

AN EMPIRICAL STUDY OF THE SEGMENTATION OF US MEETING PLANNERS USING A FACTOR-CLUSTER ANALYSIS

Jae-Kyoon Jeon

Professor, Dong-Eui University, Korea

Introduction

South Korea has emerged as an international tourism destination. In particular, 1994 marked a milestone for the Korean tourism industry. To aggressively promote its tourism industry, Korea designated 1994 as "Visit Korea Year 1994" in order to once again enjoy the remarkable growth in its travel industry that it had during the summer Olympics of 1988. One major goal of "Visit Korea Year 1994" was to position Korea as an international meeting destination. In fact, the hosting of conventions and meetings has recently emerged as a major business in Korea's tourism industry with more than 200 international conventions and exhibitions scheduled annually (Kim, 1992). South Korea's expanding economic relations with foreign countries and the continuing nationwide emphasis on its inbound tourism industry have played a vital role in advancing Korea's meetings and conventions industry. In 1988, South Korea was ranked as the fourth largest convention hosting country in Asia (Hunt, 1991). In the long run, South Korea hopes to be one of the leading convention and meeting destinations in the world. Despite the importance of the meetings market segment in South Korea, little research has been conducted into what destination selection criteria are most important to

meeting planners and how these criteria might be used to define market segments for South Korea.

Market segmentation refers to the process of dividing a market into distinct groups of consumers with similar needs and wants. It allows marketing resources to be more optimally allocated to a specific target market (Lewis, Chambers, & Chacko, 1995). Beane and Ennis (1987) indicated that market segmentation is done for two reasons: to develop new product opportunities that may be receptive to product repositioning, and to improve advertising strategies from getting a better understanding of consumers. It might be argued that we are better able to tailor our marketing mix based on the characteristics of the target markets.

The purpose of this study was to segment association meeting planners from the United States based on international destination selection factors, using a factor-cluster market segmentation approach. The studies of this factor-cluster analysis in segmentation research can be found in tourism area (e.g., Roehl & Fesenmaier, 1992; Loker & Perdue, 1992; Jurowski, Uysal, & Noe, 1993; Cha, McCleary, & Uysal, 1995). Meeting planners were chosen as the focus of the study because they are responsible for the planning, organizing, and implementing meetings and conventions (Montgomery & Strick, 1995). In particular, they are deeply involved in the site selection process (Crocker, 1990). It is hoped that this study will provide meetings/conventions marketers in South Korea with some insights about U.S. association meeting planners, thereby helping them plan the appropriate marketing strategies targeted at this market.

Review of Literature

Conventions and meetings have been attracting increasing attention recently. However, this recognition of the importance of the meetings sector developed slowly. The earliest work identified by this study, Fortin and Ritchie (1976) investigated how associations select their meetings and convention sites. The researchers sampled all associations that have held their

convention in Canada over a five-year period. The study found the relative importance of the following ten key variables that influence association meeting planners' site selection decisions: hotel service level, air accessibility, hotel room availability, conference room availability, price level, hospitality in the city, restaurant service and quality, personal safety, local interest, and geographic location.

McCleary (1978) conducted a study based on in-depth personal interviews with a convenience sample of 15 corporate-meeting planners and examined which factors influenced satisfaction among meeting planners. Results from this study indicated that the decision process for selecting corporate meeting sites is similar to the process for purchasing other industrial products. While multiple factors determine the site selection, the main concerns for meeting planners were the meeting accommodations themselves, the facility's staff, and location. Lee and Weaver (1994) in a study of important attributes in site selection for both corporate and association meeting planners found results similar to the McCleary study. A major finding from the Lee and Weaver study was the greater importance placed on distance by corporate meeting planners than association planners.

The Institute of Outdoor Recreation and Tourism at Utah State University examined an image of the Salt Lake Valley as a meeting site (Dalton, 1978). The study was designed to gather information from national associations regarding their convention habits and their perception of Salt Lake City as a potential convention site. Results indicated that meeting facilities are the most important item to be considered when choosing a convention site followed by the location of the site and lodging facilities. Renaghan and Kay (1987) investigated what factors are important to meeting planners in selecting a meeting facility. They identified most important attribute as climate and lighting control, followed by location of breakout rooms, price, size of main meeting room, and audio-visual capabilities.

Shaw, Lewis, and Khorey (1991) measured meeting planners' satisfaction with hotel convention services. As a results of factor analysis, the 13 attribute variables were grouped into 3 factors: meeting rooms/ breaks, billing, and personal services. Among three factors, personal services including

convention services manager (CSM) responsiveness, CSM accessibility, preliminary planning, and pre-convention meetings had the most effect on meeting planners' overall satisfaction with hotel meeting services.

