case $PW_{ij} = 1/m$ (or 1/3 in this study) for all j. In contrast, when the performance of destinations on an attribute differ, Armacost and Hosseini (1994) point out that a measure of the average similarity effect of the m destinations is the geometric mean of the local performance weights. Thus if APW_i represents the average similarity effect for the i th attribute, then

$$APW_i = \left(\prod_{j=1}^{m} PW_{ij} \right)^{1/m} , i = 1,...,n \qquad (3)$$

The value of APW_{ij} is a maximum ($1/m$) when all destinations are judged to perform equally on a particular attribute. The difference between APW_{ij} and $1/m$ is therefore a measure of the degree to which destinations differ with respect to attribute i. This difference can be represented as D_i such that

$$D_i = \left(1/m - APW_i \right), i = 1,...,n \qquad (4)$$

The measure of attribute determinance for the i th attribute (AD_i) then becomes the product of the importance weights, IW_i and the difference measure, D_i, such that

$$AD_i = IW_i . D_i , i = 1,...,n \qquad (5)$$

This procedure then produces a measure of attribute determinance for all $n = 36$ destination competitiveness attributes.

Table 4 summarises the mean and other statistics of the computed attribute determinance measures from equation 5. The table includes results for all 36 sub-factors. Attribute determinance measures for the five main factors are also computed and presented in the same table for convenience. Figure 10 shows the box plot of these results for the five main competitiveness factors only, whereas Figure 11 illustrates the box plots for the attribute determinance measures for the complete set of 36 sub-factors. A visual comparison of Figures 3 and 10 shows somewhat similar patterns for the main-factor importance weights and attribute determinance measures respectively. *Core Resources and Attractors* remains the dominant group of competitiveness factors after computation of the determinance measures. However, it is evident that *Destination Management*, and *Qualifying and Amplifying Determinants* factors have lowered in their significance relative to the other main factors.

In order to establish which of the n attributes have a determinant impact on destination competitiveness, the criterion employs use of the sampling distribution of the attribute determinance measures with a one-tailed significance test and a 95% confidence level (type I error of 0.05) to determine which of the attribute determinance measures is statistically significantly greater than average. Of the estimated determinance measures for the five main factors of destination competitiveness, the grand mean was 0.00592. For the set of 36 sub-factors, the grand mean of the determinance measures was 0.00188. Thus each determinance measure is compared to the respective grand mean by this significance test to establish which determinance measures are statistically significantly greater than the average.

Table 4: Destination Competitiveness Global Attribute Determinance (AD_i) Measures

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Core resources and attractors	59	.059772	-.000043	.059729	.01058482	.001354330	.010402809	.000	2.495	.311	8.813	.613
Special events	59	.009116	.000006	.009122	.00253281	.000264482	.002031522	.000	.938	.311	.872	.613
Physiography and climate	59	.029722	.000003	.029725	.00466607	.000647991	.004977310	.000	2.729	.311	10.456	.613
Culture and history	59	.022256	.000005	.022260	.00374240	.000461297	.003543286	.000	2.703	.311	11.941	.613
Mix of activities	59	.016290	.000020	.016310	.00346997	.000385010	.002957316	.000	2.698	.311	9.108	.613
Entertainment	59	.009603	.000006	.009609	.00248176	.000254281	.001953173	.000	1.127	.311	2.054	.613
Superstructure	59	.015596	.000013	.015609	.00360022	.000396271	.003043814	.000	2.090	.311	5.595	.613
Market ties	59	.012685	.000007	.012691	.00216598	.000310914	.002388176	.000	2.430	.311	7.534	.613
Supporting factors and resources	54	.021051	.000009	.021060	.00519101	.000678522	.004986102	.000	1.248	.325	1.170	.639
Infrastructure	52	.010251	.000193	.010444	.00235778	.000244420	.001762535	.000	2.062	.330	7.588	.650
Accessibility	52	.007471	.000007	.007478	.00232166	.000232567	.001677065	.000	1.187	.330	1.839	.650
Facilitating resources	52	.008669	.000007	.008676	.00173326	.000206892	.001491921	.000	2.069	.330	7.931	.650
Hospitality	52	.007999	.000006	.008006	.00163639	.000218395	.001574871	.000	1.561	.330	3.762	.650
Enterprise	52	.006220	.000008	.006227	.00179140	.000186251	.001343072	.000	1.037	.330	1.303	.650
Political will	52	.006543	.000002	.006544	.00182542	.000191896	.001383779	.000	1.200	.330	2.031	.650
Destination policy, planning and development	54	.024093	.000077	.024170	.00596151	.000816716	.006001616	.000	1.266	.325	1.049	.639
System definition	52	.003430	.000002	.003432	.00103470	.000128179	.000924312	.000	.705	.330	-.063	.650
Philosophy/ values	52	.003815	.000001	.003817	.00109074	.000128885	.000929404	.000	.959	.330	.496	.650
Vision	52	.004451	.000003	.004454	.00125598	.000149437	.001077603	.000	.934	.330	.873	.650
Positioning/ branding	52	.007034	.000001	.007036	.00222268	.000184586	.001331068	.000	1.288	.330	3.169	.650
Development	52	.003840	.000005	.003845	.00114975	.000125277	.000903388	.000	.876	.330	.519	.650
Competitive/ collaborative analysis	52	.004261	.000001	.004262	.00120460	.000154387	.001113301	.000	.837	.330	.241	.650
Monitoring and evaluation	52	.004164	.000002	.004166	.00110951	.000146260	.001054698	.000	.882	.330	.015	.650
Audit	52	.006881	.000001	.006882	.00103444	.000173018	.001247648	.000	2.294	.330	8.288	.650
Destination Management	55	.022131	-.000025	.022106	.00498198	.000768701	.005700840	.000	1.707	.322	2.032	.634
Organization	53	.004927	.000004	.004930	.00122841	.000160913	.001171462	.000	1.495	.327	2.107	.644
Marketing	53	.004218	.000006	.004224	.00180109	.000143061	.001041497	.000	.466	.327	-.341	.644
Quality of service/ experience	53	.004951	.000004	.004956	.00173383	.000175509	.001277725	.000	.598	.327	-.179	.644
Information/ research	53	.003769	.000004	.003773	.00108794	.000130837	.000952510	.000	.863	.327	.003	.644
Human resource development	53	.003348	.000003	.003351	.00092521	.000132390	.000963811	.000	1.105	.327	.282	.644
Finance and venture capital	53	.003139	.000002	.003141	.00102926	.000117501	.000855422	.000	.833	.327	-.120	.644
Visitor management	53	.005932	.000003	.005935	.00087041	.000147165	.001071376	.000	2.396	.327	8.613	.644
Crisis management	53	.007313	.000003	.007315	.00089401	.000179635	.001307765	.000	2.850	.327	10.812	.644
Resource stewardship	53	.006895	.000002	.006897	.00121344	.000187561	.001365461	.000	2.179	.327	6.528	.644
Qualifying and amplifying determinants	55	.011319	-.000017	.011302	.00254495	.000390690	.002897438	.000	1.549	.322	1.535	.634
Location	53	.009756	.000005	.009761	.00218077	.000271294	.001975052	.000	1.552	.327	3.547	.644
Safety/ security	53	.013749	.000000	.013749	.00191820	.000385292	.002804968	.000	2.377	.327	6.396	.644
Cost/ value	53	.006121	.000005	.006127	.00188651	.000190845	.001389373	.000	1.013	.327	.863	.644
Interdependencies	53	.005957	.000001	.005958	.00106911	.000176444	.001284533	.000	1.662	.327	3.257	.644
Awareness/ image	53	.012465	.000007	.012472	.00294738	.000357130	.002599948	.000	1.774	.327	3.535	.644
Carrying capacity	53	.011170	.000001	.011170	.00120777	.000244336	.001778792	.000	3.703	.327	18.778	.644
Valid N (listwise)	51											

18

Figure 10: Box plot of Attribute Determinance Measures - Main Factors
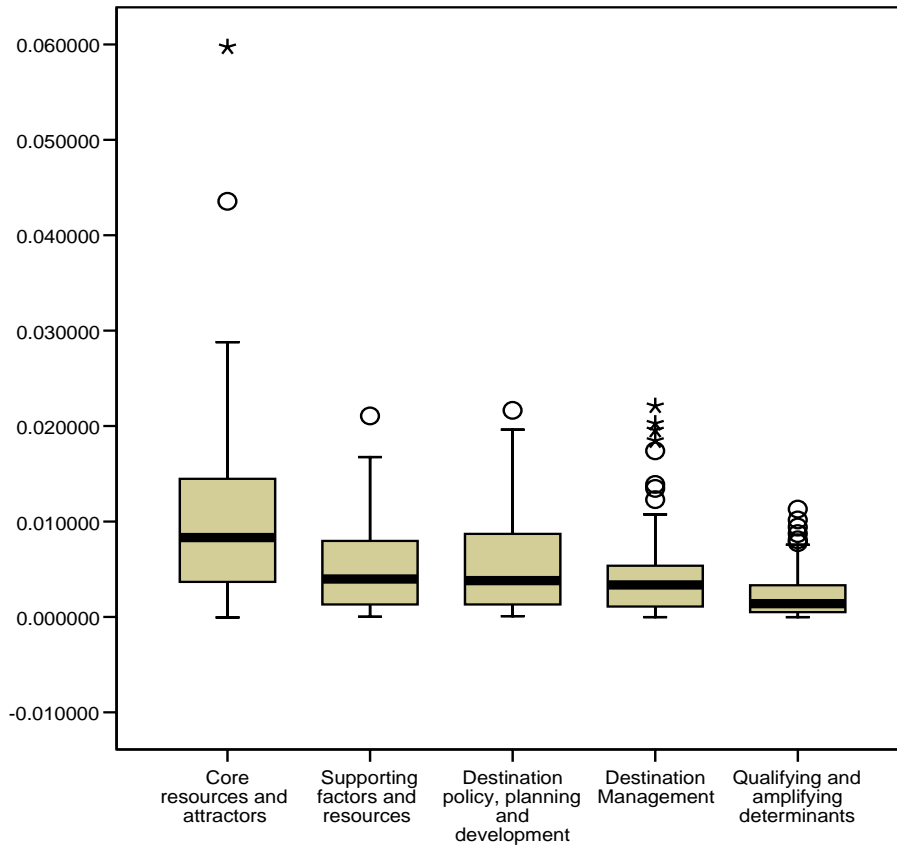
Tables 5 and 6 summarise the results of these two sets of tests for the five main factors and 36 sub-factors respectively. Of the five main factors of destination competitiveness, *Core Resources and Attractors* dominate the results. The measure of attribute determinance for this group of factors is statistically significantly greater than the average indicating that, of these five main groups of factors, *Core Resources and Attractors* is the determinant group of attributes of destination competitiveness.

Table 5: Significance Test Results of Attribute Determinance – Main Factors

Destination Competitiveness Main Factors	N	Mean	Standard Deviation	Standard Error Mean	Difference from grand mean of 0.00592	T statistic	Degrees of Freedom	Significance Level (1-tailed)
Core Resources and Attractors	59	0.01058*	0.01040	0.00135	0.00466	3.442	58	0.0005
Supporting Factors and Resources	54	0.00519	0.00499	0.00068	-0.00073	-1.079	53	0.8575
Destination Policy, Planning and Develop.	54	0.00596	0.00600	0.00082	0.00004	0.047	53	0.4815
Destination Management	55	0.00498	0.00570	0.00077	-0.00094	-1.224	54	0.8870
Qualifying and Amplifying Determinants	55	0.00254	0.00290	0.00039	-0.00338	-8.647	54	1.0000

Note: * indicates a determinance measure that is statistically significantly greater than the average attribute determinance of 0.00592.

