

# Development of Evaluation Index for Competitiveness of Island Tourism Destination

Yong K. Suh\*, Hong J. Hyun\*\* and Gwang H. Koh\*\*\*

*The main purpose of the study is to develop evaluation index for competitiveness of island tourism destination. It identifies conceptual framework on competitiveness in detail and develop a new frame to apply the framework to island tourism destination by analyzing the competitiveness of existing tourism destination (industry) and redesign conceptual framework on competitiveness of tourism destination. Then, the study attempt to discover competitiveness factor of island tourism destination that can universally applied, through the Delphi survey. Expected effect of the study can be summarized as follows. First, it is meaningful that the study on tourism destination competitiveness (TDC), which has been conceptually conducted, can be utilized through systematic study. Second, it is significant in that it dealt with 'island TDC' which not much discussion and study had been made. Third, tourism study as applied academics should provide alternatives to existing problem. If concept framework and staged competitiveness evaluation factor of island tourism destination suggested in this study can be universally applied, it will enable many islands actively cope with existing environment issue.*

Field of Research: Tourism Competitiveness, Evaluation Index, Island Tourism

---

\*Prof. Yong K. Suh, Ph.D., Dept. of Tourism Management, Cheju National University, Korea, email: [yong@cheju.ac.kr](mailto:yong@cheju.ac.kr)

\*\*Hong J. Hyun, Dept. of Tourism Management, Cheju National University, Korea, email: [hongjun2@hanmail.net](mailto:hongjun2@hanmail.net)

\*\*\*Gwang H. Koh, Jeju Special Self-Governing Provincial Council, Korea, email: [infobank1127@naver.com](mailto:infobank1127@naver.com)

## **I. Introduction**

### **1. Background**

Common challenge that most tourism destinations face is increased competition between already-dominating destinations and promising destinations. Keeping the ecological status of tourism-affected region intact is another pressing issue. These two factors provide necessity for establishing competitive and sustainable tourism destination (Goeldner & Ritchie, 2003). Consistent development of world economy in 1950s and the end of cold-war in 1989 brought changes in global economy structure, income increase, reduced work time, change in travel pattern and expansion of international destinations, keeping international tourist arrivals growing at 6% annually. UNWTO (United Nations World Tourism Organizations) predicts that the number of international travelers will be increased to 1 billion by 2010 and 1.6 billion by 2020. Furthermore, tourism industry is assumed as the biggest industry in relation to job creation and consumption as a single sector, firming its foothold as main strategic industry in every region and nation.

Competition by nation, region to attract international travelers are intensifying and a wide array of policies and marketing strategies are mapped out accordingly. 'Vision of World Tourist Capital' strategy of Singapore, 'New Commercial World Tourism City' plan of Shanghai, Designation of 'Special Tourism District (Jul, 2003) in Hainan, China and promotion of 'holding G8 Summit and tourism destination for international culture exchange' is shown as good examples(Suh, 2004). Domestically, 'Establishment of Jeju Special Self-Governing Province and Free International City', regional development strategy combining business and resort-tourism (Tourism Leisure City, Economic Free Zone) under the special act of corporate city development is being proceeded. In February 2006, tourism industry was included in the scope of export industry recognized in 'trade law'. Going one step further, another big change in international tourism after the 2<sup>nd</sup> World War is expanded competition in tourism destination as islands with hard access before became(Colin, Michael V. · Baum, Tom, 1995),( Lockhart, Douglas G. · Drakakis-Smith, David, 1997) the new resort and tourism destination. McElroy & Albuquerque 2002. In

general, islands are welcomed as resort tourism destination with unique environment and attractive factors unlike mainland, promoting aggressive tourism development. Hawaii belonging to the U.S., Guam, Bali (Indonesia), Jeju (Republic of Korea), Hainan(China), islands of Indian sea, South Pacific, Mediterranean, Caribbean sea show best examples.

The economy of most islands worldwide, however, is facing with weak domestic market, high logistics cost and environmental issue, making it difficult to introduce manufacturing industry structure. Those islands are highly relying on tourism sector, which is clean service industry. Asia Development Bank (ADB) announced that the average economic growth rate of Cook island at South Pacific Ocean from 1982 to 1994 recorded mere 4.5% comparing with that of mainland tourism destination, mainly due to significantly-reduced growth rate at tourism sector, which is the most important industrial sector of Cook islands. It can be said that the economy of island overall will deal a fatal blow when the growth of tourism industry in the islands is declining or staggering.

