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Abstract

Understanding visitors and the factors that pull them to visit a destination is imperative for successful branding as visitor characteristics and salient attributes are used to differentiate and position. This study identifies important attributes and segments of international tourists visiting India. Factor and Cluster analyses were used to analyse the data. Factor analysis identified six underlying dimensions while Cluster analysis identified four segments of international tourists across four continents. Profiling of clusters was done through Chi Square analysis leading to identification of target segments. Suggestions for branding and marketing strategies are provided according to the factors and segments identified.

Keywords

Cluster analysis, market segmentation, Indian market

Disciplines

Fashion Design | Fiber, Textile, and Weaving Arts | Industrial and Product Design

Comments

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Profiling and Segmentation of International Tourists in India

Introduction

Tourism in India has witnessed growth in the recent past and appears on target to be a major economic force for the country. Between 1997 and 2013, international tourist arrivals increased from 2.37 million to 6.58 million (India tourism statistics, 2012, Government of India). The Compounded Average Growth Rate (CAGR) of the tourism sector in India between 2001 and 2010 was approximately 8%. The ministry of Tourism of India is consistently working to improve the image of India, most recently through its “Incredible India” campaign (India tourism global competitiveness, Ministry of Tourism, Government of India). This campaign emphasizes that the country has much diversity to offer tourists.

Despite growing figures for tourism and despite the wide diversity of India, the country lags behind not only developed countries but many developing and Asian countries when it comes to tourism. Asian countries such as Malaysia, Thailand, Singapore, China, and Indonesia are far ahead of India in tourist arrivals. According to the global travel & tourism competitiveness index, India ranks 65th among total of 140 countries surveyed by the World Economic Forum in 2013. India ranked 42nd in international tourist arrivals across the world in 2010 (Source: UNWTO Barometer, 2011). India’s diversity and natural beauty suggest that it has tremendous potential to attract international tourists but to-date, as these figures suggest, it has not been able to compete with many Asian countries.

The Indian Tourism Ministry has played an important role in the development of the industry through the initiation of advertising efforts such as the “Incredible India” campaign but despite these efforts India’s tourism has continued to fall below its potential (Competitiveness of Tourism sector in India with

selected countries of World, Ministry of Tourism, Government of India). This may be due to the fact that India has not been able to identify and then communicate the correct factors that will attract tourists (Singh, Ahuja, 2012). According to Klenosky (2002), the choice of a tourism destination is often made on the basis of factors related to features, attractions or attributes of the destination itself. In its most recent efforts, however, India has identified no unique attributes for branding. (Singh, Sunaina, 2014). In addition to identifying the factors that will attract tourists, it is important for a destination to understand the target segment(s) interested in visiting the country. India's tourism campaign "Incredible India" uses a mass marketing approach worldwide rather than engaging in customized branding on the basis of the tastes and preferences of people from various countries or continents (Singh & Sunaina, 2014). Hence, the study has been undertaken with two main purposes:

- a) To find the attributes that are motivating factors to attract tourists in India
- b) To segment international visitors based on those identified attributes.

Literature Review

Tourist motivation is a complex phenomenon that changes over time (Pearce, 1993). Current literature in the field is divided into two categories: literature based on factors that motivate tourists to travel (push factors) or to visit a specific destination (pull factors), and literature related to the segmentation of tourists visiting a specific destination. The identification of motivating factors in understanding tourism decision-making is generally agreed to be critical to the success of branding a location as a holiday/vacation destination.

Push factors have been studied by a number of researchers (Bieger & Laesser, 2002, Iso-Ahola, 1989, Kim, Lee, & Klenosky, 2003, Yuan and McDonald, 1990). Push factors focus on the internal motivations of

travelers and have been found to include, among others, escape, seeking behavior, family togetherness, and health. A full review of push factors is not provided here as the emphasis of the current study is on pull factors.