Bonn, Ohlin, and Brand (1994) analyzed the relative attractiveness of ten Caribbean destinations as perceived by U. S. association meeting planners in terms of facilities and services, recreation, and entertainment. The result of this study indicated that the meeting planners perceived the selected Caribbean destinations differently. Clark and McCleary (1995) investigated the elements of organizational buying theory in selecting an association meeting site through in-depth interviews with 23 association professionals who were familiar with the buying process for meeting-site selection. Results found the organizational purchasing theory to be helpful in understanding how association-meeting planners select meeting destinations. It was concluded that situational variables such as buyclass, perceived risk, and power are essential in the site-selection process.

Methodology

The population of concern in the study was association meeting planners in the United States. A systematic sample was drawn from the 1994 Directory of Association Meeting Planners and Conference & Convention Directors. After a random starting point, every seventeenth name was selected until 500 meeting planners were identified. The directory includes the 13,821 association meeting planners and conference & convention directors listed for the 8,689 associations.

A four-page questionnaire was mailed to sample members. Included with the questionnaire was a cover letter explaining the purpose of the study, information on how the meeting planners were selected, and a statement assuring the meeting planners complete confidentiality and that information would be used only for research analysis purposes. The survey instrument focused on the respondent's perception of South Korea as an offshore meeting destination. The majority of questionnaire items were designed to measure

the perceived importance of South Korea in terms of the destination selection criteria. The fifteen items related to offshore selection criteria were adopted from the Meeting & Conventions' (1992) study. Survey recipients were asked to respond to each item on a five-point Likert-type scale ranging from 1 = least important to 5 = very important. Other parts of the questionnaire requested general information concerning the respondents. Twenty graduate students in a hospitality management school reviewed the questionnaire for clarity and content validity. A self-addressed, stamped envelope was included for the return of the questionnaire. After a period of 3 weeks, a second mailing, identical to the first, was sent to all nonrespondents. Again, a three-week period of time was established as the cutoff for receiving responses. Usable surveys were returned by thirty-six percent of potential respondents (180 out of 500).

The data analysis in this study consisted of three steps. First, factor analysis with varimax rotation was utilized to identify the underlying components among 15 offshore destination selection variables. In order to derive appropriate factors, both the latent root criterion (eigenvalues > 1) and the scree test were performed. Cronbach's alpha was used to examine the reliabilities of factors.

Second, cluster analysis was used to classify meeting planners based on four factors identified by factor analysis. Hair, Anderson, Tatham, and Black (1995) suggested that cluster analysis is very helpful in identifying latent patterns providing useful clusters of consumers. Factor scores were computed for cluster analysis because factor scores are more reliable than single variables. We used the hierarchical procedures to identify three clusters. Finally, Chi-square analysis was used to profile the three clusters based on the characteristics of the associations.

Results

Profile of Respondents

Approximately 58% of the respondents were male and 42% were female. Most respondents had a bachelor or Master's degree (91%). The type of association the respondents represented is as follows: 39% business / trade/ commercial; 30% professional; 17% educational/ religious; 6% fraternal; 2% trade union association; and 7% were in other types of associations. About 39% reported above 5000 members; 34% reported 1001-5000; 17% claimed 500-1000; and 10% had fewer than 500 members.

Identification of Destination Selection Factors

Factor analysis was performed to identify the underlying dimensions among fifteen destination selection variables. To test the assumptions of factor analysis, two measures were used. First, the Bartlett test of sphericity was used to test the hypothesis that the correlation matrix is an identity matrix. The value of the test statistic was large (860.32) and the associated significance level was small ($p < .01$), so the hypothesis was rejected. Thus, the correlation matrix had significance correlations among the variables. Another measure to quantify the degree of intercorrelations among the variables is the measure of sampling adequacy (MSA). We had overall MSA of 0.70, which falls in the acceptable level (Hair et al., 1995).

A factor analysis of fifteen destination selection scales indicated that four factors explained 58% of overall variance. Table 1 shows the variables loading on each of the four factors. Internal reliability tests showed Cronbach alphas ranging from .67 to .86. Each factor was labeled based on higher loadings. The first factor was named "service," and included four variables: availability of services and suppliers of goods; ease of transporting attendees to and from location; crime rate; and availability of hotels and/ or meeting facilities. This factor explained 23.9% of the total variance with an eigenvalue of 3.59. The second factor, "value," had an eigenvalue of 2.31 with an explanation of

15.4% of the total variance. This factor included five variables: overall value and level of costs; sightseeing, cultural, historical attractions; stability of currency and exchange rate; transportation costs; and customs procedures. The third factor, "image," included three variables: distance from individual attendees; political environment; and popular image of location. This factor had an eigenvalue of 1.74 and explained 11.6% of the variance. The fourth factor, "recreation," had three variables: availability of recreation facilities; availability of night life activities; and climate. The fourth factor has an eigenvalue of 1.06 with an explanation of 7.01% of the total variance.