In this respect, island tourism turned as a series of distinct social phenomenon and trend, but academic discussion on this matter were minimal both domestically and globally. In business administration field, competitiveness issues were spiritedly discussed since 1980s, but destination competitiveness issues in the tourism field were first introduced in the study of Rithcie and Crouch in 1993. It is not completely defined and the analysis on competitiveness was conducted in corporate, industry and nation-level. With the inception of EU, NAFTA, ASEAN, APEC, etc, block competitiveness is recently recognized as the analysis standard. However, the study on analysis of competitiveness at regional, industrial level was hardly done. Each nation or local government official is making an all-out effort to develop tourism sector and promote competitiveness and they feel the need of objective evaluation on that. Considering the difficulty caused by the absence of objective evaluation standard, setting and developing clear index on local tourism competitiveness is imperative.

## **2. Purpose of the Study**

The main purpose of the study is to develop evaluation index for competitiveness of island tourism destination and put additional point by sector and index. Concrete study objectives to realize this is as follows: First, it identifies conceptual framework on competitiveness in detail and develop a new frame to apply the framework to island tourism destination by analyzing the competitiveness of existing tourism destination (industry) and redesign conceptual framework on competitiveness of tourism destination. Second, it defines conceptual framework of competitiveness of island tourism destination. As shown in the theory of competitive strategy (Competitive strategy, 1980) and national competitiveness evaluation model (competitive advantage of nations, 1990) by Porter, national competitiveness model by Swiss International Management Development (1989), National competitiveness model of International Management Development (1989), Nine factor model by professor Jo at Seoul National University (1990), competitiveness evaluation model applied to national-level is still debated issue, but it is universally quoted by verifying its usefulness. The importance of evaluation on international competitiveness is highly recognized in World Economic Forum or International Management Development. As mentioned in study background, however, talks on competitiveness evaluation of tourism destination is very limited and the competitiveness evaluation of island tourism destination issue has been rarely talked. Third, the study attempt to discover competitiveness factor of island tourism destination that can universally applied. Instead of providing a long list of evaluation factor and variable for tourism destination competitiveness (TDC), the study is to provide conceptual model that can represent the competitiveness of tourism attraction by abstracting core issues.

## **II. Literature Review**

### **2.1. Tourism Destination Competitiveness (TDC)**

Traditionally, the concept of competitiveness has been adapted from economic theory and applied to the general firm or company (Poter, 1990; World Economic Forum, 1995). Competitiveness has been viewed as “producing more and better quality goods and services that are marketed successfully to

consumers” (Newall, 1992, p. 94). It refers to combining both assets and processes where assets are inherited (e.g., natural resources) or created (e.g., infrastructures) and processes transform assets into economic results (Crouch & Ritchie, 1999, p. 140). Competitiveness can also be defined as “the ability to retain the competitive position of an organization by satisfying the expectations of customers and shareholders while constantly eliminating the threats and exploiting the opportunities which arise in the competitive environment” (Feurer & Chaharbaghi, 1994, p. 51).

The debate on destination competitiveness within tourism research has not yet settled on a widely accepted concept of destination competitiveness. Competitiveness in the tourism literature has been considered as a “destination’s ability to create and integrative value-added products that sustain its resources while maintaining market position relative to competitors” (Hassan, 2000). Mihalic (2000) described destination competitiveness from environmental perspectives that can be related to natural and man-made tourism components, as well as social and cultural environments. Also, Pearce (1997) described destination competitiveness as destination evaluation techniques and methods that can systematically analyze and compare the diverse attributes of competing destinations within a planning context. In addition, Ritchie and Crouch (2000) consider destination competitiveness to have tremendous ramifications for the tourism industry and it is therefore of considerable interest to practitioners and policy makers.

The concepts of comparative and competitive advantage provide a theoretically sound basis for the development of a model of destination competitiveness (Ritchie and Crouch, 2003). In recently years, a number of tourism research scholars have begun to respond to this need for models of competitiveness tailored to the peculiarities of tourism destinations. For instance, Poon (1993, p. 24) suggests that destinations will need to follow four key principles if they are to be competitive; namely, (1) put the environment, (2) make tourism a lead sector, (3) strengthen the distribution channels in the market place, and (4) build a dynamic private sector.