Several researchers have identified pull factors for a city or area. Laaksonen et al. (2006) used a visual collage technique to understand the pull factors for the city of Vaasa, Finland. Individuals in group interviews revealed their subjective images of the city. Results indicated that Vaasa was viewed as rich in cultural activities, beautiful, and possessing diverse leisure time possibilities. These findings were used to create an overall appealing picture of the city as a tourism destination with the theme “Better Life”.

Vanolo (2008) has expressed that many destinations, including Turin, Italy are using culture as an important pull factor to attract tourists but in a study of Turin several new and creative attributes for branding were identified. These included art, diversity, nightlife, education, food, and wine. In a survey of 878 residents of Gold Coast City, Australia, Merrilees et al. (2009) identified the pull factors of sun and surf, creative business, safety, nature, and cultural activities. Finally, Prayag (2010) completed studies of two African locations. In one study the brand image of Cape Town, South Africa was defined through the identification of scenery, friendly people, value, culture, beaches, and climate as pull factors. In the case of Mauritius the pull factors of safety, value, food, good service, climate, beautiful scenery, and culture were identified.

Additional research into the impact of pull factors has extended beyond simple factor identification. Etchner & Ritchie (1991) found that pull factors can be classified as functional or psychological. Functional factors are specific to the details of the location and include items such as price levels, transportation, accommodation, and climate. Psychological factors focus on supplementary features such as friendly people, safety, and quality of service. Both types of factors contribute to form a destination image and positive assessments of both types of factors are needed to pull tourists to a destination. Baloglu and Uysal (1996) argue that reasons for travel may correspond to certain benefits that are obtained at the destination site through pull factors. Marketers and destination promoters in tourism, according to Baloglu and Uysal, should keep in mind that winning destinations are those which respond best to the needs of a given market segment. Hence more marketing efforts to match a destination's major attributes (pull factors) to the tourists' diverse psychological needs should be undertaken. Finally, Jenkins (1999), in a study of Australia, states that there is a need to understand the important attributes that create a particular kind of image to the tourists and to the world. He argues that there is need to reevaluate a country's image keeping in mind potential market segments and new markets.

The segmentation of the tourist market, mentioned in the last two studies above, is also viewed as critical to the success of tourism for specific destinations. Historically the tourism industry has largely used demographics including age, nationality, income, gender, and country of origin to define segments (Beerli & Martin, 2004; Prayag, 2010; Diem-Trinh, 2009). In addition to demographics, however, travel characteristics such as purpose of visit, length of stay, and visitation levels have also been used as grounds for segmentation (Fakeye & Crompton, 1991; Prayag, 2010; Diem-Trinh, 2009). In his study of two African locations, Prayag (2010) found four segments: novelty seekers, traditional shoppers,

multifarious, and activity & culture seekers. These segments were identified on the basis of both demographics and travel characteristics. Similarly, Diem-Trinh (2009) used a combination of demographic and travel characteristics in his study of tourism in Vietnam to identify the three segments of passive tourists, enthusiasts, and opportunists. These three segments were identified through factor analysis. The segments were then profiled on the basis of age, gender, country of origin, visitation level, and purpose of visit.

Some segmentation efforts have gone beyond the application of standard variables such as demographics and travel characteristics. Sung (2004) segmented a sample of 892 adventure travelers using psychographics and behavioral variables (trip related factors, frequency of trip, expenditure and information sources). Segmentation was done using a K-means clustering technique. Six clusters were identified and labeled as “General Enthusiasts”, “Budget Youngsters”, “Soft Moderates”, “Upper High Naturalists”, “Family Vacationers”, and “Active Soloists”. Activity preferences were found across the segments and therefore different marketing activities were recommended for each segment.

A study by Jonsson and Devonish (2008) identified the underlying motivations for tourists to visit Barbados. The study then investigated whether tourists from different countries varied in their motivations. Findings indicated that variation in motivation correlated with home country thus suggesting that segmentation by nationality could produce segments whose underlying motivations for travel varied. Kozak (2002) made an attempt to determine whether tourists from the same country have similar or different motivations to visit various destinations and whether tourists from different countries have different motivations to travel to the same destination. Tourist motivations were empirically examined in order to identify markets in which tourists’ motivations match. Factors were

first found through factor analysis to provide a basis to understand tourist motivation. Independent T-tests were then used. It was found that some tourists' motives differed between nationalities and places visited.