Figure 11: Box plot of Destination Competitiveness Attribute Determinance Measures – 36 Sub-Factors
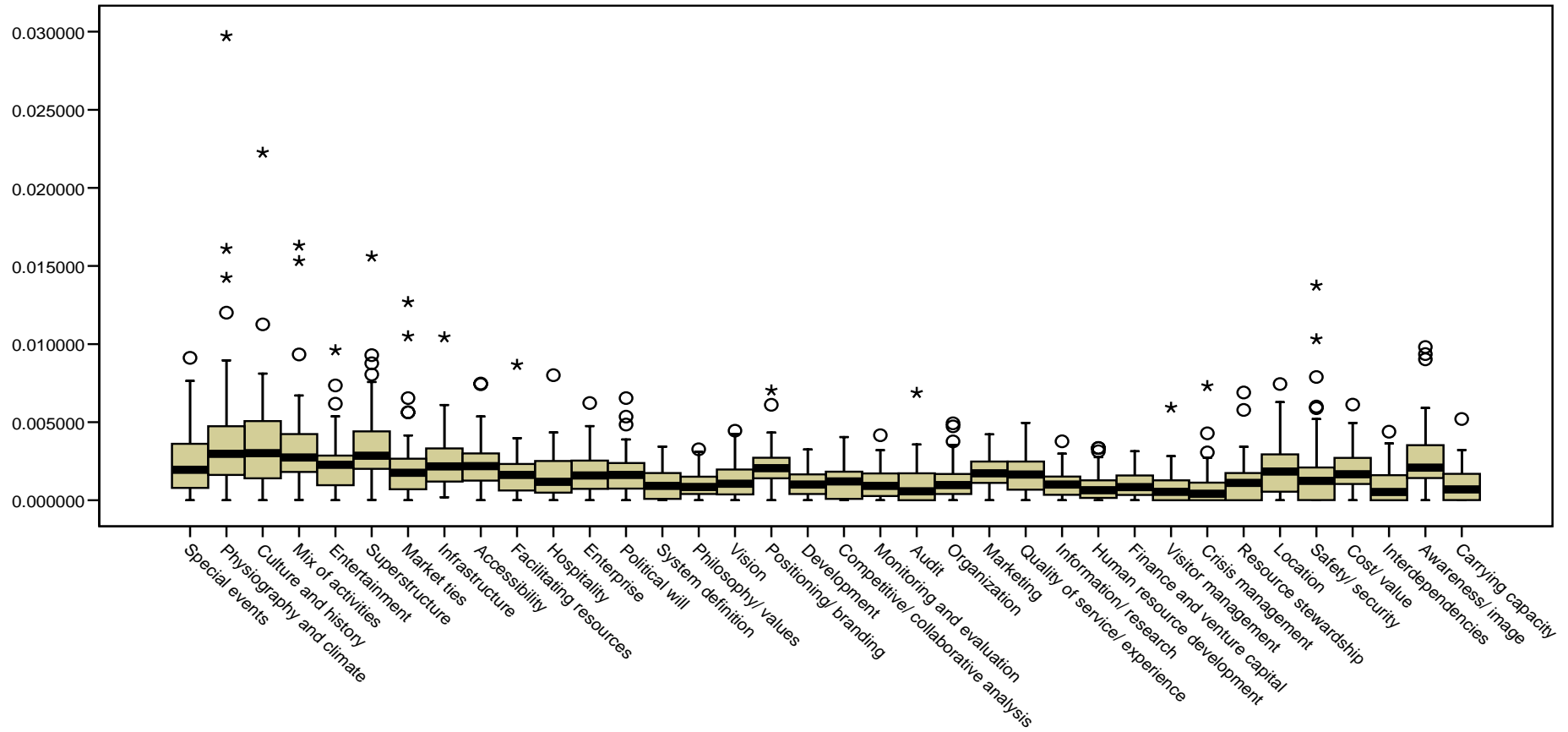
Inspection of Table 6 indicates that there are 10 of the 36 destination competitiveness attributes which have attribute determinance measures significantly greater than average. In descending order of significance, these are:

1. Physiography and Climate
2. Culture and History
3. Mix of Activities
4. Tourism Superstructure
5. Awareness/Image
6. Special Events
7. Entertainment
8. Infrastructure
9. Accessibility
10. Positioning/Branding

Six of these ten determinant attributes originate from the group of *Core Resources and Attractors*. This is not surprising given the result from Table 2. The only attribute from this group not found to be a determinant attribute was *Market Ties*. Whereas this attribute was judged to be the second most important, destinations were not judged to vary substantially with respect to this factor. Of the other four determinant attributes, two (*Infrastructure* and *Accessibility*) originate from the *Supporting Factors and Resources* group, one attribute (*Awareness/Image*) is part of the *Qualifying and Amplifying Determinants* group, and one other attribute (*Positioning/Branding*) is a component of *Destination Policy, Planning and Development*.

Comparing this list of the ten most significant determinant attributes of destination competitiveness with the earlier list of the ten most important attributes, we can make a number of observations. Overall, *Physiography and Climate* appears at the top of both lists. *Culture and History* has moved up one rung in the list. *Tourism Superstructure* has maintained the same position. Both *Awareness/Image* and *Infrastructure* have become more significant in the list. *Accessibility* has fallen a couple of places and four attributes have dropped out of the list; namely, *Market Ties*, *Safety and Security*, *Cost/Value*, and *Location*. In their place, four other attributes have appeared including, *Mix of Activities*, *Special Events*, *Entertainment*, and *Positioning/Branding*.

To recap, it is important to note that the changes that have occurred between the ten most important attributes, as judged by the participants in this research, and the ten most determinant attributes has occurred because if competing destinations do not differ substantially on any particular attribute, an otherwise important attribute will not be a determinant attribute with regard to the relative competitiveness of destinations. It is important also to emphasise that the ten significant determinant attributes are those for which the determinance measure was statistically significantly greater than the average measure of attribute determinance. Therefore, while this group represents the most *determinant* of the attributes, there is another group of attributes which have an effect on destination competitiveness that is roughly around average and a third group that is significantly below this average effect.

The relationship between the five groups of attributes was explored by undertaking a hierarchical cluster analysis on the attribute determinance measures across participants in order to investigate similarities between the judgments made about these attribute groups. The resulting dendogram is shown in Figure 12. This result indicates that the attribute determinance measures across participants for *Destination Policy, Planning and Development* and *Destination Management* tended to vary rather closely. Such a finding seems quite plausible since a participant is likely to either – 1) judge one of these two attribute groups to be important (unimportant) if they had also judged the other group to be important (unimportant) and/or, 2) conclude that the destinations they evaluated differed considerably (little) for one of these attribute groups if they had also judged the destinations to differ considerably (little) for the other group. *Supporting Factors and Resources* shared similarities with *Qualifying and Amplifying Determinants*. This also seems to make intuitive sense since both groups of attributes tend to share a number of things in common in relation to the general level of economic development in the destination. As *Destination Management* and *Destination Policy, Planning and Development* are also a function of the level of economic development in general, it seems unsurprising also that, to a lesser extent, all of the first four attributes display a clustered relationship. In contrast, *Core Resources and Attractors* clusters least with the other four attribute groups. While some of the attributes within *Core Resources and Attractors* (such as *Tourism Superstructure*, *Special Events,* and *Entertainment*) might also be expected to covary with levels of economic development, a number of the other attributes within this group are not likely to do so (such as *Physiography and Climate*, and *Culture and History*).

Table 6: Significance Test Results of Attribute Determinance – Sub-Factors

Destination Competitiveness Sub-Factors	N	Mean	Standard Deviation	Standard Error Mean	Difference from grand mean of 0.00188	T statistic	Degrees of Freedom	Significance Level (1-tailed)
Special Events	59	0.00253*	0.00203	0.00026	0.000655	2.478	58	0.008
Physiography and Climate	59	0.00467*	0.00498	0.00065	0.002789	4.304	58	0.000
Culture and History	59	0.00374*	0.00354	0.00046	0.001865	4.043	58	0.000
Mix of Activities	59	0.00347*	0.00296	0.00039	0.001593	4.137	58	0.000
Entertainment	59	0.00248*	0.00195	0.00025	0.000604	2.377	58	0.011
Tourism Superstructure	59	0.00360*	0.00304	0.00040	0.001723	4.348	58	0.000
Market Ties	59	0.00217	0.00239	0.00031	0.000289	0.928	58	0.179
Infrastructure	52	0.00236*	0.00176	0.00024	0.000480	1.966	51	0.028
Accessibility	52	0.00232*	0.00168	0.00023	0.000444	1.911	51	0.031
Facilitating Resources	52	0.00173	0.00149	0.00021	-0.000144	-0.696	51	0.756
Hospitality	52	0.00164	0.00157	0.00022	-0.000241	-1.103	51	0.863
Enterprise	52	0.00179	0.00134	0.00019	-0.000086	-0.461	51	0.677
Political Will	52	0.00183	0.00138	0.00019	-0.000052	-0.270	51	0.606
System Definition	52	0.00103	0.00092	0.00013	-0.000843	-6.574	51	1.000
Philosophy/ values	52	0.00109	0.00093	0.00013	-0.000787	-6.103	51	1.000
Vision	52	0.00126	0.00108	0.00015	-0.000621	-4.158	51	1.000
Positioning/ Branding	52	0.00222*	0.00133	0.00018	0.000345	1.871	51	0.034
Development	52	0.00115	0.00090	0.00013	-0.000728	-5.808	51	1.000
Competitive/ Collaborative Analysis	52	0.00120	0.00111	0.00015	-0.000673	-4.357	51	1.000
Monitoring and Evaluation	52	0.00111	0.00105	0.00015	-0.000768	-5.250	51	1.000
Audit	52	0.00103	0.00125	0.00017	-0.000843	-4.872	51	1.000
Organisation	53	0.00123	0.00117	0.00016	-0.000649	-4.033	52	1.000
Marketing	53	0.00180	0.00104	0.00014	-0.000076	-0.533	52	0.702
Quality of Service/ Experience	53	0.00173	0.00128	0.00018	-0.000143	-0.818	52	0.792
Information/ Research	53	0.00109	0.00095	0.00013	-0.000789	-6.033	52	1.000
Human Resource Development	53	0.00093	0.00096	0.00013	-0.000952	-7.192	52	1.000
Finance and Venture Capital	53	0.00103	0.00086	0.00012	-0.000848	-7.217	52	1.000
Visitor Management	53	0.00087	0.00107	0.00015	-0.001007	-6.842	52	1.000
Crisis Management	53	0.00089	0.00131	0.00018	-0.000983	-5.474	52	1.000
Resource Stewardship	53	0.00121	0.00137	0.00019	-0.000664	-3.540	52	0.999
Location	53	0.00218	0.00198	0.00027	0.000303	1.119	52	0.134
Safety/ Security	53	0.00192	0.00280	0.00039	0.000041	0.106	52	0.458
Cost/ Value	53	0.00189	0.00139	0.00019	0.000009	0.048	52	0.481
Interdependencies	53	0.00107	0.00128	0.00018	-0.000808	-4.581	52	1.000
Awareness/ Image	53	0.00295*	0.00260	0.00036	0.001070	2.996	52	0.002
Carrying Capacity	53	0.00121	0.00178	0.00024	-0.000669	-2.740	52	0.996

Note: * indicates a determinance measure that is statistically significantly greater than the average attribute determinance of 0.00188.

Figure 12: Hierarchical Cluster Analysis Dendogram

Destination Policy, Planning & Development
Destination Management
Supporting Factors & Resources
Qualifying & Amplifying Determinants
Core Resources & Attractors
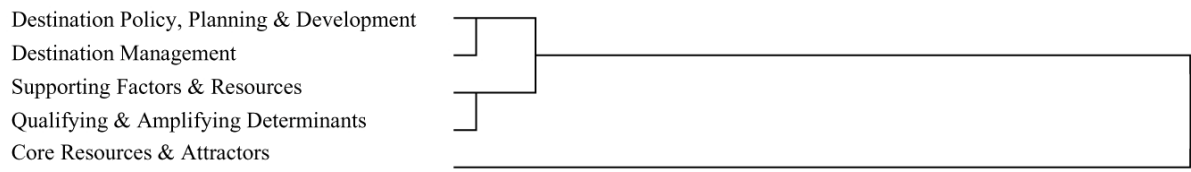
Chapter 5

CONCLUSIONS

Over the past 15 years, an emerging body of research has progressively proposed and refined destination competitiveness theory. It is evident from this work that the management of destination competitiveness is very complex since − 1) the competitiveness and fortunes of tourism destinations are subject to a very large number of forces, influences and events, 2) many of these attributes of competitiveness are either impossible or very difficult to manage, 3) responsibility for the management of many of the elements which are part of many of the competitiveness attributes is shared across a large number of diverse organisations and groups, 4) tourism development produces both benefits and costs and there is often disagreement or a lack of consensus within a destination about the social, economic and environmental outcomes and impacts, 5) the problem is made more difficult by the fact that destinations often do not set clear development goals against which competitive performance can be evaluated, 6) there is a significant lack of objective information, measures or indicators that are available to diagnose and inform efforts to manage destination competitiveness, and 7) since competitiveness is a relative concept, the competitiveness of a tourism destination is a function of what is happening to or in that destination, as well as events affecting other competing destinations.

Despite these complexities, tourism destinations around the world find themselves competing against other destinations more then ever before. The increasing global mobility of tourists means that new competitors are emerging globally, not just locally. Therefore, destinations cannot afford to escape the competitive challenge by the justification that the task is too difficult.

Research into destination competitiveness has helped to build an understanding of its components and structure. While the conceptual models, such as the one adopted for the purpose of this research, provide an insight into the breadth and complexity of the attributes of destination competitiveness, the research so far has made only a limited attempt to try to evaluate the relative importance or significance of the many components involved. It is quite likely that some of the attributes of destination competitiveness will be much more important than others in terms of their impact. A destination seeking to improve its competitive performance would therefore be wise to focus attention and limited resources on those attributes, which are likely to have the greatest beneficial impact. The aim of this research therefore sought to develop an insight into which attributes are estimated to be the most relevant in this regard.

For the reasons outlined earlier, at the present time, given limited data, the study pursued this aim by undertaking a rigorous analysis of 'expert' knowledge, experience and judgment. This judgment represents the collective general wisdom of the participants in this study. While judgment can arise from assimilation, assortment and synthesis of a broad range of diverse inputs, and is therefore very useful, it is also subjective and subject to distortion and bias. Nevertheless, compared to other alternative means of tackling this objective, such information and analysis was considered to be an important step in the progress of research into this topic.