## **2.2. Previous studies on evaluation for tourism destination competitiveness (TDC)**

TDC is becoming an area of growing interest among tourism researchers (Crouch & Ritchie, 1999; Chon & Mayer, 1995; d'Hautesserre, 2000; Hassan, 2000). A number of studies have introduced and applied the concept of competitiveness in the area of tourism destinations (Ahmed & Krohn, 1990; Buhalis, 2000; Crouch & Ritchie, 1999; d'Hautesserre, 2000; Dwyer & Kim, 2003; Enright & Newton, 2005; Go & Govers, 2000; Hassan, 2000; Kozak & Rimmington, 1999; Maznec, Wober, & Zins, 2007; Mihalic, 2000; Murphy, Pritchard, & Smoth, 2000; Pearce, 1997; Ritchie & Crouch, 1993). The major interest of the prior studies has been to investigate how destination competitiveness can be sustained as well as enhanced while maintaining a market position among other destination competitors.

This increased interest in understanding destination competitiveness has spurred a number of destination-specific studies addressing the competitive position of the Sun/lost City, South Africa (Botha, Crompton, and Kim, 1999), Australia (Dwyer, Livaic, and Mellor, 2003), European cities (Mazanec, 1995), casino resort (d'Hautesserre, 2000), and South Korea (Kim et al., 2001). Other destination competitiveness research has addressed a variety of other issues including destination positioning (Chacko, 1998), destination management systems (Baker, Hayzelden, and Sussmann, 1996), quality management (Go and Govers, 2000), destination marketing (Buhalis, 2000), and price competitiveness (Dwyer, Forsyth, and Rao, 2000).

The most widely published research on destination competitiveness concerns the conceptual model of Crouch and Ritchie (1999), and Ritchie and Crouch (1993, 2000). These research studies suggest that interest in understanding destination competitiveness is high, most of this body of research has not attempted to develop any general models or theories of destination competitiveness. However, there have been two such efforts to do so. Dwyer and Kim (2003) and Dwyer, Mellor, Livaic, Edwards, and Kim (2004) have contributed to model development. Their model which is based substantially on the work and model of Crouch and Ritchie (1999), posits that destination competitiveness is a function of endowed resources (comprising natural and

heritage resources, and supporting factors), destination management (comprising government and industry), situational conditions, and demand.

Heath (2003) also adapted the work of Crouch and Ritchie (1999), to tailor a model from a southern African perspective. His model comprises the function that provide that provide an essential base for competitiveness; the cement, which binds and links the respective facets of competitiveness; the building blocks, that are essential to make tourism happen; and the roof (the key success drivers), which comprises the people part of destination competitiveness. According to the well-known TDC researchers Ritchie and Crouch (2000), a destination's competitiveness is a country's ability to create added value and thus increase the national wealth by managing assets and process attractiveness, aggressiveness and proximity, and there by integrating these relationships within an economic and social model that takes into account a destination's natural capital and its preservation for future generations (Gomezelj & Mihalic, 2008; Ritchie & Crouch, 2003). In 2003 they presented the most recently improved version of their competitiveness model: a conceptual model of destination competitiveness. It has five key determinants, namely destination policy, planning and development, destination management, core sources and attractors, and supporting factors and resources. It also points out the importance of the environment surrounding the destination: the global macro environment and the competitive micro environment.

Some of the variables identified by Ritchie and Crouch have been included in the so-called integrated model by researchers in Korea and Australia (Dwyer et al., 2003). The model also seeks to capture the most important elements of competitiveness mentioned in the general literature and the main destination competitiveness elements proposed by tourism researchers. Its main, so-called competitiveness determinants are inherited resources, created resources, supporting factors and resources, destination management, situational conditions and demand conditions.

Table 1. Precious studies on determinants of TDC

Authors	Determinants of TDC
Gomezelj & Mihalic (2008)	Inherited resources, Created resources, Supporting factors, Destination management, Situational conditions, Demand conditions
Mazanec et al. (2007)	Heritage and culture, Communication facilities, Social Competitiveness, Education
Enright & Newton (2005)	Attractors, Business factors
Dwyer & Kim (2003)	Resources, Destination management, Situational conditions, Demand conditions, Destination competitiveness, Social-economic prospect
Dwyer et al. (2000)	Travel cost, Ground cost
WTOBC (2000)	Tourism product development and promotion, Tourism infrastructure and human resources, Marketing and promotion, Social-economic and geographical-political factors
Murphy et al. (2000)	Natural environment, Service infrastructure, Quality, Value
Go & Govers (2000)	Leadership, Policy and strategy, Resources, Process, Customer satisfaction, Business results
Kozak & Rimmington (1999)	Direct factors: Number of visitors, Tourism demand Indirect factors: Local resident's hospitality, Manager attitude, Safety, Transportation service, Natural environment
Crouch & Ritchie (1999)	Industry competitor, Supplier, Buyer, Historical-cultural resources
Ritchie & Crouch (1993)	Merit, Management, Organization, Information, Efficiency

