

**PEI-TI CHANG****Graduate Institute of Architecture and Sustainable Planning, National Ilan University, Taiwan, R.O.C****WEI-LUN LO****Graduate Institute of Architecture and Sustainable Planning, National Ilan University, Taiwan, R.O.C****THE INVESTIGATION OF TOURIST PREFERENCE****Abstract:**

Tourism destination competitiveness is becoming an area of growing interest amongst tourism researchers (Crouch & Ritchie, 1999). The potential for any country's tourism industry to develop will depend substantially on its ability to maintain competitive advantage in its delivery of goods and services to visitors (Dwyer, Forsyth, & Rao, 2000). The success of tourism destinations thus depends on their regional tourist competitiveness in terms of the attractiveness characteristics that make up the tourist strength of a certain area (Cracolicia & Nijkampb, 2009).

According to World Tourism Organization (WTO) and World Travel & Tourism Council (WTTC), it was predicted that the revenue of global tourism industry was about 10.4% of global GDP. Moreover, WTO estimated that the global tourism people would increase to more than 16 hundred million, and the revenue of global tourism industry would be 2 thousand billion US dollars in 2020. In other words, tourism industry would generate a great deal of profit.

Tourism destination competitiveness has been studied for more than 20 years. In order to evaluate tourism destination competitiveness, establishing evaluation model and choosing evaluation method are two critical aspects (Zhang et al., 2008).

In this study, ten factors of destination attractiveness (Cracolicia and Nijkampb, 2009) were adopted to establish the model for evaluating tourist preference. These destination attractiveness related factors include reception and sympathy of local residents, artistic and cultural cities, landscape/environment and nature, hotels and other accommodation, typical foods, cultural events, level of prices/living costs, quality and variety of products in the shops, information and tourist services as well as tourist safety. In addition, Support Vector Machine (SVM) was employed as the methodology to investigate tourist preference. SVM is a powerful classifier. The related data were collected from tourists of two groups of tourists with different age. One group is of tourists below age of 50, and the other group is of tourists above age of 51. Through SVM analysis, the prediction of tourist preference of different age groups could be obtained. The results of the study could be used to offer suggestions for developing tourism industry.

**Keywords:**

Tourism destination competitiveness, Tourist preference, Support Vector Machine, Attractiveness characteristics, Classifier.