Table 7 summarises the results of this study by showing the rank orders for the main factors and sub-factors of destination competitiveness in terms of both the estimated importance weights as well as their respective determinance measures. Figure 13 illustrates the relative determinance measures for each of the ten attributes found to be statistically more significant than average. The results of this study suggest that 'experts' judge the attributes that comprise a destination's core touristic resources and attractiveness to be the cornerstone of a destination's competitiveness. A major competitive weakness in this area would appear to be very difficult to overcome through competitive strengths in other areas. A destination's physiography and climate is considered to be the most important determinant attribute within this group of factors, as well as overall. Nevertheless, the results suggest that there are several other very important attributes that comprise a destination's core attractiveness such that, whilst a wonderful climate and scenic qualities may be major assets, a destination may still be able to perform well in terms of its culture and history, the quality of its tourism superstructure, the creation and hosting of special events, a thriving entertainment sector, and the development of a broad mix of recreation and tourism activities.

The results also emphasise the importance of a destination's image and reputation in the tourism market. A destination's awareness and image is formed and created by many and varied forms of information that shape the perceptions of tourism consumers. Destinations undertake marketing activities to brand and position a destination, and the results indicate that these activities are regarded as critical. Additionally, the results suggest that the awareness and image of a destination in the tourism market is similarly critical to a destination's competitiveness. While branding and positioning activities may play an important role in influencing destination awareness and image, many others sources of information about a destination, and which are beyond the control of the destination, can also impact market perceptions.

<p style="text-align:center">**Table 7: Ranking of Destination Competitiveness Attributes**</p>

Attribute Level	Attribute Label	Importance Ranking	Determinance Ranking
Main Factors	Core Resources and Attractors	1	1
	Destination Management	2	4
	Qualifying and Amplifying Determinants	3	5
	Destination Policy, Planning and Development	4	2
	Supporting Factors and Resources	5	3
Sub-Factors	Physiography and Climate	1	1
	Mix of Activities	2	4
	Culture and History	3	2
	Tourism Superstructure	4	3
	Safety/ Security	5	13
	Cost/ Value	6	14
	Accessibility	7	9
	Special Events	8	6
	Awareness/ Image	9	5
	Location	10	11
	Infrastructure	11	8
	Hospitality	12	20
	Market Ties	13	12
	Entertainment	14	7
	Quality of Service/ Experience	15	19
	Political Will	16	15
	Positioning/ Branding	17	10
	Enterprise	18	17
	Facilitating Resources	19	18
	Carrying Capacity	20	24
	Marketing	21	16
	Interdependencies	22	30
	Development	23	26
	Information/ Research	24	29
	Resource Stewardship	25	23
	Vision	26	21
	Monitoring and Evaluation	27	27
	Audit	28	32
	Organisation	29	22
	Philosophy/ Values	30	28
	Competitive/ Collaborative Analysis	31	25
	Human Resource Development	32	34
	Visitor Management	33	36
	Finance and Venture Capital	34	33
	System Definition	35	31
	Crisis Management	36	35

The two remaining determinant attributes identified in this study are *Infrastructure* and *Accessibility*. Both of these attributes form part of the *Supporting Factors and Resources* group of attributes. A destination's basic infrastructure provides an important foundation upon which tourism and other industries rely. Where infrastructure is poor, the participants in this research are of the judgment that a destination's tourism industry is likely to find its competitive position significantly compromised. This result suggests that, particularly for developing economies, one of the best forms of development that would enhance the position of the tourism industry to compete effectively would be to invest in basic infrastructural improvements.

Accessibility – the ease of gaining transportation access into and around a destination – was found to be an important determinant attribute as well. Where accessibility is difficult (whether it is due to lengthy travel times, high costs, entry barriers and formalities, unpleasant travel connections or schedules, etc.) the results suggest that destination's would do well to place considerable emphasis on finding solutions that make travel and entry to the destination much easier.

Whilst these ten determinant attributes are considered to be the most critical, in general, to destination competitiveness, it is important to recognise that all competitiveness attributes require monitoring and evaluation. However, these ten attributes signal those key areas in which destinations need to focus particular attention when searching for strategic ideas and solutions and when allocating limited resources for tourism development.

Figure 13: Determinant Destination Competitiveness Attributes
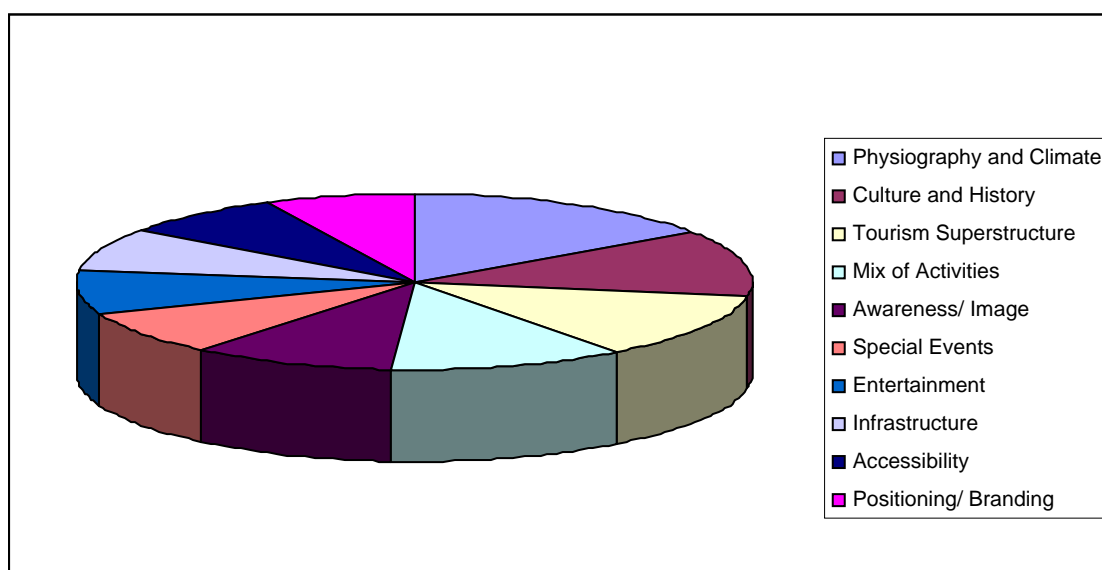
The results of this study were limited in several respects. The study was based on a survey of a panel of 'experts', and the collective judgment and experience which they bring to the issue. Although the panel encapsulated a breadth of insight in terms of geography, background, experience, and DMO characteristics, the panel does not span undeveloped and developing destinations to any significant extent. Further, as an evaluation of 'expert judgment' the results are largely subjective. But, as explained, it was considered that this approach, although subjective, would be more reliable and practical at this stage than a purely quantitative analysis. The research examined the determinance of destination competitiveness attributes in general. There is a need also to investigate the relative importance of attributes as they apply to particular segments of the tourism market.

There is considerable scope for further research into tourism destination competitiveness. A better understanding of the drivers of destination competitiveness has the potential to provide considerable help to the tourism industry. Although theory, models and information can be helpful, it is important to stress, however, that such tools merely guide and facilitate the development of tourism policy and strategy.

APPENDIX A: BRIEF DESCRIPTION OF EACH NODE (ATTRIBUTE) IN THE DESTINATION COMPETITIVENESS MODEL

GOAL NODE: to determine the most sustainably competitive tourism destination
The goal of this task is to select, from among several alternatives, the most sustainably competitive destination. To do this, we will use the hierarchy of criteria shown in the 'decision model'. Research over the past decade has identified the factors in this model as important determinants of a destination's competitiveness. Sustainable competitiveness is defined as a destination's ability to compete for its targeted tourist markets while being able to sustain this ability over the long term (i.e. so that the destination can maintain the quality of its endowed touristic resources over time).

1. Core Resources & Attractors: the strength of the destination's drawing power
This component of the model describes the primary elements of destination appeal. The sub-components that represent a destination's core resources and attractors determine the strength of the destination's drawing power. While other components are essential for success and profitability, a destination's core resources and attractors are often the fundamental reasons why prospective visitors choose one destination over another.

a. Special Events: staged happenings of particular touristic significance
Special events can create high levels of interest and involvement on the part of both visitors and residents. The spectrum of possible special events ranges from modest community festivals through to large scale international 'mega-events' such as an Olympic Games, World Exposition, and global sporting championships. Some destinations have pursued the development of special events as a cornerstone of their competitive strategy.

b. Physiography & Climate: the destination's natural tourism attributes
The natural, physical attributes of the destination define its character. Together, these create the natural environment within which visitors experience the destination. It also defines much of the aesthetic and visual appeal of the destination and determines the extent to which the climate sustains and supports touristic activities. The breadth of the destination's natural attributes includes landscape and scenery, flora and fauna, and appealing or unique and intriguing natural phenomena.

c. Culture & History: the destination's human heritage
Destinations vary in terms of the abundance, uniqueness, and attractiveness of cultural and historical resources they have to offer the potential tourist, including quality-of-life and contemporary lifestyle experiences.

d. Mix of Activities: the range and variety of touristic experiences & opportunities
The range, variety and mix of activities available within a destination represent a sub-component of competitiveness over which the destination does have some influence and control. While the activities within a destination may be governed by, for example, physiography, climate, and culture, destinations can assemble a mix of touristic activities that enable tourists to become more actively engaged with the destination. This factor appears to be growing in importance as the traveller increasingly seeks experiences that go beyond the more passive visitation practices of the past. A destination able to offer a more multi-dimensional set of touristic experiences is in a better competitive position than one which has a more limited mix of activities that it can offer the visitor.

e. Entertainment: the performing arts sector's contribution to tourism
The entertainment industry can be a major supplier to the tourism sector. For example, the Las Vegas experience is based on entertainment. Many visitors to New York or London include a live show in their travel itinerary. The theatre, concerts, comedy festivals, operas, and circuses such as Cirque du Soleil are examples of the contribution that the entertainment sector can make toward a destination's competitiveness. For some destinations, entertainment may play a major role in their destination marketing and competitive strategy.

f. Superstructure: the quantity and quality of tourism's built environment
The tourism superstructure comprises the built environment that provides for tourist-specific needs such as accommodation facilities, restaurants, transportation facilities, recreation facilities, attractions such

as theme parks, museums, and art galleries, exhibition and convention centres, resorts, airports, etc. The tourism superstructure is distinguished from the basic infrastructure in that it is designed primarily to serve tourists and can be an important element of the destination's attractiveness.

g. Market Ties: the depth of cultural and economic links with origin markets

A destination may have a variety of ties, links or relationships with important tourism source markets. Ethnic ties and migration patterns may provide a strong and enduring link. The 'Visiting Friends and Relatives' (VFR) segment of the travel market may provide a firm foundation for building tourism within a destination. It can also lead to the establishment of business or trade ties that can generate both a steady flow of visitors and create other forms of economic development. Other important ties include religion, sport, and culture. Therefore, destinations which share significant ties of these kinds with substantial origin or source markets, have a competitive advantage.

2. Supporting Factors & Resources: the springboard for tourism development

These support or provide a foundation upon which a successful tourism industry can be established. A destination with an abundance of core resources and attractors but a lack of adequate supporting factors and resources, may find it very difficult to develop its tourism industry. These factors may significantly shape the realisation of tourism potential at the destination. Careful planning and management may be required to ensure a proper balance between tourism growth and the development of infrastructure and other facilitating resources.

a. Infrastructure: the condition of the destination's basic facilities & services

A destination's basic infrastructure includes those facilities and services that support all economic and social activity, such as roads, highways and transportation systems, sanitation systems, communication systems, government services and public facilities, a reliable and potable water supply, legal systems, utilities, financial systems, health systems, education, etc. A developed and well-maintained infrastructure provides a solid basis for an effective and efficient tourism industry.

b. Accessibility: the overall ease involved in getting to & into the destination

The destination's accessibility is a function of a variety of factors such as changes in the regulation of the airline industry; entry visas and permits; route connections, airport hubs, and landing slots; airport capacities and curfews; competition among carriers; and the character of other forms of transport mode accessibility. Once at a destination, tourists need also to be able to gain easy access to tourist sites and resources. Within the destination, the accessibility of tourism resources is affected by broad economic, social, political, or physical factors. While the tourism industry may endeavour to enhance this internal accessibility, its influence occurs in the context of these other, broader factors.

c. Facilitating Resources: human, knowledge, financial & governmental assets

Examples include the availability and quality of local human, knowledge and capital resources, education and research institutions, financial institutions, various areas of the public service, etc. The labour market in terms of available skills, work ethics, wage rates, union demands, and government regulations may be important. The availability of capital resources will depend on the extent of local wealth and savings, competition for capital, government constraints on foreign investment, and financial returns to tourism investors.

d. Hospitality: the level of friendliness by the destination's residents towards tourists

Many destinations believe that the hospitality or friendliness of their residents or employees towards visitors provides a competitive advantage. It is not enough to deliver all the attributes of an experience in a cold and detached manner. Each individual visitor must feel that they are more than a source of cold cash revenue for the destination. Rather, visitors have a natural human desire for warm acceptance as they seek to enjoy the range of experiences the destination has to offer.

e. Enterprise: the destination's entrepreneurial talent

The health, vitality, and sense of enterprise, entrepreneurship and initiatives in developing new ventures in a destination, may contribute to its competitiveness in many different ways. The tourism industry is made up of many small to medium-sized enterprises, which are often the engine for innovation and economic development. The extent to which tourism development advances economic prosperity and the quality of life of residents, depends significantly upon the actions and success of these entrepreneurial firms.

f. Political Will: the level of support for tourism by political & community leaders

A further factor that can support or hinder destination competitiveness is the degree of political will. Political will is not just a function of the attitudes and opinions of politicians alone. All community

leaders shape political attitudes toward the contribution that tourism might make in helping to stimulate economic and social development, and the resultant quality of life in the destination.