### III. Method

The purpose of this study is to develop evaluation index for destination competitiveness of island tourism and apply to the selected case area for verification Evaluation index is the criteria for evaluation which provide overall meaning that product resulted from action to get background, aim and purpose of evaluation must be in that form (Cha, 1999). To summarize study designing process for its successful accomplishment as follows:

First, it attempts to set definition framework on the study through literature review. To derive competitive factor suitable to island tourism destination, therefore, this study specifically derive competitiveness evaluation index of



possible island tourism destination by combining quality factor of island tourism identified by literature review.

Second, it seeks to develop finalized index by abstracting index through 1<sup>st</sup> and 2<sup>nd</sup> Delphi survey conducted by related expert group. The purpose of in-depth interview for experts is to complement the limitation of related literatures and secondary data analysis. Interviewee of in-dept interview was a professor who has previously conducted related research and a researcher from related institution.

Table 2. Summary of the research methodology

Stage	Content	Remark
Stage 1	Derive competitiveness evaluation index of island tourism destination by factor through literature review	
Stage 2	Conduct 1 <sup>st</sup> study (using Modified Delphi Technique) on experts	
Stage 3	Conduct 2 <sup>nd</sup> study on experts by addressing problems identified from 1 <sup>st</sup> study.	
Stage 4	Finalize variables of competitiveness evaluation index for island tourism destination	

## IV. Results

### 4.1. Derivation of competitiveness of island tourism destination

This study is to select competitiveness comparison index of island tourism destination based on tourism economy that is appropriately modified economic circumstance, quality of life, civil awareness presented to the comparison of world city competitiveness by SERI (Samsung Economic Research Institute, 1997), standard of the quality of local resident's life, island tourism destination comparison index based on 2<sup>nd</sup> data on awareness of residents on tourism, degree of satisfaction of tourists, businessman, investor, local residents. Therefore, qualitative and quantitative measurement of TDC can be done. Quantitative performance of tourist destination can be seen as tourist arrivals

and tourism income. Qualitative performance can be seen as “best liked or most disliked” on various quality of item of visiting (Kozak & Rimminton, 1999).

To summarize factors needed for each island TDC index, quality of vacation and TDC is partially determined by quality of delivering service (Fagence M, 1996. Planning issues in Pacific tourism. In tourism in the Pacific: Issues and cases, ed. C.M. Hall and S.J. Page. London: International Thomson Business Press). This study also shows that competitiveness evaluation index by interest groups will be different, island factor should be taken into consideration, and the development of tourism destination to gain tourist experience (Pritchard & Havitz, 2006), cost (Dwyer, Forsyth & Rao, 2000), competitive edge should be economically, ecologically, socially and politically sustainable (Crouch & Ritchie, 1999). Sustainability (Choi & Sirakaya, Sustainability indicators for managing community tourism, 2005, sustainable tourism development index of WTO, 2004) will be the important competitiveness index.

Also, most tourists use standardized checklist such as individual safety, money value and the image of destination in selecting their tourism destinations. Therefore, lack of security of tourists regardless of personal and public sector will cause tourism industry in the region vulnerable. If those information are exposed to public media such as TV or newspaper, the region will be labeled as the crime-prone, notorious place, putting already-declined tourism industry into unrecoverable status. (Prideaux, 1996; Pizam & Mansfield, 1996). Therefore, index for safety evaluation of tourism destination can be selected as health factor (crime, terror, disease), political uncertainty and war, accident and natural disaster (Seo Yong Keun, Ko Kwang Hee, Lee Jung Chung, 2006). Therefore, potential island TDC index combining literature review can be derived as follows:

Table 3. Potential island TDC index

Evaluation field	Evaluation standard		Number of index	
General qualification of island tourism destination	Basic factor	Economic level	4	
		Business environment	8	
		Infrastructure	6	
		Superstructure	7	
	Core factor	Globalization level	12	
		Travel environment	10	
Investment environment		16		
Sustainability	Basic(supporting) factor	Political aspect	3	
		Technological aspect	3	
	Core factor	Economic aspect	4	
		Social aspect	4	
		Cultural aspect	3	
		Ecological aspect	5	
Administrative official, politician	Knowledge on tourism industry		3	
	Insightfulness		3	
	Management competence		3	
Tourist	Core factor	Natural attraction	7	
		Cultural attraction	12	
		Special attraction	15	
	Supporting factor	Tourism promotion factor		9
		Tourist safety		7
		Quality of physical environment		11
		Cost	Transportation cost	6
			Accommodation cost	4
		Quality of service	Assurance	4
			Reliability	4
			Responsiveness	4
			Sympathy	4
			Type	4