Dolnicar and Kemp (2009), have expressed that in the tourism industry it is very important to understand which groups of tourists have similar needs and then to develop tourism products that meet particular groups' needs. It is interesting to note the methodological approaches used in the research reported here. Thirty six percent of the reported research used K-means clustering techniques and 21 percent used Hierarchical clustering. Factor Analysis is the most common method used by the researchers for pre-processing the data and this is followed most commonly by K-means or a Hierarchical means clustering technique. Studies then commonly profile segments using psychographic variables (64% of the researchers) or behavioral variables (21% of the researchers). "Factor cluster segmentation" has been commonly used in tourism research since the very early years of data-driven market segmentation and has been adopted by many segmentation researchers (Sheppard, 1996; Dolnicar and Grun, 2008). The current study uses similar methodological approaches to those used in earlier tourism research to identify pull factors, find clusters of international tourists, and ultimately to define segments for visitors to India.

Research Methodology

Measurement

To fulfill the first objective of this study, identifying the attributes that are motivating factors attracting tourists to India, both personal interviews and surveys were completed with foreign tourists visiting India. First, fifty semi-structured interviews with foreign tourists were completed to obtain a better

understanding of the variables that were later included in a survey instrument. As a part of the interviews, participants were asked to review a list of factors derived from the literature (like; Beerli & Martin, 2004; Etchner & Ritchie, 1991; Baloglu and Uysal (1996); Jenkins (1999)) to confirm each item's appropriateness in the context of the destination. A list of 28 attributes was retained and included in the survey instrument. These items were measured on the instrument by asking respondents to indicate each item's importance using a five point scale (1- not at all important, 2- unimportant, 3- neither important nor unimportant, and 4- important, 5- very important). The instrument also collected demographic information such as country of origin, age, visitation level and purpose for visit. The instrument was pretested with 100 international visitors and minor amendments were made to the wording of several items. Yoga and meditation, for example, were presented as two attributes but pre-test respondents perceived them as one, therefore, these two attributes were reduced to a single attribute. Similarly, culture and heritage were combined into a single attribute instead of two attributes. The final list of factors/attributes included 25 items.

Data Collection

The survey data was collected from international visitors over a period of 6 months at seven popular tourist cities in India (Agra, Jaipur, Amritsar, Dharamshala, Goa, Mumbai, and Delhi). These destinations were chosen for data collection as they attract substantial numbers of tourists seeking different benefits and experiences. Various locations within each of the cities were chosen for data collection. The sampling techniques used were convenience, judgment, snowball and quota sampling. Quota Sampling was done to ensure fair representation from multiple continents. The sample ultimately included 100 Asian respondents, 126 European respondents, 125 North American respondents, 109 Australian respondents, and 40 respondents from Africa and South America. Respondents were approached by interviewers on weekday evenings and weekends. A total of 543 surveys were distributed. Of those, 511 were returned with 11 of those determined to be unusable. Therefore, the sample size was 500.

Data Analysis

Data were analyzed in three stages. First, the attributes were factor analyzed through principal component analysis to identify the important factors for motivating respondents to visit India. Then, the factor score for each respondent was used to cluster the visitors into market segments. Visitors were clustered in such a way that those within each cluster were more similar to each other than to the visitors in other clusters thereby producing homogeneity within the clusters and heterogeneity between clusters (Hair, Black, Babin, Anderson & Tatham, 2005). In the third stage, segment characteristics were identified then Chi Square and ANOVA tests were used to explore the characteristics of the variables and clusters (Sarigollu & Huang, 2005).