3. Destination Policy, Planning & Development: the destination's strategic framework
A strategic or policy-driven framework for the planning and development of the destination with particular economic, social, and other societal goals as the intended outcome, can provide a guiding hand to the direction, form and structure of tourism development. Such a framework can help to ensure that the tourism development that does occur promotes a competitive and sustainable destination, whilst meeting the quality-of-life aspirations of those who reside in the destination. Thus, better tourism development policies and planning ought to result in greater destination competitiveness.

a. System Definition: extent stakeholders have defined/recognise the 'destination'
Before the destination can formulate a strategic framework for tourism development, it is first necessary for all stakeholders involved to decide, agree, or define just what such a strategy is being developed for. In other words, what is the framework meant to govern? This requires an explicit recognition and common understanding across stakeholders concerning the definition of the tourism destination system involved. Before different parties can agree or come to some consensus on what needs to be done, they must first agree on the entity for which the strategy is to be developed.

b. Philosophy/Values: extent stakeholders have identified their priorities
In the process of developing a policy-driven framework for destination development, various philosophical perspectives are likely to emerge among the stakeholders concerned. For example, some destination communities may feel that major resort development is quite compatible with the social and environmental nature of the destination and will provide the best opportunity for creating economic growth and jobs for younger people. In different circumstances, another community might hold the view that a different sort of approach to tourism development is called for. So a community's philosophy on the best way to address economic, social, environmental, and political goals through tourism development will shape the policy framework. This philosophy needs to fit the circumstances but there also needs to be some emergent view among stakeholders as to the 'right' or at least prevailing philosophy to be applied.

c. Vision: extent the community has crafted a sense of its desired future
Vision then is a statement or understanding of what the destination's philosophy or values logically suggest makes most sense for the destination in terms of its desired future. The same general philosophy might, for example, suggest different visions in different circumstances. Whereas a philosophy is a way of looking at a problem, the vision is more the answer to the problem. That is, the vision is a view of what one sees when adopting a particular philosophical perspective on tourism development.

d. Positioning & Branding: the destination's efforts to create a tourism identity
'Positioning' concerns where, in the mind of the tourist, the destination is located compared to its competitors. How a destination is so positioned depends upon its perceived relative uniqueness in terms of the characteristics valued by tourism market segments. Branding is the tool used to create this positioning. Destination positioning entails knowing how different market segments currently perceive the destination, which market segments it makes most sense to covet and therefore target, and how the destination might be effectively repositioned with respect to these segments. Destinations with a clear competitive position and strong supportive branding usually perform better in gaining the attention of potential tourists.

e. Development: quality and cohesiveness of policies for tourism development
A destination's competitiveness is influenced by the quality of policies designed to govern and regulate tourism development. The more cohesive or integrated the system of development policies, the more likely they are to work in concert (that is, be compatible rather then conflict) toward the achievement of the destination's overall vision and its resulting competitiveness and sustainability goals. Development policies must also find an appropriate balance between under- and over-regulation, and address the range of important issues that govern destination competitiveness, including both demand and supply related concerns.

f. Competitive/Collaborative Analysis: extent competitive environment is known
Competitive/collaborative analysis involves an evaluation of how the destination relates and compares to other destinations and to the international tourism system. Because competitiveness is a relative concept, decisions about the most appropriate policy or strategy for developing a destination must be made in the context of what other destinations are doing and how they are performing. Destinations that

analyse and understand their competitive circumstances are in a better position to strengthen those circumstances.

g. Monitoring & Evaluation: extent outcomes are tracked & strategy is fine-tuned

The effectiveness and impact of policies in a complex system can neither be forecast nor predicted with a high degree of confidence. Hence, the task of policy formulation, planning and development must be followed by monitoring and evaluation to see how well such policies are performing, whether improvements to implementation are needed, or indeed, whether circumstances have changed rendering the policies no longer relevant or effectual. The monitoring and evaluation of policy outcomes can therefore provide information useful for improving a destination's competitive position.

h. Audit: the degree to which the destination audits its performance

An audit of the destination and its attributes, strengths and weaknesses, problems and challenges, past and current strategies, and overall performance, can help to uncover the facts, and communicate information and issues to all parties engaged in policy formulation. As such, it may be a key input to any effort to create and maintain a competitive destination. The more comprehensive, systematic, independent, and periodic the audit, the more potentially helpful its results.

4. Destination Management: the destination's ability to implement a tourism strategy

This group of factors focuses on those activities which implement the policy and planning framework established under destination policy, planning and development, enhance the appeal of the core resources and attractors, strengthen the quality and effectiveness of the supporting factors and resources, and adapt best to the constraints or opportunities imposed or presented by the qualifying and amplifying determinants. These activities represent the most direct mechanism for managing the destination's competitiveness and sustainability.

a. Organisation: the quality & strength of the destination's organisational structure

A destination that is better 'organised' is potentially more competitive. The concept of the Destination Management Organisation (DMO), where the 'M' emphasises total 'Management' rather than simply 'Marketing' is a somewhat recent conceptualisation of the organisation function for destination management. This broader view sees management as responsible for the well-being of all aspects of the destination. It emphasises the provision of a form of leadership for destination development that makes extensive use of teamwork in all DMO-led initiatives. Destination promotion is no longer the sole purpose of the DMO. While this modified role presents many new challenges, it also provides a much broader range of opportunities for ensuring destination competitiveness.

b. Marketing: the destination's ability to attract & satisfy visitors through marketing

Perhaps the most traditional of these activities is the function of destination marketing. In practice, destination marketing has tended to focus on the task of promoting and selling. That is, the concept of marketing has typically only been applied to the destination in very limited ways. As a result, there is much scope for the application of a true marketing philosophy to enhance destination competitiveness. This broader application of marketing extends beyond promotion and selling alone to encompass all aspects of the marketing mix (i.e., the well-known marketing P's) with a focus on satisfying visitor needs and wants as the primary aim of destination marketing.

c. Quality of Service/Experience: ability to deliver integrated visitor experiences

Tourists consume individual products and services while visiting a destination. While the quality of these individual products and services plays an important part in the destination's competitiveness, more importantly the destination's ability to assemble and deliver a complete experience to the visitor is what counts most. Essentially, providing individual high-quality service transactions is not enough. To the extent possible, destination managers must attempt to ensure a seamless, hassle-free interface among all elements of the total travel experience.

d. Information & Research: effort made to gather information for decision making

The information/research component of destination management pertains to the development and effective use of information systems that provide managers with the information required for understanding visitor needs and for effective product development. This also involves the regular monitoring of visitor satisfaction and the tracking of industry performance. Each DMO also has the responsibility to disseminate key market and performance information to its members on a timely basis.

e. Human Resource Development: programs to produce trained industry employees
Some destinations have developed programs and mechanisms targeted at producing industry-specific trained employees and graduates with management skills designed to meet the specific needs of the tourism and hospitality industries. All industries compete to attract a talented workforce. Such programs can enable a destination to better provide for its own human-resource needs.

f. Finance & Venture Capital: programs to facilitate funding for tourism development
While financial institutions will normally fund most private sector tourism development, some public sector support or programs can assist the availability of finance and venture capital to tourism developers. For example, guided by public policy, governments or DMOs can institute programs to provide seed funding, grants, loan guarantees, depreciation allowances, capital gains exclusions, taxation concessions or other such incentives to investors to stimulate private investment for tourism development. Such programs should clearly be designed to promote the achievement of a destination vision.

g. Visitor Management: programs to control positive & negative visitor impacts
As the travel and tourism industry continues to grow rapidly, some destinations, which experience large numbers of visitors, have found that they may need to introduce policies and systems required to control visitor numbers or behaviour in order to exert some influence over visitor impacts. Where this occurs, industry cooperation is important. In the absence of such cooperation, governments or other regulatory authorities may be forced to act if problems are left unattended. DMOs can play an important role in coordinating efforts to institute such industry-regulated arrangements.

h. Crisis Management: preparedness and capacity to cope with crises or disasters
An increasingly important challenge for destination managers involves crisis management. Destinations, from time to time, have to deal with various crises affecting visitors as well as the after-effects in terms of a tarnished destination image. Anecdotally, in recent years, it seems that crises have become more problematic for destinations. Crises may arise for many different causes, including the outbreak of disease, accidents, crime, natural disasters, political and social problems, union strikes, and terrorism, etc., to list a few. When such crises occur, destinations need to be able to respond in an effective way to deal with the immediate impact of the event as well as its longer-term consequences. Destinations which respond to such eventualities more effectively or, better still, act to prevent or minimise them to the extent that is possible, enhance their competitive position. Proactive crisis management or disaster planning is therefore becoming an additional challenge and responsibility for forward-thinking destinations.

i. Resource Stewardship: extent of efforts to preserve fundamental qualities & assets
Resource stewardship is a concept that stresses the importance, indeed the obligation, which destination managers have, to adopt a 'caring' mentality with respect to the resources that make up the destination. This involves the effective maintenance of those resources and a careful nurturing of those that are particularly vulnerable to damage that may be caused by tourism. The model is then not one of simple economic competitiveness but one of long term 'sustainable competitiveness' that acknowledges the stewardship of ecological, social, and cultural resources.

5. Qualifying and Amplifying Determinants: factors which leverage or limit competitiveness
The potential competitiveness of a destination is conditioned by a number of factors which fall outside the scope of the other four groups of competitiveness factors. This group of factors might alternatively have been labelled situational conditioners because it represents factors which affect the competitiveness of a tourist destination by defining its scale, limit, or potential. These qualifiers and amplifiers moderate or magnify destination competitiveness by filtering or leveraging the influence of the other four groups of factors. Their effect may be so important that they represent a 'ceiling' to tourism demand and potential. However, despite the potential importance of these factors, it may be difficult for the tourism industry alone to control or influence their impact on the destination's competitiveness.

a. Location: favourable/unfavourable proximity of the destination to major markets
A physically remote destination, that is, one that is far from the world's major tourist origin markets, is clearly at a distinct disadvantage in terms of accessibility, compared to another destination which neighbours major tourist markets and is therefore better able to convert latent visitor interest into actual visitation. The closer destination has the advantage of familiarity and lower travel cost (both monetarily and in terms of the opportunity cost of travel time). Although there is nothing a destination can do to change its physical location, its location relative to important origin markets for tourists can change

over time. For example, in the Asian region the economies of several countries have improved markedly over a relatively short space of time. The wealth generated in these countries and the overflow effect to other neighbouring countries has created growing tourism markets in this region. This has resulted in a shift in the competitiveness of tourism destinations as a result of this one factor, location, alone.

b. Safety & Security: degree of freedom from potential forms of harm to tourists
Safety and security concerns can affect the choice of destination. Some intrepid tourists may disregard travel advisories, warnings, or adverse media coverage of events in dangerous destinations. Indeed, some travellers might even seek out dangerous or risky experiences for the excitement and challenge they represent. In fact, most people tolerate a certain degree of uncertainty and risk but their tolerance levels are normally relatively low. The need for safety, along with the physiological needs of food and shelter, represent primary motivational forces behind human behaviour. If potential visitors are gravely concerned about crime, the quality of drinking water, the risk of natural disasters, the standards of medical services, terrorism, etc., a destination's competitive strengths may seem quite minor by comparison. Tourism authorities may launch recovery programs in response to these problems and these may help somewhat but problems such as these may dwarf a destination's ability to cope effectively.

c. Cost/Value: factors affecting the overall affordability of the destination
The cost of a destination to a foreign visitor is influenced by a broad range of local, domestic, and global forces, and because cost, in itself, is so fundamental to the question of competitiveness, this factor is treated as a qualifying and amplifying determinant. The monetary cost of a destination is governed by three factors: (1) the cost of transportation to and from the destination, (2) the currency exchange rate (in the case of international travel), and (3) the local cost of tourism goods and services. Many aspects of the global (macro) environment (e.g. international trade balances, relative interest rates, relative inflation rates, taxes, etc.) and competitive (micro) environment (e.g. competition, productivity, cost of supplies, labour rates and agreements, etc.) will affect the cost of tourism services in the destination. Consequently cost is largely governed by economic structures within the destination and its comparative international position.

d. Interdependencies: favourable/unfavourable associations with other destinations
The competitiveness of any destination may be affected by the competitiveness of other destinations since competitiveness is a relative concept. But beyond this, there are interdependencies that can significantly affect the fortunes of individual destinations. This can best be illustrated if we consider the situation of 'stopover' destinations. Some destinations depend, at least to some significant extent, on travellers who break their journey to or from more distant destinations. Should the attractiveness of those distant destinations change either positively or negatively, the stopover destination is sure to experience some consequent impact. Another example concerns the impact of terrorist events, wars, and crime in a neighbouring region even though the destination itself might be free of these problems. So the destination's competitiveness can be impacted by what is occurring in other destinations with which it shares an interdependent relationship.

e. Awareness & Image: extent to which the destination is well-known & desired
The image of a destination can take time to change even though the reality at a destination no longer accords with a pre-existing negative or positive image. Hence, a negative image can qualify improvements at a destination and a positive image can cushion the effect of problems such as crime or high living costs. Low market awareness of the destination can also ensure that destination image changes slowly but the effect of awareness also impacts the likelihood that a potential tourist will even consider visiting a destination. As there are very many destinations today competing for a space in the minds of intending tourists, it is important that tourists are sufficiently aware of a destination if it is likely to at least be considered by would-be visitors. More broadly, however, destination image is the 'lens' through which tourists perceive all characteristics of a destination and therefore effectively all of the other competitiveness factors.

f. Carrying Capacity: extent to which the destination is at or close to its viable limit
If tourist demand is close to, or in excess of a destination's sustainable carrying capacity, further tourism growth will result in deterioration of tourism assets and resources, and in the quality of the visitor experience. This may ultimately harm a destination's comparative attractiveness. Venice, for example, is clearly an extremely popular destination that is under stress in terms of its carrying capacity. It remains very popular but struggles to cope with visitors at certain times of the year. Indeed, the restricted system of access to Venice effectively serves as a ceiling on visitor numbers during these peak periods.