		Hospitality of local residents	4
Local resident	Economic satisfaction		4
	Environmental satisfaction		4
	Socio-cultural satisfaction		6
Total			203

The first Delphi research was conducted in 20 July, 2007 and 60 questionnaires were used for survey. 30 questionnaires were sent to experts in Jeju Special Self-Governing Province and 30 experts from mainland of Korea. 42 questionnaires were collected in 20 August 2007 and 36 were accepted for analysis. 1<sup>st</sup> expert survey form included 206 items, which comprising 203 island TDC and 3 general references, etc. The competitiveness index is comprised of 85 general references of island tourism destination and sustainability-related index of island tourism destination, which quantitative evaluation is possible. 118 Interest group-related index is non-quantitative evaluation index. These can be classified as follows: 25 basic factor (economic standard, business environment, infrastructure and tourism facilities) and 38 core factor (globalization standard, travel environment, investment environment) of island tourism destination, 6 basic factor (Political, technological aspect) and 16 core factor (economic, social, cultural, ecological aspect) of the sustainability of island tourism destination. Of the competitiveness index of island tourism destination by interest group, which can only be qualitatively evaluated, is comprised of 9 index (Index on knowledge, insightfulness, management competence on tourism industry by administrative official or politician), 61 basic factor for tourists (tourism promotion, safety, physical environment, cost, service quality, hospitality of local residents), core 34 index (natural, cultural and special attraction) and 14 satisfaction-related index (economic, environmental, socio-cultural satisfaction level of local residents).

The 2<sup>nd</sup> expert group survey was conducted after completing questionnaire comprising 170 index. 33 index which scored under 3.3 point out of 5 point were not accepted. Fifty questionnaires were sent to the experts in Jeju Special Self-Governing Province and other region in 27 Sep, 2007 and the 29 sample were collected by 10 October, showing

58% collection rate. Except for 4 questionnaires which was considered as ambiguous, 25 were used for analysis. The survey result showed that 'number of internationally-recognized tourism company' (Index of globalization standard), 'effectiveness of culture district management fund and resource' (Index of cultural aspect), 'organizing ability' (Managing ability factor of administrative official and politician), 'theme park' (Special attraction of core factor focused on tourists), 'a variety of convention', 'casino' index was not included since they scored 3.5 point below. The reason that excluded index scored 3.5 point in the 1<sup>st</sup> and 2<sup>nd</sup> research is to set clear and objective standard in selecting the index. Even though index included in experts survey is based on the previous study, the importance and the objectivity is a little different. Therefore, 164 index out of 203 index were selected as island tourism destination index through the 1<sup>st</sup> and 2<sup>nd</sup> expert survey.

## **V. Implications**

Expected effect of this study can be summarized as follows:

First, it is meaningful that the study on tourism destination competitiveness (TDC), which has been conceptually conducted, can be utilized through systematic study. By differentiating previous research that only provided conceptual model and lacked in practical use, this study fully meet the aim of tourism study as practical academics. Second, it is significant in that it dealt with 'island TDC' which not much discussion and study had been made. In light of complex aspect of tourism, practical application of tourism competitiveness in promising tourism destination is expected to contribute to the theoretical development of tourism management strategy, which in its infant in the tourism study. Third, tourism study as applied academics should provide alternatives to existing problem. If concept framework and staged competitiveness evaluation factor of island tourism destination suggested in this study can be universally applied, it will enable many islands actively cope with existing environment issue and set up, provide political aim and alternatives for the development of tourism.

## References

- Ahmed, Z. U., Krohn, F. B. (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.
- Baker, M., Hayzelden, C., & Sussmann, S. (1996). Can destination management systems provide competitive advantage? A discussion of the factors affecting survival and success of destination management systems. *Progress in Tourism and Hospitality Research*, 2, 1-13.
- Botha, C., Crompton, J. L., Kim, S.-S. (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.
- Chacko, H. E. (1998). Positioning tourism destination to gains a competitive edge. *Asia Pacific Journal of Tourism Research*, 1(2), 69-75.
- Colin, Michael V. · Baum, Tom(1995) *Island Tourism(Management Principles and Practice)*, John Wiley & Sons Ltd, England, 6.
- Chon, K.-S., & Mayer, K. J. (1995). Destination competitiveness models in tourism and their application to Las Vegas. *Journal of Tourism Systems and Quality Management*, 1(2-4), 227-246.
- Crouch, G. I., & Ritchie, J. R. B. (1999). Tourism, competitiveness, and societal prosperity. *Journal of Business Research*, 44(3), 137-152.
- Crouch, G. I., & Ritchie, J. R. B. (2003). *The competitive destination: A sustainable tourism perspective*. Wallingford, Oxon, UK: CABI Publishers.