Results

Demographic Profile and Traveling Characteristics of Respondents

The sample was comprised of 59.8% males and 40.2% females. Respondents with 18 years or younger represented a total of 2.2% of the sample. Although these respondents were minor nonetheless plays important role in choosing the destination. Respondents aged 19-30 years were 40.2% of the sample while people 31- 50 years of age were 29%. The remaining 28.6% of the sample was above 50 years. Approximately half the sample (48%) had an average monthly income of USD 4,001- 8,000. First time visitors were nearly half the sample with 50.4%. Respondents were mainly from the USA (25% of the sample) and the UK (25% of the total sample).Forty percent of the respondents were from Australia and Asia. The remaining 10% of respondents were from Africa and South America. These demographics are similar to official international Indian tourism statistics.

Factor Analysis

The first stage of data analysis involved the identification of underlying motivations using factor analysis. The KMO measure of sample adequacy was 0.842 and Bartlett's test of sphericity was $\chi^2=372.846$, $p < 0.001$. Sample Size (500) was 20 times the number of variables which exceeds the minimum requirement of 5 times the number of variables suggested by Hair, Black, Babin, Anderson & Tatham, (2005). Hence, the data is fit for factor analysis. As shown in Table 1, principle component analysis was used with Varimax rotation that yielded six underlying factors which explain 56% of the total variance. In keeping with the protocol of factor analysis, factor loadings of 0.5 and above are considered significant. Factor with loadings less than 0.5 are omitted. This resulted in 20 valid variables while five variables were omitted. The variables which were omitted are fun and adventure, exotic cities, lots of excitement, safe in terms of crime, and ease of availability of local food.

Six factors were extracted with Eigen Values >1 , which explains the 56% of Variance. Reliability of the factors generated was tested. Reliability of (Cronbach alpha) $\alpha > 0.50$, is accepted as an indication of reliability (Mehmetoglu, 2005). While recommended alpha value to support internal consistency is above 0.7, value of 0.5 is acceptable in the context of research exploring new phenomenon (Hair et al. 2010). Factor 1 consisted of five items, all related to cuisines, spices, and food chains. Hence, it was labeled 'Food'. Factor 2 consisted of four variables related to spiritual and religious learnings, yoga and meditation. As a result Factor 2 was labeled 'Spirituality'. Factor 3 consisted of three variables related to value for money, inexpensive prices, and affordable services and therefore this factor were labeled "Value for money". The fourth factor consisted of two variables related to ethnicity of culture and was labeled "Rich Culture". Factor 5 included items related to rich history, monuments, forts, and heritage and therefore was named "Rich History". The last factor included two variables and was related to diverse landscapes. This factor was labeled "Natural beauty". The fourth and sixth factor though consists

of only two items; these are retained because of their significance in literature. Reliability test of these factors came to be well above the lower limit of 0.5.

The first factor “food” consist five items viz. India is copious in traditional, regional and international cuisines; India is rich in Ayurvedic (herbal) spices; Ease of availability of International fast food chains of foods like, McDonalds, KFC, Barista, Pizza hut, etc.; Cosmopolitan and multi ethnic country; and Variety of delicious cuisines available. As can be seen in table, the items in this factor have high factor loadings which reveal a strong association of the variables with the factor. The reliability value (alpha) of this factor is 0.734. With an Eigen value of 6.044, this factor accounts for the highest portion of the variance explained (14%).

The second factor “Spirituality” consists of four motivational variables viz. India provides high ayurvedic medicinal quality, rich, aromatic, green and herbal leaves; Great place to do yoga and meditation; Famous for spiritual learnings; India famous for religious temples and structures. The items constituting this factor have the highest loadings compared to other factors reflecting a strong connection within variables. Variables under this factor are significantly correlated with each other. The reliability value (alpha) of this factor is 0.740, and with Eigen value of 2.549 it explains 11.06% of total variance.

The third factor “Value for money” has an Eigen value of 1.622 and explains 10.5% of the total variance. It consists of the variables, Good and reasonable shopping destination for artifacts, clothes, handicrafts and accessories, Indian products offer a good value for money, cheap in services like, accommodation,

transportation, body spa, and body therapy. A reliability alpha shows that there is a strong correlation between the variables composing this factor.