APPENDIX B: EXPERT CHOICE PARTICIPANT INSTRUCTIONS

Professor Geoffrey I. Crouch

Destination Competitiveness Expert Choice
Research Project

Instructions for Participants

FOLLOW THIS 8-STEP PROCESS

1. Print a copy of these instructions now.
It is critical that you follow this process and the instructions below rather than the instructions in the left margin of the Expert Choice screen (step 3 below) where it indicates that you need to click the forward button to progress to the next pair-wise comparison. The system will automatically move to the next pair immediately after you have indicated your graphical judgment. Clicking the forward button as well only slows the process down. If you follow the instructions below carefully, you should not get lost and should obtain a successful outcome. Before proceeding any further, print a copy of these instructions now so that you have them available to refer to at any time. It is recommended that you first set the print page to *landscape.*

2. Obtain Your Own Unique Username and Password.
Before proceeding further, you need to obtain a <u>unique</u> username and password. These are not the same as the <u>global</u> username (DCExpert1) and password (Crouch*1) you have used earlier. If you already have your own unique username and password, continue to step 3. Otherwise, complete the relevant *Participant Registration Form* (Form A for Destination Management Organisation mangers or Form B for university researchers) first, available at the end of the web page accessible by clicking here

[ENTER]

3. Access the *Expert Choice* model of destination competitiveness via the Internet.
To do this:

(a) Launch your Internet Explorer browser, ensure that your computer's access to the Internet is operational, and go to: **https://decisionportal.expertchoice.com** or simply click on the Enter button below. This will open a new Internet Explorer window to enable you to toggle between this window with the instructions, and the *Expert Choice* window. However, you may find it much more convenient to print the instructions as suggested in step 1 so that you can see both at once.

[ENTER]

(b) From this page you will be asked to enter your own <u>unique</u> username and password from step 2 above.

(c) After typing in your unique username and password, click the Logon button.

4. Open the Destination Competitiveness Model.

(a) You should now see a page headed 'Expert Choice Available Models'. Read the information on this page and then open the model by clicking once on **Destination Competitiveness Model**. You should see the following on your screen:
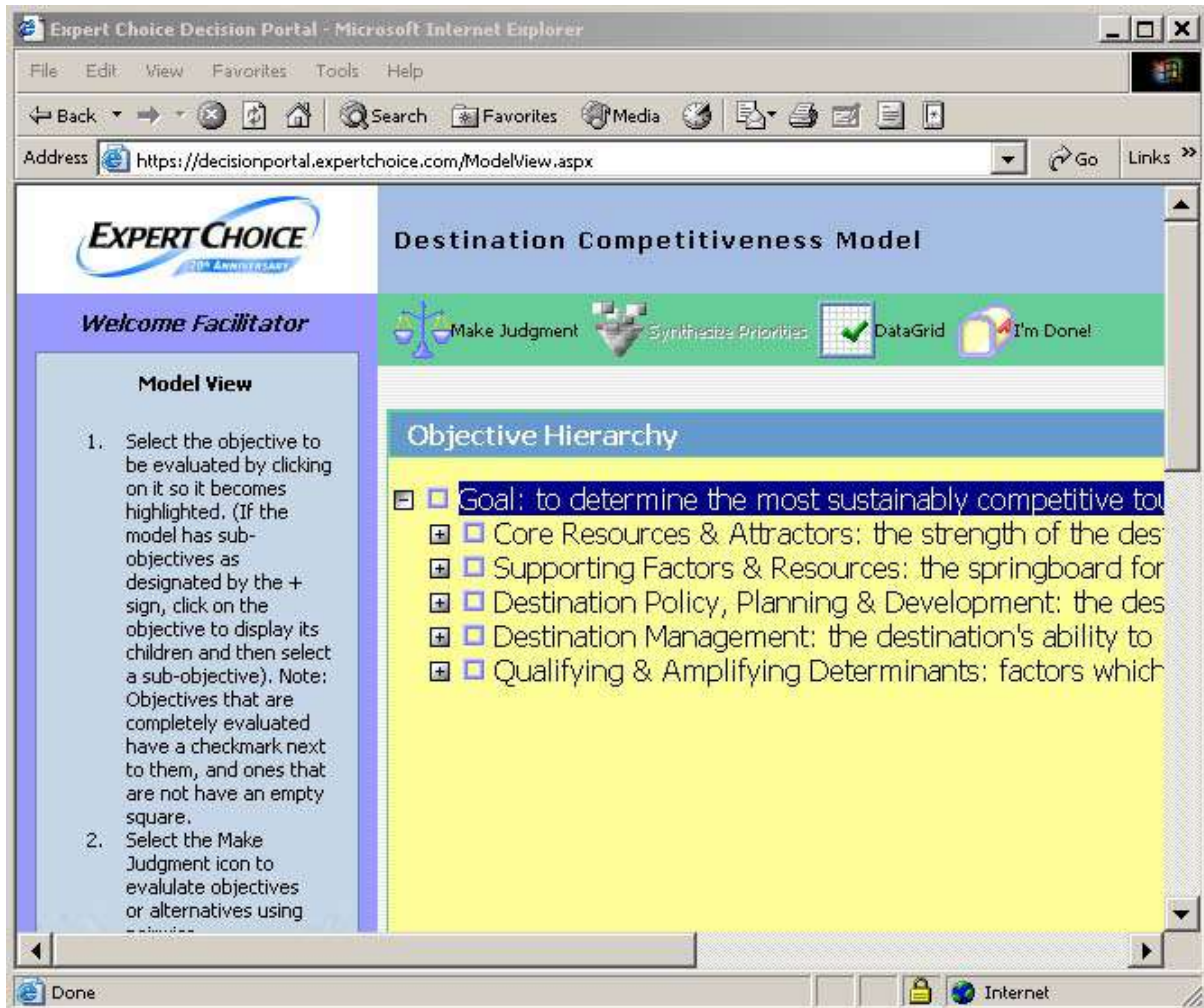
(b) You will now see the main Model View. By scrolling to the *right* or *down* you will be able to see all parts of the Model View. Again, read the information in the left panel and note that the information under 'Objective Hierarchy' shows the main components of the model depicted in the diagram of the model previously provided. If you have not yet printed a copy of this model, do so now by clicking Enter below, as it will help you to follow the process:

The Model View in *Expert Choice* and the printed depiction of the model are formatted differently, but each illustrates the same components of the model of destination competitiveness. At the top of the Model View, the top level of the destination competitiveness hierarchy (level 1) is shown. This is the overall goal of this exercise which is to determine the most sustainably competitive tourism destination. To the left of this goal you will see a small box with either - or + inside the box. If - is shown, you will also be able to see, under the goal, each of the 5 main dimensions of the model which form the next level in the hierarchy (level 2). If the box shows + , click once on the box to change it to - so that you can see these 5 dimensions. To see the sub-dimensions (level 3) under each main dimension, you may again need to click on each small box in order to expand the view of the model to

34

reveal all or parts of the model tree. Think of this 3-level 'tree' as consisting of nodes that represent the parent-level to anything lower, and/or the child-level to anything higher. Clicking on the - or + box alternatively expands or collapses the view of the model tree.

(c) The instructions in the left-hand window briefly indicate the task you will be asked to complete.

(d) The right-hand window shows the calculated priorities for each of the child-level factors in the model under the parent-level highlighted in the Objective Hierarchy. Click on the goal in the Objective Hierarchy to see the 5 level-1 factor priorities. These will all initially be zero before you have started to enter your judgments in the model but later the priority figures will start to reflect your judgments.

(e) If you now scroll down to the bottom, right-hand window you will see a similar set of results showing the performance of destinations 1 to 3. Initially, these too will be set at zero but as you work through the latter stages of the exercise, these performance results will also begin to appear indicating the calculated destination competitiveness scores at each level of the model. This will be further explained below.

(f) In the 'Objective Hierarchy' window to the right of the Model View, you will note two icons. The first

of these (the note icon shown as   ) enables you to type in any notes or comments related to that part of the model which you currently have selected (highlighted). If you wish to enter a comment or note for any of the other nodes of the model, left-click on that node to select it and then click on the note icon to open a 'Note for' dialogue box.

(g) The second icon, appearing as   , is the information document icon. A left-click on this icon opens an information document that explains the model node currently selected. As you first encounter and start work on each node of the model, you should open the relevant information document and read about the node to understand it.

(h) If you wish to save your work at any point in time to complete it later, click on the 'Sign Out' icon

shown as   . DO NOT click the 'I'm Done' icon   until you get to step 8.

5. Retrieve the Details on the Target Market Segment and the Destinations You Selected for the Analysis.

At the time you completed the online ***Participant Registration Form*** to obtain your unique username and password, you were asked to indicate the identity and scope of a target market segment and 3 destinations that you wish to analyse. The first of these (i.e., destination1) was to be your own DMO or primary destination. You also nominated another 2 destinations. When you completed that form you were asked to make a note of the target market segment and the 3 destinations on a sheet of paper and to keep that handy as a reference once you started this exercise. The identity of the market segment and 3 destinations was also returned back to you in the email which provided your unique username and password. Please retrieve either that email or the piece of paper on which you recorded these details now and have it in front of you. You will need to refer to it when you reach step 7 below. If you have lost that email and paper note, please email Professor Crouch at g.crouch@latrobe.edu.au.

6. Start Your Evaluation.

The evaluation comprises two parts. First, you will evaluate the relative importance of each of the five main components of destination competitiveness, and each of other sub-components of destination competitiveness shown in the destination competitiveness model. This is explained in this 6th step. Second, you will evaluate the relative performance of 3 destinations. This is explained in step 7 below.

A Reminder - Please note that no data is required. The evaluation does not require you to enter any data or information about any of the destinations you choose to examine or about any of the competitiveness factors. Participation relies only on your current subjective experience and knowledge through a series of comparative judgments. It does this by asking you to compare the relative importance of each competitiveness factor to other factors for the particular market segment you have chosen to examine. The performance of each destination, for each competitiveness factor, is also assessed based upon your composite knowledge, insight and experience. No data is required. This subjective approach is based on the following rationale:

1. Each competitiveness factor potentially entails **many** separate elements or components.
2. **Objective** data on each of these is likely to be difficult or time-consuming to obtain, or non-existent.

3. There is currently no theory or knowledge sufficient for determining how such data, if it were available, ought to be used or aggregated to develop composite measures or indexes.

4. In contrast, **subjective** assessments and evaluations utilise the full range of expertise, experience, insight, knowledge and *gut feel* of eligible 'experts'. Thus subjective expert judgments are therefore much more useful and comprehensive than objective data could possibly be at the present time.

5. By collecting and aggregating the expert opinions and judgement of *many* tourism destination experts around the world, the eventual research results will represent the collective wisdom of many individuals.

No doubt there will be occasions where you may have some difficulty making a subjective comparative judgment in what follows due to your limited knowledge. However, you should proceed by making the best judgment you possibly can, based upon whatever limited knowledge you possess. *Expert Choice* is able to use this information and it is better that this information is factored into the assessment rather than being omitted altogether.