Classification of Meeting Planners

Cluster analysis was utilized to segment association meeting planners into groups based on four factor scores provided by factor analysis. The hierarchical clustering techniques were performed with Ward's method (Hair et al., 1995). The examination of the vertical icicle plot and dendrogram suggested that three clusters would be appropriate for this study. All four factors contributed to differentiating the three clusters ($p < .01$) based on the results of factor-specific cluster comparisons (see Table 2).

Cluster I (N = 40 and 22%) had the highest factor scores on the image factor (0.47) among four factors. Cluster II (N = 63 and 35%) placed the highest importance on the recreation (0.78) and image (0.54) factors relative to Cluster I and II. Cluster III (N = 77 and 43%) had the highest value on the service (0.37) and value (0.33) in comparison with Cluster I and II. Based on the cluster means for the derived factor scores and the cluster sizes, the three clusters were labeled: Cluster I "image-oriented meeting planners," Cluster II "recreation-oriented meeting planners," and Cluster III "service-value-oriented meeting planners."

Table 1. Factor Analysis of the International Destination Selection Criteria

| Factors | Loadings | Eigen value | Percent of Variance | Reliability Explained |
|---|----------|-------------|---------------------|-----------------------|
| Factor 1 (service) | | 3.59 | 23.9% | 0.86 |
| Availability of services and suppliers of goods | 0.72 | | | |
| Ease of transporting attendees to and from location | 0.72 | | | |
| Crime rate | 0.65 | | | |
| Availability of hotels and/or meeting facilities | 0.62 | | | |
| Factor 2 (value) | | 2.31 | 15.4% | 0.81 |
| Overall value and level of costs | 0.73 | | | |
| Sightseeing, cultural, historical attractions | 0.58 | | | |
| Stability of currency and exchange rate | 0.57 | | | |
| Transportation costs | 0.56 | | | |
| Customs procedures | 0.55 | | | |
| Factor 3 (image) | | 1.74 | 11.6% | 0.73 |
| Distance from individual attendees | 0.84 | | | |
| Political environment | 0.68 | | | |
| Popular image of location | 0.49 | | | |
| Factor 4 (recreation) | | 1.06 | 7.01% | 0.67 |
| Availability of recreation facilities | 0.67 | | | |
| Availability of night life activities | 0.58 | | | |
| Climate | 0.54 | | | |
| Total variance explained | | | 58% | |
| Overall Measure of Sampling Adequacy = 0.70 | | | | |
| Bartlett Test of Sphericity = 860.32, Significance = 0.00 | | | | |

Table 2. Cluster Analysis for Association Meeting Planners

| | Cluster | | | F-ratio | Sig. Level |
|---------------------------|---------|-------|-------|---------|------------|
| | I | II | III | | |
| Service | 0.18 | -0.57 | 0.37 | 22.76 | .000 |
| Value | -0.73 | 0.06 | 0.33 | 20.45 | .000 |
| Image | 0.47 | 0.54 | -0.69 | 55.72 | .000 |
| Recreation | -0.97 | 0.78 | -0.13 | 77.29 | |
| Number of Cases | 40 | 63 | 77 | | |
| Percentage of Respondents | 22 | 35 | 43 | | |

Demographic and Association Profiles of the Three Clusters

Cross-tabulation analysis was used to identify demographic and association profiles of the three clusters (see Table 3). The chi-square statistic was employed to determine if there were any statistically significant differences among the three cluster groups. Only “education,” “type of association” and “type of meeting to be planned” were significantly different among groups. The item, “type of meeting to be planned,” is based on the statement “If you plan your meetings in South Korea, what type of meetings do you want to plan?”

Discussion And Implications

Based on the factor analysis results, there are four distinct factors that meeting planners consider when selecting an international meeting destination. These factors are: service, value, image, and recreation. Based on the cluster analysis results, there are three homogeneous groups of meeting planners formed by selection criteria representing each factor. These clusters are: “image-oriented meeting planners,” “recreation-oriented meeting planners,” and “service-value-oriented meeting planners.”

There were no significant differences among the three clusters in terms of gender, age, number of members in association, or experience of holding conventions in Korea. However, the chi-square analysis revealed that clusters were significantly different based on the variables of “education,” “type of association,” and “type of meeting to be planned.”

Cluster I had the highest education level (about 59% with a college degree and 37% with a graduate degree), more meeting planners in business/ trade/ commercial association (56.5%), and were more likely to plan educational seminars in South Korea (56.5%). Cluster II had more high school graduates (15.3%), more in the professional type of association (34.7%), and had the largest number who planned to hold professional & technical meetings (38.9%) among the three groups.