The fourth factor labeled “Rich culture” is composed of two variables, ethnic products of India is a major attraction amongst foreign tourists and rich ethnic culture and traditions in India. The reliability alpha of this factor is 0.504. The Eigen value is 1.507 and it explains 7.82% of the total variance.

‘Rich history’ which is the fifth factor comprises of three variables viz. Forts and Monuments, Interesting history about kings and their dynasties, and Rich cultural heritage. Its reliability value (alpha) is 0.507. The Eigen value is 1.323 and it explains 7.26% of the total variance.

The last factor “Natural beauty” embraces two statements, (i) land of many rituals and festivals and (ii) Diverse landscapes, like, beaches, forests, deserts, mountains, etc. A reliability value (alpha) of 0.553 indicates reasonable correlation between the two variables. The eigenvalue of the “natural beauty” factor is 1.065 and it explains 5.814% of the total variance.

Cluster Analysis

After identifying the major underlying factors for choosing India as a holiday destination, the next stage in the analysis clustered the visitors on the basis of these factors. A K-means clustering algorithm analysis was used in which the number of clusters had to be pre-determined, on the six dimensions identified through factor analysis. The method was used owing to its ability to work well with large data sets. Further, the effectiveness of the method to solve the clustering issues efficiently without requiring many resources became another reason behind its selection (Jain & Dubes, 1988). Two to six cluster

solutions were produced. This is in line with previous factor-cluster studies such as Diem-Trinh (2009), Sung's (2004), and Prayag (2010). Findings from a range of solutions (two to six clusters) were then retrieved from SPSS K-means cluster analysis. Table 2 shows the results for different solutions.

The 5-cluster and 6-cluster solutions are less favorable since they have relatively small clusters (the smallest cluster has less than 10% of the total sample). In particular, cluster 2 in a 5 cluster solution has 38 cases (7.68%) and cluster 1 in a 6-cluster solution has 45 cases (9%). Therefore, preference is given to the other clusters whose number of cases in each cluster is large enough to increase the generalizability of the cluster solution.

Considering the distances between the final clustering centers, the 5-cluster and the 6- cluster solutions have the maximum distance but they have been rejected in the previous step due to small sample size leaving the choice between 2-Cluster, 3-Cluster and 4-Cluster solutions. Table 3 shows the minimum distance of all the clusters. From the table it has been observed that out of the 2-Cluster, 3-Cluster and 4-Cluster solutions, the 4-Cluster has the highest minimum distance indicating a strong level of distance between clusters. It is preferable to have the highest minimum distance because the higher the distance, the more distinct the segments are from each other. Therefore, the 4-cluster solution is the most readily interpreted and most favorably meets the criteria for effective segmentation.

Table 4 reports the mean factor scores for each of the four segments. The highest factor score has been highlighted to determine the segment corresponding most significantly to the factor. All the segments differed from each other, confirming that the segments are statistically different from each other in

their factor scores. In order to facilitate the interpretation of the cluster profiles, clusters were labeled according to the importance of the motivation factors attached to each cluster. Segment 1 consists of visitors who consider food and spicy delicacies and cuisines important factors of a destination and was labeled Culinary Tourists. Segment 2 consists of people who are more interested in activities such as yoga, meditation, spirituality and who like natural beauty. This segment was labeled Religious & Nature Lovers. Segment 3 consists of people who like India's culture and history and therefore was labeled History & Culture Seekers. Last, Segment 4 consists of people who look for value for their money and less expensive services. Therefore, this segment was labeled Conservative Tourists.

After having established that the segments are different from each other and are motivated by different benefits, the final stage of the analysis involved profiling the segments with respect to their demographic and travel characteristics. The development of profiles allows for identification of the segments which can then be targeted with unique marketing strategies. Chi Square tests revealed country of origin, visitation level, and age differed across clusters. Cross tabulation indicated statistical significance between segments and various other characteristics. Table 5 reports the Chi Square results.