D'Hautesserre, A.-M. (2000). Lessons in managed destination competitiveness: the case of Foxwoods casino resort. *Tourism Management*, 21(1), 23-32.

Dwyer, L., Forsyth, P., & Rao, P. (2000). Price competitiveness of tourism package to Australia: Beyond the big magic index. *Asia Pacific Journal of Tourism Research*, 5(2), 50-56.

Dwyer, L., Livaic, Z., & Mellor, R. (2003). Competitiveness of Australia as a tourist destination. *Journal of Hospitality and Tourism Management*, 10(1), 60-78.

Dwyer, L., Mellor, R., Livaic, Z., Edwards, D., & Kim, C. (2004). Attributes of destination competitiveness: A factor analysis. *Tourism Analysis*, 9(1-2), 91-101.

Dwyer, L., & Kim, C. (2003). Destination competitiveness: Determinants and indicators. *Current Issues in Tourism*, 6(5), 369-414.

Enrihgt, M. J., & Newton, J. (2005). Determinants of tourism destination competitiveness in Asia Pacific: Competitiveness and universality. *Journal of Travel Research*, 43(4), 339-350.

Goeldner, Charles R. & Ritchie, J. R. Brent, (2003), *Tourism, Tourism: Principles, Practices, Philosophies*, John Wuley & Sons, 412.

Go, F. M., & Govers, R. (2000). Integrated quality management for tourist destinations: A European perspective on achieving Competitiveness. *Tourism Management*, 21(1), 79-88.

Gomezelj, D. O., & Mihalic, T. (2008). Destination competitiveness: Applying different models, the case of Slovenia. *Tourism Management*, 29(2), 294-307.

Hassan, S. S. (2000). Determinants of market competitiveness in an environmentally sustainable tourism industry. *Journal of Travel Research*, 38(3), 239-245.

Heath, E., (2003). Towards a model to enhance destination competitiveness: A southern African perspective. In proceeding of the CAUTHE 2003 Conference, Coffs Harbour, Australia, February 5-8, 2003.

Kim, C. W., Choi, K. T., Moore, S., Dwyer, L., Faulkner, B., Mellor. R., &

Livaic, Z. (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 Australia-Korea Foundation.

Kozak, M., & Rimmington, M. (1999). Measuring tourist destination competitiveness: conceptual considerations and empirical findings. *International Journal of Hospitality Management*, 18(3), 273-283.

Lockhart, Douglas G. · Drakakis-Smith, David(1997) *Island Tourism(trends and prospects)*, A Cassell Imprint, NY, USA. 3-21.

Maznec, J. A. (1995). Competition among European tourist cities: A Competitive analysis with multidimensional scaling and self-organizing maps. *Tourism Economics*, 1(3), 283-302.

Maznec, J. A., Wober, K., & Zins, A. H. (2007). Tourism destination competitiveness: From definition to explanation? *Journal of Travel Research*, 46(August), 86-95.

Mihalic, T. (2000). Environmental management of a tourist destination A factor of tourism competitiveness. *Tourism Management*, 21(1), 65-78.



Murphy, P., Pritchard, M. P., & Smoth, B. (2000) The destination product and its impact on traveller perceptions. *Tourism Management*, 21(1), 43-52.

Newall, J. E. (1992). The challenge of competitiveness. *Business Quarterly*, 56, 94-100.

Pearce, D. (1997). Competitive destination analysis in Southeast Asia. *Journal of Travel Research*, 35(4), 16-24.

Poon, A. (1993). *Tourism, technology and competitive strategies*. Wallingford, Oxon, UK: CABI Publishers.

Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: The Free Press.

Ritchie, J. R. B., & Crouch, G. I. (1993). Competitiveness in international tourism: A framework for understanding and analysis. *Proceeding of the 43rd Congress of the Association International d'Experts Scientifique du Tourism*, 17-23 October, San Carlos de Bariloche, Argentina, 23-71.