(a) To begin work on the model, select the goal node (i.e., click on the goal node in the hierarchy to highlight it) and then left-click on the 'make judgment' icon shown as [icon]. You will then see something like the following which shows two horizontal bars indicating the relative importance of the first two main model dimensions (i.e. level-2 nodes):
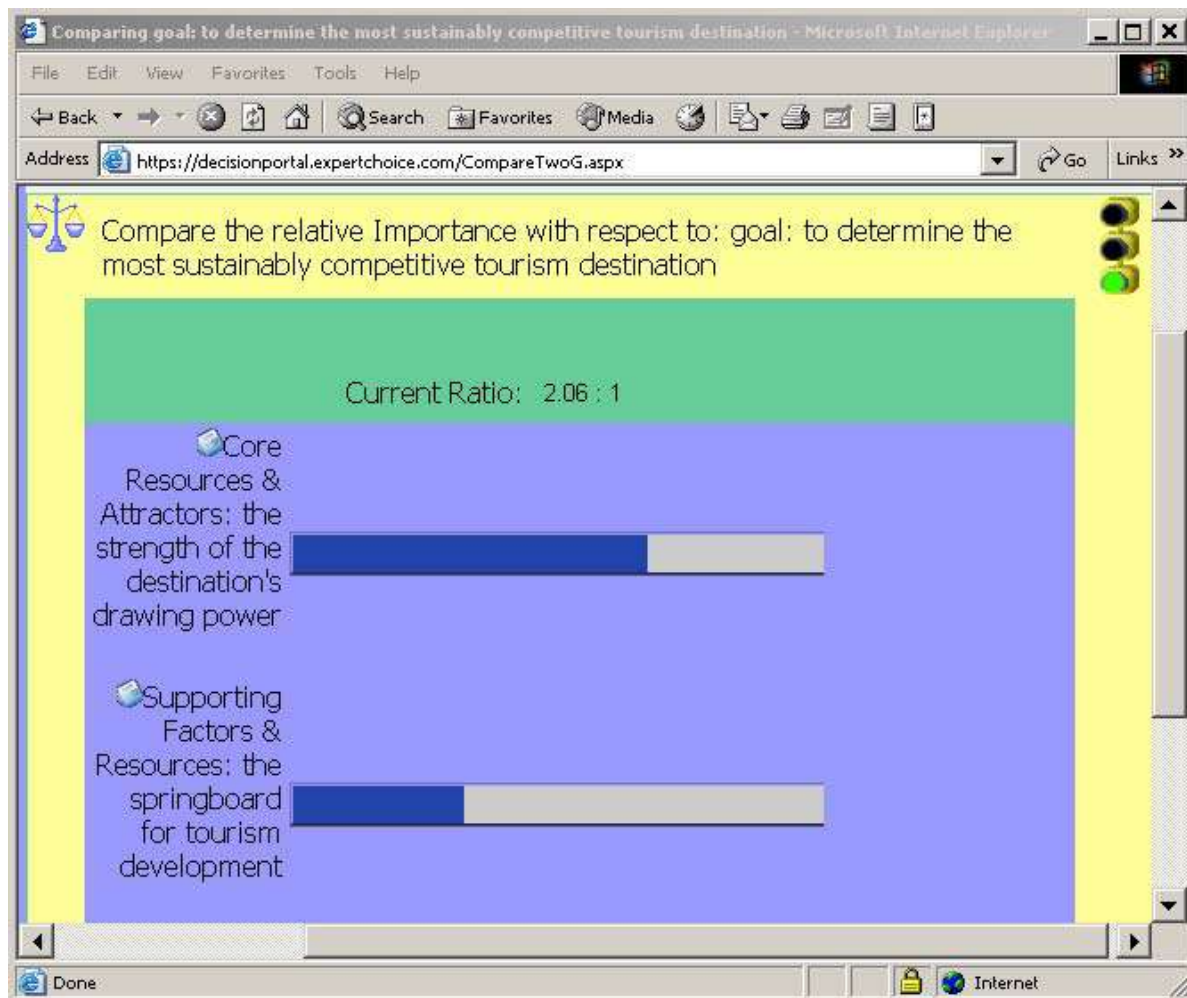
(b) The next step is to evaluate the importance of each of the 5 main dimensions with respect to the goal of determining the most sustainably competitive tourism destination in the target market segment you have previously chosen. This is accomplished by considering the importance of these dimensions two at a time (i.e. in pairs). In the lower part of the screen, you will see a 5x5 grid that indicates the possible level-2 pairs involved. One of the boxes in this grid is coloured yellow to indicate the first of the pairs you are about to evaluate. As it is necessary to compare each dimension only once in terms

of their relative importance with the other 4 dimensions, only 10 of the cells in this grid are 'open' for assessment. The yellow box in the grid indicates the currently selected pair of dimensions shown above the grid, comparing (in the above illustrated example) *Core Resources and Attractors* with *Supporting Factors and Resources*.

(c) The blue horizontal bars indicate the relative importance of these two dimensions with respect to the level above in the model (in this case, level 1 - the goal - but when we get to assess the importance of the sub-dimensions [i.e. level 3] these will be assessed in terms of their relative importance to the relevant level-2 factor). Initially the blue bars are shown equal in length. If you feel that one of these two paired factors is more important than the other, position the cursor over that bar using the mouse, and then click, hold and drag the bar to the right until the length of the blue bars relative to one another reflects your best judgment of their importance. You can then release the bar to record your assessment. When this is done Expert Choice normally takes a few seconds to automatically move to the next pair for comparison. Therefore, please **do not** left-click on the 'forward' button as this only slows the move to the next pair. The next pair of factors for your next evaluation will automatically after several seconds so only left-click on the 'forward' icon if this fails to happen. You will note that a different box in the 5x5 grid below is indicated in yellow representing this new pair. The previous pair already evaluated is now shown blue in the grid.

(d) Repeat the same click-and-drag procedure again on the blue bars for this new pair of factors and continue until all cells in the grid have been evaluated. You can move back and forth among pairs by clicking the left or right arrow icons. Alternatively you can click on one of the cells in the grid to move directly to a pair you wish to evaluate, review, or modify.

(e) When all pairs have been evaluated, the traffic light will show green to indicate that you have completed the evaluations relevant for this node of the model.

(f) Next, click the calculate icon, . Based upon the paired comparisons you made, Expert Choice calculates the relative importance of each of the dimensions with respect to the parent node and produces the results for you. The numbers are the *weights* for each dimension with respect to the parent level above these dimensions, which, in this first case, is the goal. When you begin to assess the relative importance of the sub-dimensions (level 3), the parent level will be the relevant level-2 dimension. Note that these calculated weights add to 1. Suppose, for example, that for one of the dimensions, the resulting weight is calculated to be 0.39. This can be interpreted to mean that this dimension accounts for 39% of the parent-level dimension and the remaining factors collectively account for the other 61%.

If you wish to keep a permanent record of these results as you proceed, print a Results Sheet now by clicking the ENTER button below.

In this sheet there is room to record the importance weights for the five level-2 dimensions (i.e., in the 2nd column of the table), the level-3 sub-dimensions (i.e., in the 3rd column), and the destination performance weights for level-2 and level-3 dimensions (see item 7 below). There is also space in the bottom row of the table to record the overall destination competitiveness results with respect to the goal.

(g) Below the importance weights on the current screen, a measure labelled 'Inconsistency' is also calculated and displayed. This number is a measure of the logical inconsistency of your judgments. For example, if you were to say that A is more important than B, and B is more important than C, then logically you should feel that A is more important than C. If not, then you are being inconsistent in your judgment. In general, you should try to ensure that the inconsistency measure is less than 0.1 for your judgments to be considered reasonably consistent. If you need to reassess your judgments for this reason, help is at hand. To the right of this measure is a window labelled 'View nth most inconsistent

judgment'. The first (**1st**) of these finds the most inconsistent of your paired judgments. If you click on **1st,** Expert Choice will take you back to this paired comparison to enable you to review your judgment and change it if you feel appropriate. You should only change an inconsistent judgement if you feel that your initial comparison was in error and did not truly represent your opinion. Hence the most inconsistent cell may not necessarily be the problem and the solution may come by modifying other judgments. You can select other inconsistent pairs to review by clicking on **2nd**, **3rd**, etc. After modifying a paired comparison, click on the calculate icon again to show the new results. Review the inconsistency measure to see if it has improved and is now less than 0.1. If not, continue to improve the consistency of your judgments before proceeding further.

(h) Having completed your judgments for this node in the model, return to the model view by clicking

. You should now notice that a green check or tick has appeared next to the goal or level-1 node to show that you have successfully evaluated this part of the model.

(i) Now you are ready to repeat the pair-wise comparison exercise for a different part of the model of destination competitiveness. What we have done so far is assess the relative importance of each of the level-2 factors (the 5 main dimensions) with respect to the parent level which in this case is the goal (level 1) of determining the most sustainably competitive tourism destination. Now we are going to assess the relative importance of each of the level-3 factors (the sub-dimensions under each dimension) with respect to their parent level-2 factor (i.e. each of the 5 main dimensions). For example, the level-3 sub-dimensions, *Location* and *Safety and Security* might be compared with respect to their level-2 parent (i.e., *Qualifying and Amplifying Determinants*). It is important to note in this example that these two sub-dimensions should be compared with their parent level and not a higher level in the hierarchy. To do this, click on the first of the 5 dimensions in the Model View *(Core Resources and Attractors)* to select and highlight it. This will also display each of the 7 sub-dimensions which cover the core resources and attractors. Remember to use the information document icon,

to learn about each dimension before proceeding with the judgements again. Do this now by first selecting the node you are interested in and then clicking on the icon. When you are ready to judge the relative importance weights with respect to the new parent node, **click back on the parent node** (i.e., *Core Resources and Attractors*) **to ensure that it is highlighted** and then click on the 'Make Judgment' icon to start. A reminder that this time you will notice that you are now comparing the relative importance of each sub-dimension NOT to the overall goal (level 1), but instead to the parent level, which in this case is the relevant level-2 dimension, *Core Resources and Attractors*.

(j) Repeat the same process above to complete the grid with your new set of pair-wise judgments. Be sure to check the Inconsistency measure before you move to another node. Then repeat this process for each of the other four of the five main dimensions. Again, you should check that, as you complete the pair-wise comparisons for each node in the model, the Model View indicates a green tick to show which nodes have been evaluated and which have not. Proceed to step 7 only when a green tick appears next to all of the level-2 dimensions in the Model View to indicate that all level-3 paired comparisons for each level-2 dimension is now complete.

At the end of step 6, the pair-wise comparisons of the level-2 and level-3 factors of destination competitiveness is complete.
If you wish to assess the competitiveness of the three destinations you previously nominated, please proceed now to step 7 below, otherwise skip directly to step 8 to complete this survey.

7. Next, Assess the Competitive Performance of Your Nominated Destinations With Respect to the Target Market Segment You Have Selected.

(a) Now that you have assessed all of the elements of the model of destination competitiveness in terms of your judgments about their relative importance, the next step is to assess, using the model, the competitive performance of two of your destination's closest competitors (defined above in step 5) with your own or primary destination, and among one another, focusing on the target market segment you have chosen. The process for doing this is somewhat similar to the pair-wise approach we have

used so far. However, this time the set of three pair-wise comparisons per level-3 sub-dimension can all be carried out on the one web page as shown below. The first row compares destinations 1 and 2, the next row compares destinations 1 and 3, and the third row compares destinations 2 and 3. In the example illustrated below, the relative preference of the 3 destinations is to be evaluated with respect to *Physiography & Climate*. Therefore, taking each level-3 sub-dimension of the model one-at-a-time, each of the three destinations is to be compared in turn to every other destination. So click on *Physiography and Climate,* the first of the 7 sub-dimensions under *Core Resources and Attractors,* to select and highlight it (if you can not see the sub-dimensions listed under *Core Resources and Attractors*, click on *Core Resources and Attractors* to make them appear).
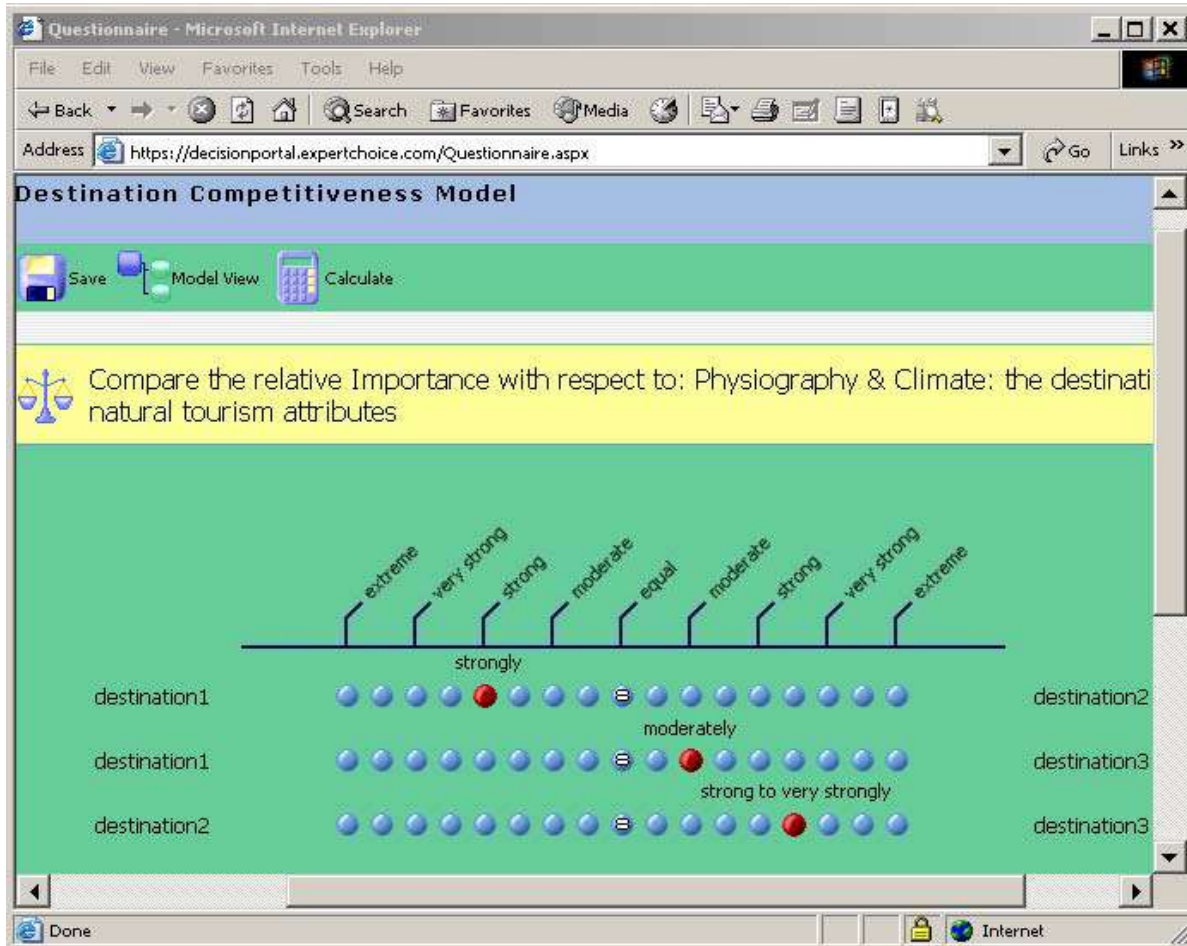
(b) Next click on and your screen should appear as above (but without your judgments entered) and you are now ready to compare the destinations in terms of their respective physiographies and climates. To do this, left-click on the blue button, to turn the button red, in each row to indicate how strongly the destination to the left or to the right of the row is to be preferred or performs, in your view, with respect to *Physiography & Climate*. In the example above, destination1 performs 'strongly' compared to destination2, destination3 performs 'moderately' compared to destination1, and destination3 rates between 'strong' and 'very strong' compared to destination2. Complete these paired-comparisons to show your judgments and then click on the calculate icon. This will produce the performance weights for each dimension and indicate the Inconsistency measure. As above, if necessary, review your judgments to reduce the Inconsistency measure below 0.1. Once you are happy with your judgments, record the destination preference weights in the table you printed under step 6(f) above in the row corresponding to 'Physiography and climate'.