**Table 3. Demographic and Association Profile of
Three Clusters of Meeting Planners**

| Characteristics | Cluster | | |
|---|--------------------|------------------|-------------------|
| | I (n=40) 22% | II (n=63) 35% | III (N=77) 43% |
| Gender | | | |
| Male | 45.7% | 63.9% | 60.2% |
| Female | 54.3 | 36.1 | 39.8 |
| Age | | | |
| Under 30 | 2.2 | 11.1 | 5.7 |
| 30-40 | 21.7 | 13.9 | 18.2 |
| 41-50 | 39.1 | 34.7 | 34.1 |
| 51-60 | 26.1 | 26.4 | 29.5 |
| Over 60 | 10.9 | 13.9 | 12.5 |
| Education* | | | |
| High School | 4.3 | 15.3 | 6.8 |
| College degree | 58.7 | 55.6 | 71.6 |
| Graduate degree | 37.0 | 29.2 | 21.6 |
| Type of Association* | | | |
| Business/ trade/ commercial | 56.5 | 29.2 | 38.6 |
| Professional | 15.2 | 34.7 | 33.0 |
| Educational/ religious | 19.6 | 12.5 | 19.3 |
| Fraternal | 4.3 | 12.5 | 2.3 |
| Trade Union | 2.2 | - | 2.3 |
| Other | 2.2 | 11.1 | 4.5 |
| Number of members in association | | | |
| Fewer than 500 | 8.7 | 15.3 | 6.8 |
| 500-1000 | 13.0 | 22.2 | 14.8 |
| 1001-5000 | 37. | 27.8 | 36.4 |
| Over 5001 | 41.3 | 34.7 | 42.0 |
| Experience of holding conventions in Korea | | | |
| Yes | 21.7 | 37.5 | 33.0 |
| No | 78.3 | 62.5 | 67.0 |
| Type of meeting to be planned in Korea* | | | |
| Educational seminars | 56.5 | 43.1 | 46.6 |
| Professional & technical meetings | 8.7 | 38.9 | 23.9 |
| Board meetings | 19.6 | 9.7 | 10.2 |
| Regional sales/ local chapter meetings | 4.3 | - | 6.8 |
| Training seminars | 6.5 | 2.8 | 5.7 |
| Other meetings | 4.3 | 5.6 | 6.8 |

* Chi-square $p < .05$ (These variables were significantly different between clusters).

Note: Cluster I: Image-oriented Planners, Cluster II: Recreation-oriented Planners, Cluster III: Service-Value-oriented Planners. Columns may not equal 100% due to rounding.

Cluster III had the most members in the college degree category (71.6%), had a more even breakdown between business (38.6%) and professional (33.0%) types of associations, and were in the middle of the three clusters in planning of educational seminars and professional/ technical meetings.

Defining and interpreting clusters is more of an art than a science. The fact that a sample of meeting planners can be grouped based on the degree of importance they place on various characteristics of a potential meeting location indicates that there are distinct market segments with varying needs and wants. A strategy that more precisely targeted each of the identified market segments would require a modification of the market mix to match the needs of each segment. The modification may be as simple as stressing in the communications mix, the degree to which South Korea is able to meet the criteria most important to each segment. The element in the marketing mix to be addressed will depend on its important to the targeted segment. For example, cluster III (Service-Value-oriented Planners) scored high on a concern for cost and for having transportation, suppliers, hotels and other services available. A strategy aimed at this segment might stress the high quality and abundant infrastructure and superstructure available in Korea. The ability to package air, hotel and meeting services to keep cost competitive would also be a rational way of attracting this segment. This strategy appears to fit with the profile of the meeting planners in cluster III. The largest type of meeting planners is the educational seminar which tend to be price sensitive.

Cluster I contained the largest percentage of business/ trade/ commercial meeting planners, stressed educational meetings and had the highest percentage of the three clusters indicating they planned board meetings. The "Image" factor was the most highly loading factor for this segment and the factor included items which indicated a concern for distance and the political environment. The "Value" and "Recreation" factors had negative loadings for cluster I. This information suggests a marketing strategy which has to overcome the problem of distance between South Korea and the U. S. as well as any perception of political instability. Emphasizing low cost or recreational advantages does not appear to be a good strategy for this segment. On the other hand, stressing the popularity of South Korea as a

meeting location and providing a convincing argument that South Korea has solved any problems of political stability would be potentially good messages to communicate.

Cluster II meeting planners placed a higher importance on the "Recreation" factor than another other group. The "Image" factor also loaded highly on cluster II. This cluster was less educated and had a more even representation of the various types of associations than the other two clusters with a higher emphasis on professional and technical meetings. This indicates that a marketing strategy for this segment should emphasize what recreational facilities and nigh life activities are available in South Korea and, to a lesser extent, deal with the problems of distance and political stability.

The data analysis clearly indicated that, within the sample, there were well-defined market segments that identified with specific and different meeting site selection characteristics. This information can prove useful in developing specific themes and more targeted marketing strategies for South Korea.

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