Ritchie, J. R. B., & Crouch, G. I. (2000). The competitive destination: A sustainability perspective. *Tourism Management*, 21(1), 1-7.

Ritchie, J. R. B., & Crouch, G. I. (2003). The competitive destination: A sustainable tourism perspective.

Suh, Y. K. (2004). A report on Singapore case study – Tourism organization and attractions, Jeju Special Self-Governing Province.

World Economic Forum. (1995). *The world competitiveness report 1995*. Geneve: International Institute for Management Development.

[www.oecd.org](http://www.oecd.org)

[www.world-tourism.org](http://www.world-tourism.org)

## Appendix – (Delphi Survey)

- Competitiveness index of island tourism destination (basic, core factor, quantitative index)

Evaluation Field	Evaluation standard		Competitiveness index of island tourism destination	Eligibility of index				
				Very Bad	Bad	Average	Good	Very Good
Requirement of island tourism destination	Basic factor	Economic standard	Tourism GDP	①	②	③	④	⑤
			Tourism GDP/Total GDP	①	②	③	④	⑤
			Tourism budget portion in total budget	①	②	③	④	⑤
			Tourism industry ratio	①	②	③	④	⑤
		Management environment	Interest rate	①	②	③	④	⑤
			Producer price rate	①	②	③	④	⑤
			Producer price index	①	②	③	④	⑤
			Time-based wage					
			Highly-skilled personnel ratio					
			Labor productivity					
			Unemployment rate					
		Investment environment	Economically-active population					
			Investment in tourism capital					
			Investment ratio in tourism sector					
			Investment productivity of tourism capital					
			Investment efficiency of tourism capital					
		Infrastructure	Annual growth rate of actual investment					
			Airport					
			Port					
			Road					
		Information						

General requirement of island tourism destination	Core factor	Superstructure	?						
			Hotels						
			Bed & Breakfast facilities						
			Restaurants						
			Visitor centers						
			Car rental locations						
			Convention centers						
			Interpretation centers						
	Globalization standard	Core factor	Globalization standard	Number of international hotel chains					
				Number of world-class tourism companies					
				Availability of currency exchange					
				Number of websites in foreign language					
				Airport usage rate					
Passenger flow of International flights ratio									
Number of International conventions held									
Number of interpretation facilities									
Number of operating airlines									
Diversity of visit purpose									
Number of references by press									
Travel environment	Core factor	Travel environment	Number of peoples using airport						
			Number of people using port						
			Number of registered charter buses						

General requirement of island tourism destination	Core factor	Travel environment	Number of registered rental cars					
			Number of accommodations					
			Number of rooms					
			Number of luxury accommodations					
			Number of rooms of luxury accommodations					
			Number of travel agencies					
			Number of tourism companies					
			Number of airplane operation					
			Number of ship operation					
		Price and tax	Average fee of hotel (5-star hotel)					
			Average arrival rate fee (airplane)					
			Rental car fee (mid-size)					
			Airport fee					
			Beverage fee (Tourist hotel)					
			Accommodation fee (Tourist hotel)					
Acquisition tax								

- Competitiveness index of island tourism destination by interest groups (non-quantitative index)

Evaluation Field	Evaluation standard		Competitiveness index of island tourism destination	Eligibility of index				
				Very Bad	Bad	Average	Good	Very Good
Administrative official and politician	Knowledge		Understanding on products and markets					
			Understanding on tourism-related process and technology					
			Understanding on external and internal environment trends					
	Insightfulness		Knowing how destination activities fit with market requirements and opportunities					
			Recognizing opportunities in the fiercely-competing environment					
			Understanding the key strategic strength of the business					
	Management competence		Planning ability					
			Organizing ability					
			Controlling ability					
	Tourists	Island attraction factor	Natural attraction of island	Island environment				
Beauty of island landscape								
Beach and sea of the island								

			Unique flora and fauna of island					
			Open-air space (park, etc)					
			Unique geographic terrain of island					
		Cultural attraction of island	Unique architectural site of island					
			Unique cultural site of island					
			Unique historical site of island					
			Unique tradition and custom of island					
			Artwork of island					
			Handicraft of island					
			Interesting economic activities of island (ex: Haenyo or woman diver in Jeju island)					
			Local language of island					
			Unique food of island					
			Unique apparel of island					
			Unique leisure activities of island					
Tourists	Island attraction factor	Leisure sports activities	Beautiful port					
			Fishing district					
			Yacht marina					
			Sea bathing					

			Big waves					
			Scuba diving					
			Snorkeling					
			Photo-taking of seabed					
			Deep sea fishing					

●Yorghos Apostologpulos and Dennis J. Gayle (2002), Island tourism and sustainable development, Praeger,

94.