Now click on the Model View icon, select the next sub-dimension in the model (*Culture and History*) and repeat the process. In this way, continue through all level-3 sub-dimensions for each level-2 dimension until they are all shown as having been completed by a green check or tick. Each time you complete the paired comparisons among the destinations for each sub-dimension (level 3), you will

also notice that the relative preference or performance of each destination in terms only of that level-3 factor is shown numerically to the right.

(c) When you have completed the paired destination judgments for each set of sub-dimensions (i.e. level 3), return to the model view and click on the synthesise icon shown as . This combines all of the results across all levels of the model.

(d) By selecting any parent node at any level in the model, the 'Priorities with respect to' window to the right of the screen will show the relative importance weights for all children nodes. The 'Alternatives with respect to' window in the lower right of the screen shows the relative preference or performance of the three destinations. Note that the destination performance weights change for each node because these are the calculated destination performance weights determined for that particular node or dimension. To see how the destinations compare for the level-2 dimensions, highlight the required dimension in the Model View and note the destination weights in the lower right corner of the screen. To see the overall results for your judgments of the competitive performance of the three destinations, you need to select the goal (i.e., level 1) in the Model View. The destinations weights are now your global judgments of the overall competitiveness of each destination. These are calculated by combining all of your judgments about the importance of all factors in the model with your judgments about the performance of each destination in terms of these factors. Again, you may wish to record your results for the destination performance weights as a permanent record of your evaluations using this model in the Destination Competitiveness Results Sheet. The overall destination competitiveness results may be recorded in the bottom row of the table, while the competitiveness results for each of the five level-2 dimensions may be written in the remaining relevant rows of the table.

8. End Your Work on the Model.

(a) Before you finish, if you wish to keep a record of your results and you have not already done so as explained in step 6 (f) above, do so now by printing the Results Sheet which you can access by clicking on this ENTER button below.


(b) If you have completed step 7, all of the nodes in the model should indicate a green tick or check in the adjacent box as shown in the image below. If you skipped step 7, the model should show green ticks in the level-1 and level-2 boxes (i.e., for the goal and the five main competitiveness dimensions) only. In this case there will be no green ticks adjacent to each of the level-3 sub-dimensions since, by skipping step 7 you chose not to assess the competitiveness of the destinations against each of the sub-dimensions. If the green ticks indicate that there are parts of the model that you still need or wish to assess, please return to the relevant node(s) and do so. Then click the 'I'm done' icon shown as to signal that you have completed all judgments in the model.
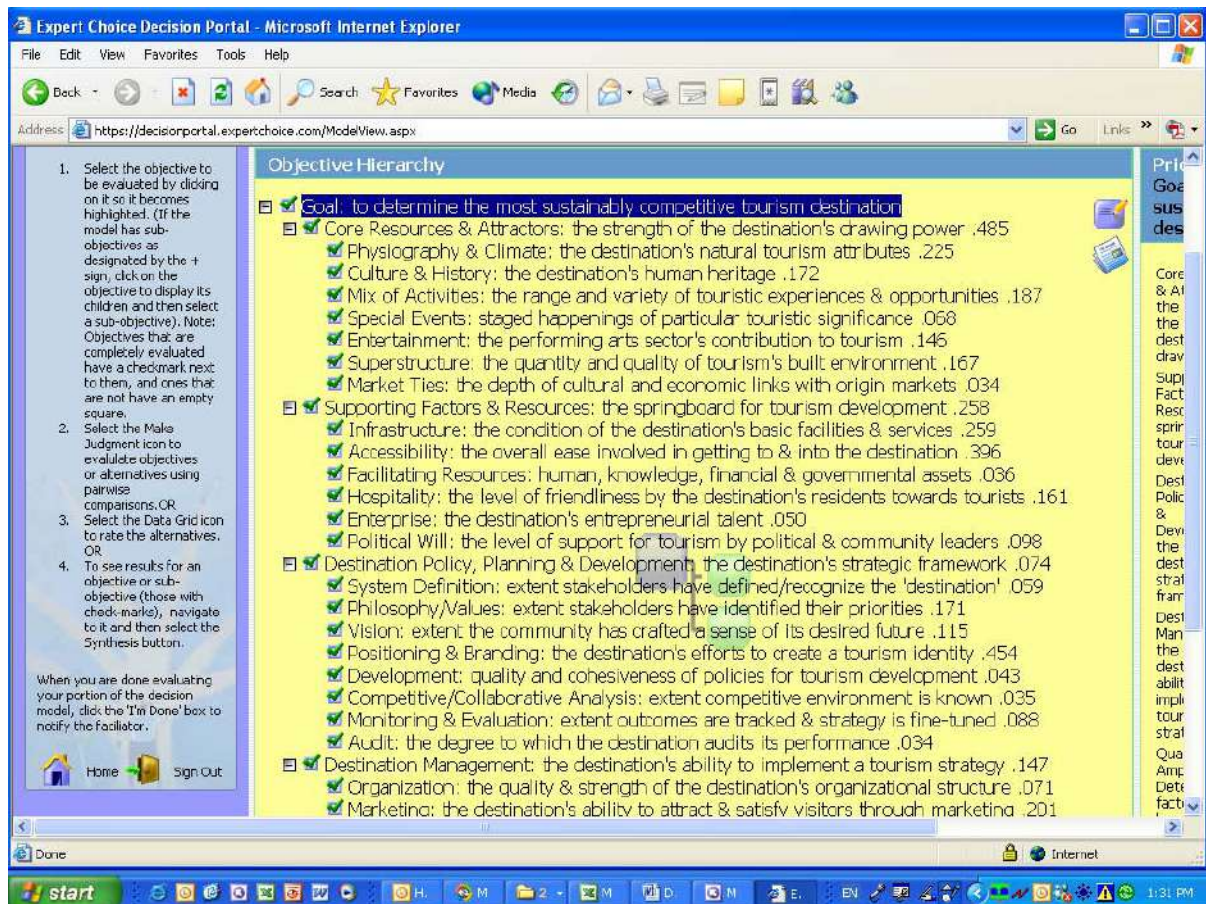
(c) To end your work, click on the sign out icon, in the lower left part of the screen. This will return you to the Login page. From there you can simply close your Web Browser.

(d) You will have received immediately, by completing the Destination Competitiveness Results Sheet, your own results. These results indicate, using the Crouch & Ritchie Destination Competitiveness Model, how the three destinations you have selected to evaluate, compare to one another based on your judgments of the relative importance of each of the competitiveness factors (i.e., dimensions) *in terms of the target market segment* you chose for this exercise. Note that because you made these judgments with respect to that particular target market segment, the importance weights produced are unique to that segment and may very well differ for other target market segments. If you wish to repeat this exercise for a different target market segment, you are free to do so. However, you will need to re-register for the research by filling in the relevant online Participant Registration Form again to be found at:
http://www.business.latrobe.edu.au/secure/staffhp/gichp/ppfiles/EC portal/DCexpert.htm using the global username (DCExpert1) and password (Crouch*1).

(e) When all participants in this research have completed their judgements, the results will be analysed in order to determine the overall judgments regarding the importance of all of the factors of destination competitiveness based upon the collective wisdom and experience of all of the participants in this research study. It will also be possible to examine how these judgments differ in terms of key differences between participants and their DMOs. When this analysis has been completed, you will receive via email an Executive Summary of the research results. It may be several months, however, before these results are available as participants will be undertaking this task over a period of time, and the data will take some time to analyse and report.

Thank you very kindly for your participation.

REFERENCES

Ahmed, Z.U. and F.B. Krohn (1990). 'Reversing the United States' Declining Competitiveness in the Marketing of International Tourism: A Perspective on Future Policy', *Journal of Travel Research*, 29(2): 23-29.

Ananda, J. and G. Herath (2002). 'Assessment of Wilderness Quality Using the Analytic Hierarchy Process,' *Tourism Economics*, 8(2): 189-206.

Armacost, R.L. and J.C. Hosseini (1994). 'Identification of Determinant Attributes Using the Analytic Hierarchy Process', *Journal of the Academy of Marketing Science*, 22(4): 383-392.

Baker, M., C. Hayzelden and S. Sussmann (1996). 'Can Destination Management Systems Provide Competitive Advantage? A Discussion of the Factors Affecting the Survival and Success of Destination Management Systems', *Progress in Tourism and Hospitality Research*, 2: 1-13.

Botha, C., J.L. Crompton and S. Kim (1999). 'Developing a Revised Competitive Position for Sun/Lost City, South Africa', *Journal of Travel Research*, 37(4): 341-352.

Buhalis, D. (2000). 'Marketing the Competitive Destination of the Future,' *Tourism Management*, 21(1): 97-116.

Calantone, R.J. and C.A. di Benedetto (1991). 'Knowledge Acquisition Modeling in Tourism,', *Annals of Tourism Research*, 18: 202-212.

Carmichael, B. (2002). 'Global Competitiveness and Special Events in Cultural Tourism: the Example of the Barnes Exhibit at the Art Gallery of Ontario, Toronto', *The Canadian Geographer*, 46(4): 310-325.

Chacko, H.E. (1998). 'Positioning a Tourism Destination to Gain a Competitive Edge', *Asia Pacific Journal of Tourism Research*, [On-line], http://www.hotel-online.com/Neo/Trends/AsiaPacificJournal/ PositionDestination.html.

Chen, C. (2006). 'Applying the Analytic Hierarchy Process (AHP) Approach to Convention Site Selection,' *Journal of Travel Research*, 45(2): 167-174.

Chen, S.J. and C.L. Hwang (1992). *Fuzzy Multiple Attribute Decision Making*, New York: Springer-Verlag.

Chon, K. and K.J. Mayer (1995). 'Destination Competitiveness Models in Tourism and Their Application to Las Vegas', *Journal of Tourism Systems and Quality Management*, 1(2/3/4): 227-246.

Crouch, G.I. and J.R.B. Ritchie (1994). 'Destination Competitiveness: Exploring Foundations for a Long-Term Research Program', *Proceedings of the Administrative Sciences Association of Canada 1994 Annual Conference*, June 25-28, Halifax, Nova Scotia, 79-88.

Crouch, G.I. and J.R.B. Ritchie (1995). 'Destination Competitiveness and the Role of the Tourism Enterprise', *Proceedings of the Fourth Annual World Business Congress*, July 13-16, Istanbul, Turkey, 43-48.

Crouch, G.I. and J.R.B. Ritchie (1999). 'Tourism, Competitiveness and Societal Prosperity', *Journal of Business Research*, 44(3): 137-152.

Crouch, G.I. and J.R.B. Ritchie (2005). 'Application of the Analytic Hierarchy Process to Tourism Choice and Decision Making: A Review and Illustration Applied to Destination Competitiveness', *Tourism Analysis*, 10(1): 17-25.

Curry, B. and L. Moutinho (1992). 'Environmental Issue in Tourism Management: Computer Modelling for Judgemental Decisions,' *International Journal of Service Industry Management*, 3(1): 57-69.

Deng, J., B. King and T. Bauer (2002). 'Evaluating Natural Attractions for Tourism,' *Annals of Tourism Research*, 29(2): 422-438.

d'Hauteserre, A. (2000). 'Lessons in Managed Destination Competitiveness: The Case of Foxwoods Casino Resort', *Tourism Management*, 21(1): 23-32.

Dwyer, L., P. Forsyth and P. Rao (2000a). 'Price Competitiveness of Tourism Packages to Australia: Beyond the 'Big Mac' Index', *Asia Pacific Journal of Tourism Research*, 5(2): 50-56.

Dwyer, L., P. Forsyth and P. Rao (2000b). 'Sectoral Analysis of Destination Price Competitiveness: An International Comparison', *Tourism Analysis*, 5(1): 1-12.