Through the Chi Square results, it is observed that the four segments vary in terms of their continent of origin. The majority of Asians (40%) visit to see India's rich history and culture. The majority of Australians visit to experience spirituality and to see its natural beauty. Europeans come to India primarily to experience spirituality and Americans visiting India want to enjoy services which offer value for their money. Also it is observed that the majority of repeat visitors are coming because of spirituality. With respect to age, people 19-30 years of age visit India for spirituality, natural beauty and food. Multiple factors attract people 31- 50 years of age but people above 51 years of age are attracted

to India primarily for spiritual activities. While these observations and the data in Table 5 help to differentiate between the segments they also indicate that spirituality is a very strong factor across a variety of demographic categories.

Conclusion and Implications

This study has sought to identify different segments of visitors based on the factors affecting their choice of India as a holiday/vacation destination. The results suggest six motivating factors and four segments which vary with respect to the dominance of the six factors in their decision making. The identified pull factors are food, culture, natural beauty, history, value for money, and spirituality. Segments were constructed on the basis of the variables found through factor analysis and profiled using the demographic characteristics of age and continent of origin as well as the travel characteristic, visit frequency. Segments were labeled Culinary Tourists, Spirituality & Nature Lovers, History & Culture Seekers, and Conservative Tourists to reflect the strength of the various pull factors for each segment. It was found that tourists from Asia largely belong to the History & Culture Seekers segment, visitors from Australia and Europe primarily belong to the Spirituality & Natural Beauty segment, and Americans largely belong to the Conservative Tourist (value for money) segment. Hence evidence of the existence of different segments that are attracted by the different pull factors of India is provided. It should be noted, however, that across almost all demographic and travel characteristics evaluated, spirituality, a psychological factor, is a highly rated pull factor for India.

These findings suggest two clear managerial implications. First, spirituality provides the basis for a valuable overall branding strategy for India. Across all geographic and age categories, and among both first-time and repeat visitors spirituality is the pull factor identified by the largest or second-largest

percentage of visitors. This suggests that rather than the emphasis on diversity that supports the current “Incredible India” undifferentiated marketing campaign that if a general branding strategy for the country is desired, it should emphasize various aspects of the spirituality that can be found in India.

In addition to the direction for an overall branding strategy for tourism in India, the findings of this study provide strong evidence that a differentiated segmentation strategy should be implemented. This approach, based on an understanding of the variation of segment needs and preferences, allows for proper allocation of limited marketing resources and the development of customized marketing efforts. The findings of this study indicate which pull factors should be emphasized to increase the appeal of India for a particular segment and also, geographically, where significant portions of the four segments can be expected to be found. Projected images in brochures, magazines and other media should reflect the diverse interests of each segment to be targeted and should be directed to appropriate continents. Prospective visitors from Asia, for example, are likely to be attracted by appeals focused on history, culture, spirituality and natural beauty. Therefore, images of India should be projected in Asia’s media accordingly. Similarly, images should be projected at various other continents according to visitor’s interests. Thus, instead of projecting one image of India across the world, it is better to project the desired image of India to continents according to the tastes and preferences of the region. Hence customized marketing should be developed for various continents.

The potential for growth in international visitors to India is significant. To realize this potential, however, the tourism industry in the country must better understand the pull factors that attract tourists to visit and make better use of segmentation in implementing marketing efforts. The six pull factors identified that motivate tourists to visit India and the four segments of international visitors that are differentiated

by the importance of these pull factors, along with demographic and travel characteristics can and should be used in marketing efforts to better realize the visitor potential in the country.

The country of India can benefit tremendously from growth in its tourism sector. The experience of other rising nations in attracting international visitors and the economic benefit that comes with these visitors suggests that India, too, can continue to expand the sector making tourism a major economic force in the country. Greater understanding of the factors that motivate international visitors to travel to India and the application of strong branding and segmentation strategies will enhance the country's ability to succeed in growing its efforts.

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