Tourists	Supporting factor	Tourism-inducing factor (Richie and Crouch, 2003, 110~)	Museums					
			Zoos					
			Unique office buildings/towers					
			Sports stadium					
			Homes of famous people					
			Space centers					
			Unique/well-known residential districts					
			Churches, cathedrals and temples					
			Historic landmarks					
		Unique industrial sites						
		Tourist Safety(Seo Yong Gon, Ko Hwang Hee, 2006)	Crime(theft, violence)					
			Terrorism					
			Communicable disease, SARS, etc					
			Political instability, demonstration					
			Threat of war					
			Accidents					
		Quality of environment (Inskeep,	Natural disaster					
			Air quality					
			Water quality and supply					
			Noise level					

		1991, 61, 344-347, 353)	Attractive seascape					
			Beautiful beach					
			Mild climate					
			Day-long sunlight					
			Cleanliness of public place					
			Landscaping					
			Building design and maintenance					
			Signs					
Tourists	Supporting factor	Quality of environment (Inskeep, 1991, 61, 344-347, 353)	Functional land use					
			Functional transportation patterns					
			Congestion levels					
			Open space, park and conservation areas					
			Scenic views					
			Environmental diseases					



Evaluation Field	Evaluation standard		Competitiveness index of island tourism destination	Eligibility of index				
				Very Bad	Bad	Average	Good	Very Good
Tourists	Cost (Dwyer, Forsyth & Rao, 2000)	Transportation cost	Flight fee to island					
			Ferry fee to island					
			Rental car fair					
			Taxi fair					
			Bus fair					
		Stay cost	Food price					
			Accommodation fee					
			Shopping fee					
			Entertainment fee					
		Service quality (Fagence M, 1996)	Assurance (Certainty)	Reliability of tour companies staff to tourists				
	Assurance of tour companies staff to tourists when selling							
	Kindness of tour companies staff							
	Enough knowledge that can deal with tourist inquiry							
	Reliability		Fulfillment of promise					
			Attitude of service institution when problem arises					
			Provide service on time					
			Reliability of tourists to the staff of tour company					
	Responsiveness		Notice on exact service time					
			Availability of quick service					

			Willingness of helping tourists					
			Quick response on request of tourists in busy time					
Tourists	Service quality (Fagence M, 1996)	Sympathy	Interest of tour companies to individual tourists					
			Personal interest of staff to tourists					
			Consideration of service company for the benefit of tourists					
			Understanding on request of tourists					
	Type	Physical appearance of staffs in tour company						
		Visual attractiveness of service brochures of tour company						
		Visual atmosphere of tour company facilities						
		Quality of facilities						
	Hospitality of local residents Evaluation ***	Order	Order of residents of island tourism destination					
		Cleanliness	Cleanliness of residents of island tourism destination					
		Etiquette	Etiquette of residents of island tourism destination					
		Kindness	Kindness of residents of island tourism destination					
Evaluation Field	Evaluation standard	Competitiveness evaluation index of island tourism destination	Eligibility of index					
			Very Bad	Bad	Average	Good	Very Good	
Local residents	Economic satisfaction	Job creation						
		Investment inducement						

		Quality of life improvement through tourism					
		Economic benefit to local residents and small business					
	Environmental satisfaction	Tourism cause traffic congestion, noise and pollution					
		Construction of hotels and other facilities harm natural environment					
		Tourism cause annoying congestion in beach, park, other tourism attractions					
		Tourism provide more parks and entertainments to local residents					
	Socio-cultural satisfaction	Negative effect of purchase behavior by tourists					
		Change in traditional culture					
		Pain of local residents caused by tourism					
		Facilitation of various cultural activities through tourism					
		Tourism facilitate more cultural exchange between local residents and tourists					
		Tourism provide positive cultural identity to local community					
	Entrepreneur	Tourism business-related	International access				

	factor	Banking and financial system					
		International transportation facilities					
		Communication facilities					
		Free port status					
		Access to information					
		Geographic location					
		Political stability					
		High quality accommodation					
		Infrastructure					
Investor	Tourism investment-related factor(No Seong Tae, 1996, change in investment environment and long-term growth forecast, Seogang economic newsletter)	Wage					
		Interest rate					
		Land price					
		Logistics cost					
		Regulation					
		Tax					
		Government-business relation					
		Market opening					
		Competition system					
		Growth possibility					