Dwyer, L., P. Forsyth and P. Rao (2000c). 'The Price Competitiveness of Travel and Tourism: A Comparison of 19 Destinations', *Tourism Management*, 21(1): 9-22.

Dwyer, L., P. Forsyth and P. Rao (2001). 'International Price Competitiveness of Australia's MICE Industry', *International Journal of Tourism Research*, 3(2): 123-139.

Dwyer, L., P. Forsyth and P. Rao (2002). 'Destination Price Competitiveness: Exchange Rate Changes versus Domestic Inflation' *Journal of Travel Research*, 40(Feb): 328-336.

Dwyer, L. and C. Kim (2003). 'Destination Competitiveness: Determinants and Indicators', *Current Issues in Tourism*, 6(5): 369-414.

Dwyer, L., Z. Livaic and R. Mellor (2003). 'Competitiveness of Australia as a Tourist Destination', *Journal of Hospitality and Tourism Management*, 10(1): 60-79.

Dwyer, L., R. Mellor, Z. Livaic, D. Edwards and C. Kim (2004). 'Attributes of Destination Competitiveness: A Factor Analysis,' *Tourism Analysis*, 9(1-2): 91-101.

The Economist (1998). 'Survey: Travel and Tourism', supplement to the January 10.

Enright, M.J. and J. Newton (2004). 'Tourism Destination Competitiveness: A Quantitative Approach', *Tourism Management*, 25(6): 777-788.

Enright, M.J. and J. Newton (2005). 'Determinants of Tourism Destination Competitiveness in Asia Pacific: Comprehensiveness and Universality,' *Journal of Travel Research*, 43(4): 339-350.

Faulkner, B., M. Oppermann and E. Fredline (1999). 'Destination Competitiveness: An Exploratory Examination of South Australia's Core Attractions,' *Journal of Vacation Marketing*, 5(2): 125-39.

Finnie, G.R., G.E. Wittig and D.I. Petkov (1993). 'Prioritizing Software Development Productivity Factors Using the Analytic Hierarchy Process,' *Journal of Systems Software*, 22: 129-139.

Go, F.M. and R. Govers (2000). 'Integrated Quality Management for Tourist Destinations: A European Perspective on Achieving Competitiveness', *Tourism Management*, 21(1): 79-88.

Gray, H.P. (1989). 'Services and Comparative Advantage Theory', in *Services in World Economic Growth*, Herbert Giersch (ed), Institut fur Weltwirtschaft an der Universitat Kiel, pp. 65-103.

Griffiths, W.E., R. Carter Hill and G.G. Judge (1993). *Learning and Practising Econometrics*, John Wiley & Sons, Inc., New York.

Hassan, S.S. (2000). 'Determinants of Market Competitiveness in an Environmentally Sustainable Tourism Industry', *Journal of Travel Research*, 38(3): 239-245.

Heath, E. (2002). 'Towards a Model to Enhance Destination Competitiveness: A Southern African Perspective,' *Journal of Hospitality and Tourism Management*, 10(2): 124-141.

Hudson, S., J.R.B. Ritchie and S. Timur (2004), 'Measuring Destination Competitiveness: An Empirical Study of Canadian Ski Resorts', *Tourism Hospitality Planning and Development*, 1(1): 79-94.

Huybers, T. and J. Bennett (2003). 'Environmental Management and the Competitiveness of Nature-Based Tourism Destinations', *Environmental and Resource Economics*, 24: 213-233.

Hwang, C.L. and M.J. Lin (1987). *Group Decision Making Under Multiple Criteria: Methods and Applications*, New York: Springer-Verlag.

Jamal, T. and D. Getz (1996). 'Does Strategic Planning Pay? Lessons for Destinations from Corporate Planning Experience', *Progress in Tourism and Hospitality Research*, 2: 59-78.

Kim, S., J.L. Crompton and C. Botha (2000). 'Responding to Competition: A Strategy for Sun/Lost City, South Africa', *Tourism Management*, 2 (1): 33-42.

Kim, C.W., K.T. Choi, S. Moore, L. Dwyer, B. Faulkner, R. Mellor and Z. Livaic (2001). *Destination Competitiveness: Development of a Model with Application to Australia and the Republic of Korea*, unpublished report for the Department of Industry, Science and Resources, Australia; the Ministry of Culture and Tourism, Korea; the Korean Tourism Research Institute; the CRC for Sustainable Tourism, Australia; and the Australia-Korea Foundation.

Kim, C. and L. Dwyer (2003). 'Destination Competitiveness and Bilateral Flows between Australia and Korea', *Journal of Tourism Studies*, 14(2): 54-67.

Kozak, M. (2003). 'Measuring Competitive Destination Performance: A Study of Spain and Turkey', *Journal of Travel and Tourism Marketing*, 13(3): 83-110.

Kozak, M. and M. Rimmington (1999). 'Measuring Tourist Destination Competitiveness: Conceptual Considerations and Empirical Findings,' *International Journal of Hospitality Management*, 18(3): 273-284.

Louviere, J.J. (1988). *Analyzing Decision Making: Metric Conjoint Analysis*, Sage University Paper series on Quantitative Applications in the Social Sciences, 07-67, Newbury Park, CA: Sage.

Mazanec, J.A. (1995). 'Competition among European Tourist Cities: A Comparative Analysis with Multidimensional Scaling and Self-Organizing Maps', *Tourism Economics*, 1(3): 283-302.

Mihalic, T. (2000). 'Environmental Management of a Tourist Destination: A Factor of Tourism Competitiveness', *Tourism Management*, 21(1): 65-78.

Mouthino, L., P. Rita and B. Curry (1996). *Expert Systems in Tourism Marketing*, Routledge, London.

Myers, J.H. and M.I. Alpert (1968). 'Determinant Buying Attitudes: Meaning and Measurement', *Journal of Marketing*, 32(October): 13-20.

Papatheodorou, A. (2002). 'Exploring Competitiveness in Mediterranean Resorts', *Tourism Economics*, 8(2): 133-150.

Pearce, D.G. (1997), 'Competitive Destination Analysis in Southeast Asia,' *Journal of Travel Research*, 35(4): 16-25.

Porter, M.E. (1990). *The Competitive Advantage of Nations,* The Free Press, New York.

Ricardo, D. (1817). *On the Principles of Political Economy and Taxation*, John Murray, London, (3rd edition, 1821).

Ritchie, J.R.B. and G.I. Crouch (1993). 'Competitiveness in International Tourism: A Framework for Understanding and Analysis', *Proceedings of the 43rd Congress of the Association Internationale d'Experts Scientifique du Tourisme*, 17-23 October, San Carlos de Bariloche, Argentina, 23-71.

Ritchie, J.R.B. and G.I. Crouch (2000a). 'The Competitive Destination: A Sustainability Perspective', *Tourism Management*, 21(1): 1-7.

Ritchie, J.R.B. and G.I. Crouch (2000b). 'Are Destination Stars Born or Made: Must a Competitive Destination Have Star Genes?', in *Proceedings of the 31st Annual Travel and Tourism Research Association Conference*, Norma P. Nickerson, R. Neil Moisey and Kathleen L. Andereck (eds.), June 11-14, 2000, Burbank, California, 306-315.

Ritchie, J.R.B. and G.I. Crouch (2003). *The Competitive Destination: A Sustainable Tourism Perspective*, CABI Publishing, Wallingford, UK.

Saaty, T.L. (1977). 'A Scaling Method for Priorities in Hierarchical Structures', *Journal of Mathematical Psychology*, 15(June): 234-281.

Saaty, T.L. (1980). *The Analytical Hierarchy Process*, New York: McGraw-Hill.

Saaty, T.L. (1994). 'How to Make a Decision: The Analytic Hierarchy Process', *Interfaces*, 24(6): 19-43.

Saaty, T.L. and L.G. Vargas (1991). *Prediction, Projection and Forecasting: Applications of the Analytic Hierarchy Process in Economics, Finance, Politics, Games and Sports,* Kluwer Academic Publishers, Norwell, Massachusetts.

Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*, Methuen and Co. Ltd, London, (5th edition, 1904).

Soteriou, E.C. and C. Roberts (1998). 'The Strategic Planning Process in National Tourism Organizations', *Journal of Travel Research*, 37(1): 21-29.

Stevens, B.F. (1992). 'Price Value Perceptions of Travelers', *Journal of Travel Research*, 31 (2), 41-48.

Taylor, P. (1995). 'Measuring Changes in the Relative Competitiveness of Package Tour Destinations', *Tourism Economics*, 1(2): 169-182.

Tourism Council Australia (1998). *The Price Competitiveness of Australia as a Tourist Destination*, unpublished report.

Vengesayi, S. (2005). *Determinants and Outcomes of Tourism Destination Competitiveness and Destination Attractiveness*, PhD dissertation, Monash University.

Yoon, K.P. and C. Hwang (1995). *Multiple Attribute Decision Making: An Introduction*. Thousand Oaks, California: Sage Publishers, Inc.

Yu, P.L. (1985). *Multiple Criteria Decision Making: Concepts, Techniques and Extensions*, New York: Plenum.

AUTHOR

GEOFFREY I. CROUCH
Geoffrey Crouch is a Professor of Marketing in the School of Business at La Trobe University. His research interests broadly fall into the area of tourism marketing. Topics of particular interest include, tourist choice modelling, destination marketing and competitiveness, tourism psychology and consumer behaviour, and space tourism. He was also an elected member of the Board of Directors of the Calgary Convention and Visitors Bureau. Professor Crouch serves on a number of Editorial Review Boards of scholarly journals and is Co-Editor-in-Chief of the journal, *Tourism Analysis*. Professor Crouch was the Organising Chair of the Third Symposium on the Consumer Psychology of Tourism, Hospitality and Leisure in 2003. He is an elected Fellow and Treasurer of the International Academy for the Study of Tourism, and is a member of several Australian and international scholarly associations in marketing and tourism management. Email: G.Crouch@latrobe.edu.au

The Sustainable Tourism Cooperative Research Centre (STCRC) is established under the Australian Government's Cooperative Research Centres Program. STCRC is the world's leading scientific institution delivering research to support the sustainability of travel and tourism - one of the world's largest and fastest growing industries.

Research Programs

Tourism is a dynamic industry comprising many sectors from accommodation to hospitality, transportation to retail and many more. STCRC's research program addresses the challenges faced by small and large operators, tourism destinations and natural resource managers.

Areas of Research Expertise: Research teams in five discipline areas - modelling, environmental science, engineering & architecture, information & communication technology and tourism management, focus on three research programs:

Sustainable Resources: Natural and cultural heritage sites serve as a foundation for tourism in Australia. These sites exist in rural and remote Australia and are environmentally sensitive requiring specialist infrastructure, technologies and management.

Sustainable Enterprises: Enterprises that adhere to best practices, innovate, and harness the latest technologies will be more likely to prosper.

Sustainable Destinations: Infrastructural, economic, social and environmental aspects of tourism development are examined simultaneously.

Postgraduate Students: STCRC's Education Program recruits high quality postgraduate students and provides scholarships, capacity building, research training and professional development opportunities.

THE-ICE: Promotes excellence in Australian Tourism and Hospitality Education and facilitates its export to international markets.

Commercialisation

STCRC uses its research network, spin-off companies and partnerships to extend knowledge and deliver innovation to the tourism industry. STCRC endeavours to secure investment in the development of its research into new services, technologies and commercial operations.

CRC
AUSTRALIA

Australia's CRC Program

The Cooperative Research Centres (CRC) Program brings together researchers and research users. The program maximises the benefits of research through an enhanced process of utilisation, commercialisation and technology transfer. It also has a strong education component producing graduates with skills relevant to industry needs.

Sustainable Tourism Cooperative Research Centre

SUSTAINABLE TOURISM
CRC

NATIONAL NETWORK

CAIRNS
NQ Coordinator
Prof Bruce Prideaux
Tel: +61 7 4042 1039
bruce.prideaux@jcu.edu.au

DARWIN
NT Coordinator
Ms Alicia Boyle
Tel: + 61 8 8946 7267
alicia.boyle@cdu.edu.au

BRISBANE
SE QLD Coordinator
Mr Noel Scott
Tel: +61 7 3381 1024
noel.scott@uq.edu.au

PERTH
WA Coordinator
Dr Jeremy Northcote
Tel: + 61 8 6304 2307
j.northcote@ecu.edu.au

LISMORE
NSW Coordinator
Regional Tourism Research
Dr Jeremy Buultjens
Tel: +61 2 6620 3382
jbuultje@scu.edu.au

ADELAIDE
SA Coordinator
Gary Crilley
Tel: +61 8 8302 5163
gary.crilley@unisa.edu.au

MELBOURNE
VIC Coordinator
A/Prof Sue Beeton
Tel: +61 3 9479 3500
s.beeton@latrobe.edu.au

SYDNEY
Sustainable Destinations
Mr Ray Spurr
Tel: +61 2 9385 1600
r.spurr@unsw.edu.au

HOBART
TAS Coordinator
Adjunct Prof Malcolm Wells
Tel: + 61 3 6226 7686
Malcolm.Wells@utas.edu.au

CANBERRA
ACT Coordinator
Dr Trevor Mules
Tel: +61 2 6201 2589
Trevor.Mules@canberra.edu.au

INDUSTRY PARTNERS

UNIVERSITY PARTNERS

SPIN-OFF COMPANIES

SUSTAINABLE TOURISM
CRC

An Australian Government Initiative